Public AEDs cost-effective for saving lives, improving cardiac arrest outcomes
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Automated external defibrillators (AEDs) accessible in public places are cost-effective health tools for saving lives and improving cardiac arrest survival, according to two separate research studies to be presented in Chicago at the American Heart Association's Resuscitation Science Symposium 2018.

In a U.S. study (Presentation 25), researchers compared the cost-effectiveness of having public AEDs to not having them for out-of-hospital cardiac arrest. Estimating costs in 2017 U.S. dollars per year of life adjusted for quality, researchers found placing an AED, versus not placing one, was cost-effective and increased years of quality living. The cost of public AEDs, to save one quality-adjusted life year, was approximately $50,000, a cost that is generally considered to be reasonable.

Placement of AEDs remained cost-effective even in places where cardiac arrest is relatively rare. The research findings support widespread dissemination of public AEDs in the United States and similar countries.

In a Japanese study (Presentation 183) that reviewed AED use in public locations, researchers found that public access defibrillation use was associated with better outcome among patients with shockable rhythm.

Among 1,743 eligible adult patients identified from the Osaka City registry who had a cardiac arrest in public locations before medical service personnel arrived, 336 victims (19.3 percent) received AED pad application. Nearly 30 percent of those patients survived one month with favorable neurological outcome compared to 9.7 percent of patients who had not received AED pad application.

The American Heart Association supports placing AEDs in targeted public areas such as sports arenas, gated communities, office complexes, doctor's offices, and shopping malls. When AEDs are placed in the community or a business or facility, the Association strongly encourages that they be part of a defibrillation program in which:

- Persons that acquire an AED notify the local EMS office.
- A licensed physician or medical authority provides medical oversight to ensure quality control.
- Persons responsible for using the AED are trained in CPR and how to use an AED.

Provided by American Heart Association