

# Transient Ischaemic Attack 999 Emergency Referral feasibility trial (TIER): Recruitment and intervention usage

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## Background

Early specialist assessment of Transient Ischaemic Attack (TIA) can reduce the risk of stroke and death. This study assessed feasibility of undertaking a multi-centre randomised trial to evaluate clinical and cost effectiveness of referral of patients attended by emergency ambulance Paramedic with low-risk TIA directly to specialist TIA clinic for early review.

## Methods

- Developed a protocol and referral pathway for Paramedics to assess patients
- Paramedics who volunteered to participate were randomly allocated to intervention or control group
- Intervention Paramedics were trained to deliver the intervention during the patient recruitment period
- Control paramedics continued to deliver care as usual
- Patients with TIA were identified from hospital records
- We aimed to recruit 86 patients over a 12 month recruitment period and pre-defined progression criteria related to feasibility of intervention delivery and trial methods.

## Results

- Development and recruitment phases are complete with outcome follow up ongoing
- 89 of 134 (66%) paramedics participated in TIER
- 53 (3.8%) of 1377 patients identified as having a TIA from hospital records during the patient recruitment period were attended by a TIER Paramedic and identified as eligible for trial inclusion
- 3 of 36 (8%) patients attended by intervention paramedics were referred directly to the TIA clinic
- 1 incident appeared to be a eligible for referral but attended the ED
- 1 was attended by an Intervention paramedic who was not TIER trained
- 1 patient record was missing
- 1 patient was refused a TIA Clinic referral and was referred to their own GP
- All others attended by intervention Paramedics (n=29) were recorded with contraindications to receiving referral: FAST positive (n=13); ABCD2 score >3 (n=5); already taking warfarin (n=2); crescendo TIA (n=1) other clinical factors (n=8)

- **Preliminary results indicate challenges in recruitment and low referral rates.**
- **The low-risk 999 TIA population suitable for Emergency Department avoidance may be smaller than previously thought.**
- **Further analyses will focus on whether progression criteria for a definitive trial were met, and clinical outcomes from this feasibility trial**