Appendix 1.

Multiple overlapping methods of identification of patients for the study cohort.

1) ANVC. Patients were identified if they attend the ANVC and were from a participating general practice. Patients could be referred to the ANVC via Emergency Departments, GPs, or specialists.
2) Designated practice nurses from the participating general practices. The nurses identified the patients in the following ways:
    a. Being notified by a GP as to a potential TIAMS patient
    b. Being notified by the ANVC regarding patients who missed their appointment who may have had a potential TIAMS
    c. Running a search query on practice records for diagnoses of Transient Ischaemic Attack, Amaurosis fugax and Cerebrovascular Accident recorded in patients' clinical records. The list created from this query was then compared to a baseline list, and newly identified patients' records were then reviewed to ascertain if a potential TIAMS had occurred. The nurse could consult with GPs at the practice to clarify if the identified patient had had a potential TIAMS.
    d. Running a search query on practice records for relevant investigations ordered: brain imaging (Computed Tomography (CT) or Magnetic Resonance Imaging)) or vascular imaging (Carotid/Vertebral Doppler Ultrasound or CT angiogram). Identified patients' records were then reviewed to ascertain if a potential TIAMS has occurred. Nurses could consult with GPs at the practice to clarify if the identified patient had had a potential TIAMS.
    e. Being notified by the local GP After-Hours service of the practice's patients attending the after-hours service with potential TIAMS.
3) Hospitals of the Hunter New England Local Health District. An InSIST primary investigator ran a weekly search query on the hospital database from Emergency

Department presentation lists, Stroke Unit admission lists, and patient information systems (iPMS) discharge lists. The search query was on TIA, Stroke, CVA, Collapse, Dizziness, amongst other criteria. The practice nurse/s was notified of identified patients. These patients were then contacted by their practice nurse.

Appendix 2 Study participant inclusion criteria

Study participant inclusion criteria were:

- Patients who were 18 years of age or older
- Patients who attended one of the participating practices
- Patients who suffered a possible TIAMS during the study period

Exclusion criteria are:

- Patients who were unable to make an informed decision about consent e.g. moderate or severe dementia or cognitive impairment.
- Patients during the study period who had a TIAMS but who delayed consulting a general practitioner and subsequently presented with recurrent stroke or major vascular event.
- Patients with a moderate or severe stroke at presentation, that is, they had symptoms that lasted more than 24 hours and a severity sufficient to warrant hospital admission (National Institute of Health Stroke Scale >5)

Appendix 3: Patient recruitment procedures

Following the identification of potential TIA patients, the patients were sent or given an information and consent pack by the practice nurse. The consent process involved a consent form completed and returned directly to the study team via a pre-paid envelope. The practice was notified immediately by the study team so that the consent could be documented in a practice recruitment log.

Consent was to participation in the study, with provision for additional consent to review of the participant's clinical notes by InSiST study investigators. Patients with possible TIAMS were phoned before the packs were sent out to inform them of the study and the pack. They could initially consent to participation via email or phone, if preferred. After 2 weeks, if no consent was received, the practice nurses rang once more to remind patients of the study.

Appendix 4: Participant and non-responder data collected

Participant information collected at baseline interview included demographic details (age, sex, ethnicity, patient address for derivation of area-based soicioeconomic status (SES)[1] and ASGC-RA index of ruralty,[2] education, marital status), past medical history, family history, lifestyle, medications, education, narrative of the index event, clinical features of the index event, and from whom the participant sought help following the index event. Investigations and management including medications were collected. The initial interview also included assessments of the following: modified Rankin Disability score,[3] Verbal Fluency test,[4] European Quality of Life score,[5] Hospital Anxiety and Depression Scale,[6] Telephone Interview for Cognitive Status (TICS)[7] and Chalder Fatigue scale[8]. The interviews at three and 12 months included: health since the index event, clinical features of any further events, changes to medication, changes in working ability/functional status, changes in alcohol/smoking, and repeat assessments of the above instruments.

Patients not consenting to participation had de-identified baseline data collected at recruitment sites. The baseline data included gender, age, postcode, where referred, date of index event/date consulted, symptoms (motor, sensory, visual, speech, ataxia), duration of symptoms and GP diagnosis. At 12 months, the non-participating patients also had outcome data collected: subsequent TIA, stroke, cardiovascular event, cardiovascular intervention, death or admission to nursing home during that time period.

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Appendix 5: Statistical analyses and power calculations

All multivariate analyses will adjust for clustering and for the multiple measured patient, practice and clinical factors.

1. Proportion of TIAMS patients managed in primary care exclusively.

The proportion and 95% confidence limits will be calculated as a subset of the overall cohort. A sample size of 400 TIAMS events will allow a 95% confidence interval around the anticipated rate of 70% of +/- 5%.

2. Association of age, rurality and SES with referral to specialist care.

Logistic regression analysis will be performed with referral and non-referral to specialist care as the dependent variable. A sample size of 400 will allow us to detect a relative risk of rurality of 0.65 or greater with 80% power at an alpha level of 0.05.

3. Comparison of adherence to guideline recommended investigation and management between specialist and GP care in: Early brain imaging; Early vascular imaging; Immediate antiplatelet, statin and blood-pressure therapy.

Logistic regression analyses will be performed with each specific aspect of guideline adherence as the dependent variable. For all these outcomes, we assume that adherence to guidelines among specialists will be at 90%. The sample size of 400 will allow us to detect an adherence rate among GP of 78% or lower, i.e. a relative risk reduction of 13% at 80% power and alpha of 0.05.

4. Association specialist care with recurrent vascular event rates.

Cox regression analysis with the projected sample size of 400, (assuming 30% receive specialist treatment, a recruitment period of 3 years, follow up period of 1 year, median time to recurrence of 3.5 years), will allow us to detect a hazard ratio of 1.7 or greater for GP care with 80% power at alpha of 0.05.

5. Benchmark rates of recurrent vascular events in this study to rates internationally (OXVASC and Auckland).

Comparison of proportions will be done using a chi square with alpha set at 0.05.

6. Association of processes of care with ABCD2 risk stratum, patient factors and practice factors.

Using Cox regression analysis and gearing the detectable effect size to the outcome with the lowest power, i.e. dichotomous predictors (ABCD2, geography), the sample size of 400 will allow us to detect a HR of 1.3 with 80% power at alpha 0.05 assuming the following time frames: time from event to presentation - 2 days median; time from referral to secondary care - 1 day median; time to secondary care assessment - 6 days median.