



# STROKE CARE POLICY AND PROCEDURES

## **DOCUMENT INFORMATION**

**Author:** Dave Sherwood  
Assistant Director of Patient Care

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## Contents

DOCUMENT INFORMATION .....	2
1.0 SCOPE OF THE POLICY .....	4
2.0 POLICY STATEMENT.....	4
3.0 DUTIES .....	4
4.0 AIMS AND OBJECTIVES.....	5
5.0 GENERAL CARE .....	5
6.0 MONITORING.....	5
7.0 STROKE NETWORKS AND PATHWAYS .....	5
8.0 EDUCATION .....	6
Appendix 1: South Central Cardio-Vascular Network Ambulance Service Specification.....	8

# **STROKE CARE POLICY AND PROCEDURES**

## **1.0 SCOPE OF THE POLICY**

**1.1** This Policy outlines the Trust's current arrangements to respond, assess, diagnose, treat and transport to the most appropriate centre for all suspected cases of stroke.

## **2.0 POLICY STATEMENT**

**2.1** Ensure that South Central Ambulance Service NHS Foundation Trust staff are able to identify and respond to patients with suspected stroke in a timely manner, perform an adequate assessment of their condition and convey them to an appropriate facility.

**2.2** The Trust acknowledges the guidance provided in the AACE/JRCALC Guidelines 2016 and 2017 supplement.

## **3.0 DUTIES**

**3.1** Accountability for the treatment and care of stroke patients is ultimately with the Trust's Chief Executive; however this can be devolved within the Trust Board to a Medical Director if appropriate.

### **3.2 Medical Director**

The Medical Director has Board level responsibility for the implementation of this policy within South Central Ambulance Service NHS Foundation Trust. The Medical Director also chairs the Clinical Review Group with responsibility for ensuring the most effective care of Stroke victims.

### **3.3 Assistant Director of Patient Care**

The Assistant Director of Patient Care has senior management responsibility for ensuring that the stroke pathway is monitored and reviewed. The role also has a responsibility to link with the Cardio-Vascular networks via direct reports.

### **3.4 Clinical Review Group**

The Clinical Review group will assess the effectiveness of stroke care and coordinate the production of gap analysis and action plans for the Governance Committee to monitor.

### **3.5 Quality and Safety Committee**

The Quality and Safety Committee will monitor the effectiveness of stroke care, and highlighting any risks on the risk register, within the Trust's governance structure. The Quality and Safety Committee will monitor the financial implication of stroke care ensuring that the Trust Board is aware of

any significant risks or funding associated with the implementing or any changes to stroke care.

#### **4.0 AIMS AND OBJECTIVES**

4.1 Ensure that South Central Ambulance Service NHS Foundation Trust staff are able to identify and respond to patients with suspected stroke in a timely manner, perform an adequate assessment of their condition and convey them to an appropriate facility.

#### **5.0 GENERAL CARE**

5.1 The Trust works to the guidance provided in the AACE/JRCALC Guidelines and all staff will be made aware when there are updates and changes to this information.

5.2. Over and above providing basic and advanced clinical care in line with approved clinical guidelines and Trust policies staff will deliver appropriate clinical care to patients believed to have suffered a stroke.

5.3. Patients will be conveyed to the most appropriate centre in line with the South Central Stroke Care Ambulance Service Specification (Appendix 1).

#### **6.0 MONITORING**

6.1 The Policy will be monitored for its effectiveness by the Assistant Director of Patient Care through the following:

- Responsibilities of staff will be monitored through attendance at meetings, management of systems, development of reports and the appraisal process.
- The process for finding reviewing and action planning will be monitored by the Clinical Effectiveness Department and a report produced bi-annually to the Quality and Safety Committee covering:
  - Number of Stroke Patients attended;
  - Number of Stroke patients receiving the Care Bundle;
  - Number of Patients referred onto the TIA Pathway.

These will be conducted on a bi-annual basis and reports provided to the Clinical Review Group and Quality and Safety Committee.

6.2 There will also be an audit of performance provided by the Assistant Director of Patient Care via the Unify and Commissioning reports. The Care Quality Commission and MONITOR will review the Trust's achievements against the Fundamental Standards laid down in the KLOES. Reports will be provided for the Quality and Safety Committee meetings every two months, and an annual report produced for the Trust board.

#### **7.0 STROKE NETWORKS AND PATHWAYS**

7.1 The Trust will support a coordinated approach to Stroke care working

closely with South Central Cardio-Vascular Network and local networks.

**7.2** Patients will be transported to the most appropriate centre for their clinical condition.

**7.3** All Patient Clinical Records where staff indicate that the patient has suffered a stroke are subject to clinical audit by the clinical Effectiveness department. A report is prepared on a monthly basis and monitored through the Trusts Integrated Performance Report (IPR). The IPR is monitored to individual team member level by Team Leaders via the Qlikview software.

**7.4** The Trust will support and work with the networks and specialist units to monitor capacity and assist in balancing workload across all units.

**7.5** The Trust will provide for the transfer of critically ill patients, and those in need of life-saving interventions from local emergency departments to specialist units by use of the Time Critical Transfer Policy.

**7.6** The Trust will support the stroke networks in raising awareness about stroke in the medical and general community.

## **8.0 EDUCATION**

8.1. Training in the recognition and management of stroke will be delivered in accordance with the Trust's Training Needs Analysis (TNA).

8.2. Emergency Operations Centre Staff will be trained to identify patients believed to be suffering from a stroke using approved decision support software, and to mobilise appropriate resources in an appropriate time frame.

8.3. Clinical Staff of all levels will be trained to recognise patients believed to be suffering from a stroke using clinically accepted tools such as FAST.

8.4. Clinical Staff at all levels will be trained in the management of Stroke assessing ABCD and managing any deficits and checking and maintaining blood glucose levels.

8.5. Staff will be made aware of, and be advised how to access the most appropriate care pathway for their patients.

8.6. All Stroke care training is in line with the current clinical practice guidelines issued by AACE/JRCALC. Whenever there is a major change in an associated clinical guideline this will be communicated via update training for all relevant staff.

8.7. Periodically, AACE/JRCALC may review their guidance and following any updates will provide a gap analysis, highlighting any significant changes to practice. This is documented in every copy which is distributed to staff, with a lead in period stated which allows for queries or extra educational needs required.

8.8. Update training requirement for all operational staff responding to general accident and emergency calls involving stroke emergencies will be carried out as indicated in the TNA. Staff should indicate during their annual Appraisal whether they require update training in stroke care and will also be reminded of any changes to clinical practice as outlined above.

8.9. Non-attendance for stroke training, as per the TNA, will be monitored and reported via the ESR (Electronic Staff Records) to the Clinical Review Group. The relevant Heads of Operations will be contacted for subsequent action to ensure non-attendance is followed up and rectified.

8.10 Records of all training and education will be kept in the Trust's Education Centres.

## **Appendix 1: South Central Cardio-Vascular Network Ambulance Service Specification**

Service Specification No.	Stroke/TIA
Service	Management of patients following suspected Stroke or TIA
Commissioner Lead CCG	Fareham & Gosport /North and West Reading
Provider Lead	Dave Sherwood
Period	1 April 2020 – 31 March 2022
Date of Review	April 2020

### **1. Population Needs**

#### **1.1 National/local context and evidence base**

This service specification is based around a comprehensive evidence base, drawn from a range of sources, including the Royal College of Physicians, the British Association of Stroke Physicians, National Institute for Clinical Excellence and the Department of Health's National Stroke Strategy.

The National Clinical Guideline for Stroke (5<sup>th</sup> edition) was updated in 2016. It was prepared by the intercollegiate working party and was the most comprehensive and up to date document on how stroke care should be provided covering the whole pathway from pre- hospital care to long-term management.

Time is critical and the first 72 hours' care is vital to ensure the optimum clinical outcome. This needs to be underpinned by an effective whole system pathway for assessment, discharge and repatriation to local stroke services, subsequent rehabilitation and longer term support.

### **2. Scope**

#### **2.1 Aims and objectives of service**

##### **Aims**

To provide emergency access to specialist provision for the assessment and treatment of individuals who have suffered a stroke or a transient ischaemic attack (TIA).

##### **Objectives**

The objectives are to:

- Provide a patient-delivery mechanism that complements the hyperacute stroke service specification and TIA service specification for the Thames Valley and Wessex region
- Ensure that services provide an excellent patient experience
- Ensure equity across the region
- Establish and implement a fair and transparent decision-making process

Any patient presenting with an acute stroke will be placed on the Hyperacute pathway, to receive the most appropriate care for their condition. The implementation of this pathway will provide the best possible outcomes for the patients.

Any patient presenting with a suspected TIA should be referred urgently for secondary care assessment in an acute neuro-vascular clinic and the referrals from ambulance crews will be triaged as high risk and seen within 24 hours. Ambulance crews should send a referral to the local neuro-vascular TIA service and the patient should be given 300mg of aspirin, unless contraindicated.

## **2.2 Service description/care pathway**

Patients with ongoing neurological symptoms should be assessed by ambulance crews using a structured FAST protocol and hypoglycaemia should be excluded as a cause for their acute neurological symptoms. If a patient presents with their symptoms completely resolved, they should be clinically assessed by the ambulance crew and if the assessment concludes that a transient neurological event has occurred should be referred to the local neuro-vascular clinic as a matter of urgency. The referrals from ambulance crews will be triaged as high risk and seen within 24 hours. Ambulance staff should receive adequate training in the assessment of patients suspected to be suffering from an acute neuro-vascular event and understand the FAST structured assessment tools.

### **Stroke – for patients who are FAST positive:**

Patients who are identified by rapidly-attending ambulance crews as potentially having a stroke (via the FAST assessment) are taken directly to a Hyperacute Stroke Centre.

- A “call to depart scene” time of 39mins
- Ambulance crews will pre-alert the receiving centre
- All patients with signs and symptoms of a suspected stroke will be taken to the nearest hyperacute stroke centre as quickly and safely as possible.

## **Mechanical Stroke Thrombectomy Transfer**

Mechanical Thrombectomy (MT) is the first line treatment for patients who have suffered an occlusion of a major cerebral artery (Large Vessel Occlusion – LVO). This treatment involves mechanical retrieval of the clot from the occluded vessel. This is undertaken in specialist Neuroscience Centres in the region - the John Radcliffe Hospital, Oxford, Charing Cross Hospital, London and at the University Hospital Southampton.

There is no change to the existing acute stroke care pathways – all patients with suspected acute stroke will be transferred to the nearest Hyper Acute Stroke unit (HASU) irrespective of time of onset for further assessment and investigation. Patients that may be suitable candidates for MT will be started on thrombolytic infusion therapy (tPA) by the HASU stroke team, and arrangements will be made for rapid urgent transfer to either Oxford, London or Southampton by SCAS.

### **MT Transfer Protocol**

The HASU will provide an appropriate clinical escort (stroke nurse/doctor or anaesthetist) as determined by the stroke consultant if there is a need to continue thrombolytic therapy during the transfer, if there is a need to treat hypertension (BP > 185/105), or if the patient is unstable and/or has a deteriorating level of consciousness. The transfer team (including SCAS clinicians) can obtain advice on on-going management of the patient during transfer from the referring stroke consultant and SCAS will be expected to provide a pre-arrival alert with an estimated time of arrival to the Neuroscience Centre.

For John Radcliffe Hospital contact the Emergency Department Priority Line or directly; For UHS contact the Stroke Team via the hospital's switchboard **02380 777222 Bleep 1592** or as a backup mobile phone **07879 116288**. UHS have asked to be alerted 10 minutes before the anticipated arrival of the patient at UHS. For Charing Cross Hospital pre-alert the stroke team 15 minutes before anticipated arrival via mobile phone **07388 998 370**.

### **TIA – following assessment:**

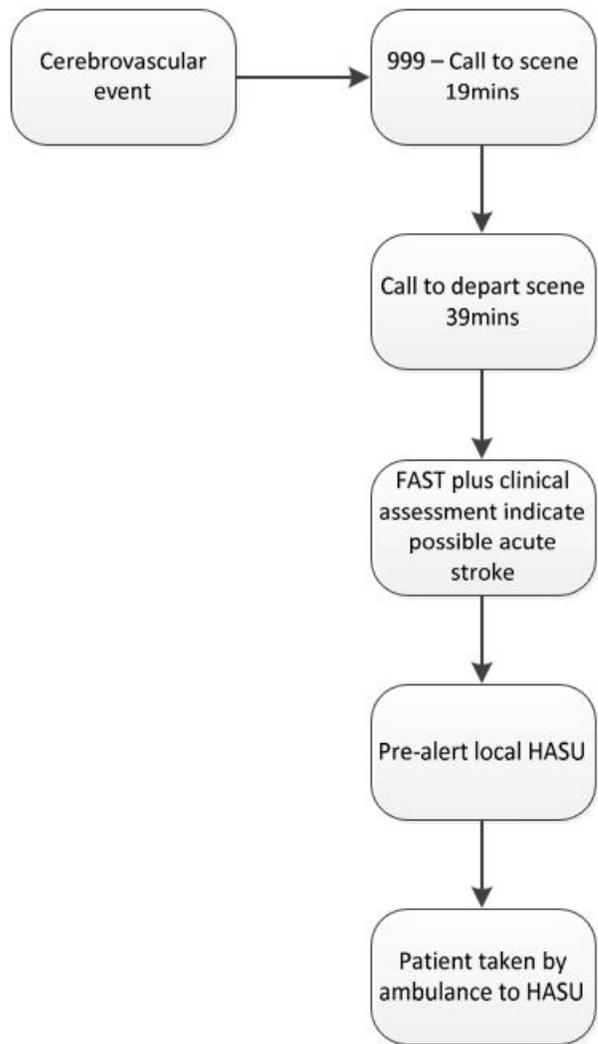
Patients who are clinically suspected by ambulance crews as potentially having suffered a TIA do not need to be transferred to hospital (unless clinically indicated otherwise) and instead a referral is sent to their local neuro-vascular TIA clinic.

- In all patients suspected to have suffered from a TIA an urgent referral should be immediately sent to the local neuro-vascular TIA clinic
- All patients where the referral is sent by the ambulance trusts will be seen, assessed and treated as being at high risk of stroke
- All TIA patients should be given advice on FAST and lifestyle management and not driving until approved by a clinician (leisure and occupational), employment (if employed in a potentially hazardous

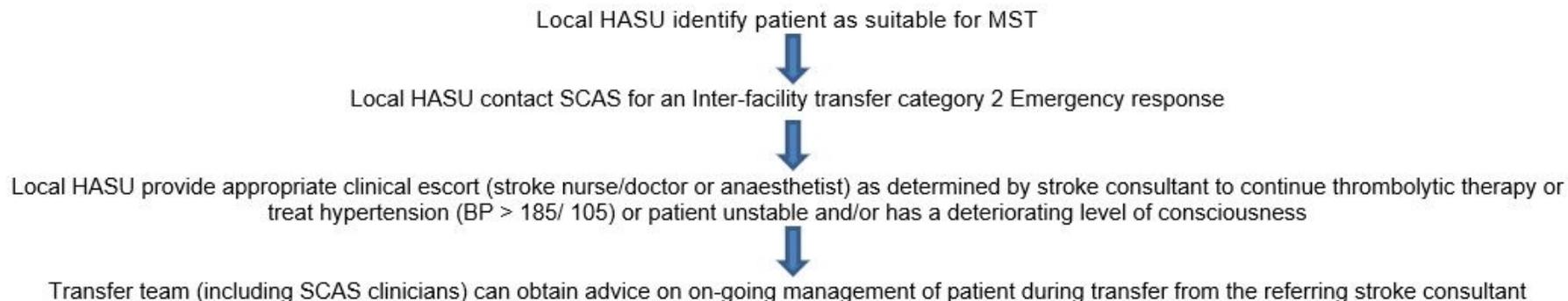
role, e.g. scaffolder, rigger, machine operative, etc.)

- 300mg of aspirin should be given to the patient, unless contraindicated
- Any patients with the following symptoms should be taken directly to hospital for admission:
  - Extreme hypertension (>200/105) or acutely uncontrolled diabetes
  - Unstable vital signs
  - CNS infection (fever)
  - Persistent new onset neurological symptoms and signs
  - 2 or more TIAs within previous week (Crescendo/Stuttering TIA)

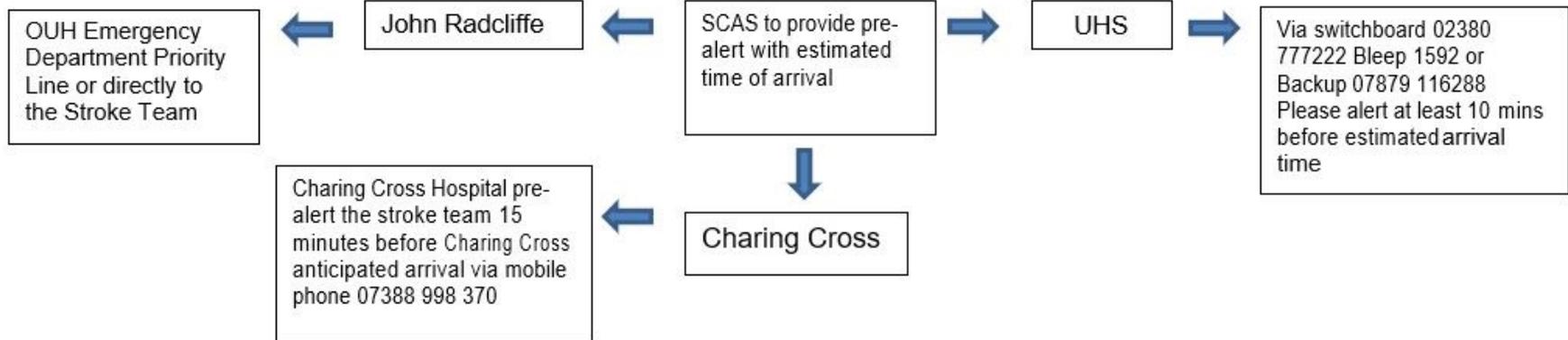
## Care Pathways: Stroke



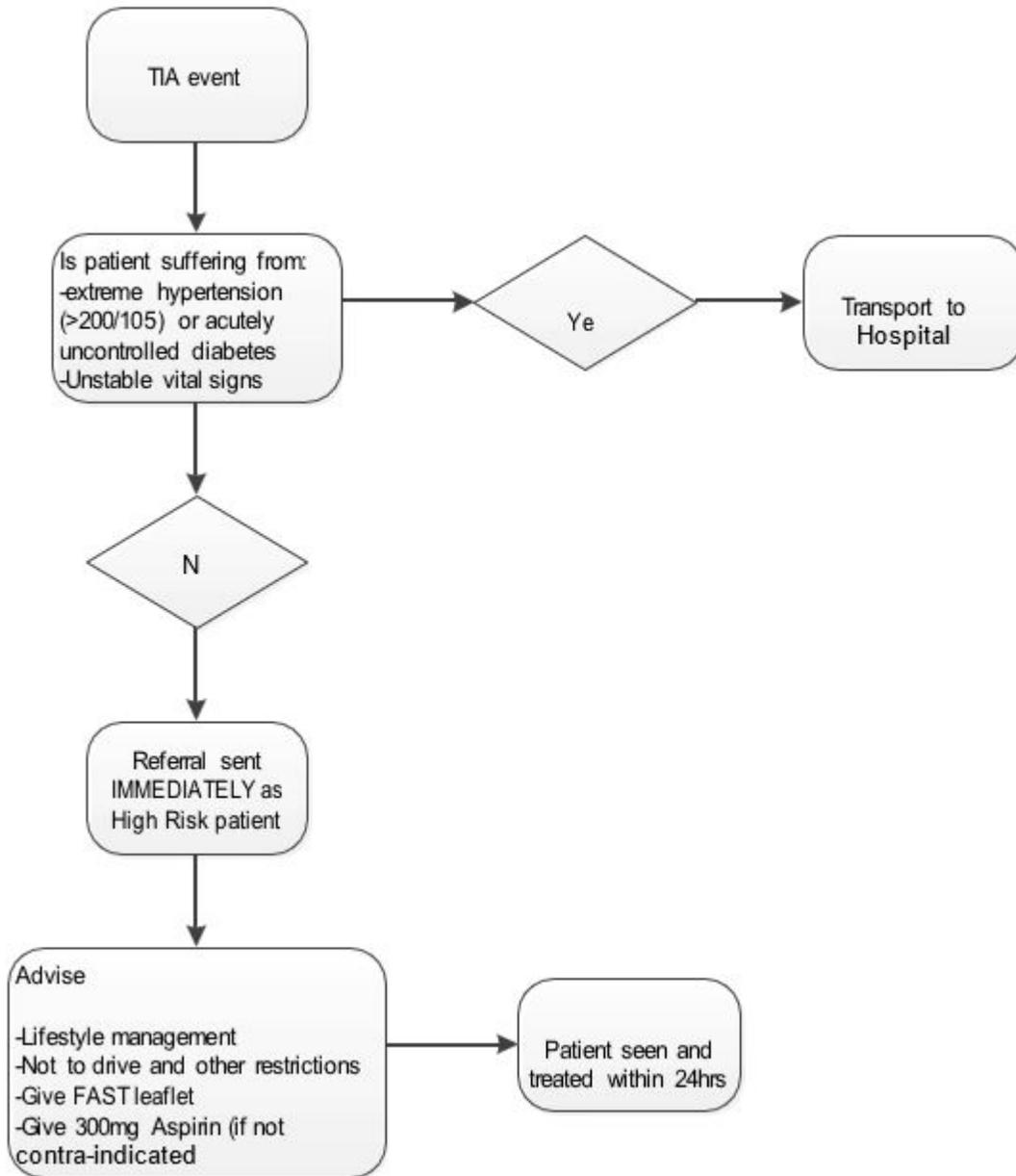
# MST Transfer protocol



- Transfer check list:**
1. Appropriate Hospital Escort if patient unstable?
  2. Referring stroke consultant mobile phone number?
  3. Patients Clinical Records/Next of Kin/Property details collected?
  4. Monitor patient vital signs every 15 minutes. Nurse patient 30 degrees head up.
  5. Confirm ETA with OUH ED via John Radcliffe ED priority line or UHS Stroke Team on 02380 777222 Bleep 1592 (or backup 07879 116288) 10 minutes before anticipated arrival at UHS. For Charing Cross Hospital pre-alert the stroke team 15 minutes before anticipated arrival via mobile phone 07388 998 370
  6. Consider diverting to nearest Emergency Department in the unlikely event of major haemorrhage/major clinical deterioration occurring during transfer



## Transient Ischaemic Attack



## **2.3 Population covered**

This service will be delivered to all patients across Berkshire, Buckinghamshire, Milton Keynes, Oxfordshire, Hampshire, Portsmouth and Southampton by South Central Ambulance Service. The service will be delivered to all patients across the Isle of Wight by the Isle of Wight Ambulance Service.

## **2.4 Any acceptance and exclusion criteria**

The Ambulance Services will respond 24 hours a day, 7 days a week basis without exception.

Any patient not suspected of suffering a stroke or a TIA. These patients will still need to be assessed and treated, but according to the pathway appropriate to their condition.

## **2.5 Interdependencies with other services**

All South Central Acute Trusts

Primary Care organisations

Out-of-Area providers

## **3. Applicable Service Standards**

### **3.1 Applicable national standards e.g. NICE, Royal College**

Ambulance staff should be FAST trained.

### **3.2 Applicable local standards**

All patients with signs and symptoms of an acute stroke will be assessed by ambulance crews using FAST. All patients who are assessed by the ambulance crews and clinically thought to have suffered an acute stroke are to be taken directly to the local Hyperacute Stroke Centre.

The “call to depart scene” time for acute stroke patients should be as fast as possible, with a maximum limit of 39 minutes.

Patients with an acute stroke should be taken directly to the nearest Hyperacute Stroke Centre

Once a TIA patient has been assessed, an immediate referral should be sent to their local neuro-vascular clinic. It is up to the receiving hospital trust to ensure that patients are seen and treated within the time limits established in the TIA service specification.

#### **4. Key Service Outcomes**

The expected outcomes for the ambulance services in South Central are:

For Stroke:

- To determine eligibility for transport to a hyperacute stroke centre
- To enable eligible patients to reach a Hyperacute Stroke Centre in time to receive thrombolysis or clot retrieval
- The service will be sustainable and value for money
- Equity of access to the service across the region
- Equity of quality of care

For TIA:

Reduction in the number of admissions of patients with TIA who can be assessed and treated without need for admission