



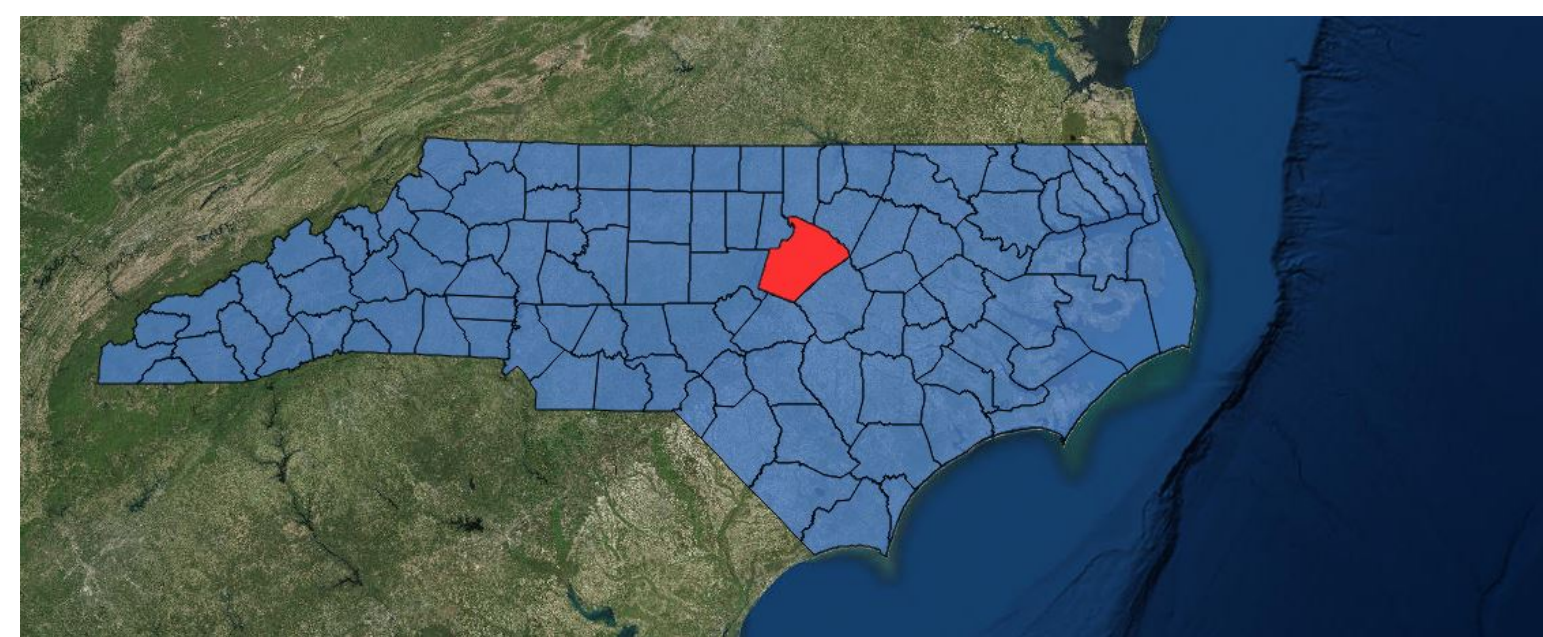
Preventative aspirin in victims of out-of-hospital sudden unexpected death

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INTRODUCTION

Low-dose aspirin is a cost-effective, accessible strategy for the prevention of cardiovascular disease (CVD). We examined low-dose daily aspirin in victims of out-of-hospital sudden unexpected death (OHSUD) in Wake County, North Carolina.



LEARNING AREAS

- Chronic disease management and prevention
- Clinical medicine applied in public health
- Epidemiology

LEARNING OBJECTIVES

- Describe adherence to preventative aspirin guidelines in OHSUD victims.
- Evaluate the impact of low aspirin adherence in high-risk populations.
- Differentiate the role of daily low-dose aspirin in primary and secondary prevention.

KEYWORDS

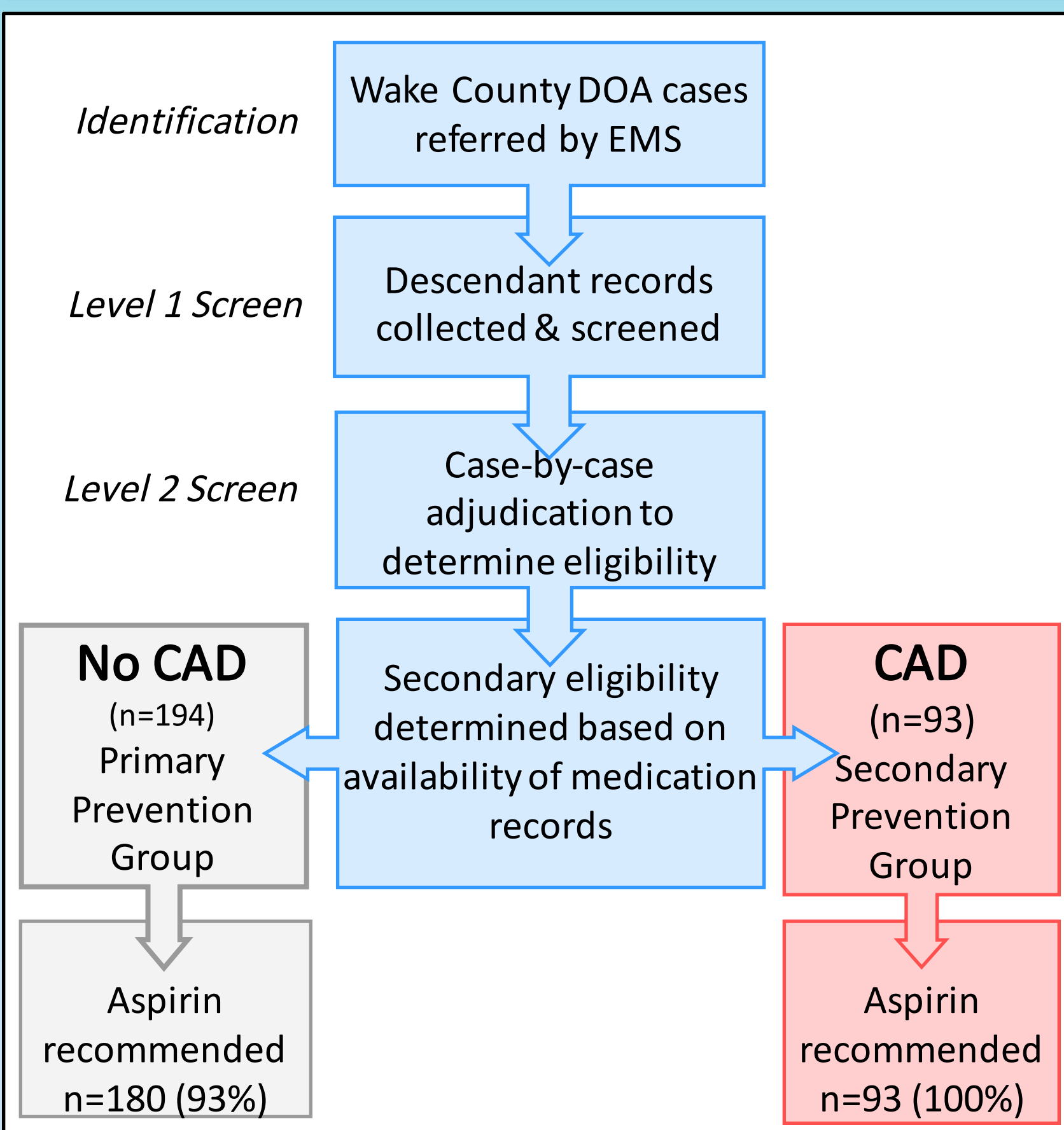
- Adherence
- Preventive Medicine

METHODS

408 OHSUD victims were identified from EMS-reported deaths in Wake County, North Carolina from March 1, 2013 to February 28, 2015 using health records and medical examiner (ME) reports. Victims were classified into two groups based on the presence or absence of ICD-coded coronary artery disease (CAD).

According to published guidelines, aspirin was recommended for all victims with CAD (n=93), and for victims with non-CAD (n=194) if 10-year risk of coronary artery disease (men) or stroke (women) exceeded published thresholds. Adherence was defined as documentation of appropriately-dosed, daily oral aspirin in the medical record or ME report. Aspirin adherence was compared to that of a living control group of Wake County residents (n=7,066).

Figure 1. Descendant eligibility process



RESULTS

47% of victims with CAD were using aspirin. Of the 194 victims without CAD, 93% qualified for aspirin. Of these, 16% were using aspirin. Overall, aspirin use was higher in the CAD group than in the non-CAD group (47% vs 16%, p<0.001). CAD victims exhibited significantly lower use when compared to a living control group (71% vs. 47%, p<0.001).

Figure 2. Aspirin use for CHD prevention in OHSUD Descendants

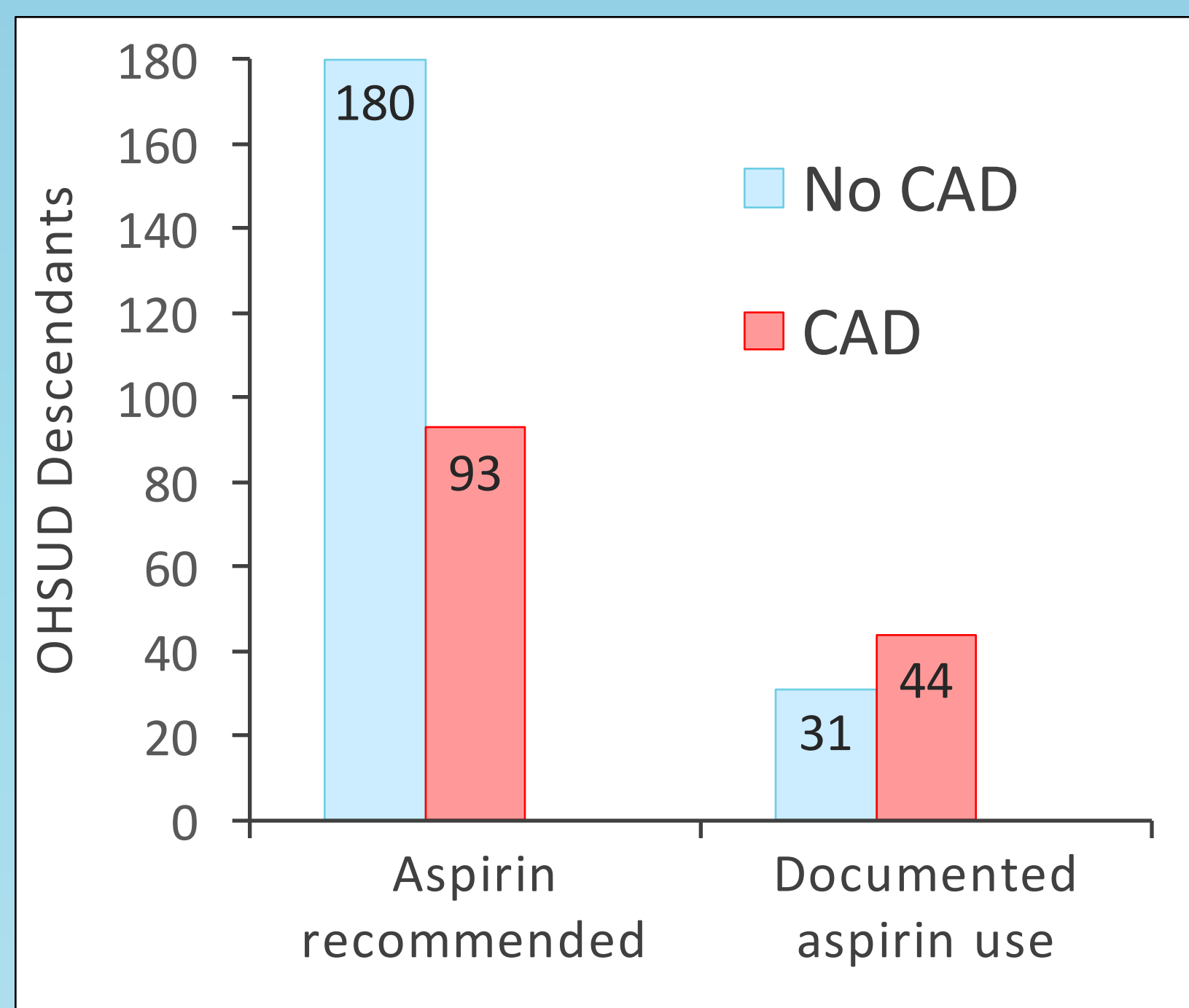


Table 1. Aspirin use for CHD prevention in Wake County, NC

	Total n=287	No CAD n=194	CAD n=93
Aspirin recommended	273 (95%)	180 (93%)	93 (100%)
Daily aspirin use	75 (26%)	31 (16%)	44 (47%)

CONCLUSIONS

Adherence to aspirin guidelines was poor in out-of-hospital sudden unexpected death victims and was significantly lower when compared to a control group. Our results reinforce previous findings of low adherence while suggesting a potential prevention strategy for sudden death.

LIMITATIONS

- Exclusion of OHSUD descendants without medical record history.
- Adherence to recommendations & medication compliance difficult to measure.

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