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## **Enhancing emergency dispatch communication as part of innovative approaches to public-access defibrillation**

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*To the editor*

We commend the International Liaison Committee on Resuscitation (ILCOR) on its recent scientific statement to improve the use of public-access defibrillators on a global scale.<sup>1</sup> As researchers and workers in emergency medical services (EMS), we wholeheartedly support strategies to increase the number of out-of-hospital cardiac arrest (OHCA) patients who benefit from early defibrillation.

The writing group for the ILCOR statement has comprehensively reviewed the research to conceive a multilayered approach to improving the “various steps on the pathway from cardiac arrest occurrence to early defibrillation and successful resuscitation”.<sup>1</sup> Our linguistic research has identified some obstacles to effective communication regarding defibrillator retrieval and use during the emergency dispatch call<sup>2</sup>, and supports ILCOR’s focus on the need to improve public awareness of automatic external defibrillators. This is based on our finding that callers were frequently unfamiliar with the word “defibrillator”, and the actual device, and this led to delays and miscommunication in the emergency call interaction regarding defibrillator retrieval. The EMS under investigation used

the Medical Priority Dispatch System version 13<sup>3</sup> which employed the defibrillator prompt: *If there is a defibrillator available, send someone to get it now, and tell me when you have it.* We found this prompt to be problematic in relation to its three-clause composition and the exclusion of a question structure which contributed to caller misunderstandings.<sup>2</sup>

In our recently published paper we explore these communication issues further by analysing how call-takers handle these breaks in the flow of the emergency call interaction.<sup>4</sup> As readers would know, minimising the time spent on call communication reduces the time to commencement of dispatcher-assisted cardiopulmonary resuscitation (CPR).<sup>5</sup> With a strong impetus for early intervention to OHCA, and given the current low rates of defibrillator use and impact on overall OHCA patient survival<sup>1</sup>, our study found that it was common for call-takers to not try to repair exchanges where callers did not understand the defibrillator prompt (meaning, they did not try to correct a misunderstanding or address caller unfamiliarity about the defibrillator). Our findings suggest that call-takers had to consider the most pragmatic option in the immediate moment of the OHCA emergency i.e. whether to help callers to understand the defibrillator prompt or whether to discard the matter in order to move on to CPR. In doing so, the opportunity for defibrillation would be forgone in favour of commencing CPR.

We draw attention to these studies to highlight that the effectiveness of communication in the emergency dispatch interaction regarding defibrillator retrieval and use is a factor impacting on public access defibrillation success. Therefore, it should be given consideration in ILCOR's strategies for improving public-access defibrillation in the future.

### **Conflicts of Interest**

AW is employed by St John Western Australia (SJ-WA); JF and SB hold adjunct appointments with SJ-WA and JF receives research project funding from SJ-WA. JF is a Chief Investigator on the NHMRC-

funded (#1116453) Prehospital and Emergency Care Centre of Research Excellence (PEC-ANZ) and holds a NHMRC Leadership Fellowship (#1174838) – receiving salary support and research funds.

### **Acknowledgments**

We wish to acknowledge Tanya Birnie, Alani Morgan, Janet Bray and Paul Bailey (SJ-WA) for their input into the two cited defibrillator studies undertaken at the Prehospital, Resuscitation and Emergency Care Research Unit, Curtin University.

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