

Data table: Effectiveness of ultraportable or pocket AEDs ScR 2024 (BLS 2603)

Study Design	Population	Intervention / Comparator(s)	Findings
Shaker 2022 economic analysis	600,000 simulated patients at low, moderate, and high-risk for sudden cardiac death	Small AED for rapid treatment of SCA (SMART) / No SMART strategy	At a 1.6% SCA annual risk, SMART strategy was associated with \$95,251/QALY (societal perspective) and \$100,797/QALY (healthcare perspective). At a 3.5% SCA annual risk, SMART strategy was associated with \$53,925/QALY (societal perspective) and \$59,672/QALY (healthcare perspective). SMART prevented 1,762 fatalities across risk strata (1.59% fatality relative risk reduction across groups).
Todd 2023 Cluster RCT Study protocol	Sample size calculation of 714 (357 per arm)	Community responder dispatched with GoodSAM app equipped with an ultraportable AED (CellAED) /Community responder not equipped with AED	Primary outcome: survival to 30 days. Aim to detect a 7% increase in survival (9% to 16%)
Todd 2023 Cluster RCT Preliminary results (abstract)	1805 community responders recruited, 903 allocated to CellAED	Community responder dispatched with GoodSAM app equipped with an ultraportable AED (CellAED)	Unfinished study. 1,788 alerts to CellAED participants, 104 arriving before EMS.

AED Automated External Defibrillator
 QALY Quality Adjusted Life Year
 SCA Sudden Cardiac Death