# NI Regional Model For TIA Services 2024

# What's New?

Ivan Wiggam, Interim Clinical Lead, NI Stroke Network

16th January 2025

*Age and Ageing* 2001; **30:** 379–381

© 2001, British Geriatrics Society

**COMMENTARY**

# Transient ischaemic attacks: under-reported, over-diagnosed, under-treated

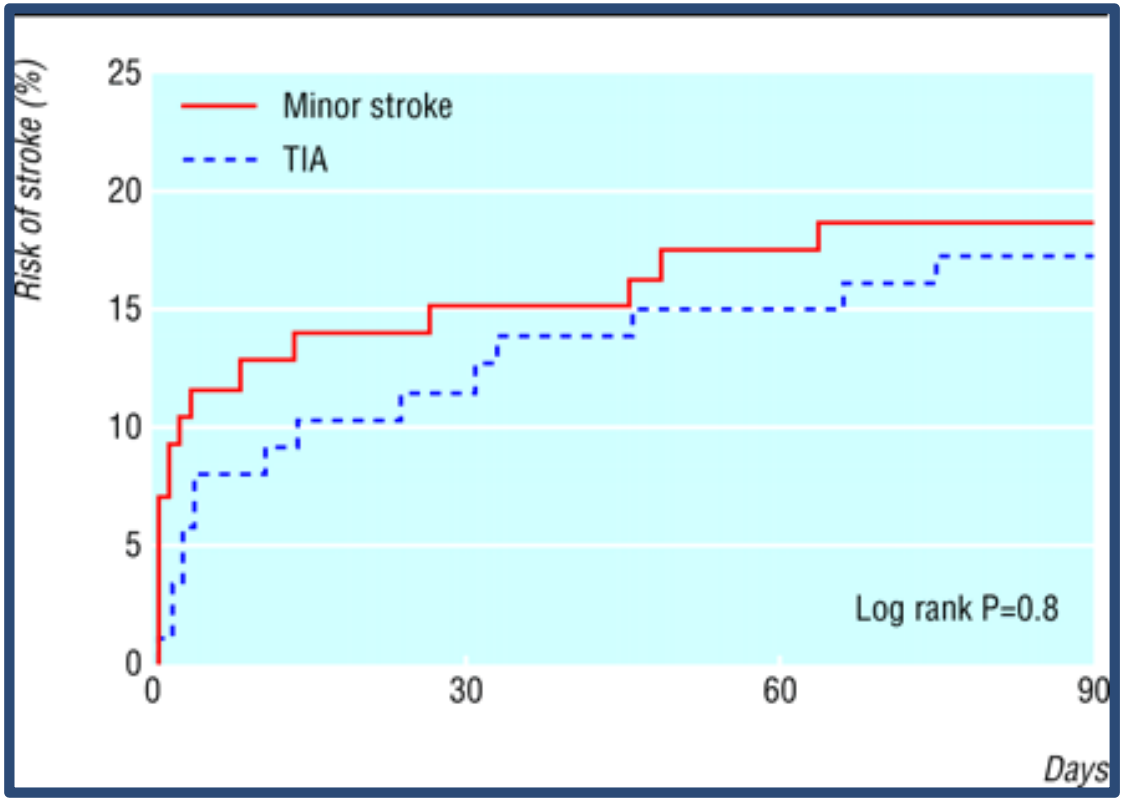
Transient ischaemic attacks (TIAs) are defined as acute episodes of focal loss of cerebral or monocular function due to embolic or thrombotic vascular disease lasting less than 24 h [1].The symptoms are listed in Table 1.

While this concept appears relatively straightforward, up to half of patients labelled with this diagnosis by generalists are reassigned to non-vascular diagnoses following specialist review [2, 3].Furthermore, patients may not bring relevant symptoms to medical attention tests, and is almost always retrospective.In addition, symptoms are usually evanescent, often lasting less than 1 h [7], and many other disorders, such as focal fits, migraine and space-occupying lesions, can cause transient focal neurological symptoms.Inter-observer disagreement is therefore hardly surprising, and even occurs amongst specialists [8].

Consequently, the term is often inappropriately applied as a diagnostic label in patients exhibiting

Age Ageing, 2001 Sep;30(5):379-81

# Cumulative risk of stroke after a transient ischaemic attack (TIA) or minor stroke



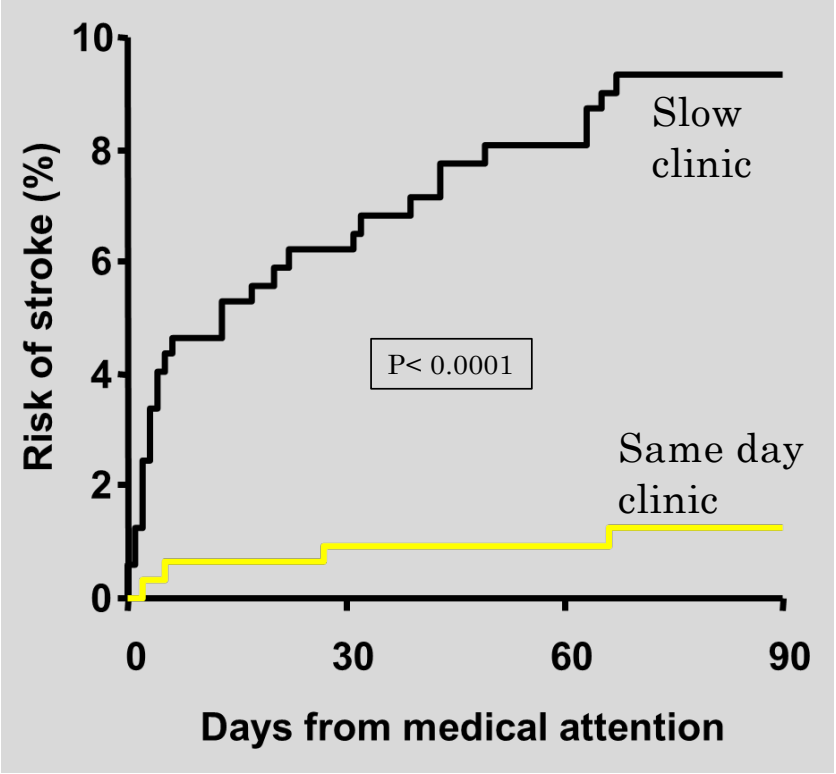

| Time | Risk of Stroke % | |
|---|---|---|
| | Minor stroke | TIA |
| 7d | 11.5% | 8% |
| 30d | 15% | 11.5% |
| 90d | 18.5% | 17.3% |

N= 87 minor stroke, 87 TIA

Oxford Vascular Study, BMJ 2004; 328:326-30

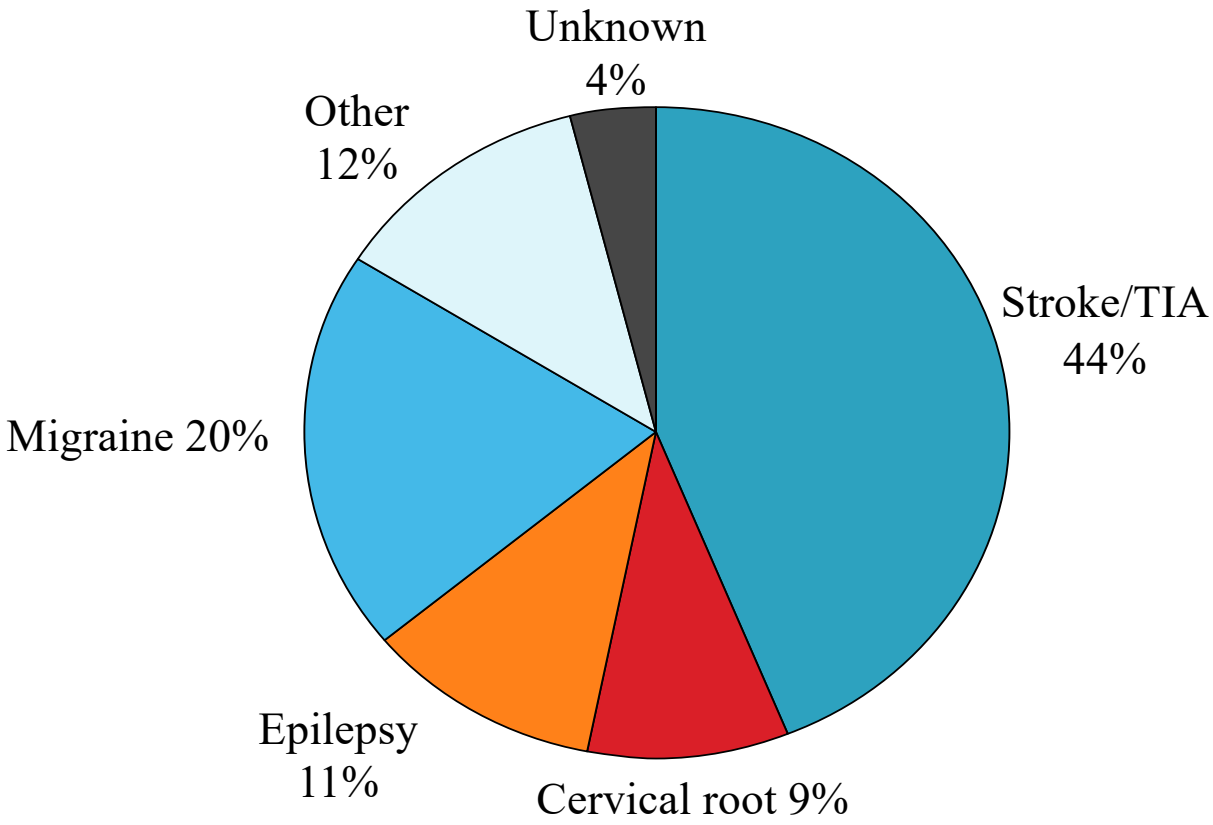
# THE EXPRESS STUDY

- Walk-in same day clinic (weekday)
- If diagnosis of TIA –
  - given aspirin 300mg in the clinic
  - Antiplatelet, statin, BP reduction is SBP >130mmHg
  - Dopplers / CEA if indicated
- 80% reduction in stroke risk, with same day clinic




Lancet 2007; 370:1432-42

# Final diagnoses at RVH TIA clinic (2005)



# ABCD² Score

| | | |
|---|---|---|
| Age | 60 years or older | 1 |
| BP | SBP ≥140 or DBP≥90 | 1 |
| Clinical features | unilateral weakness | 2 |
| | speech disturbance (no weakness) | 1 |
| | other | 0 |
| Duration/Diabetes | ≥60 min | 2 |
| | 10-59 min | 1 |
| | Diabetes | 1 |
| | Maximum | 7 |

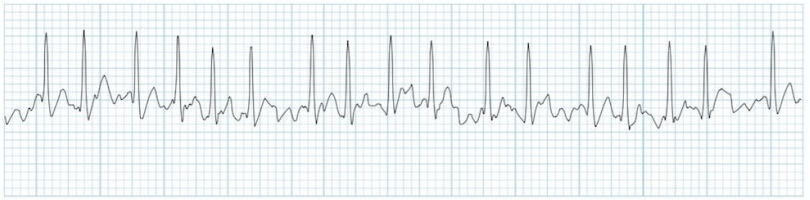
Lancet 2007;369:283-92

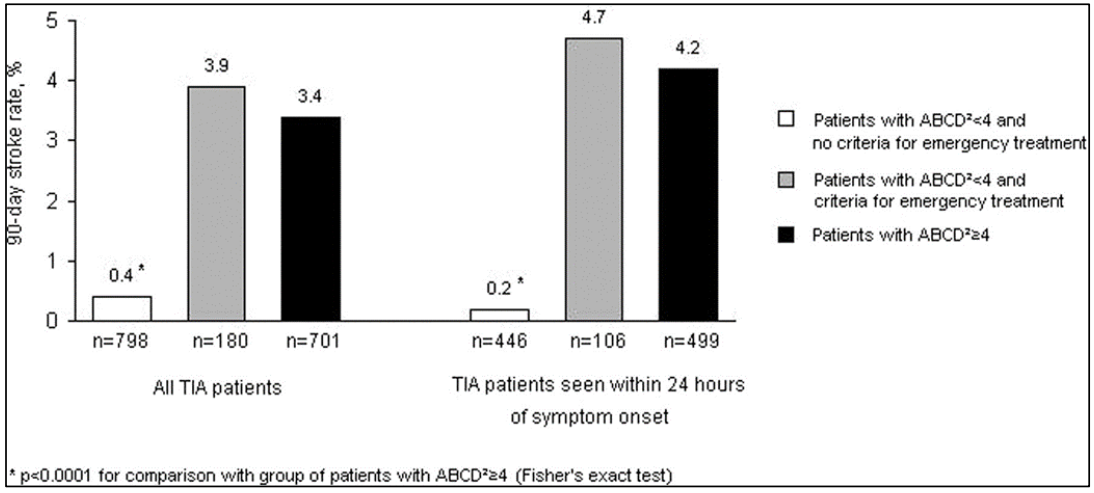
# Risk stratification

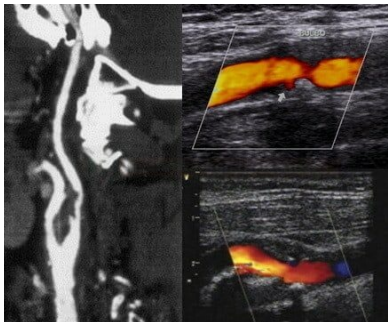
| ABCD$^2$ Score | 7 day Stroke Risk |
|---|---|
| < 4 | 1.2% |
| 4/5 | 5.9% |
| 6/7 | 11.7% |

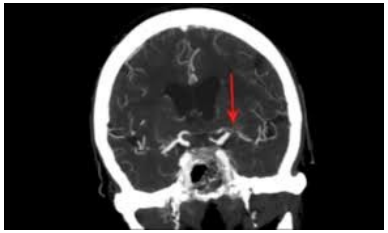
# But not all patients with ABCD² <4 are at low risk……

- About 1/5 of those with low score have wither AF or intra-extra-cranial vascular stenosis >50%
- Also at high risk







Amarenco et al. Stroke, 2011, 43 (3): 863-865

# INITIAL MANAGEMENT OF SUSPECTED AND CONFIRMED TIA (2019)

1.1.4

Offer aspirin (300 mg daily), unless contraindicated, to people who have had a suspected TIA, to be started immediately. [2019]

1.1.5

Refer immediately people who have had a suspected TIA for specialist assessment and investigation, to be seen within 24 hours of onset of symptoms. [2019]

1.1.6

Do not use scoring systems, such as ABCD2, to assess risk of subsequent stroke or to inform urgency of referral for people who have had a suspected or confirmed TIA. [2019]

1.1.7

Offer secondary prevention, in addition to aspirin, as soon as possible after the diagnosis of TIA is confirmed. [2008, amended 2019]

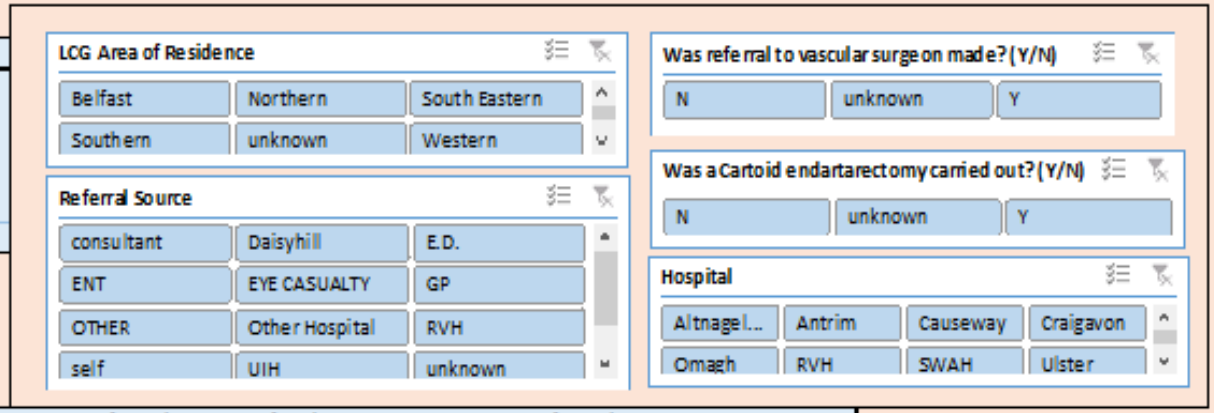
# 2019 TIA Audit in Northern Ireland




1. Issues with participation and data completeness
2. All 5 Trusts provide a 5-day/week ambulatory service
3. 39% of patients with a suspected TIA underwent specialist assessment within 24-hours following receipt of referral
4. 48% of patients were referred by their GP
5. 33% of patients referred with suspected TIA were not prescribed an anti-platelet prior to TIA clinic attendance.
6. 41% of patients assessed were diagnosed with TIA.

# MONITORING 2021

| Row Labels | Count of H&C Number |
|---|---|
| Belfast | 134 |
| Northern | 400 |
| South Eastern | 445 |
| Southern | 1422 |
| Western | 187 |
| Grand Total | 2588 |




| Row Labels | Average of Days between TIA & Referral | Average of Days between Referral & Assessment | Average of Days between TIA & Assessment |
|---|---|---|---|
| Belfast | 6 | 3 | 9 |
| Northern | 2 | 1 | 3 |
| South Eastern | 3 | 0 | 4 |
| Southern | 3 | 1 | 12 |
| Western | 8 | 4 | 12 |
| Grand Total | 4 | 1 | 5 |






## The Way Forward

Following consideration of the response to the Reshaping Stroke Care consultation and emerging evidence on stroke treatments, this paper sets out the way forward in respect of six priority areas:

- Priority 1: Prevention
- Priority 2: Thrombolysis
- Priority 3: Thrombectomy
- Priority 4: Rehabilitation and Long Term Support
- Priority 5: Hyperacute Stroke Care
- Priority 6: Workforce

**Priority 1 – Opportunities**

- Regional standardisation of TIA services to reduce risk of stroke
- Monitoring to identify areas for service improvement

# REGIONAL MODEL FOR TIA SERVICES IN NORTHERN IRELAND

| | | | | | |
|---|---|---|---|---|---|
| **Version Number:** | 1.0 | | | | |
| **Type of Update/Status:** | New document | | | | |
| **Division/Department:** | ED/ GP/ Stroke Services | | | | |
| **Author / Originator and Job Title:** | Dr Ivan Wiggam<br>NI Stroke Network Interim Clinical Lead | | | | |
| **Replaces:** | New procedure | | | | |
| **Description of amendments:** | See below | | | | |
| **Approved by:** | NI Stroke Network Steering Group | | | | |
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| **Issue Date:** | 24th May 2024 | | | | |
| **Review Date from Date of Approval:** | **1 Year**<br>**X** | **2 Years**<br>☐ | **3 Years**<br>☐ | **4 Years**<br>☐ | **5 Years**<br>☐ |

| Version Control Sheet | | | |
|---|---|---|---|
| This must be completed and form part of the document appendices each time the document is updated and approved | | | |
| **Date dd/mm/yy** | **Version** | **Author** | **Reason for changes** |
| 14/12/23 | 1 | Dr Ivan Wiggam | New document |

| Consultation with Stakeholders | |
|---|---|
| **Name** | **Designation** |
| See Appendix C | NI Stroke Network TIA Task & Finish Group |
| | NI Stroke Network Clinical Leads |

# Team effort!

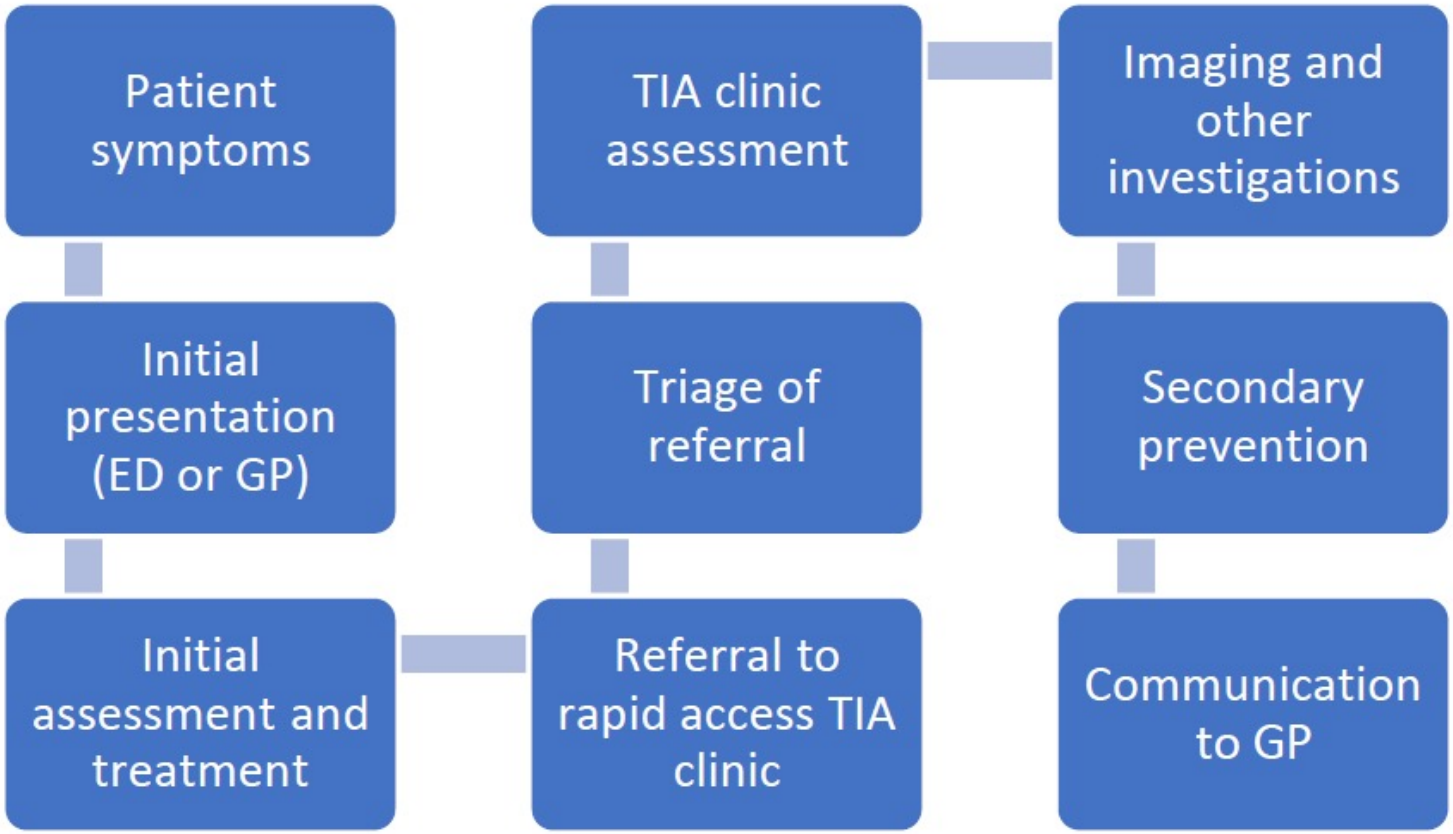
Membership of the TIA Model Task & Finish Group who developed this is as follows:

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| Dr Andrew McKelvey | NHSCT | Speciality Doctor |
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| Jenny Taylor | SPPG | Stroke Network Project Manager |
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The group acknowledge and thank the following for helpful comments on relevant sections of the document:

| Name | Organisation | Role |
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| Dr Peter Flynn | BHSCT | Consultant Neuroradiologist |
| Dr Emma Greenwood | BHSCT | Consultant ED Physician |
| Dr Michael McKenna | SPPG | GP |
| Dr Donagh MacDonagh | SPPG | Primary Care eHealth Clinical Advisor |

# TIA ASSESSMENT PATHWAY



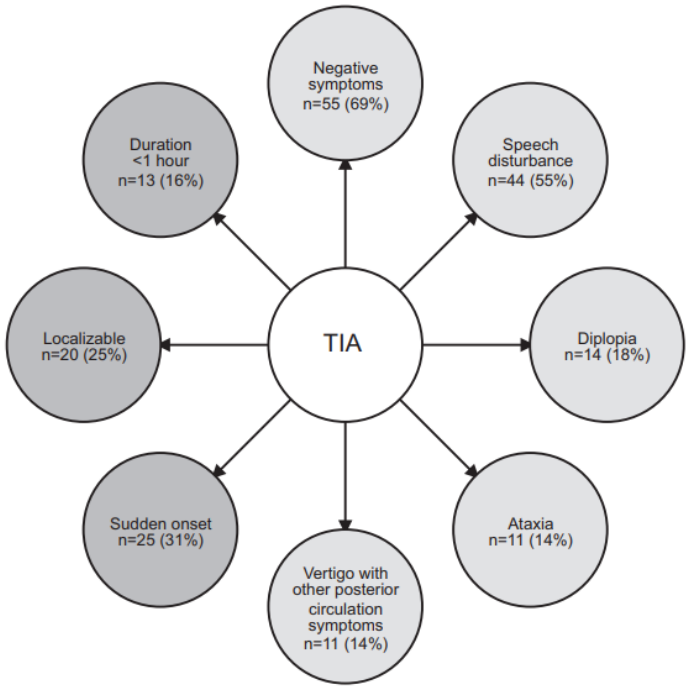
# PATIENT SYMPTOMS

- FAST campaign has been used to raise public awareness - need to seek urgent medical advice, even if symptoms resolve
- NHS website lists other potential symptoms…..
  - complete paralysis of one side of the body
  - sudden vision loss, blurred vision or double vision
  - vertigo
  - being sick
  - dizziness
  - confusion
  - difficulty understanding what others are saying
  - problems with balance and co-ordination
  - difficulty swallowing (dysphagia)

  …….However, there may be other causes for these symptoms.

# Clinician assessment – TIA likely

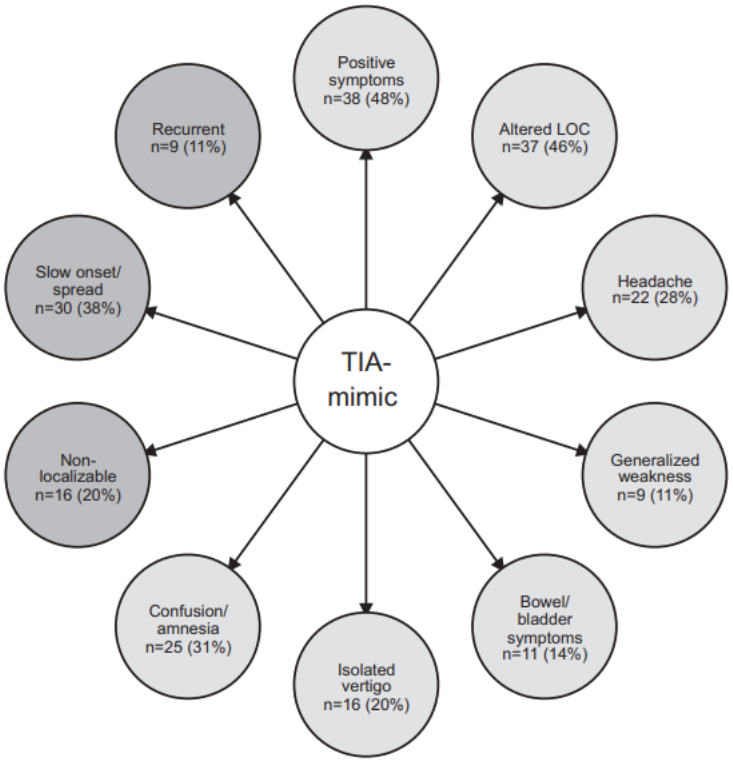
**Figure 2.** Commonly identified clinical features suggestive of TIA. Symptoms are depicted in light gray bubbles and qualitative features are depicted in dark gray bubbles. N = number of publications making reference to each differentiating feature. The percentage of included studies is shown in parentheses. TIA: transient ischemic attack.




International Journal of Stroke, 2019, Vol. 14(2) 115–124

# Clinician Assessment - TIA unlikely

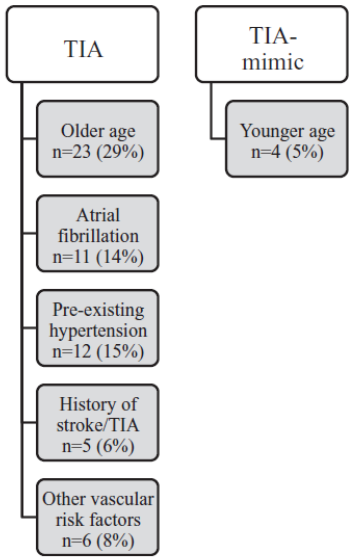
**Figure 3.** Commonly identified clinical features suggestive of TIA–mimic. Symptoms are depicted in light gray bubbles and qualitative features are depicted in dark gray bubbles. N = number of publications making reference to each differentiating feature. The percentage of included studies is shown in parentheses. TIA: transient ischemic attack.




International Journal of Stroke, 2019, Vol. 14(2) 115–124

# Clinician Assessment – Risk factors

**Figure 4.** Risk factors and demographic features commonly identified as predictors of TIA diagnosis and TIA–mimic diagnosis. N = number of publications making reference to each risk factor. The percentage of included studies is shown in parentheses. TIA: transient ischemic attack.




International Journal of Stroke, 2019, Vol. 14(2) 115–124

# TIA Symptoms

## Classic

- Motor weakness
- Dysphasia
- Hemianopia
- Monocular visual loss

## Non-consensus

- Isolated diplopia
- Dysathria
- Vertigo
- Ataxia
- Sensory loss

But not including

- Loss of consciousness
- Headache
- Generalised weakness
- Bowel/bladder problems
- Confusion / amnesia

# Diagnosis of non-consensus transient ischaemic attacks with focal, negative, and non-progressive symptoms: population-based validation by investigation and prognosis

Maria A Tuna, Peter M Rothwell, on behalf of the Oxford Vascular Study

Lancet 2021; 397: 902–12

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## Summary

**Background** Diagnosis of transient ischaemic attacks (TIAs) can be difficult. There is consensus on classic symptoms (eg, motor weakness, dysphasia, hemianopia, monocular visual loss) but no consensus on several monosymptomatic events with sudden-onset, non-progressive, focal negative symptoms (eg, isolated diplopia, dysarthria, vertigo, ataxia, sensory loss, and bilateral visual disturbance), with much variation in investigation and treatment.

**Methods** We prospectively ascertained and investigated all strokes and sudden onset transient neurological symptoms in a population of 92 728 people (no age restrictions) from Oxfordshire, UK, who sought medical attention at nine primary care practices or at the John Radcliffe Hospital, Oxford, UK (Oxford Vascular Study). Patients classified at baseline with minor ischaemic stroke (National Institutes of Health Stroke Score <5), classic TIA, or non-consensus TIA were treated according to secondary prevention guidelines. Risks of stroke (7-day, 90-day, and 10-year risks) and risks of all major vascular events (from the time of first event, and from the time of seeking medical attention) were established by face-to-face follow-up visits and were compared with the risk expected from age and sex-specific stroke incidence in the underlying study population.

**Findings** Between April 1, 2002, and March 31, 2018, 2878 patients were identified with minor ischaemic stroke (n=1287), classic TIA (n=1021), or non-consensus TIA (n=570). Follow-up was to Oct 1, 2018 (median 5·2 [IQR 2·6–9·2] years). 577 first recurrent strokes after the index event occurred during 17 009 person-years of follow-up. 90-day stroke risk from time of the index event after a non-consensus TIA was similar to that after classic TIA (10·6% [95% CI 7·8–12·9] *vs* 11·6% [95% CI 9·6–13·6]; hazard ratio 0·87, 95% CI 0·64–1·19; p=0·43), and higher than after amaurosis fugax (4·3% [95% CI 0·6–8·0]; p=0·042). However, patients with non-consensus TIA were less likely to seek medical attention on the day of the event than were those with classic TIA (336 of 570 [59%] *vs* 768 of 1021 [75%]; odds ratio [OR] 0·47, 95% CI 0·38–0·59; p<0·0001) and were more likely to have recurrent strokes before seeking attention (45 of 570 [8%] *vs* 47 of 1021 [5%]; OR 1·77, 95% CI 1·16–2·71; p=0·007). After excluding such recurrent strokes, 7-day stroke risk after seeking attention for non-consensus TIA (2·9% [95% CI 1·5–4·3]) was still considerably higher than the expected background risk (relative risk [RR] 203, 95% CI 113–334), particularly if the patient sought attention on the day of the index event (5·0% [2·1–7·9]; RR 300, 137–569). 10-year risk of all major vascular events was similar for non-consensus and classic TIAs (27·1% [95% CI 22·8–31·4] *vs* 30·9% [27·2–33·7]; p=0·12). Baseline prevalence of atrial fibrillation, patent foramen ovale, and arterial stenoses were also similar for non-consensus TIA and classic TIA, although stenoses in the posterior circulation were more frequent with non-consensus TIA (OR 2·21, 95% CI 1·59–3·08; p<0·0001).

**Interpretation** Patients with non-consensus TIA are at high early and long-term risk of stroke and have cardiovascular pathological findings on investigation similar to those of classic TIA. Designation of non-consensus TIAs as definite cerebrovascular events will increase overall TIA diagnoses by about 50%.

**Funding** Wellcome Trust, National Institute for Health Research Oxford Biomedical Research Centre, Wolfson Foundation, Masonic Charitable Foundation, and British Heart Foundation.

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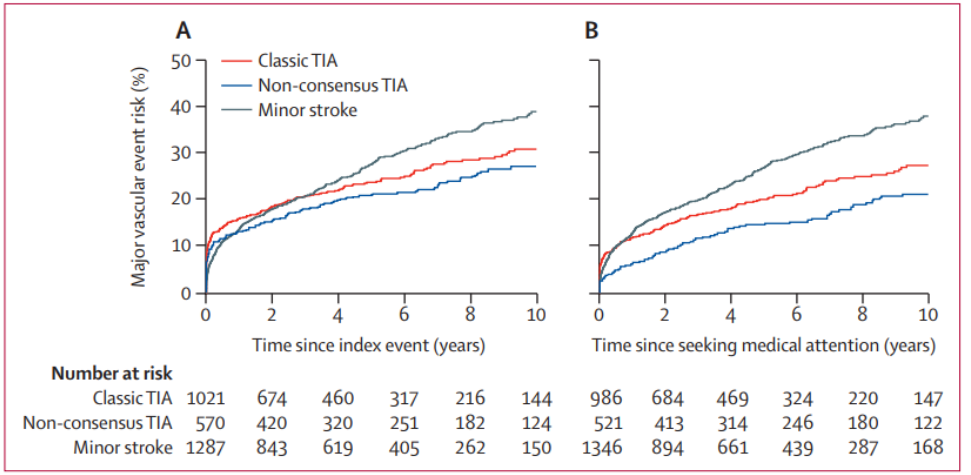



***Figure 4:*** **10-year risk of all major vascular events in patients with non-consensus TIA, classic TIA, and minor ischaemic stroke**
Plots show 10-year risk from time of index event (A) and from time of seeking medical attention (B). TIA=transient ischaemic attack.

High vascular risk in patients with non-consensus symptoms which are:

- Focal
- Negative
- Non-progressive

# REFERRAL TO RAPID ACCESS TIA CLINIC

- Referrals from ED - generic Trust TIA email or ENCOMPASS
- Referrals from GPs should be made using CCG



- TIA referral inboxes and CCG referrals should be screened at least twice per day for new referrals.
- Service remains Mon-Fri 9am – 5pm …..consider admission

# TRIAGE OF REFERRALS

| Triage Group | Description | Response |
|---|---|---|
| 1 | Very high-risk TIA (i.e. suspected stroke admitted to HASU, subsequently found to be TIA) | Immediate admission 24/7 |
| 2 | Probable/possible TIA | See within 24 hours at TIA clinic (or admit) |
| 3 | Unlikely TIA needing assessment | See within 1 week |
| 4 | Needs other specialty | Alternative OP clinic |
| 5 | Clear alternative diagnosis | Immediate diagnosis, advice, prescription (if needed). |

*Table 1: GIRFT - South East Coast TIA Triage categories*

- all patients with suspected TIA should be assessed within 24 hours, regardless of risk assessment using ABCD2 score

# TIA CLINIC ASSESSMENT

- Clinician (medical or nursing) experienced in the diagnosis of TIA and common mimics.
- The history may be taken virtually or in person.
- The diagnosis may remain uncertain!



- What investigations can you expect?

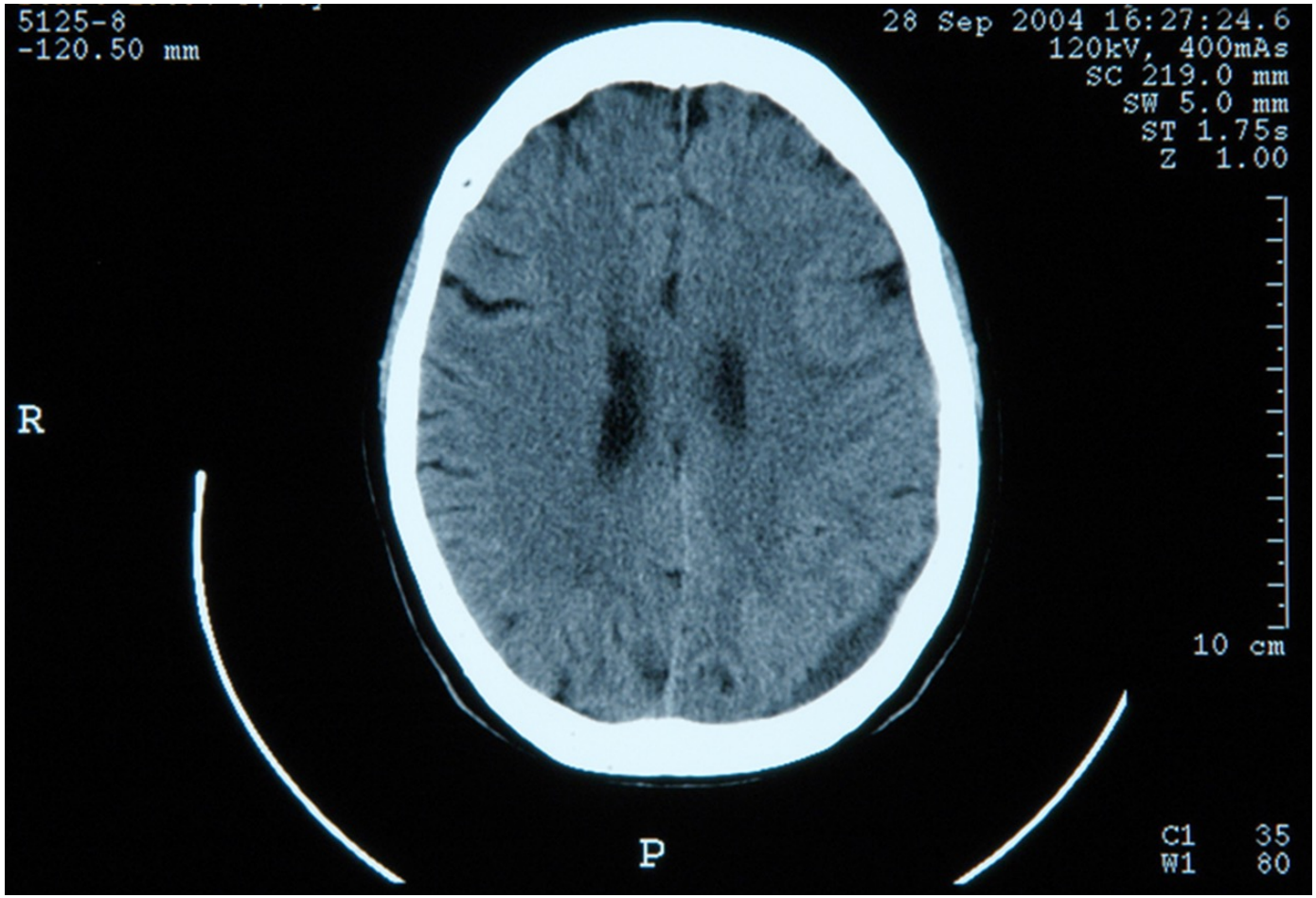
# Brain Scan

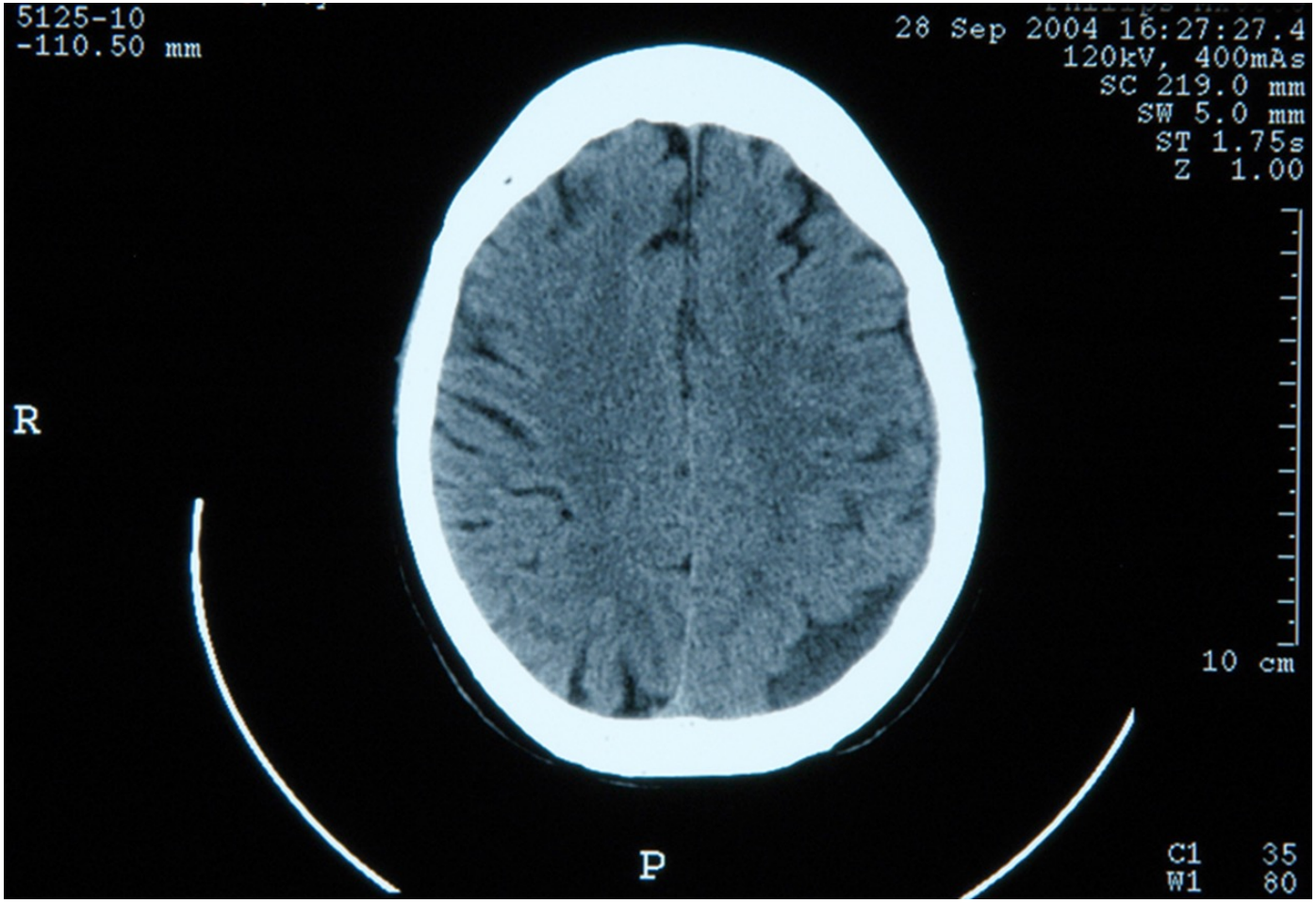
- Don't promise a scan – not everyone needs one!
- Scan is needed if
  - Patient on anticoagulation – urgent scan
  - Any suspicion of ICH (can cause transient symptoms)
  - Patient needs anticoagulation eg AF
  - DAPT being prescribed
  - Recurrent events
  - Diagnosis uncertain



# EXAMPLE

- 76 year old lady
- Recurrent episodes of right sided tingling despite aspirin….

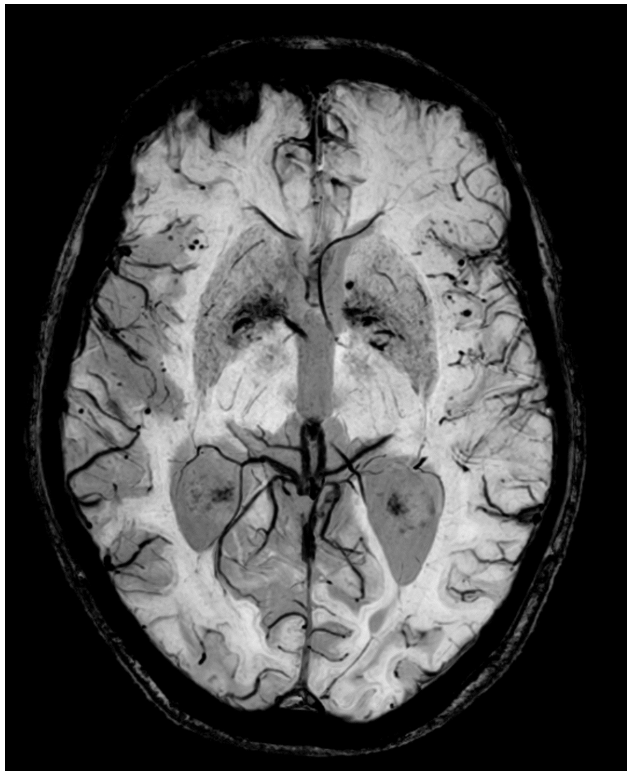

5125-8
-120.50 mm
28 Sep 2004 16:27:24.6
120kV, 400mAs
SC 219.0 mm
SW 5.0 mm
ST 1.75s
Z 1.00
R
10 cm
P
C1 35
W1 80

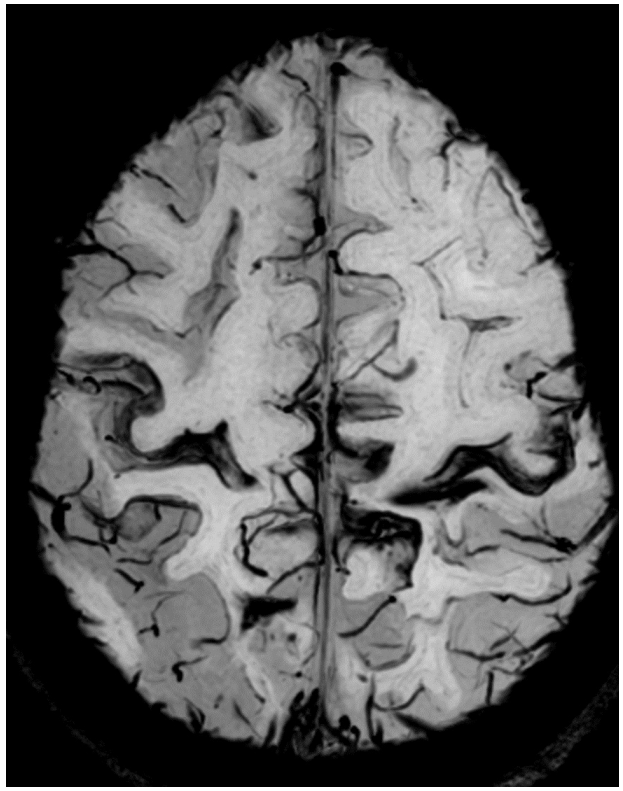

5125-10
-110.50 mm
28 Sep 2004 16:27:27.4
120kV, 400mAs
SC 219.0 mm
SW 5.0 mm
ST 1.75s
Z 1.00
R
10 cm
P
C1 35
W1 80

## EXAMPLE

- 80 year old lady with recurrent episodes right hand pins & needles and slurred speech
- Memory loss

# MRI WITH SWI





Stroke

CLINICAL AND POPULATION SCIENCES

# Clinical Diagnosis and Magnetic Resonance Imaging in Patients With Transient and Minor Neurological Symptoms: A Prospective Cohort Study

William N. Whiteley, PhD; Allan MacRaild, BA, BSc; Ying Wang, MD; Martin Dennis, MD; Rustam Al-Shahi Salman, PhD; Alasdair Gray, MD; Matthew J. Reed, MD; Catriona Graham, MSc; Joanna M. Wardlaw, MD

**BACKGROUND:** The utility of magnetic resonance imaging (MRI) brain in patients with transient or minor neurological symptoms is uncertain. We sought to determine the proportion of participants with transient or minor neurological symptoms who had MRI evidence of acute ischemia at different clinical probabilities of transient ischemic attack (TIA) or minor stroke.

**METHODS:** Cohort of participants with transient or minor neurological symptoms from emergency and outpatient settings. Clinicians at different levels of training gave each participant a diagnostic probability (probable when TIA/stroke was the most likely differential diagnosis; possible when TIA/stroke was not the most likely differential diagnosis; or uncertain when diagnostic probability could not be given) before 1.5 or 3T brain MRI ≤5 days from onset. Post hoc, each clinical syndrome was defined blind to MRI findings as National Institute of Neurological Disorders and Stroke criteria TIA/stroke; International Headache Society criteria migraine aura; non-TIA focal symptoms; or nonfocal symptoms. MRI evidence of acute ischemia was defined by 2 reads of MRI. Stroke was ascertained for at least 90 days and up to 18 months after recruitment.

**RESULTS:** Two hundred seventy-two participated (47% female, mean age 60, SD 14), 58% with MRI ≤2 days of onset. Most (92%) reported focal symptoms. MR evidence of acute ischemia was found, for stroke/TIA clinical probabilities of probable 23 out of 75 (31% [95% CI, 21%–42%]); possible 26 out of 151 (17% [12%–24%]); and uncertain 9 out of 43, (20% [10%–36%]). MRI evidence of acute ischemia was found in National Institute of Neurological Disorders and Stroke criteria TIA/stroke 40 out of 95 (42% [32%–53%]); migraine aura 4 out of 38 (11% [3%–25%]); non-TIA focal symptoms 16 out of 99 (16% [10%–25%]); and no focal features 1 out of 29 (3% [0%–18%]). After MRI, a further 14 (5% [95% CI, 3–8]) would be treated with an antiplatelet drug compared with treatment plan before MRI. By 18 months, a new ischemic stroke occurred in 9 out of 61 (18%) patients with MRI evidence of acute ischemia and 2 out of 211 (1%) without (age-adjusted hazard ratio, 13 [95% CI, 3–62]; $P<0.0001$).

**CONCLUSIONS:** MRI evidence of acute brain ischemia was found in about 1 in 6 transient or minor neurological symptoms patients with a nonstroke/TIA initial diagnosis or uncertain diagnosis. Methods to determine the clinical and cost-effectiveness of MRI are needed in this population.

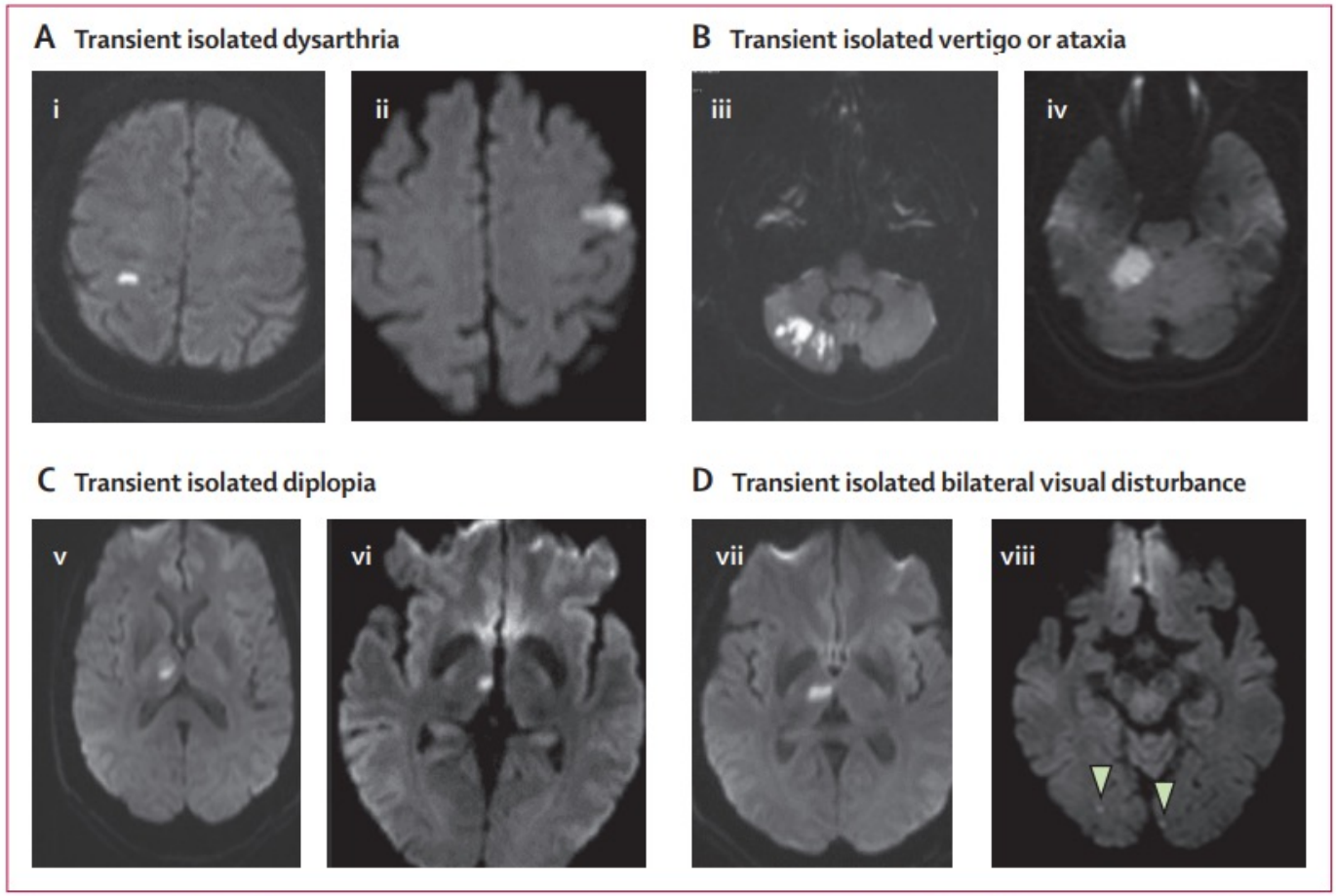
**GRAPHIC ABSTRACT:** A graphic abstract is available for this article.

**Key Words:** diagnosis, differential ■ ischemia ■ magnetic resonance imaging ■ transient ischemic attack ■ tomography

Downloaded from http://ahajournals.org by on January 14, 2025

| MRI evidence of acute ischaemia | |
|---|---|
| Clinical Diagnosis | MRI +ve |
| Probable TIA | 31% |
| Possible TIA | 17% |
| Uncertain | 20% |

Stroke 2022; 53(11)3419-3428




Lancet 2021; 397: 902–12

| Clinical Scenario | Modality of Imaging | Timing of Imaging request |
|---|---|---|
| History of AF or current AF and not on warfarin or DOAC | CT | In Emergency Department |
| Patient with prosthetic heart valves and not anticoagulated / subtherapeutic INR | CT | In Emergency Department |
| Patient on warfarin/DOAC or known bleeding disorder | CT | In Emergency Department |
| ≥ 2 events in one week | CT | In Emergency Department |
| Patient with neck pain/headache and TIA | CT and CTA (to exclude dissection) | In Emergency Department |
| Patient with confirmed TIA (based on clinical assessment) who will receive DAPT | CT | Either in ED (after discussion with stroke team) or at TIA clinic |
| Patient in whom the diagnosis or location of ischaemia is uncertain | MRI | At TIA clinic (on day of attendance) |
| Older patient for whom there is clinical suspicion of amyloid spells | MRI (to include SWI) | At TIA clinic (on day of attendance) |
| Patient presenting more than 7 days after symptoms and exclusion of haemorrhage is required | MRI (to include SWI) | At TIA clinic (on day of attendance) |

# Other investigations to assist rapid diagnosis & Management



## Vascular imaging

- If carotid territory, but useful for all
- Increasingly *CTA used (dopplers for cervical carotids)

## Cardiac investigations

- ECG (should already be done)
- 72h monitor
- ECHO if cardiac history / signs / abnormal ECG



## Bloods (should already be done)

- Routines
- Lipids, HbA1c

*Coutts et al. CT/CT angiography and MRI findings predict recurrent stroke after transient ischaemic attack and minor stroke: results of the prospective CATCH study. Stroke 2012:43(4):1013-7

# Usefulness of CTA – example

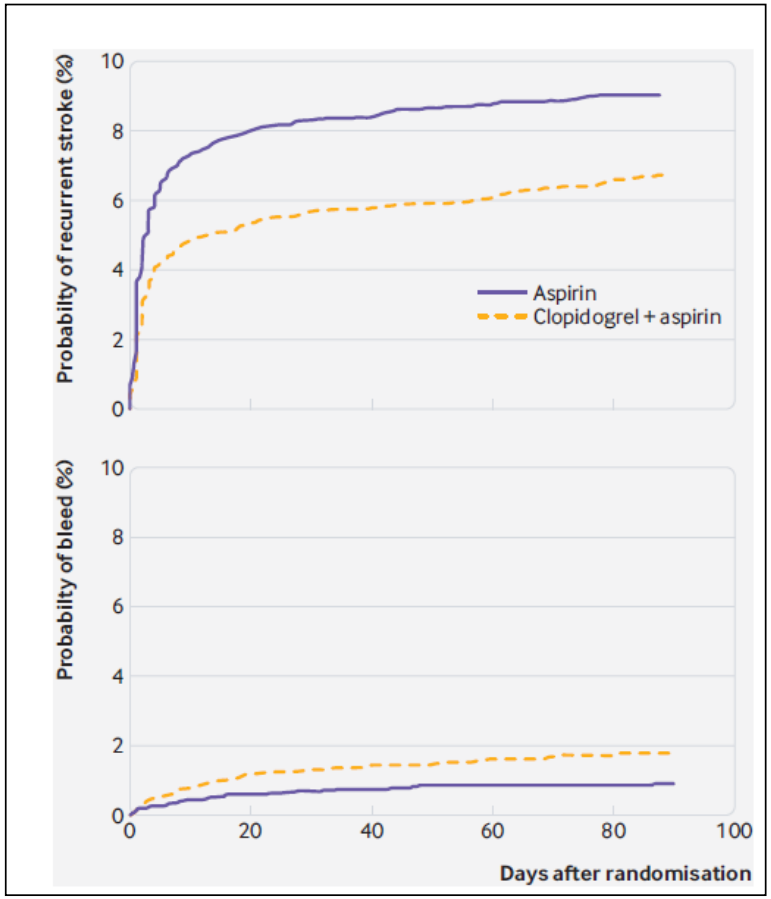
- Patient with posterior circulation minor stroke



- Free-floating thrombus in left VA
- Right VA missing

# Antiplatelet therapy

# Clopidogrel plus aspirin versus aspirin alone after minor stroke and high risk TIA – meta-analysis of CHANCE, FASTER and POINT




Dual antiplatelet therapy with clopidogrel and aspirin given within 24 hours after high risk TIA or minor ischaemic stroke reduces the risk of subsequent stroke by about 2%, with few serious adverse consequences. Discontinuation of dual antiplatelet therapy as early as 10 days, and no later than 21 days, after initiation is likely to maximise its net benefit.

BMJ 2018; 363:k5108

# Ticagrelor + Aspirin v Aspirin Alone in Acute Ischemic Stroke (NIHSS 5 or less) or high-risk TIA

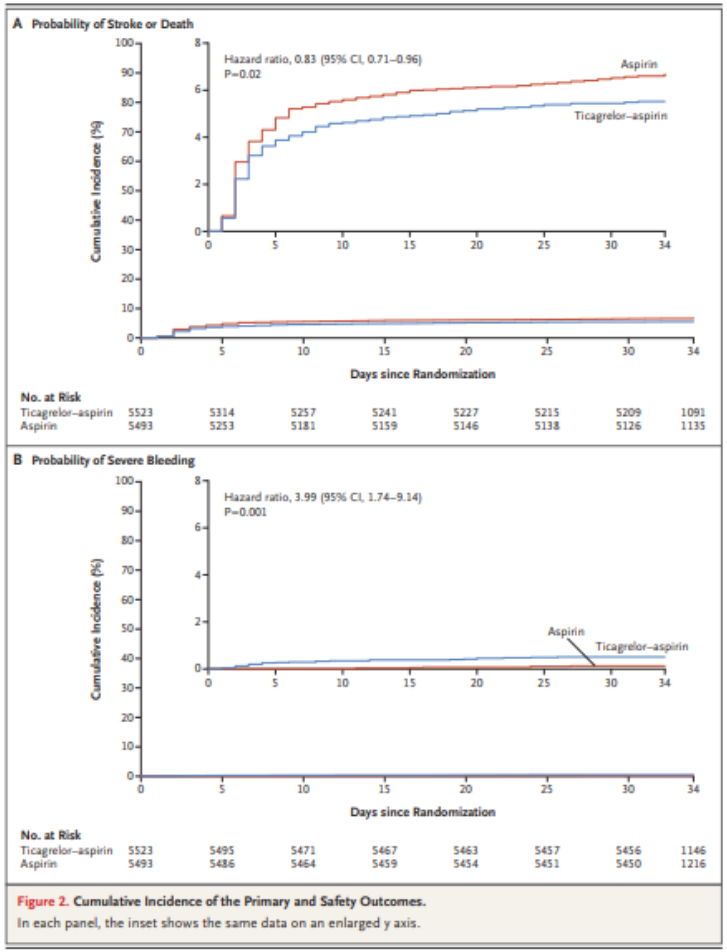



Figure 2. Cumulative Incidence of the Primary and Safety Outcomes.
In each panel, the inset shows the same data on an enlarged y axis.

THALES trial
N Engl J Med 2020;383:207-17

# ANTIPLATELET THERAPY

- Aspirin 300 mg at time of referral (unless contraindicated)
- DAPT when diagnosis confirmed (evidence for high risk TIA, National Clinical Guideline advises for all)
    a) Usually: clopidogrel plus aspirin for 3 weeks, then lifelong clopidogrel (aspirin may be considered as alternative)
    b) Alternative: ticagrelor (initial dose 180 mg followed by 90 mg twice daily) plus aspirin (300 mg followed by 75 mg daily for 30 days)

Note
1. PPI (lansoprazole also prescribed)
2. If intracranial stenosis, or other high risk situation, DAPT may be for 3 months or longer

# Other secondary prevention

- If AF – DOAC instead of antiplatelet
- Statin therapy – usually atorvastatin 20-80mg
- Antihypertensive therapy (as per NICE guidelines). Care should be taken to avoid rapid blood pressure reduction if severe carotid stenosis.
- If symptomatic severe carotid stenosis (50–99%) referral for carotid endarterectomy to be performed as soon as possible **within 7 days** of the onset of symptoms
- Lifestyle advice

# COMMUNICATION TO GP / RECORD OF ASSESSMENT

- Electronic record of the assessment completed within 24 hours, to be available to the patients GP or other practitioners.
- For patients not seen by the TIA service or diverted to another pathway, communication should be sent to the referrer containing advice to stop aspirin(if that is appropriate) and whether driving restriction remains

## 13. MONITORING OF SERVICE

13.1 The aim of routine data collection will be to monitor overall workload of TIA services and monitor responsiveness of the service for those with a final working diagnosis of TIA. It is suggested that monthly data will include:

1 Number of patients referred to TIA service

2 Number of patients assessed at clinic:

   a. face to face

   b. virtual

3 Number of referrals not assessed following triage:

- diverted to TIA service in another Trust
- diverted to other specialty
- Returned to referrer

4 Number with final working diagnosis of TIA (2023 ICD-10 Diagnosis Code G45.0, G45.1, G45.2, G45.3, G45.8 and G45.9. This includes possible, probable and definite) or minor stroke, migraine, peripheral vertigo, syncope/presyncope/postural hypotension, functional neurological symptoms, other diagnosis, uncertain diagnosis.

5 Number with final working diagnosis of TIA (as defined above, including possible, probable and definite) started on aspirin or already on antithrombotic therapy prior to attendance at TIA clinic

6 For patients assessed at TIA service:

- referral source – ED, GP, ophthalmology, other hospital speciality and other (ie none of the above)
- date of symptoms (defined as last symptoms before referral)
- date of referral
- date of TIA clinical assessment
- Did patient get a CT brain – yes/no and date
- Did patients get an MRI - yes/no and date
- Whether referred for CEA and date of CEA if performed

# New GP Referral Form

Changes

- Guidance page at front of form
- ABCD2 score removed from referral information

- Old forms still being used by some GPs

## GP REFERRAL TEMPLATE TO RAPID ACCESS TIA CLINIC

If **ANY** of the questions below are answered **YES**, then please **DO NOT REFER** to outpatient TIA service and consider ALTERNATIVE

| **Feature that suggest alternative diagnosis:** | **If YES, what to do:** |
|---|---|
| Gradual onset of symptoms or non-focal symptoms (e.g. general weakness, amnesia) | *Consider alternative diagnosis and refer as appropriate* |
| Period of reduced consciousness or blackout (syncope) | *TIA is unlikely to present with collapse. Consider referral to cardiology/syncope clinic/COE/medicine.* |
| Feeling of faint, facial pallor or near collapse (presyncope) | *Consider referral to cardiology/syncope clinic/COE/medicine.* |
| Seizures / Migraine | *Consider referral to neurology via appropriate pathway* |
| Episodic Dizziness | *Only refer to TIA service if you have excluded postural hypotension and BPPV (Dix-Hallpike)* |
| Sudden severe headache | *Refer to ED to rule out subarachnoid haemorrhage* |
| | |
| **Features that suggest referral to ED (versus OP TIA clinic) is required** | **If YES, what to do:** |
| Symptoms still present at time of assessment | *Not TIA. If features suggest vascular event, treat as acute stroke (refer to ED)* |
| History of AF/current AF | *Refer to ED - requires urgent CT* |
| On warfarin/DOAC for any reason | *Refer to ED – requires urgent CT* |
| Patient with prosthetic heart valves | *Refer to ED – requires urgent CT* |
| Neck pain/headache and TIA | *Refer to ED – requires urgent CTA* |
| ≥ 2 events in one week | *Refer to ED – requires urgent CT* |

**Immediate Management Checklist for GP**

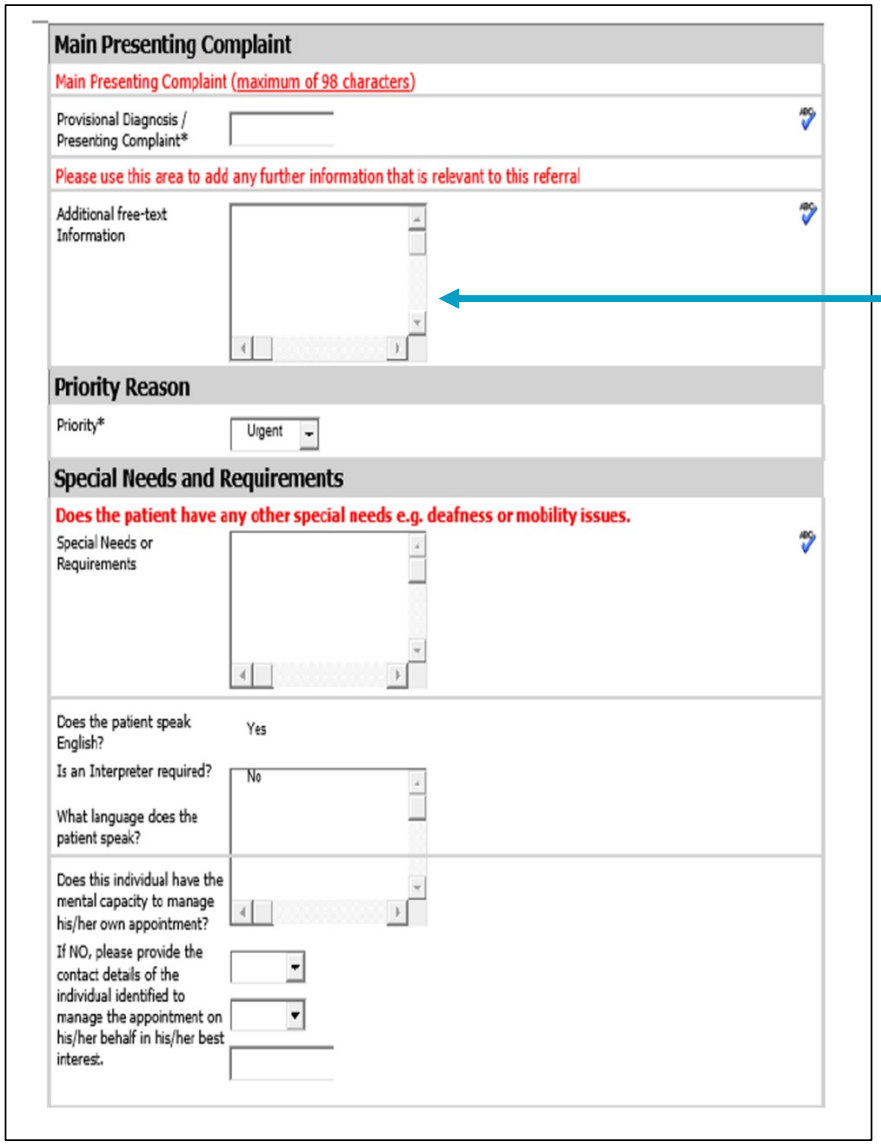
| | |
|---|---|
| **Antiplatelet therapy** | If not already taking antiplatelet therapy (e.g. aspirin 75mg or clopidogrel 75mg) or anticoagulant, prescribe Aspirin 300mg daily until seen at TIA clinic. |
| **AF screen** | Do a 12 lead ECG and give copy to patient. If AF present, refer to ED instead. (If ECG not available, feel pulse to check for AF) |
| **Check bloods** | Please send FBP, ESR, U+E, coagulation screen, LFTs, TFTs, HbA1c* and random Lipids* (should not delay referral; *unless done in last 3 months) |
| **Driving** | **Ask the patient to stop driving** until assessed by the TIA service |
| **Appointment** | Complete CCG form (below) and send immediately to TIA service in local Trust (**relevant to patient's address**) |
| **Patient contact** | Check that patient's phone number on record is correct. Advise patient they will receive a phone call from TIA service (Usually withheld, private or 0800 number). |
| **Advice** | Advise **patient to call 999 if any recurrence** while waiting for TIA assessment |

If **ANY** of the questions below are answered **YES**, then please **DO NOT REFER** to outpatient TIA service and consider ALTERNATIVE

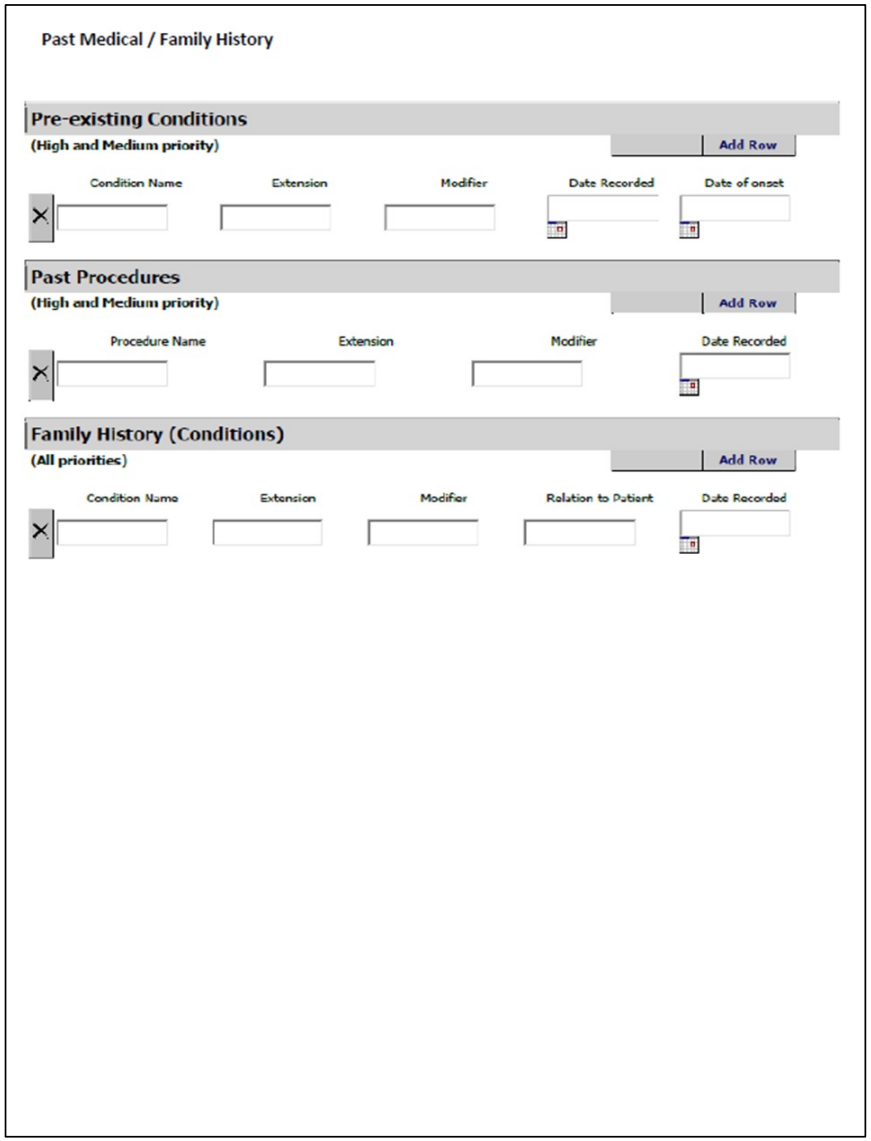
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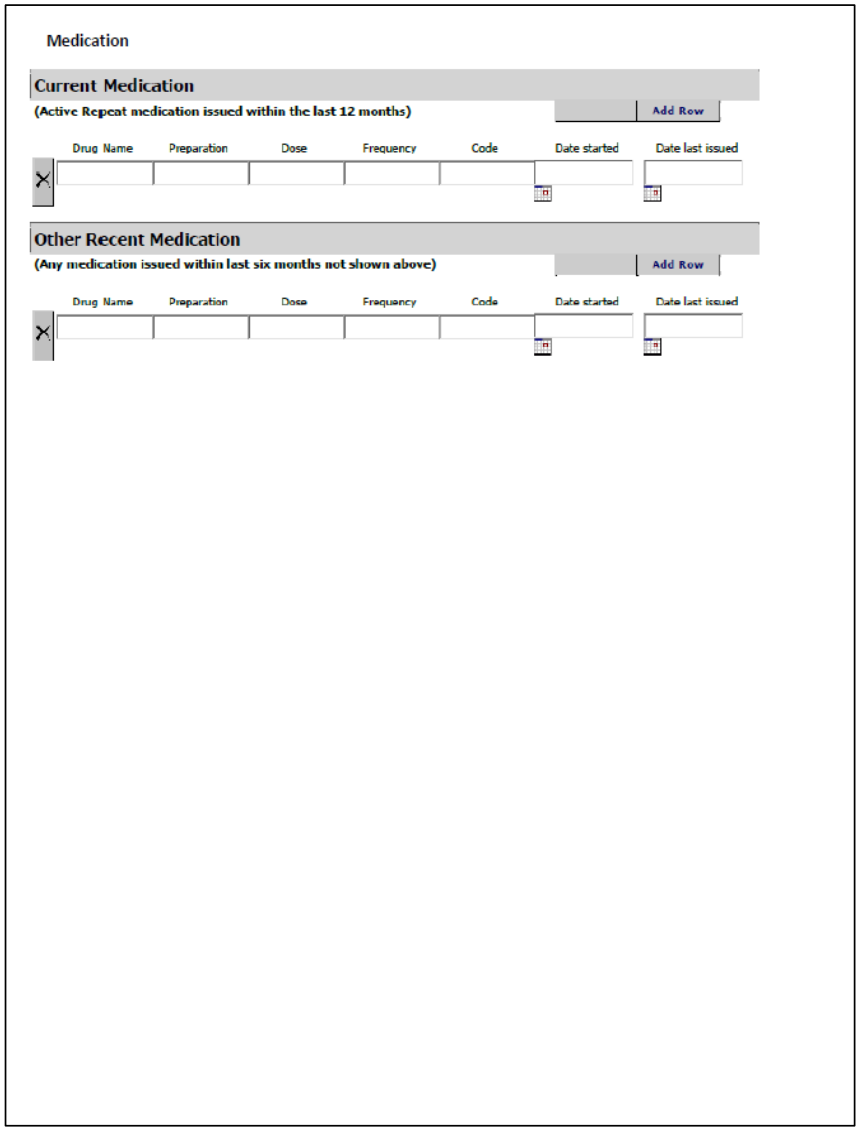
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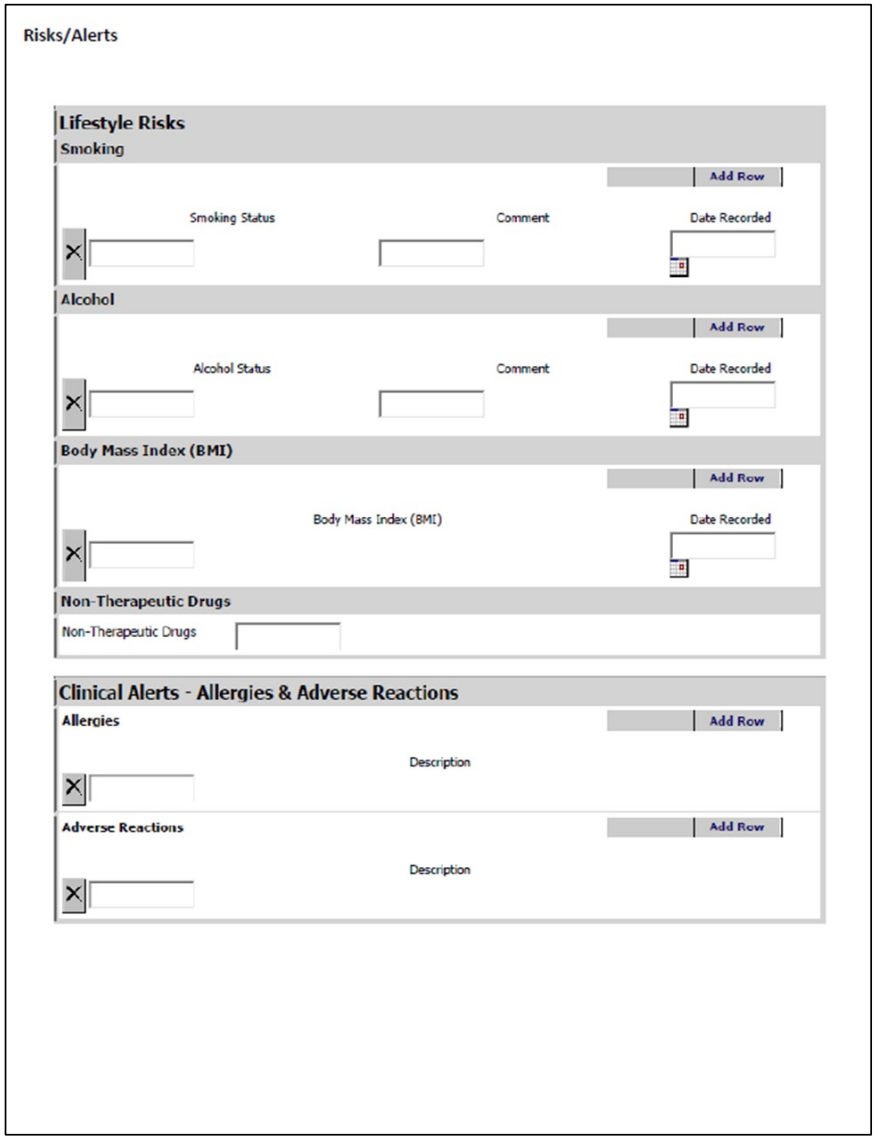
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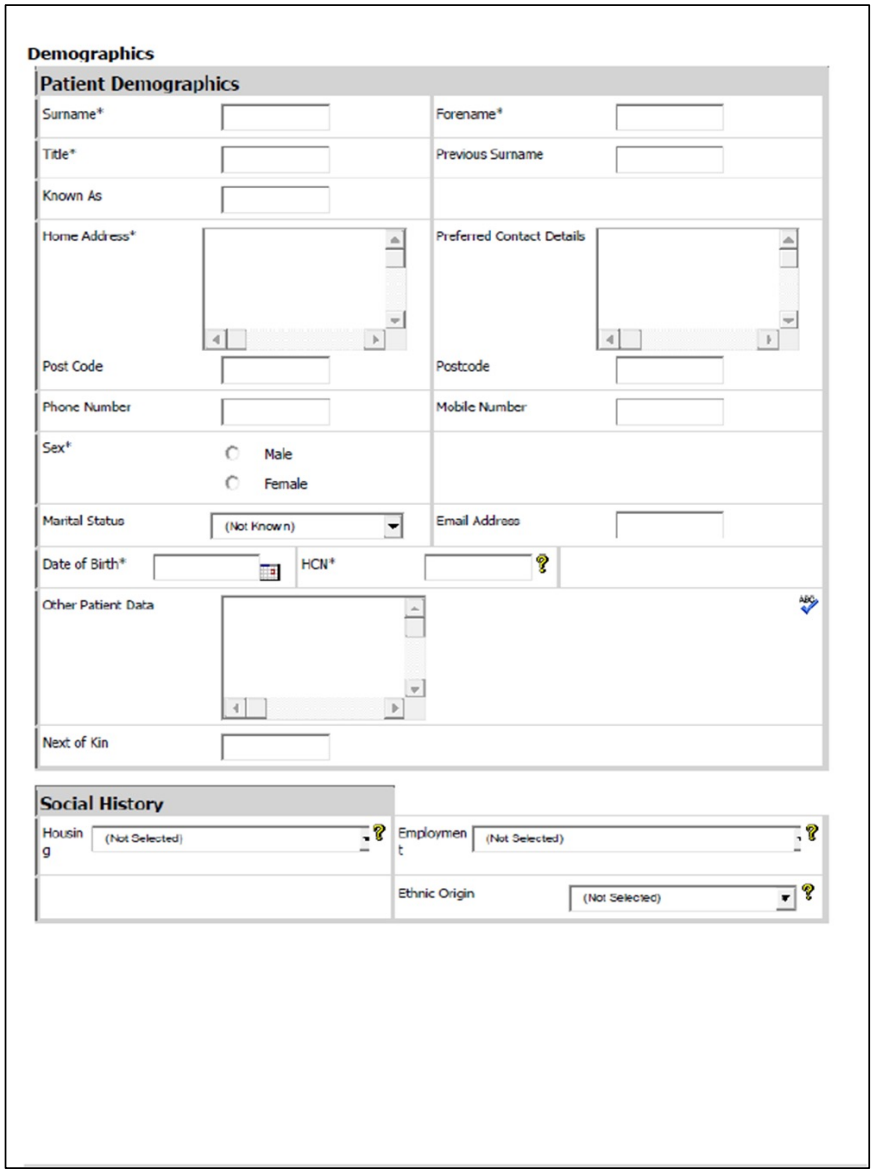


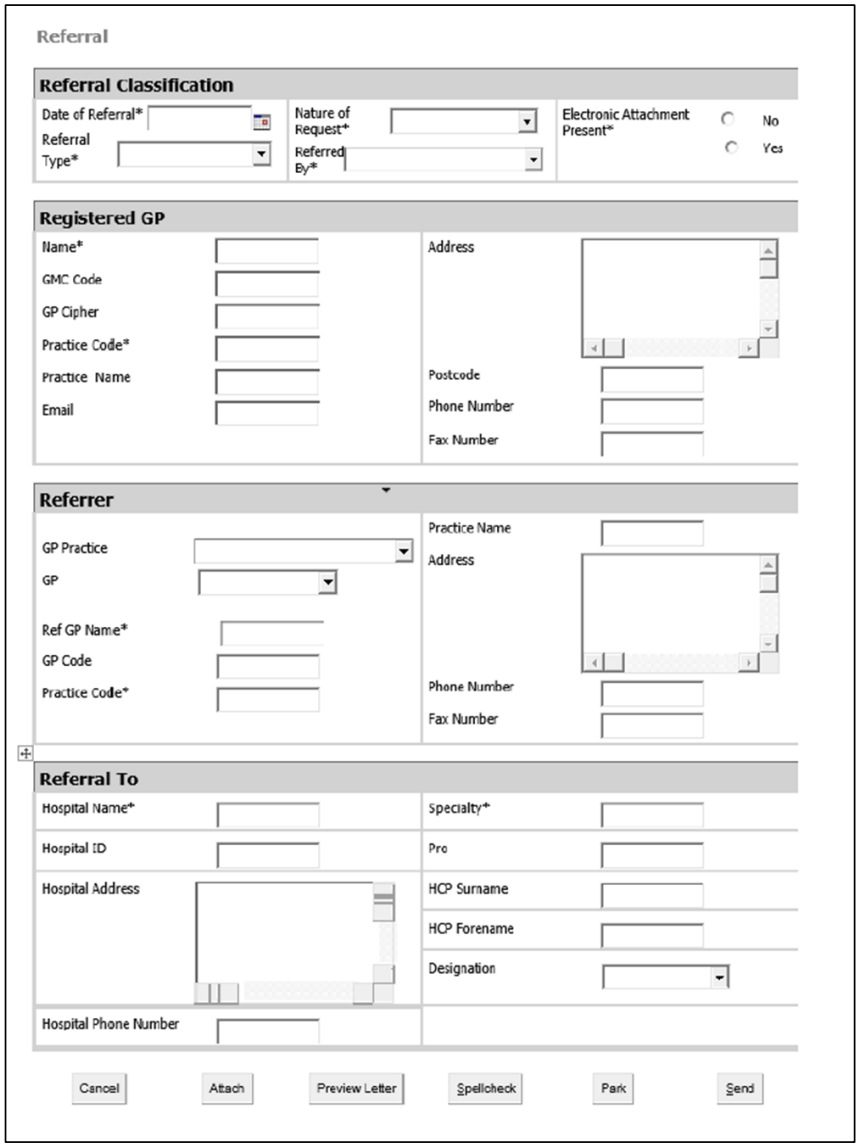

- When did it happen?
- What symptoms?
- Qualitative details?
  - ?sudden onset
  - ?focal
  - ?Non-progressive
  - ?<1 hour


Past Medical / Family History
Pre-existing Conditions
(High and Medium priority)
Add Row
Condition Name
Extension
Modifier
Date Recorded
Date of onset
Past Procedures
(High and Medium priority)
Add Row
Procedure Name
Extension
Modifier
Date Recorded
Family History (Conditions)
(All priorities)
Add Row
Condition Name
Extension
Modifier
Relation to Patient
Date Recorded


Medication
Current Medication
(Active Repeat medication issued within the last 12 months)
Add Row
Drug Name
Preparation
Dose
Frequency
Code
Date started
Date last issued
Other Recent Medication
(Any medication issued within last six months not shown above)
Add Row
Drug Name
Preparation
Dose
Frequency
Code
Date started
Date last issued


Risks/Alerts
Lifestyle Risks
Smoking
Add Row
Smoking Status
Comment
Date Recorded
Alcohol
Add Row
Alcohol Status
Comment
Date Recorded
Body Mass Index (BMI)
Add Row
Body Mass Index (BMI)
Date Recorded
Non-Therapeutic Drugs
Non-Therapeutic Drugs
Clinical Alerts - Allergies & Adverse Reactions
Allergies
Add Row
Description
Adverse Reactions
Add Row
Description


Demographics
Patient Demographics
Surname*
Forename*
Title*
Previous Surname
Known As
Home Address*
Preferred Contact Details
Post Code
Postcode
Phone Number
Mobile Number
Sex*
Male
Female
Marital Status
(Not Known)
Email Address
Date of Birth*
HCN*
Other Patient Data
Next of Kin
Social History
Housing
(Not Selected)
Employment
(Not Selected)
Ethnic Origin
(Not Selected)


Referral
Referral Classification
Date of Referral*
Referral Type*
Nature of Request*
Referred By*
Electronic Attachment Present*
No
Yes
Registered GP
Name*
GMC Code
GP Cipher
Practice Code*
Practice Name
Email
Address
Postcode
Phone Number
Fax Number
Referrer
GP Practice
GP
Ref GP Name*
GP Code
Practice Code*
Practice Name
Address
Phone Number
Fax Number
Referral To
Hospital Name*
Hospital ID
Hospital Address
Hospital Phone Number
Specialty*
Pro
HCP Surname
HCP Forename
Designation
Cancel
Attach
Preview Letter
Spellcheck
Park
Send

# Summary

- If it may be a TIA – refer urgently
- If other diagnosis more likely (as per referral guidance) – don't refer
- Start aspirin 300 mg on all referrals (unless contraindicated)
- Referrals will be triaged
- Expect prompt communication
- If TIA – DAPT likely for 3 weeks (3 months if intracranial stenosis)

- Service will be monitored – to feed back if areas for service improvement identified

# THANK YOU