WM QRS West Midlands Quality Review Service

NHS

West Midlands Partnership of

Cardiac and Stroke Networks

Quality Standards

Services for People with Stroke (Acute Phase) and Transient Ischaemic Attack

Version 1

April 2010

Review by: April 2015 at the latest

Contents

INTRODUCTION

These Quality Standards have been developed by the West Midlands Cardiac and Stroke Networks. They are based on the:

- West Midlands Service Specification for the Management of Stroke Thrombolysis and Acute Care (Hyper-Acute) (2009) and the
- West Midlands Specification of Services for Patients with Transient Ischaemic Attack and Non-Disabling / Minor Stroke (2010).

The Quality Standards follow the patient pathways in each of the Service Specifications and aim for the highest quality of care at each stage of the patients' journey.

A full list of references is given in the West Midlands Service Specifications. The Quality Standards are based on the following main sources of national guidance:

- *National Stroke Strategy*
- NICE guidelines *'Diagnosis and initial management of acute stroke and transient ischaemic attack'* (2008) and the draft NICE Quality Standard for Stroke (2009).

The Quality Standards are also consistent with the Royal College of Physicians *'National Clinical Guideline for Stroke' (3rd Edition)* (2008).

The Quality Standards are in a format suitable for use in quality reviews. They help to answer the question "If I walk into a service today, how will I know that best-practice guidance has been implemented?" They concentrate on the structure and process aspects of quality and should be seen alongside the indicators of outcomes given in the service specifications. The Quality Standards can also be used to show compliance with the Care Quality Commission's Regulatory Requirements (Appendix 1).

The Quality Standards were developed by the Stroke Clinical Leads and Network Directors from the West Midlands Cardiac and Stroke Networks and incorporate comments received from NHS organisations in the West Midlands. They link with other West Midlands Quality Standards, in particular, those for urgent care services and services for people with vascular disease. The further development of the Quality Standards, review process and support for implementation is being taken forward by the West Midlands Cardiac and Stroke Networks. This will include consideration of Quality Standards for stroke (post acute) and cardiac services.

As recommended by the National Audit Office[1] these Quality Standards should be implemented by all services within the West Midlands as soon as possible. Although more rapid than envisaged in the draft Quality Standards, this links with the NHS Improvement Programme '*Accelerating progress on stroke*'. The Quality Standards will be reviewed by April 2015 at the latest and may be revised earlier based on experience of use for peer review visits or following changes to national guidance or evidence of effectiveness.

[1] National Audit Office (2010) *Progress in Improving Stroke Care*

Scope of the Quality Standards

The scope of the Quality Standards is the same as that of the West Midlands Service Specifications covering stroke and TIA. The Specification for the Management of Stroke Thrombolysis and Acute Care (Hyper-Acute) covers the first 24 hours from onset of symptoms for patients with stroke (including those with non-disabling stroke who are admitted to hospital). The Specification for Patients with Transient Ischaemic Attack and Non-Disabling / Minor Stroke includes patients with transient ischaemic attack (TIA), whether admitted to hospital or not, and patients with non-disabling stroke who are not admitted to hospital.

For patients with stroke (including those with non-disabling stroke who are admitted to hospital) the Quality Standards cover the patient's journey from onset of symptoms through the first 24 hours of care by a stroke service or transfer to specialist vascular or neuro-surgery service. For patients with TIA or non-disabling stroke the Quality Standards include the patient's journey from onset of symptoms through to either discharge or transfer to a specialist stroke or vascular service. Quality Standards relating to primary care services, Emergency Departments and Acute Medical Admission Units, Stroke Services (Stroke Units or Thrombolysis Centres) and Neuro-Vascular Assessment Services are therefore included. Quality Standards for the Ambulance Service are included within the WMQRS Urgent Care Quality Standards. Quality Standards for primary care services apply to General Practices, Walk-in Centres, Urgent Care Centres and Minor Injuries Units, and to community services which care for patients at high risk of stroke or TIA, for example, community stroke teams or long-term conditions teams. Other community services which may occasionally be asked to advise patients who have had a stroke or TIA, for example, district nursing or community pharmacy services, are not covered by these Quality Standards.

Structure of the Quality Standards

The Quality Standards are structured as follows:

Reference Number (Ref)	This column contains the reference number for each Quality Standard which is unique to these standards and is used for all cross-referencing. Each reference number is composed of two letters (the first identifying the care pathway and the second the service to which a standard applies) and three digits (the first identifying the relevant section and the last two being unique to that Quality Standard).
Quality Standard (QS)	This describes the quality that services are expected to meet.
Demonstration of Compliance (DoC) *Notes*	This describes how organisations may show that they are meeting the standard. This is not prescriptive and organisations may have other ways of demonstrating compliance. *The notes give more detail about either the interpretation or the applicability of the standard.*

Policies, Protocols, Guidelines and Procedures:

The Quality Standards use the words policy, protocol, guideline and procedure based on the following definitions:

Policy: A course or general plan adopted by an organisation, which sets out the overall aims and objectives in a particular area.

Protocol: A document laying down in precise detail the tests or steps that must be performed.

Guidelines: Principles which are set down to help determine a course of action. They assist the practitioner to decide on a course of action but do not need to be automatically applied. Clinical guidelines do not replace professional judgement and discretion.

Procedure: A procedure is a method of conducting business or performing a task, which sets out a series of actions or steps to be taken.

For simplicity, some standards use the term 'guidelines and protocols' which should be taken as referring to policies, protocols, guidelines and procedures. All clinical guidelines should be based on national guidance, including NICE guidance where available. Local guidelines and protocols should specify the way in which national guidance will be implemented locally and should show consideration of local circumstances.

ABBREVIATIONS

ABCD2	The ABCD2 score is calculated using the patient's age (A); blood pressure (B); clinical features (C); duration of TIA symptoms (D); and presence of diabetes (2).
AHP	Allied health professionals
CEMRA	Contrast-Enhanced Magnetic Resonance Angiography
CT	Computed Tomography
CTA	CT Angiography
CTP	CT Perfusion
CVD	Cardio Vascular Disease
DoC	Demonstration of Compliance
DH	Department of Health
DVLA	Driver and Vehicle Licensing Authority
ECG	Electrocardiogram
FAST	Face-Arm-Speech-Time to call 999
GP	General Practitioner
LTC	Long Term Condition
MRA	Magnetic Resonance Angiography
MRI	Magnetic Resonance Imaging
NICE	National Institute for Health and Clinical Excellence
PCT	Primary Care Trust
QS	Quality Standard
RCP	The Royal College of Physicians
ROSIER	Recognition of Stroke in the Emergency Room
TIA	Transient Ischaemic Attack

COMMENTS ON THE QUALITY STANDARDS

These Quality Standards will be updated as new national guidance and evidence of effectiveness becomes available and following experience of using them in practise. Any comments on the Quality Standards should be sent to wmqrs@swbh.nhs.uk and will be considered when the Standards are updated. More information about WMQRS and its Quality Standards and reviews is available at www.wmqi.westmidlands.nhs.uk/wmqrs or from your local Cardiac and Stroke Network. Further development of the Quality Standards may include the addition of short titles and risk scores.

QUALITY STANDARDS

The following terms are used throughout these Quality Standards:

Patient with TIA	This includes patients with TIA, whether admitted or not, **and** those with non-disabling stroke who are not admitted to hospital.
Patient with stroke	This includes patients with disabling stroke and those with non-disabling stroke who are admitted to hospital.
Stroke Service	This applies to both Stroke Units and Thrombolysis Centres.

Ref	Quality Standard	Demonstration of Compliance
PRIMARY CARE These Quality Standards should be met by all general practices, Walk-in Centres, Urgent Care Centres and Minor Injuries Units, and to community services which care for patients at high risk of stroke or TIA, for example, community stroke teams or long-term conditions teams.		
SUPPORT FOR PATIENTS AND CARERS		
CA - 101	Information should be offered to all patients referred to the Neuro-Vascular Assessment Service covering, at least: a. Brief description of the condition b. Arrangements for neuro-vascular assessment with clear indication of timescales c. What to do if symptoms recur d. Advice not to drive until the neuro-vascular assessment e. Availability of further information, including through NHS Direct.	Information available. Discussion with patients and carers. *Note: This information should be provided to primary care providers by the local Neuro-vascular Assessment Service or Cardiac and Stroke Network (QSCZ-102).*
GUIDELINES AND PROTOCOLS		
CA - 501	Guidelines on the primary care management of patients with suspected stroke should be in use covering at least: a. Assessment of patients with suspected stroke, including the use of a validated tool such as FAST b. Immediate management c. Referral information, including date and time of onset of symptoms and date and time of first contact.	Guidelines available.

Ref	Quality Standard	Demonstration of Compliance
CA - 502	Guidelines on the primary care management of patients with suspected TIA should be in use covering at least: a. Assessment of patients with suspected TIA, including undertaking an ABCD2 score b. Immediate management, including indications for aspirin or alternative anti-platelet agent c. Indications for referral to the Neuro-Vascular Assessment Service within 24 hours for high risk (currently ABCD2 score of 4 and above, multiple TIAs or minor stroke) or within seven days for low risk patients d. Referral information, including date and time of onset of symptoms, and date and time when symptoms resolved e. Information to be given to patients and carers referred to the Neuro-Vascular Assessment Service (QSCA-101) f. Indications for admission g. Arrangements for referral to lifestyle management services h. Arrangements for one month follow up of well-being, cognitive impairment and impact on work.	Guidelines available. *Notes:* *1. Guidelines may also include advice on statins, blood pressure management and lifestyle management.* *2. Guidelines should cover the management of patients who present more than one week after the last symptom resolved who should be considered as low risk.*

ACUTE TRUST-WIDE

This Quality Standard should be met by all Acute Trusts with a Stroke Unit, Thrombolysis Centre and / or Neurovascular Assessment Service.

STAFFING

CC - 201	There should be a nominated lead consultant and nominated lead nurse / allied health professional with responsibility for ensuring implementation of the Quality Standards for Services for People with Stroke (Acute Phase) and TIA.	Name of lead consultant and lead nurse / allied health professional. *Note: The nominated leads should be members of the Stroke Team.*

Ref	Quality Standard	Demonstration of Compliance
EMERGENCY DEPARTMENT AND ACUTE MEDICAL ADMISSIONS		
GUIDELINES AND PROTOCOLS		
CE - 501	Clinical guidelines should be in use in the Emergency Department covering: **Patients with suspected stroke** a. Assessment of patients with suspected stroke using ROSIER b. Immediate management c. Transfer of patients to an appropriate Thrombolysis Centre or Stroke Unit (QSAE-508) d. Referral information, including date and time of onset of symptoms, and date and time of first contact. **Patients with suspected TIA** a. Assessment, including undertaking an ABCD2 score b. Immediate management, including indications for aspirin or alternative anti-platelet agent c. Indications for referral to the Neuro-Vascular Assessment Service within 24 hours for high risk (currently ABCD2 score of 4 and above, multiple TIAs or minor stroke) or within seven days for low risk patients d. Referral information, including date and time of onset of symptoms and date and time when symptoms resolved e. Indications for admission f. Information to be given to patients and carers (QSCZ-102) if the patient is to be discharged before their neuro-vascular assessment.	Written guidelines. *Note: This QS is numbered QSCE-501 for Emergency Departments and QSCF-501 when applying to acute medical admissions.*

Ref	Quality Standard	Demonstration of Compliance
STROKE SERVICES These Quality Standards apply to Stroke Units **and** Thrombolysis Centres unless indicated.		
SUPPORT FOR PATIENTS AND CARERS		
CN - 101	Information should be offered to all patients and carers covering at least: a. Stroke, its causation and potential impact b. Investigations and treatment options available c. Research trials available (if any) d. Driving advice and DVLA notification e. Promoting good health, including diet, exercise and smoking cessation f. Stroke service staff and facilities available g. Who to contact with queries or for advice h. Symptoms and action to take if become unwell i. Access to benefits advice j. Support groups available k. Expert Patients Programme (if available) l. How to influence local services (QSCN-199) m. Where to go for further information, including NHS Direct and useful websites.	Examples of information available *Note: Information should be written in clear, plain English and should be available in formats and languages appropriate to the needs of the patients.*
CN - 102	Information about the following services should be easily available for patients and carers: a. Interfaith support b. Social services c. Interpreters d. Advocacy services.	Relevant information available. *Note: The availability of support services is covered in QSAC-301*

Ref	Quality Standard	Demonstration of Compliance
CN - 103	Information for patients and carers about the Stroke Service should be available covering, at least: a. What patients need with them b. Visiting times c. Who will be looking after the patient (for example, staff groups, uniform colours) d. How to find out what is happening e. Facilities for relatives f. Who to talk to about concerns g. Moving on from the Unit.	Relevant information available. *Note: Information should be written in clear, plain English and should be available in formats and languages appropriate to the needs of the patients.*
CN - 104	Patients and, with the patient's agreement, relatives and carers, should have the information, encouragement and support to enable them fully to participate in decisions about their care.	Support materials. Discussion with patients and carers. *Note: Support for patients with known communication difficulties should be available.*
CN - 105	Patients being discharged home should be given a discharge letter. This letter should describe the condition, treatment given (if any) and future management plan. The contents of the letter should be discussed with the patient and, with the patient's agreement, their carer/s and a copy should be sent to their general practitioner.	Discussion with patients and carers. Examples of discharge letters in patients' notes.
CN - 199	The Stroke Service should have: a. Mechanisms for receiving feedback from patients and carers about the treatment and care they receive. b. Mechanisms for involving patients and carers in decisions about the organisation of the services.	Description of current arrangements. Examples of changes made as a result of feedback from patients and carers. *Note: The arrangements for receiving feedback from patients and carers may involve surveys, focus groups and/or other arrangements. They may be part of Trust-wide arrangements so long as issues relating to stroke services can be identified.*
STAFFING		
CN - 201	Thrombolysis Centres: A senior healthcare professional with specialist training and experience in stroke diagnosis and stroke thrombolysis should be available on site at all times.	Details of staff with responsibility for thrombolysis. *Note: If thrombolysis is not undertaken at all times (QSCZ-601) then this QS applies for the times for which the service admits patients who may need thrombolysis.*

Ref	Quality Standard	Demonstration of Compliance
CN - 202	Thrombolysis Centres: A consultant stroke specialist should be available at all times.	Staffing details. *Notes:* *1. This QS **is** applicable to services where thrombolysis is undertaken only at some times (QSCZ-601) as problems may arise in patients previously thrombolysed.* *2. The consultant should be able to attend the hospital within 30 minutes.*
CN - 203	Stroke Units: A consultant stroke specialist should be available on weekdays. A senior member of the stroke team should be available on all days when emergency admissions are accepted and the following day.	Staffing details. *Note: This QS links with QSCN-603.*
CN - 204	An Acute Stroke Unit should be available, staffed by nurses and HCAs with appropriate competences in care of patients with stroke. The competence framework should cover at least: a. Management of acutely ill and deteriorating patients b. High dependency care c. Swallowing screening d. Complications associated with stroke thrombolysis (Thrombolysis Centres only) e. Mobilisation f. Tube feeding.	Staffing details, competence framework showing expected competences and summary of competence assessments.
CN - 205	At least one healthcare professional on each shift should have competences in swallowing screening.	Staffing rotas.
CN - 206	At least one nurse on each shift should have competences in the management of acutely ill and deteriorating patients.	Nursing rotas.
CN - 207	A member of staff with responsibility for coordination and for liaison with other services should be available and there should be arrangements for cover for this role.	Staffing details. *Note: The responsibilities of the role may include other areas such as service planning and development, audit and governance.*
CN - 208	There should be a training and development plan for all members of the Stroke Team. The competences expected of each role should be identified and the plan for achieving and maintaining these competences described.	Competence framework. Training and development programme. *Notes: Training may be delivered through a variety of mechanisms, including e-learning, organisation-wide training and departmental training. There should, however, be evidence of protected time for teaching and of clinical supervision.*

Ref	Quality Standard	Demonstration of Compliance
SUPPORT SERVICES		
CN - 301	CT scanning should be available on-site at all times. The service should be staffed by healthcare professionals with training and expertise in performing and interpreting brain CT scans and should meet The Royal College of Radiologists Standards for quality assurance of CT.	Details of service available.
CN - 302	The following services should be available daily: a. Physiotherapy b. Speech and language therapy (for both swallowing assessment and communication) c. Occupational Therapy	Staffing details. *Notes:* *1. Staff providing these services should have specific time allocated to their work on the Stroke Unit and specific training or experience in caring for people with stroke.* *2. These services should be available at weekends as well as Monday to Friday.*
CN - 303	The following services should be available for patients with stroke: a. Dietetics (including staff with competences in nutritional screening) b. Psychological support c. Social work.	Staffing details. *Note: Staff providing these services should have specific time allocated to their work on the Stroke Unit and specific training or experience in caring for people with stroke.*
CN - 304	Level 3 critical care facilities should be available on the same hospital site.	Facilities available.

Ref	Quality Standard	Demonstration of Compliance
GUIDELINES AND PROTOCOLS		
CN - 501	Clinical guidelines on the management of patients with stroke should be in use covering: a. Clinical assessment, including assessment of cognitive and perceptive problems b. Choice of imaging, including indications for CT, MRI, carotid Doppler and more complex imaging investigations c. Indications for thrombolysis or early anticoagulation treatment d. Other investigations e. Pharmacological treatment, including aspirin or alternative anti-platelet agent f. Intensity of daily therapy g. Indications and arrangements for referral to vascular services for consideration of carotid endarterectomy h. Indications and arrangements for referral to neuro-surgery i. Indications for referral to critical care j. Indications for referral to lifestyle management services (dietician, smoking cessation, psychology).	Guidelines available. *Notes:* *1. All referral guidelines should be agreed with the services to which patients are referred.* *2. Guidelines should be based on the latest evidence of effectiveness, including NICE guidance. For thrombolysis, guidelines should be based on the 'Recommendations on Stroke Thrombolysis' from the Regional Acute Stroke Steering Group (December 2009 – or later versions). Imaging guidelines should be agreed with local imaging services and be based on 'Implementing the National Stroke Strategy – an imaging guide' (DH, 2008).* *3. Draft NICE Quality Standard (2009) is that patients with stroke should be offered a minimum of 45 minutes of each therapy that is required for a minimum of 5 days a week for as long as they are continuing to benefit from it.*
CN - 502	Thrombolysis Centres: A thrombolysis protocol should be in use covering: a. Delivery and management of thrombolysis b. Management of post-thrombolysis complications.	Protocol available. *Notes: This protocol should be based on latest evidence of effectiveness, including NICE guidance.*
CN - 503	Clinical guidelines should be in use covering the immediate management of patients with: a. Intracerebral haemorrhage b. Sub-arachnoid haemorrhage c. Arterial dissection **d.** Central venous thrombosis.	Guidelines available.

Ref	Quality Standard	Demonstration of Compliance
CN - 504	Clinical guidelines should be in use covering the management of: a. Hypertension b. Obesity c. High cholesterol d. Atrial fibrillation e. Diabetes f. Fever	Guidelines available.
CN - 505	The following protocols should be in use: a. Recognition of deteriorating patients and transfer to intensive care b. Provision of high dependency care, including communication with critical care services c. Prevention and management of venous thrombosis d. Nutrition and feeding, including tube feeding e. Mobilisation f. Physiological and neurological monitoring.	Guidelines available.
CN - 506	Discharge planning guidelines should be in use covering, at least: a. Discharge to Stroke Unit closer to the patient's home (Thrombolysis Centres only) b. Discharge to stroke rehabilitation facility c. Discharge home with support from specialist stroke rehabilitation services d. Communication with the patient's GP.	Guidelines available.
CN - 598	A protocol on driving advice should be in use, covering establishing the type of licence and giving appropriate advice on DVLA notification.	Written protocol. *Note: The protocol should comply with the latest version of 'Guidance to the current Medical Standards of Fitness to Drive' produced by the DVLA and reviewed every six months.*
CN - 599	The stroke service should be aware of local guidelines for end of life care.	Availability of guidelines relating to end of life care that are used by specialist palliative care services in the local area.
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES		
CN - 601	An alert system should be in use which ensures rapid availability of clinical and imaging staff for assessment of eligibility for thrombolysis.	Details of system.

Ref	Quality Standard	Demonstration of Compliance
CN - 602	An operational policy should be in use which ensures: a. Brain imaging for urgent patients, including those where thrombolysis is being considered, within 30 minutes of admission and, at the latest, within 60 minutes of admission b. Thrombolysis within 60 minutes of admission in appropriate patients (Thrombolysis Centres only) c. Brain imaging for all patients, within four hours of admission and, at the latest, within 24 hours of admission d. Swallowing screening within four hours of admission and prior to administration of any drinks, food or oral medication e. Specialist swallowing assessment within 24 hours of admission (if indicated on admission screening) f. Rehabilitation assessment by physiotherapy, speech and language therapy and occupational therapy (if required) within 24 hours of admission g. Assessment by other members of the specialist rehabilitation team (QSCN-303), if required, within five days of admission h. Referral for carotid endarterectomy within one week of onset of symptoms, if indicated i. Care plans are in place for all patients and reviewed regularly.	Written operational policy. *Notes:* *1. The Quality Standards for urgent brain imaging, thrombolysis and brain imaging for all patients are more stringent than those in the Stroke Strategy, NICE guidance and the West Midlands Service Specification for the Management of Stroke Thrombolysis and Acute Care (Hyper-Acute). Current national standards are 60 minutes, three hours and 24 hours respectively. West Midlands Cardiac and Stroke Networks consider that there is now evidence of the effectiveness of earlier interventions and services should be working towards the more stringent Standards. If evidence of the benefit of even earlier interventions becomes available then this should also be implemented.* *2. This QS links with the Quality Standards for Vascular Services (QSDN-502) for carotid intervention within two weeks of the first event (stroke or TIA).*
CN - 603	A ward round or review of all patients by a senior member of the stroke team should take place daily.	Details of ward rounds / reviews. *Notes:* *1. This QS applies to days when emergency admissions are accepted and to the following day.* *2. A senior member of the stroke team is a consultant stroke specialist or specialist registrar with appropriate experience.* *3. As QSCN-602. This QS is more stringent than national guidance which expects a consultant ward round / review five days each week.*
CN - 604	A multi-disciplinary team meeting to review the care of patients with stroke should be held at least weekly involving at least: a. Stroke specialists b. Stroke coordinator (QSCN-207) c. Rehabilitation services (QSCN-302 & CN-303).	Description of meeting arrangements. Notes of meetings held. *Note: The treatment of patients with acute stroke should not be delayed until the multi-disciplinary team meeting.*

Ref	Quality Standard	Demonstration of Compliance
CN - 605	A neuro-radiology multi-disciplinary team meeting should be held at least weekly.	Description of meeting arrangements. Notes of meetings held.
CN - 609	Arrangements should be in place for multi-disciplinary discussion of patients' suitability for surgery involving a stroke specialist, radiologist, vascular surgeon and stroke coordinator or lead nurse.	Details of arrangements. Patients' notes with record of multi-disciplinary discussion. *Note: This QS links to the Quality Standards for Services for Patients with Vascular Disease (QSDN-603).*
GOVERNANCE		
CN - 701	The service should have a system of monitoring time from onset of symptoms and progress through the patient pathway for all patients.	Details of system in use.
CN - 702	There should be regular collection of the national data set and monitoring of activity and outcome indicators.	Availability of data and evidence of ongoing monitoring. *Note: Outcome indicators are given in the West Midlands Service Specification for the Management of Stroke Thrombolysis and Acute Care (2009). These may be updated to reflect the revised standards in QSCN-602 & CN-603).*
CN - 703	The service should have an annual programme of audit of compliance with evidence-based guidelines.	Details of audit programme. *Note: The audit programme should include audit of compliance with guidelines in QSs CN501-CN599. For Thrombolysis Centres this must include systems for monitoring the accuracy of assessment and administration of thrombolysis.*
CN - 704	The service should have arrangements for review of complaints, positive feedback, morbidity, mortality and critical incidents. This should include review of patients where thrombolysis was indicated but not administered within three hours of onset of symptoms.	Details of arrangements.
CN - 705	The service should produce an annual report summarising activity, compliance with quality standards and clinical outcomes. The report should identify actions required to meet expected quality standards and progress since the previous year's annual report.	Latest annual report.
CN - 706	The service should be an active member of the West Midlands Stroke Research Network.	Studies available and number of patients enrolled.

Ref	Quality Standard	Demonstration of Compliance
CN - 707	The service should offer an educational session on the assessment of patients with stroke to local GPs at least annually.	Details of educational sessions. *Note: The educational session may be combined with education on the assessment of patients with TIA. The organisation of the session may be through the local Cardiac and Stroke Network or PCT (QSCZ-703) rather than the Stroke Service.*
CN - 708	Thrombolysis Centres: The service should coordinate an educational session for referring Stroke Units on the assessment and treatment of patients with stroke at least annually. This session should include: a. Review of the care of patients where thrombolysis was indicated but not administered within three hours of onset of symptoms. b. Review of arrangements for discharge of patients to local Stroke Units.	Details of educational sessions.
CN - 709	Stroke Units: The service should participate in the educational session run by the Thrombolysis Centre to which patients are usually referred.	Details of attendance at educational sessions.
CN - 799	All policies, procedures and guidelines should comply with Trust document control procedures.	Policies, procedures and guidelines meeting reasonable document control quality requirements of monitoring, review and version control.

Ref	Quality Standard	Demonstration of Compliance
NEURO-VASCULAR ASSESSMENT SERVICE		
SUPPORT FOR PATIENTS AND CARERS		
CP - 101	Information should be offered to all patients with a confirmed TIA covering at least: a. Transient Ischaemic Attack, its causation and potential impact b. Investigations and treatment options available c. Research trials available (if any) d. Driving advice and DVLA notification e. Promoting good health, including diet, exercise and smoking cessation f. Symptoms and action to take if become unwell g. Follow-up arrangements h. Who to contact with queries or for advice i. How to influence local services (QSCP-199) j. Where to go for further information, including NHS Direct and useful websites.	Written information available. Discussion with patients and carers. *Notes:* *1. This information should be offered to patients with TIA attending as out-patients and to those receiving neuro-vascular assessment during in-patient care.* *2. Information should be written in clear, plain English and should be available in formats and languages appropriate to the needs of the patients.*
CP - 102	All patients with a confirmed TIA should have their management plan discussed with them. Patients should be offered a written, individual management plan. Arrangements should be in place to ensure a copy of this plan is received by the patient's GP within one week of the neuro-vascular assessment.	Examples of management plans. Review of patient notes. *Notes:* *1. The management plan should include confirmation of follow-up arrangements.* *2. The copy of the management plan sent to the patient's GP should remind the GP of the need to include the patient on the practice stroke and TIA register.*
CP - 103	Information for patients about interpreter services should be available.	Information available
CP - 199	The Neuro-Vascular Assessment Service should have: a. Mechanisms for receiving feedback from patients and carers about the treatment and care they receive. b. Mechanisms for involving patients and carers in decisions about the organisation of the services.	Description of current arrangements. Examples of changes made as a result of feedback from patients and carers. *Note: The arrangements for receiving feedback from patients and carers may involve surveys, focus groups and/or other arrangements. They may be part of Trust-wide arrangements so long as issues relating to the Neuro-Vascular Assessment Service can be identified.*

Ref	Quality Standard	Demonstration of Compliance
STAFFING		
CP - 201	A Neuro-Vascular Assessment Service should be available daily with at least: a. A healthcare professional who is a member of the stroke team and has competences in neurovascular assessment b. Ultrasound duplex devices and a member of staff with competences in vascular ultrasound c. A consultant stroke physician available for advice.	Details of service availability. Staffing details. *Notes:* *1. The service should be available at some time during each day but may be organised differently on different days (especially at weekends). The guidance for patients, primary care, Emergency Departments and Acute Medical Admissions must be clear about these arrangements (QSCZ-102, CZ-502, CE-501 & CF-501).* *2. The healthcare professional with competences in neurovascular assessment will normally be a doctor of level ST3 or above but other staffing models are feasible and may develop over time.* *3. The member or staff undertaking vascular ultrasound may be a vascular technologist, radiographer, nurse or radiologist.* *4. Additional staff may also be available, for example, a nurse, to offer support and information to patients.*
SUPPORT SERVICES		
CP - 301	MRI / MRA with diffusion weighted imaging and gradient echo sequences should be available within 24 hours for patients at high risk of subsequent stroke and within seven days for those at lower risk. CT / CTA should be available for patients where MRI is contra-indicated.	Details of service availability. *Notes:* *1. Guidelines covering choice of imaging are covered by QSCP-501.* *2. Patients may need to be transferred to another hospital for MRI / MRA, especially at weekends.* *3. It is desirable that Contrast Enhanced MRA (CEMRA) is also available.*
CP - 302	Access to lifestyle management services, including dietician, smoking cessation and psychology services, should be available.	Details of service availability. Staffing details. *Notes: Access may be directly and / or through the patient's GP.*

Ref	Quality Standard	Demonstration of Compliance
GUIDELINES AND PROTOCOLS		
CP - 501	Clinical guidelines should be in use within the Neuro-Vascular Assessment Service covering: a. Clinical assessment b. Choice of imaging, including indications for carotid Doppler, CTA and MRA c. Other investigations, including blood tests, echo and 24 hour ECG d. Pharmacological treatment, including initiation of aspirin, statins and blood pressure management (see note 2) e. Indications for admission f. Indications for referral to lifestyle management services (dietician, smoking cessation, psychology) g. Indications for referral to vascular services for consideration of carotid endarterectomy h. Indications for referral to cardiology services, including arrhythmia services. i. Arrangements for one month follow up of well-being, cognitive impairment and impact on work (if undertaken by Neuro-Vascular Assessment Service).	Guidelines available. Discussion with staff. *Notes:* *1. All referral guidelines should be agreed with the services to which patients are referred.* *2. Guidelines on prescribing must include initiation of treatment and should not just refer the patient back to their GP for a prescription.* *3. Guidelines should include immediate treatment, if indicated, and referral back to the GP for patients found not to have had a TIA but who have raised cardiovascular risk factors.* *4. Guidelines should be based on the latest evidence of effectiveness, including NICE guidance. Imaging guidelines should be agreed with local imaging services and based on 'Implementing the National Stroke Strategy – an imaging guide' (DH, 2008).*
CP - 598	A protocol on driving advice should be in use, covering establishing the type of licence and giving appropriate advice on DVLA notification.	Written protocol. *Note: The protocol should comply with the latest version of 'Guidance to the current Medical Standards of Fitness to Drive' produced by the DVLA and reviewed every six months.*
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES		
CP - 609	Arrangements should be in place for multi-disciplinary discussion of patients' suitability for surgery involving, at least, a stroke physician, radiologist and vascular surgeon.	Details of arrangements. Patients' notes with record of multi-disciplinary discussion. *Note: This QS links to the Quality Standards for Services for Patients with Vascular Disease (QSDN-603).*

Ref	Quality Standard	Demonstration of Compliance
GOVERNANCE		
CP - 701	The service should offer an educational session on the assessment of TIA to local general practitioners at least annually.	Details of sessions provided *Note: The educational session may be combined with education on the assessment of patients with stroke. The organisation of the session may be through the local Cardiac and Stroke Network or PCT (QS0) rather than the Neuro-Vascular Assessment Service.*
CP - 702	There should be regular collection of data and monitoring of activity and outcome indicators.	Availability of data and evidence of ongoing monitoring. *Note: Outcome indicators are given in the West Midlands Service Specification for the Management of TIA and Non-disabling / Minor Stroke.*
CP - 703	The service should have an annual programme of audit of compliance with evidence-based guidelines.	Details of audit programme. *Note: The audit programme should include an audit of compliance with guidelines in QSCP-501.*
CP - 704	The service should have arrangements for review of complaints, positive feedback, morbidity, mortality and critical incidents.	Details of arrangements.
CP - 705	The service should produce an annual report summarising activity, compliance with quality standards and clinical outcomes. The report should identify actions required to meet expected quality standards and progress since the previous year's annual report.	Latest annual report.
CP - 799	All policies, procedures and guidelines should comply with Trust document control procedures.	Policies, procedures and guidelines meeting reasonable document control quality requirements of monitoring, review and version control.

Ref	Quality Standard	Demonstration of Compliance
COMMISSIONING These Quality Standards are the responsibility of Primary Care Trusts but may be undertaken on their behalf by Cardiac and Stroke Networks, as agreed by the Network Board.		
SUPPORT FOR PATIENTS AND CARERS		
CZ - 101	Information should be available for the public on recognising and identifying the symptoms of stroke and TIA, such as FAST, and action to take.	Details of public awareness initiatives.
CZ - 102	Information for patients referred to Neuro-Vascular Assessment Services should be agreed and distributed to all local GPs, Walk-in Centres, Urgent Care Centres, Minor Injuries Units, Emergency Departments and Acute Medical Admissions Units.	Examples of information. Details of distribution.
GUIDELINES AND PROTOCOLS		
CZ - 501	Guidance should be agreed and distributed to all primary care services covering at least: a. Assessment of patients with suspected stroke, including the use of a validated tool such as FAST b. Immediate management c. Referral information, including date and time of onset of symptoms and date and time of first contact.	Guidance available. Details of distribution. *Notes:* *1. This guidance should be agreed by the Stroke Unit/s and Thrombolytic Centre/s to which patients are referred.* *2. Primary Care Services covered by this Quality Standard are defined in the Introduction.*

Ref	Quality Standard	Demonstration of Compliance
CZ - 502	Guidance should be agreed and distributed to all primary care services covering at least: a. Assessment of patients with suspected TIA, including undertaking an ABCD2 score b. Immediate management, including indications for aspirin or alternative anti-platelet agent c. Indications for referral to the Neuro-Vascular Assessment Service within 24 hours for high risk (currently ABCD2 score of 4 and above, multiple TIAs or minor stroke) or within seven days for low risk patients d. Referral information, including date and time of onset of symptoms and date and time when symptoms resolved e. Information to be given to patients and carers referred to the Neuro-Vascular Assessment Service (QSCZ-101) f. Indications for admission g. Arrangements for referral to lifestyle management services h. Arrangements for one month follow up of well-being, cognitive impairment and impact on work.	Guidance available. Details of distribution. *Notes:* *1. This guidance should be agreed by the local Neuro-Vascular Assessment Service.* *2. This Quality Standard links withQSCA-502.* *3. Primary Care Services covered by these Quality Standards are defined in the Introduction.* *4. Referral to lifestyle management services may be directly from the Neuro-Vascular Assessment Service and / or through the patient's GP.* *5. Follow up may be undertaken by the general practitioner or the Neuro-Vascular Assessment Service. The agreed follow-up arrangements should be reflected in the guidelines in use in the Neuro-Vascular Assessment Service (QSCP-501).* *6. PCTs should ensure that guidance has been distributed to all Emergency Departments referring patients to the local Neuro-Vascular Assessment Service.*
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES		
CZ - 601	PCTs should have agreed the configuration of the following services for their population: a. Neuro-Vascular Assessment Services b. Stroke Units c. Thrombolysis Centres.	Agreed configuration of services. *Note: If Stroke Units and Thrombolysis Centres do not admit patients at all times then the times of admission should be agreed and included in the matrix of urgent care services (QSAZ-601).*
GOVERNANCE		
CZ - 701	PCTs should have agreed the action plan resulting from the Stroke Service Annual Report (QSCN-705).	Evidence of PCT agreement of Annual Report action plan.
CZ - 702	PCTs should have agreed the action plan resulting from the Neuro-Vascular Assessment Services Annual Report (QSCP-705).	Evidence of PCT agreement of Annual Report action plan.
CZ - 703	PCTs should ensure that educational sessions for general practitioners in the management of patients with stroke and TIA take place at least annually.	Details of educational sessions.

APPENDICES

APPENDIX 1 – CARE QUALITY COMMISSION REGULATORY REQUIREMENTS

Shaded boxes indicate where a Quality Standard addresses one of the CQC's *Essential standards of quality and safety*. There are 16 such standards (referenced to the relevant regulation number and outcome number).

QS Reference	CQC Essential standards of quality and safety															
	Care and welfare of people who use services (9, 4)	Assessing and monitoring the quality of service provision (10, 16)	Safeguarding people who use services from abuse (11, 7)	Cleanliness and infection control (12, 8)	Management of medicines (13, 9)	Meeting nutritional needs (14, 5)	Safety and suitability of premises (15, 10)	Safety, availability and suitability of equipment (16, 11)	Respecting and involving people who use services (17, 1)	Consent to care and treatment (18, 2)	Complaints (19, 17)	Records (20, 21)	Requirements relating to workers (21, 12)	Staffing (22, 13)	Supporting workers (23, 14)	Cooperating with other providers (24, 6)
CA - 101	■	■							■							
CA - 501	■	■													■	
CA - 502	■	■													■	
CC - 201		■														
CE - 501	■	■							■							
CF - 501	■	■							■							
CN - 101					■				■							
CN - 102			■													
CN - 103									■							
CN - 104									■							
CN - 105									■							
CN - 199											■					
CN - 201													■			
CN - 202														■		
CN - 203														■		
CN - 204													■			
CN - 205													■			
CN - 206													■			
CN - 207																■
CN - 208															■	
CN - 301								■							■	
CN - 302						■							■			
CN - 303						■										
CN - 304	■															
CN - 501	■														■	

QS Reference	CQC Essential standards of quality and safety															
	Care and welfare of people who use services (9, 4)	Assessing and monitoring the quality of service provision (10, 16)	Safeguarding people who use services from abuse (11, 7)	Cleanliness and infection control (12, 8)	Management of medicines (13, 9)	Meeting nutritional needs (14, 5)	Safety and suitability of premises (15, 10)	Safety, availability and suitability of equipment (16, 11)	Respecting and involving people who use services (17, 1)	Consent to care and treatment (18, 2)	Complaints (19, 17)	Records (20, 21)	Requirements relating to workers (21, 12)	Staffing (22, 13)	Supporting workers (23, 14)	Cooperating with other providers (24, 6)
CN - 502	■				■										■	
CN - 503	■														■	
CN - 504	■														■	
CN - 505	■														■	
CN - 506	■														■	■
CN - 598	■														■	
CN - 599	■														■	
CN - 601	■															
CN - 602	■															
CN - 603		■														
CN - 604		■														■
CN - 605		■														
CN - 609		■														
CN - 701		■														
CN - 702		■														
CN - 703		■														
CN - 704		■														
CN - 705		■														
CN - 706		■														
CN - 707															■	
CN - 708															■	
CN - 709															■	
CN - 799		■														
CP - 101	■								■							
CP - 102	■								■							
CP - 103	■								■							
CP - 199	■								■		■					
CP - 201	■							■					■			
CP - 301	■							■					■			
CP - 302	■								■							
CP - 501		■						■								
CP - 598		■														
CP - 609																
CP - 701															■	

QS Reference	CQC Essential standards of quality and safety															
	Care and welfare of people who use services (9, 4)	Assessing and monitoring the quality of service provision (10, 16)	Safeguarding people who use services from abuse (11, 7)	Cleanliness and infection control (12, 8)	Management of medicines (13, 9)	Meeting nutritional needs (14, 5)	Safety and suitability of premises (15, 10)	Safety, availability and suitability of equipment (16, 11)	Respecting and involving people who use services (17, 1)	Consent to care and treatment (18, 2)	Complaints (19, 17)	Records (20, 21)	Requirements relating to workers (21, 12)	Staffing (22, 13)	Supporting workers (23, 14)	Cooperating with other providers (24, 6)
CP - 702																
CP - 703																
CP - 704																
CP - 705																
CP - 799																
CZ - 101																
CZ - 102																
CZ - 501																
CZ - 502																
CZ - 601																
CZ - 701																
CZ - 702																
CZ - 703																

APPENDIX 2 – REFERENCE SOURCES

A full list of references is given in the West Midlands Service Specifications. The following table summarises the links between each Quality Standard and its main reference source.

QS	NICE Guidance (CG68)[i]	RCP Stroke Guidelines – key recommendations[ii]	National Stroke Strategy - quality markers[iii]	Vital Signs[iv]
CA - 101			QM 2	
CA - 501	1.1		QM 2, 5, 7	2005
CA - 502	1.1	4.2.1.C, 6.46.1.6	QM 2, 5, 6, 7, 14, 15, 16	2005, 2006, 2007
CC - 201			QM 18	2004
CE - 501	1.1, 1.3, 1.4	3.1.1.B, 4.2.1.C	QM 5, 7, 8	2005, 2006, 2007
CF - 501	1.1, 1.3, 1.4	3.1.1.B, 4.2.1.C	QM 5, 7, 8	2005, 2006, 2007
CN - 101		3.7.1.A, 5.2.1.A, 7.5.1.B	QM 2, 3, 13	
CN - 102		3.7.1.A, 7.5.1.B	QM 3	2004
CN - 103			QM 3	2004
CN - 104		7.5.1.B	QM 3, 11, 12	2004
CN - 105		5.2.1.A, 7.5.1.B	QM 2, 12	
CN - 199			QM 4	
CN - 201	1.2, 1.3, 1.4	3.1.1.B, 3.3.1.A	QM 7, 8, 9, 18	
CN - 202	1.2, 1.3, 1.4	3.1.1.B, 3.3.1.A	QM 7, 8, 9, 18	
CN - 203	1.2, 1.3	3.3.1.A	QM 8, 9, 18	2004
CN - 204	1.3, 1.4, 1.5, 1.6, 1.7, 1.8	3.1.1.C, 3.3.1.A, 4.16.1.A	QM 8, 9, 18	2004
CN - 205	1.7	3.3.1.A	QM 8, 9, 18	
CN - 206		3.3.1.A	QM 8, 9, 11, 18	
CN - 207		2.1.1.C, 3.7.1.A	QM 10, 12, 18	
CN - 208			QM 18, 19	2004
CN - 301	1.2	3.3.1.A	QM 5, 7, 8, 9, 18	
CN - 302	1.6, 1.7, 1.8	2.1.1.C, 3.3.1.A, 3.12.1.A, 4.16.1.A	QM 9, 10, 18	
CN - 303	1.6	2.1.1.C	QM 3, 9, 10	
CN - 304			QM 7, 9	
CN - 501	1.2, 1.3, 1.4, 1.9	4.4.1.E, 5.1.1.A	QM 7, 8, 9	
CN - 502	1.4	3.1.1.B	QM 7, 9	
CN - 503	1.4	4.6.1.A	QM 7, 9	
CN - 504	1.5		QM 9	
CN - 505	1.3, 1.4, 1.5, 1.6, 1.7		QM 9	
CN - 506		2.1.1.C, 3.2.1.B, 3.7.1.A, 5.2.1.A	QM 10, 12	
CN - 598			QM 3	
CN - 599			QM 11	
CN - 601	1.3	3.1.1.B	QM 7	
CN - 602	1.3, 1.4, 1.6, 1.9	2.1.1.C, 3.1.1.B, 4.4.1.E	QM 5, 7, 8, 9, 14	
CN - 603			QM 9	
CN - 604		2.1.1.C, 4.18.1.B	QM 8, 10	2004
CN - 605			QM 8	2004
CN - 606		4.4.1.E	QM 8	2004

QS	NICE Guidance (CG68)[i]	RCP Stroke Guidelines – key recommendations[ii]	National Stroke Strategy - quality markers[iii]	Vital Signs[iv]
CN - 701			QM 20	
CN - 702			QM 20	
CN - 703			QM 20	
CN - 704			QM 4, 20	
CN - 705			QM 20	
CN - 706			QM 17, 20	
CN - 709			QM 1, 18, 20	
CN - 708			QM 18, 20	
CN - 709			QM 18, 20	2004
CN - 799				
CP – 101			QM 2, 3	
CP – 102		3.7.1.A, 5.2.1.A	QM 2, 3, 10, 12	
CP – 103		5.1.1.A, 7.5.1.B	QM 3	
CP - 199			QM 4	
CP - 201	1.2		QM 3, 5, 8, 9, 18	
CP - 301	1.2		QM 5, 8, 9	
CP - 302	1.6		QM 2, 3, 13	
CP - 501	1.1, 1.2, 1.4, 1.9	4.4.1.E, 5.1.1.A, 6.46.1.A	QM 5, 6, 8, 9, 14, 15, 16	2005, 2006, 2007
CP - 598			QM 3	
CP - 601			QM 8	
CP - 701			QM 1, 18, 20	
CP - 702			QM 20	
CP - 703			QM 20	
CP - 704			QM 4, 20	
CP - 705			QM 20	
CP - 799				
CZ - 101	1.1		QM 1, 17	
CZ - 102			QM 2, 3, 17	
CZ - 501	1.1		QM 1, 5, 8, 17	2005
CZ - 502	1.1, 1.2, 1.4	4.2.1.C	QM 1, 2, 3, 5, 8, 14, 15, 16, 17	2006, 2007
CZ - 601	1.2, 1.3, 1.4	2.1.1.A, 3.1.1.B, 3.1.1.C	QM 5, 7, 8, 9, 17	2004
CZ - 701			QM 20	
CZ - 702			Q, 17, 20	
CZ - 703			QM 1, 17, 18, 20	

Quality Standards without a reference source are based on the consensus view of the group which developed the Standards, taking into account comments received.

[i] *Stroke: Diagnosis and initial management of acute stroke and transient ischaemic attack (TIA)*, NICE clinical guidelines 68 (2008)
[ii] *National clinical guideline for stroke, Third edition*, RCP (2008)
[iii] *National Stroke Strategy*, DH (2007)
[iv] *Vital Signs Monitoring Return – commissioning based*, *associated with stroke*, DH (2008)