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Senator Delores G. Kelley  
Chair Senate Finance Committee  
Maryland General Assembly  
Annapolis, Maryland

**Re: SB 427 - Automated External Defibrillator, First Aid, and CPR – Requirements for Health Clubs - SUPPORT**

Dear Senator Kelley:

As a cardiac electrophysiologist practicing in Maryland for over 17 years, I write on my own behalf in **SUPPORT** of **Senate Bill 427**, which would require that certain health clubs in Maryland develop and maintain an automated external defibrillator (AED) program. My cardiology society, the Maryland Chapter of the American College of Cardiology, will submit a letter of support for this bill and I would like to add my voice.

As a cardiologist who treats patients with arrhythmias, I know that many patients never reach the hospital with an effective heartbeat after suffering sudden cardiac arrest (SCA) because their hearts could not be shocked with a defibrillator fast enough. I have seen many such patients in the course of my career who either died or suffered irreparable organ damage because they could not be resuscitated in time. If only an AED were available at the scene, some of these patients may well have survived.

Data from several studies indicate that application of an AED during a cardiac arrest doubles the chance of survival to hospital discharge.<sup>1-3</sup> We also know that each minute of delay from the time of arrest to defibrillation results in a loss of 5-10% of patients. Having AEDs available in places where cardiac arrests occur is therefore critical to improving survival.

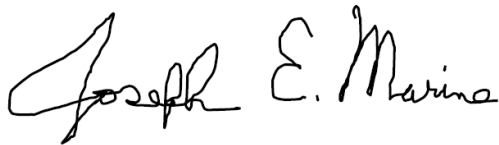
I also know first-hand the life-saving difference that an AED program can make. In March of 2011, I had the experience of participating in the resuscitation of a man who had cardiac arrest due to ventricular fibrillation in a church I was attending. Fortunately, the church had an AED program. After about 10 minutes of cardiopulmonary resuscitation, the AED

shocked his heart back into normal rhythm and stabilized his blood pressure, well before paramedics were able to arrive at the scene. He was taken to the Johns Hopkins Hospital and he made a complete recovery, walking out of the hospital a week later. We continue to exchange Christmas cards every year, including last December, 10 years later.

My experience shows that AEDs in community settings can save lives and can prevent permanent disability by restoring the heartbeat before the brain and other vital organs can be damaged. AEDs have proven to be of significant value in public settings, such as sporting events, airports, and other places where people gather. Health clubs are an opportune location for these lifesaving devices to be available. They are easy to use, and more people now know how to perform CPR. Many health clubs serve older clients with overt or latent heart disease, and exercise is a well-known trigger of cardiac arrhythmias in susceptible patients. It is likely that lives will be saved if this measure is put into place.

I ask that you support this bill. I would be happy to be available to you and your staff to provide any additional information.

Sincerely,

A handwritten signature in black ink that reads "Joseph E. Marine". The signature is written in a cursive style with a large, prominent "J" and "M".

Joseph E. Marine, MD, FACC, FHRS

Cc: Carol McDermott Sheya  
Senator Robert Cassilly

### References

1. The Public Access Defibrillation Trial Investigators. Public access defibrillation and survival after out-of-hospital cardiac arrest. *N Engl J Med* 2005; 351-637-46.
2. Weisfledt ML, Sitlani CM, Ornato JP, et al. Survival after application of automatic external defibrillators before arrival of the emergency medical system. *J Am Coll Cardiol* 2010; 55:1713-20.
3. FACTS: Every Second Counts. From AHA AED Fact Sheet 2014.  
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