

# Identification of atrial fibrillation by emergency medical services: a potential opportunity for stroke prevention

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## Background

Atrial fibrillation (AF) is a significant risk factor for ischaemic stroke (Lippi et al., 2020), however it is often asymptomatic and therefore unrecognised. Previous work suggested up to two patients per day may have a new diagnosis of AF identified by North East Ambulance Service (NEAS) NHS Foundation Trust Emergency Medical Services (EMS) (Heppenstall et al., 2022).

## Aim

To report the regional population of patients with potentially new AF who were eligible for oral anticoagulation (OAC) consideration, when attended by EMS but not conveyed to hospital.

## Method

A retrospective audit of patients who had a face-to-face assessment by NEAS, between 1st February and 30th April 2022, who had their pulse rhythm recorded and an electronic patient care record (ePCR) completed. Duplicate cases, out of date range, patients < 18 years or unknown age, any event of cardiac arrest, and consistently impalpable pulse were excluded from analysis. Past medical history (PMH) including stroke risk score (CHA<sub>2</sub>DS<sub>2</sub>-Vasc), past history of AF and OAC prescription were extracted from the EMS record. Data were labelled as not recorded if missing from the ePCR, not available to EMS or not recorded in the specific relevant ePCR field.

## Definitions

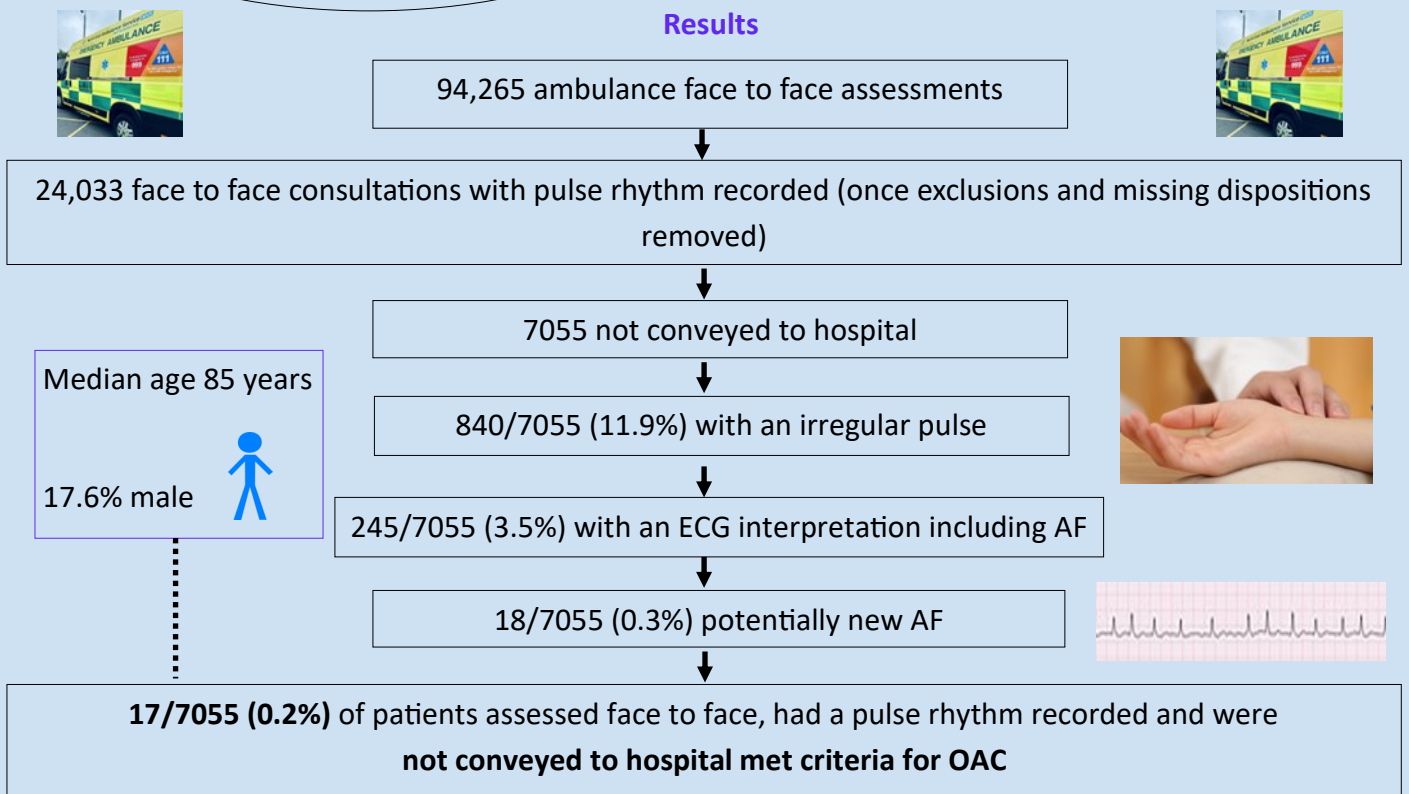
**Potentially new AF** = no AF already documented in PMH and no OAC prescribed

**OAC prescription** = warfarin or direct acting OAC

**Irregular pulse** = irregularly irregular or regularly irregular

**Criteria for OAC** = CHA<sub>2</sub>DS<sub>2</sub>-Vasc  $\geq$  2 (NICE, 2021)

## Results



## Conclusion

Limitations are that the numbers here are small, with variable clinical information documented. In addition, only around a third of patients assessed face to face had their pulse rhythm recorded, meaning cases here may be under reported.

Despite these limitations, *potentially new AF can be found in the non conveyed population*. EMS could provide a new screening opportunity for stroke prevention if an OAC pathway could be developed.

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