AED Use in the General Pediatrics Clinic

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BACKGROUND

In-Office Emergencies

General pediatrics clinics experience approximately 1 in-office emergency per month

- 10% consist of cardiac arrhythmia or sudden cardiac arrest
- Early CPR with AED defibrillation results in survival rate of up to 74%
- AAP provided official recommendations for AED access in general pediatrics clinics

Current State:

There are no comprehensive studies investigating presence and use of AEDs in general pediatrics clinics

METHOD

Survey distributed to members of AAP Listserv (Table 1)

- 53 of 10,865 responded (0.4%)
- Data collected into RedCap
- Analysis via R for Macintosh

TABLE 1: SURVEY

- Q1 Is it important to you to have an AED readily accessible at your clinic?
- 2 Are you comfortable using an AED during a clinic emergency?
- Q3 Does your site have access to an AED on its premises?
 - As you answered "no" to the previous question, please select any of the following barrriers that exist to prevent you Q3a from obtaining an AED
- Q3b What would compel you to obtain an AED for your office?
- 4 In the past year, have you needed to use an AED in the clinic?
 - Q4a As you answered "yes" to the previous question, how many times did you use the AED in your clinic in the past year?

 Q4b At the time of use, did the AED shock appropriately? Selected Choice
 - Q4c What was the patient(s) outcome at the time of resuscitation? Selected Choice
- Q5 What is the zip code of your practice
- Do you consider your practice to be "academic" or "community"?
- What type of patient population does your practice serve?
- Q8 What type of insurance does your practice service?
- Are you an employee or an owner of your practice?

 How many years out of residency training are you?
- Q11 Are you Basic Life Support (BLS) certified?
- Q12 Are the staff in your office Basic Life Support (BLS) certified?

Figure 1: Survey sent to AAP members

RESULTS

AED Possession:

- 87% reported access to on-site AED
- 92% agreed it was important to have on-site access to AED
- Employment in combined internal medicine and pediatrics practice predicted increased likelihood of AED possession
- Location (rural versus urban) and practice type (academic versus community) did not predict AED possession

Barriers to AED Access:

 Most common reported barriers to access were cost of machine and infrequency of need

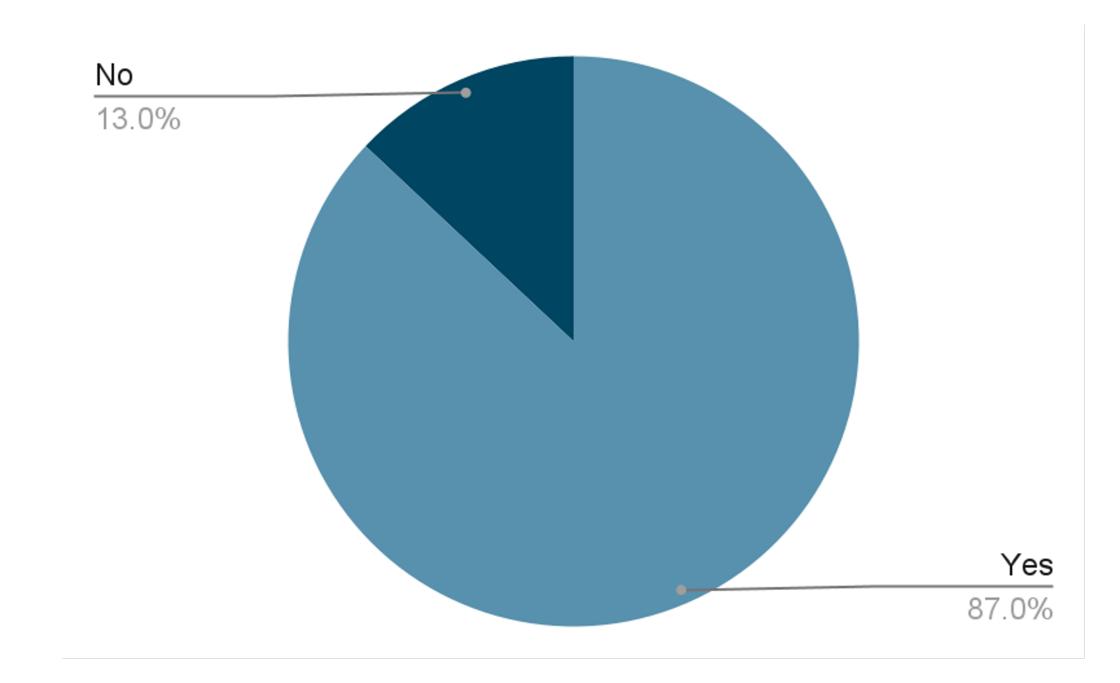


Figure 2: Proportion of respondents with and without AED access

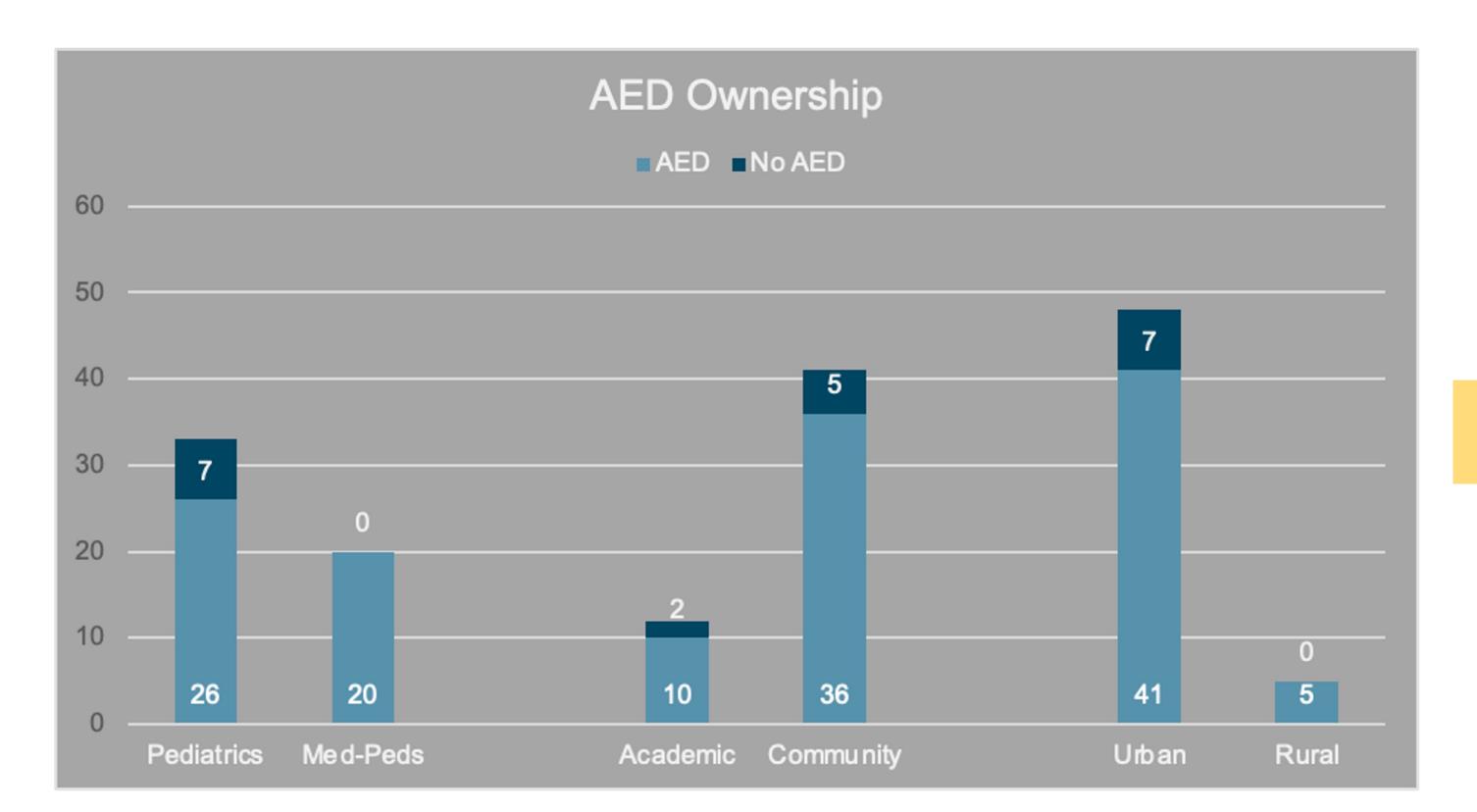


Figure 3: Distribution of AED access by characteristic

CONCLUSIONS

The majority of stand-alone and combined internal medicine-pediatrics clinics report access to on-site AEDs

AED ownership is positively associated with inclusion of adult patients in clinic demographics. There does not appear to be a correlation between academic affiliation and degree of urbanization.

Access:

- Cost of AEDs and their routine maintenance, and perceived infrequency of use, pose the greatest barrier to access
- Our results suggest improvement in access with implementation of cost-effective strategies and provider education around frequency of in-office SCA

NEXT STEPS

Small-scale:

- Improve response rate to improve generalizability
- Further data to investigate: frequency of AED use in general pediatrics clinics, degree of comfort with operation, frequency/presence of AED training for clinic staff

Large-Scale:

- Improve cost of AED
- Easy, centralized training/resources for AED operation in outpatient settings

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