

Long-term functional and quality-of-life outcomes of OHCA survivors stratified by shock provider

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Introduction

• With the proliferation of first responder and public access defibrillation programs for out-of-hospital cardiac arrest, it is important to assess their impact on 12 month health related quality of life (HRQoL) outcomes for survivors.

Methods

 Using Victoria Ambulance Cardiac Arrest Registry data we performed a 10 year retrospective analysis of HRQoL outcomes for survivors, initially shocked by bystanders (n=271), 1st responders (n=161) or paramedics (n=1088).

Results

- Bystander shocked survivors had better HRQoL outcomes at 12 months post-arrest. (Fig. 1)
- Bystander shocked survivors had higher adjusted odds of good functional recovery and HRQoL outcomes compared to paramedic shocked survivors. (Fig. 2)
- Early defibrillation was associated with better functional recovery and HRQoL outcomes. (Fig. 3)

Discussion

- Strategies to improve early defibrillation will improve 12 month functional recovery and HRQoL outcomes. Such as...
 - Equipping GoodSAM responders with AEDs.
 - Increasing 24/7 AED access in residential areas.

Minutes to 1st shock from emergency call



Compared to paramedic defibrillation, at 12 months post arrest bystander defibrillation increased the adjusted odds of.....

- Living at home without care by 77%
- Returning to work by 72%
- Having a GOS-E \geq 7 by 53%
- Having an ED-5D VAS \geq 80 by 56%

The only effect for 1st responder defibrillation was an increase in the adjusted odds of.....

• Returning to work by 84%





Fig 1: HRQoL and functional recovery outcomes at 12-months







Fig 3: Outcomes by 5 minute intervals from call to 1st shock

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