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## **Perspectives of UK Community First Responders on a National Public Access Defibrillator Database**

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### **Background**

Out-of-hospital cardiac arrest (OHCA) survival to hospital discharge in the United Kingdom is lower than in many other developed regions, with England 9% [1] and Scotland 5% [2], compared to North Holland Province, the Netherlands 21% [3] and Norway 25% [4]. In 2015, the British Heart Foundation commissioned a feasibility study into the establishment of a national Public Accessible Defibrillator (PAD) database for the UK and how it could improve OHCA survival. As part of this feasibility study, the views of a range of stakeholders were sought, including those of community first responders (CFRs). CFRs are volunteers from local communities who attend to emergency calls received by the ambulance service and provide care until an ambulance arrives. There were over 12,000 CFRs operating across the UK in 2014 [5]. Most of the PADs are static AEDs made available in public places. The alternative is the use of mobile defibrillators that are carried to the scene of an emergency by CFRs [6].

### **Methods**

A survey was designed with 12 questions. It covered the areas of CFR demographics, experience with PADs, and their views on a national PAD database and the technologies and apps available for locating defibrillators and for alerting lay responders of an emergency. The survey questionnaire was made available via an online survey tool (SurveyMonkey). Between November and December 2015, links to the survey were sent via email to CFRs via the National Ambulance Services Responder Managers Forum [7].

### **Results**

760 responses were received (6.3% response rate) with 12 out of 14 ambulance service regions represented. The experience of CFRs ranges from none (just finished training) to 16 years, with the largest proportion having under 2 years experience (47.28%, 322 of 681). Awareness of apps and their use was variable with a reasonable knowledge of GoodSAM, AED Locator and the South Central Ambulance Service app but 75% did not know if apps are routinely used in their area. 35.47% of respondents (255 of 719) felt a national database of AED locations would have a significant impact on awareness and use of defibrillators with a further 42.84% (308 of 719) thinking it would have some impact. Additionally, the use of apps linked to a national database was supported by over 85% of respondents.

## Conclusion

In the survey, CFRs expressed generally positive opinions about a national PAD database and linked apps. The need for it arises naturally from having defibrillators in the community and is an additional tool to help save lives. Issues that need to be considered however include information accuracy and maintenance; the need for training combined with first aid and CPR. CFRs identified the main barriers to defibrillator use as (1) not knowing how to use one, (2) not knowing where to find one and (3) fear of injury to the victim. Lack of awareness amongst the public about the availability and use of defibrillators was highlighted as a major challenge and the absolute need for a high profile and awareness raising campaign was flagged.

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