University Hospitals Birmingham NHS
NHS Foundation Trust

Expanded Practice Protocol for Stroke Nurse Practitioners to refer patients with a Suspected or Diagnosed Stroke / Transient Ischaemic Attack (TIA) for Head Computer Tomography (CT) and Head CT Angiogram Scan

CONTROLLED DOCUMENT

CATEGORY:	**Procedural Document**
CLASSIFICATION:	**Clinical**
PURPOSE	**The purpose of this expanded practice protocol is to support stroke nurse practitioners to refer patients with a suspected or diagnosed stroke / transient ischaemic attack (TIA) for head computer tomography (CT) and head CT angiogram scan**
Controlled Document Number:	**915**
Version Number:	**2**
Controlled Document Sponsor:	**Executive Chief Nurse**
Controlled Document Lead:	**Nominated Stroke Nurse Practitioner**
Approved By:	**Executive Chief Nurse** **Executive Medical Director (or nominated deputy)** **Associate Director of Nursing, Division C** **Matron Stroke Medicine** **Clinical Service Lead, Stroke Medicine** **Clinical Service Lead, Imaging (or nominated deputy)** **Trust IRMER Lead**
On:	**September 2016**
Review Date:	**August 2019**
Distribution: • **Essential Reading for:** • **Information for:**	**All stroke nurse practitioners (SNPs) who currently undertake the practice of referring patients with a suspected or diagnosed stroke / TIA for Head CT and head CT Angiogram Scan, and all SNPs who wish to expand their practice to include this skill.** **All clinical staff working in the speciality of stroke medicine**

EVIDENCE FOR PRACTICE

The Department of Health National Stroke Strategy (2007) and the National Institute for Health and Clinical Excellence (NICE, 2008, reviewed 2014) published specific guidance on how to assess and manage patients with a suspected stroke/transient ischaemic attack (TIA). Both emphasised the importance of the availability of immediate imaging in order to ensure early diagnosis and prompt treatment of patients. The National Audit Office supported this in reporting progress in stroke care in 2010.

Developments within healthcare have led to an expansion in the role of non-medical health care professionals, with registered nurses, such as nurse practitioners, playing a significant role in providing care for patients. A diagnostic imaging request from non-medically qualified referrers has been recognised as a key factor in improving the patient care pathway (RCN, Royal College of Radiologist et al, 2008).

By enabling the stroke nurse practitioner (SNP) to request head CT and head CT angiogram scans, patients will receive:

- Prompt booking of head CT and head CT angiogram scans, reducing delays in patients' treatment
- Improved access to acute treatments
- Improved continuity of care
- Enhanced communication from the multi-disciplinary team

Stroke is a time sensitive disease with acute treatments such as thrombolysis and mechanical clot retrieval being limited to the first few hours post stroke onset. The SNP is the primary access to stroke services and they will frequently be the first person to assess this group of patients.

All suspected stroke/ TIA patients must have plain CT head scan. Imaging must be performed **immediately** for people with suspected stroke if **any** of the following apply:

• Indication for thrombolysis or early anticoagulation treatment
• On anticoagulant treatment
• A known bleeding tendency
• A depressed level of consciousness (Glasgow Coma Score below 13)
• Unexplained progressive or fluctuating symptoms
• Papilloedema, neck stiffness or fever
• Severe headache at onset of stroke symptoms

Acute stroke patients who also qualify for mechanical clot retrieval (thrombectomy) must also have a CT angiogram performed immediately. The patients who are likely to benefit include:

- **Primary intra-arterial thrombectomy**
  - **o** Severe disabling neurological deficit (NIHSS > 8) **and**
  - **o** Contraindications to iv thrombolysis (e.g. recent surgery), 4.5 hrs - 6 hrs from onset
- **Rescue thrombectomy**
  - **o** Severe disabling neurological deficit (NIHSS > 8) **and**
  - **o** No improvement (or worsening without bleed) with iv thrombolysis
- **Brain stem stroke**
  - **o** Within 9 hrs of symptom onset and occlusion of basilar artery
  - **o** Potentially eligible even if consciousness impaired and or patient ventilated

For all other patients with acute stroke without an indication for immediate brain imaging, scanning must still be performed as soon as possible and certainly within 12 hours of onset of symptoms.

Practice against this expanded practice protocol has recently commenced therefore it has not possible to perform an audit. A review has been undertaken to ensure the practice covered by this document remains up to date. No significant changes to the protocol have been made.

CONSENT

Although formal written consent is not required for minor procedures, verbal consent for the referral of head CT and head CT angiogram scan for patients with a suspected or diagnosed stroke/TIA must be obtained where possible and/or a best interest decision will be made and this must be documented in the patient's records. For further information regarding consent and mental capacity please refer to the following documents:

- Department of Health Reference Guide to Consent for Examination or Treatment (2009)
- The Trust's Policy and Procedural document for consent to examination or treatment (current version)
- *Mental Capacity Act (2005).*

INDICATIONS

The SNP can refer the following patients for:

1. CT head and CTA angiogram of carotids and intracranial vessels (from arch to vertex) if the patient is referred to the SNP with suspected acute stroke /TIA **and** is a potential candidate for thrombolysis/endovascular thrombectomy.

2. CT head
   a. For patients referred to SNP with suspected stroke/TIA

b. For stroke patients who require 24 hour repeat imaging following thrombolysis or mechanical clot retrieval as per national stroke guidelines (DH 2007)

CONTRAINDICATIONS

The SNP must not refer patients for head CT and head CT angiogram scans when:

1. The patient has capacity and does not give consent to be referred for a head CT scan or angiogram by a SNP.

2. The patient is under 16 years of age

3. The patient is having the head CT and head CT angiogram scan for medico-legal reasons

4. The patient requests to be seen by a member of the medical team

5. The patient is acutely ill and requires additional urgent medical intervention and treatment which take precedent over stroke interventions

LIMITATIONS TO PRACTICE

1. If the patient is admitted with complex clinical presentations the SNP must discuss the patient with the consultant in stroke medicine before requesting a head CT and head CT angiogram scan

2. If the patient has known renal failure or is contraindicated to contrast for any other reason the stroke nurse practitioner will refer to consultant in stroke medicine before referring for imaging

3. If the SNP is concerned about the patient's condition they must immediately refer the patient to the appropriate medical practitioner for advice on any further action to be taken, and this must be recorded in the patient's record

CRITERIA FOR COMPETENCE

1. The SNP must attend an IRMER training session organised by the Imaging Department.

2. The SNP must have a working knowledge of the Trust Procedures for Medical Imaging (current version).

3. Evidence of satisfactory supervised practice must be provided by the SNP as witnessed by a registered practitioner who is already competent in requesting head CT and CT angiogram scans for patients with suspected or diagnosed stroke/TIA (Appendix 1).

4. The number of supervised practices required will reflect the individual SNP learning needs.

5. Evidence of competence must be provided and a copy kept in the SNP personal file (Appendix 2). Following each review and update of the protocol the SNP has a responsibility to ensure that there is evidence that they have read and familiarised themselves with the current version of the protocol.

6. SNP's new to the Trust, who has been performing the skill elsewhere, must read, understand and be signed off against this protocol. Evidence of appropriate education and competence must be provided and checked by the Matron for Stroke Medicine before undertaking this expanded practice at the Trust. The decision whether the SNP needs to complete Trust training will be at the discretion of the SNP's Clinical Service Lead for Stroke Medicine

7. In accordance with codes of professional practice, the SNP has a responsibility to recognise, and to work within, the limits of their competence. In addition, the SNP has a responsibility to practise within the boundaries of the current evidence based practice and in line with up to date Trust and national policies and procedural documents. Evidence of continuing professional development and maintenance of skill level will be required and confirmed at the SNP's annual appraisal by the SNP's line manager.

A list of SNPs competent to perform this skill must be kept by the line manager for the SNP service and in the Imaging Department.

PROTOCOL AND SKILLS AUDIT

A nominated SNP will lead the audit of the protocol with support from the Practice Development Team. The audit will be undertaken in accordance with the review date and will include:

- Adherence to the protocol
- Any untoward incidents or complaints
- Patient experience feedback
- Number of SNP's competent to perform the skill

All audits must be logged with the Risk and Compliance Unit.

CLINICAL INCIDENT REPORTING AND MANAGEMENT

Any untoward incidents and near misses must be reported via the Trust incident reporting system, and where required escalated to the appropriate management team. In addition, the Risk and Compliance Unit must be notified by telephone of any Serious Incidents (SI).

REFERENCES

Department of Health (2009) **Reference Guide to Consent for Examination or Treatment** 2nd edn. HMSO London

Mental Capacity Act 2005, http://www.legislation.gov.uk/ukpga/2005/9/contents [Accessed 29.6.16]

National Audit Office (2010) **Progress in Improving Stroke care** The Stationary Office London http://www.nao.org.uk/wp-content/uploads/2010/02/0910291.pdf [Accessed 29.6.16]

Royal College of Nursing, Society and College of Radiographers, General Chiropractic Council, General Osteopathic Council, Chartered Society of Physiotherapy, NHS Alliance and The Royal College of Radiologists (2008) **Clinical imaging requests from non-medically qualified professionals.** RCN, London. http://www.rcn.org.uk/__data/assets/pdf_file/0003/78726/003101.pdf [Accessed 29.6.16]

Department of Health (2007) **National Stroke Strategy**. London: Department of Health.

National Institute for Health and Clinical Excellence. (2008). **Stroke, Diagnosis and initial management of acute stroke and transient ischaemic attack (TIA).** NICE clinical guideline 68. (Evidence reviewed in 2014) http://www.nice.org.uk/nicemedia/live/12018/41331/41331.pdf [Accessed 29.6.16]

University Hospitals Birmingham NHS Foundation Trust (current version) **Policy for consent to examination or treatment**, University Hospitals Birmingham NHS Foundation Trust http://uhbpolicies/assets/ConsentToExaminationOrTreatmentPolicy.pdf [Accessed 29.6.16]

University Hospitals Birmingham NHS Foundation Trust (current version) **Procedure for consent to examination or treatment**. University Hospitals Birmingham NHS Foundation Trust http://uhbpolicies/assets/ConsentToExaminationOrTreatmentProcedure.pdf [Accessed 29.6.16]

University Hospitals Birmingham NHS Foundation Trust (current version) **Working with carers: common core principles** University Hospitals Birmingham NHS Foundation Trust http://uhbhome/working-with-carers-common-core-principles.htm [Accessed 29.6.16]

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National Institute for Health and Clinical Excellence. (2016). Acute Stroke NICE pathways http://www.google.co.uk/url?url=http://pathways.nice.org.uk/pathways/stroke/acutestroke.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKEwj31oC4gc3NAhXJDMAKHXXHDQIQFgg_MAc&usg=AFQjCNFgq6e0LtX7GKkAsiiNnfBF3PFJHA [Accessed 29.6.16]

Royal College of Physicians (2015) Sentinel Stroke National Audit Programme. (SSNAP) https://www.rcplondon.ac.uk/projects/outputs/sentinel-stroke-national-audit-programme-ssnap [Accessed 29.6.16]

United Kingdom Parliaments (2015) They work for you. National Stroke Strategy – Question for short debate in the House of Lords at 8pm on 18th November 2015 http://www.theyworkforyou.com/lords/?id=2015-11-18a.209.0 [Accessed 29.6.16]

University Hospitals Birmingham NHS Foundation **Trust Risk Assessment Documentation** http://uhbhome/Resources/RiskAssessmentDocs/Home.aspx

PROTOCOL SUBMISSION DETAILS

Protocol prepared by:

Don Sims	Stroke Consultant & CSL
Swarupsinh Chavda	Consultant Diagnostic and Interventional Neuro-radiologist
Colm Forde	Consultant Radiologist, Radiology
Rachael Jones	Stroke Nurse Practitioner
Tina Jones	Trust IRMER Lead
Geraldine Folliard	Matron for Stroke Medicine
Deborah Jackson	Practice Development Nurse

Protocol submitted to and approved by:

Executive Chief Nurse .....

Date: 19/09/2016

Executive Medical Director (or nominated deputy) .....
Date: 27/9/2016

Associate Director of Nursing, Division C .....

Date: 3/8/16

Matron, for Stroke Medicine .....

Date: 9-8-16

Clinical Service Lead (Stroke Consultant) .....

Date: 19/9/16

Trust IRMER Lead .....

Date: 9.08.16

Clinical Service Lead Imaging (or nominated deputy) .....
Date: 19/9/16 FORDE

Controlled Document index no: 915 Version 2 Page 8 of 11
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EVIDENCE OF SUPERVISED PRACTICE

To become a competent practitioner, it is the responsibility of each Stroke Nurse Practitioner to undertake supervised practice in order to undertake referral of head CT and head CT angiogram scan for patients with a suspected or diagnosed stroke/TIA in a safe and skilled manner.

Name of Stroke Nurse Practitioner: …… NMC Number: ……

DATE	DETAILS OF REFERRAL	SATISFACTORY STANDARD MET	COMMENTS	PRINT NAME, SIGNATURE & DESIGNATION
		Yes / No		
		Yes / No		
		Yes / No		
		Yes / No		
		Yes / No		
		Yes / No		
		Yes / No		

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CRITERIA FOR COMPETENCE

END COMPETENCE: Expanded Practice Protocol for Stroke Nurse Practitioners to refer patients with a Suspected or Diagnosed Stroke / Transient Ischaemic Attack (TIA) for Head Computer Tomography (CT) and Head CT Angiogram Scan

Date(s) of Education and Supervised Practice: ……

Name of SNP (print): …… NMC Number: …… Clinical Area / Department: ……

Name of Supervisor (print): …… Designation: ……

Element of Competence To Be Achieved	Date Achieved	Stroke NP Sign	Supervisor Sign
Discuss and identify; indications, contraindications and limitations when referring patients with a suspected or diagnosed stroke/TIA for head CT and head CT angiogram scan according to this expanded practice protocol.			
Provide evidence of attendance on the Trust IRMER training course			
Discuss what factors you would consider when identifying a patient with suspected stroke/TIA			
Demonstrate accurate history taking before referral for head CT and head CT angiogram scan for patients with suspected stroke/TIA			
Demonstrate correct completion of a CT request form/PICS referral			
Describe what information is required on the referral and the rationale for this			
Discuss the professional and legal issues associated with registered nurses requesting head CT and head CT angiogram scans.			
Discuss in what circumstances you would refer the patient back to the Consultant in Stroke Medicine prior to CT referral.			
Discuss the process for reporting on the Head CT and head CT angiogram scan in relation to the overall management plan			
Discuss accountability in relation to the NMC Code: Professional Standards of Practice and behaviour for nurses and midwives (2015).			
Demonstrate maintenance of the patient's privacy and dignity throughout.			
Demonstrate accurate provision of information pre and post the referral in a way that the patient understands.			

Element of Competence To Be Achieved	Date Achieved	Stroke CNS Sign	Supervisor Sign
Demonstrate a working knowledge of the Trust's policy for consent to examination or treatment.			
Demonstrate involvement of the patient and their families/carers, in decision making about their care and treatment.			
Demonstrate application of the Trust Principles for carers.			
Demonstrate a working knowledge of the *Mental Capacity Act.*			
Demonstrate accurate record keeping.			
Demonstrate an understanding of the incident reporting process.			
Discuss actions to take in the event of skill fade			
Discuss monitoring of protocol and monitoring patient referrals			

I declare that I have expanded my knowledge and skills and undertake to practice with accountability for my decisions and actions.

I have read and understood the Expanded Practice Protocol for Stroke Nurse Practitioners to refer patients with a Suspected or Diagnosed Stroke / Transient Ischaemic Attack (TIA) for Head Computer Tomography (CT) and Head CT Angiogram Scans

Signature of Stroke Nurse Practitioner: …… Print name: ……..

Date: ……..

I declare that I have supervised this Stroke Nurse Practitioner and found her/him to be competent as judged by the above criteria.

Signature of Supervisor: …….. Print name: ……..

Date: …… Designation: ……

A copy of this record must be placed in the Stroke Nurse Practitioners personal file, a copy sent to imaging and a copy can be retained by the individual for their Professional Portfolio.