NHS
Central Lancashire

Cumbria and Lancashire

Out of Hours Telestroke Service

Specification

Care for Life

Contents

1 INTRODUCTION

1.1 Purpose of document

The purpose of this document is to provide a detailed specification for the provision of a consultant-led out of hours Telemedicine service for the assessment of patients presenting with acute stroke who may be eligible to receive stroke thrombolysis within Lancashire and Cumbria. The Specification will form the basis upon which contractual arrangements will be made with the Provider.

The eight sites covered by this service will be

Blackpool Victoria Hospital

Cumberland Infirmary

Furness General Hospital

Royal Blackburn Hospital

Royal Lancaster Infirmary

Royal Preston Hospital

West Cumberland Hospital

Southport and Formby District General Hospital (this site is not covered by the Lancashire and Cumbria Network, but has confirmed it wishes to participate in the consultant-led out of hours Telemedicine service.)

1.2 PCTs are seeking a lead provider to deliver the service in collaboration with all the Lancashire and Cumbria providers. NHS Central Lancashire is acting as lead commissioner on behalf of all the Cumbria and Lancashire PCTs.

The population of the region is 1.9 million people. There are six PCTs in the area covered by the Network.

- NHS Blackburn with Darwen
- NHS Blackpool
- NHS Central Lancashire
- NHS Cumbria
- NHS East Lancashire
- NHS North Lancashire

Southport District General Hospital admits patients from both NHS Central Lancashire and NHS Sefton.

1.3 Healthier Horizons for the North West

The establishment of a Cumbria and Lancashire Out of Hours Telestroke service supports the objectives of NHS North West to pursue the use of telemedicine to reduce the variation in access to services and improve and standardise outcomes from stroke across the whole North West.

1.4 Background to the development of the Cumbria and Lancashire Out of Hours Telestroke service

There have been a range of publications reviewing standards of care for patients with acute stroke particularly the **National Stroke Strategy (DH 2007)**.

The following quality markers are explicit in the National Stroke Strategy.

QM7

- All patients with suspected acute stroke are immediately transferred by ambulance to a receiving hospital providing hyper-acute stroke services (where a stroke triage system, expert clinical assessment, timely imaging and the ability to deliver intravenous thrombolysis are available throughout the 24-hour period).

QM8

- Patients with suspected acute stroke receive an immediate structured clinical assessment from the right people.

- Patients requiring brain imaging are scanned in the next available scan slot within usual working hours, and within 60 minutes of request out-of-hours with skilled radiological and clinical interpretation being available 24 hours a day.

Other key drivers are

- **NICE Clinical Guideline 68 – Stroke (2008)**
- **RCP National Clinical Guideline for Stroke (2008)**
- **Healthier Horizons NHS North West (2008)**
- **Pledge 8 Draft North West Stroke Plan (2009)**
- **Care Quality Commission Indicators for Stroke Care**
- **National Sentinel Audit for Stroke**
- **National Audit Office Progress in Improving Stroke Care (2010)**

The Cardiac and Stroke Networks in Lancashire and Cumbria (CSNLC) were established in Spring 2008 to support local implementation of the National Stroke Strategy. A business case was developed in 2009 with the assistance of the Telestroke Project Board and the Network Stroke Clinical Advisory Group to support the development of 24/7 acute stroke thrombolysis across the Network, and a model of collaborative provision through a Network rota of stroke physicians using videoconferencing and remote access to CT imaging. This model of care delivery has been subject to extensive engagement with stakeholders, including patients and clinicians, through engagement events and the sharing of information for comment. The model was endorsed by the CSNLC Board and the Cumbria and Lancashire Collaborative Working Board.

1.5 Stroke

Stroke is the third largest cause of death in England and is the single largest cause of adult disability. Nationally stroke costs the NHS and the economy £7 billion a year: £2.8 billion in direct costs to the NHS, £2.4 billion of informal care costs (e.g. the costs of home nursing borne by patients' families) and £1.8 billion in income to lost productivity and disability. Stroke contributes to the gap in life expectancy between the most deprived areas and the population as a whole. People from certain ethnic minorities i.e. South Asian are at higher risk of stroke.

Stroke has a devastating and lasting impact on the lives of people and their families. Individuals often live with the effect for the rest of their lives. A third of people who have a stroke are left with long term disability.

Outcomes in the UK compare poorly internationally, despite our services being among the most expensive, with unnecessarily long lengths of stay and high levels of avoidable disability and mortality.

The Current Situation in Lancashire & Cumbria

Each year in Lancashire and Cumbria about 4000 patients will have a stroke and about 1200 will have a stroke-like episode for which an alternative diagnosis is eventually reached. This figure is not SMR adjusted and will in fact be higher. The tables below show hospital admissions by PCT for the previous two years for all stroke and for ischaemic stroke. Achieving a 10% thrombolysis rate of all strokes would mean 400 patients receiving this therapy, last year only 20 patients in the Network received thrombolysis - a rate of just 0.05%.

All Stroke Spells

Registered PCT	2007/08	2008/09	2007/08 Cost	2008/09 Cost
Blackburn with Darwen	329	361	£1,328,831.00	£1,458,079.00
Blackpool	309	328	£1,248,051.00	£1,324,792.00
Central Lancs	684	714	£2,762,676.00	£2,883,846.00
Cumbria	1071	1225	£4,325,769.00	£4,947,775.00
East Lancs	713	824	£2,879,807.00	£3,328,136.00
North Lancs	681	779	£2,750,559.00	£3,146,381.00
Total	3,787	4,231	£15,295,693.00	£17,089,009.00

(I60-I69) Cerebrovascular Diseases
Tariff used £4039

1.6 The Cumbria and Lancashire Out of Hours Telestroke service objectives

- The commissioners want to develop a collaborative model of care that will deliver a consultant-led out of hours Telemedicine service for the assessment of patients presenting with acute stroke who may be eligible to receive stroke thrombolysis within Lancashire and Cumbria.

1.7 Current service provision

There is currently no thrombolysis service beyond Monday to Friday 9-5pm in any of these eight hospital sites. All sites should be registered and participating with the SITS-MOST thrombolysis study as a part of their 9-5 service (outcome measures are generated from this study).

1.8 Commencement of the Service

NHS Central Lancashire requires mobilisation of the service to commence promptly after identification of the lead provider, with a target to commence the service 1st November 2010.

Bids to become the lead provider, those who expressed interest will submit a presentation on how they will fulfil the role of lead provider being carried out require the minimum of information as follows:

- Communication processes to be developed between providers
- Clinical leadership required to build confidence in any new arrangement
- The governance arrangements for contractual purposes and service requirements

1.9 Critical Success Factors

NHS Central Lancashire is looking for a lead provider to meet the following Critical Success Factors (CSFs) throughout the life of the Contract:

- **Access** – The service will be delivered across the eight identified sites to all eligible patients to ensure equality across the Network.
- **Quality** – The service will be patient centred, delivered in a safe, timely and effective manner, adhering to the accepted guidance for best practice, both nationally and internationally.

- **Value for Money and affordability** – The service must demonstrate cost effectiveness, efficiency and affordability.
- **Collaboration** – The Lead Provider will be expected to collaborate with other Lancashire and Cumbria providers to ensure reliability and consistency of service delivery.

2 OVERVIEW

2.1 Specification and scope of the Cumbria and Lancashire Out of Hours Telestroke service

The Out of Hours Telestroke service is to be a consultant-delivered out of hours Telemedicine service for the assessment of patients who are adults over the age of 18 years presenting with acute stroke who may be eligible to receive stroke thrombolysis within Lancashire and Cumbria

2.2 Operational Hours

Monday to Friday, 17:00 to 09:00
Saturday, Sunday and all statutory Bank Holidays 24 hour service

3 CLINICAL QUALITY REQUIREMENTS

3.1 Outline of service to be provided

In line with NICE Clinical Guideline 68, the service will provide:

- A stroke physician to be available who is trained and experienced in the management of acute stroke via an on call telemedicine service
- An assessment of the patient will be carried out by the stroke physician using agreed Network documentation, protocols and policies
- Videoconferencing and remote access to CT head images will allow the stroke physician to decide whether the patient should receive thrombolysis therapy
- A stroke physician who will link with local staff who are trained in delivering thrombolysis and in the monitoring for any complications associated with thrombolysis

The recipients of the service will be adults over the age of 18 years who are presenting to an emergency department within Lancashire and Cumbria (including Southport District General) with a positive FAST test, and identified as potentially having a stroke by a validated stroke assessment tool (ROSIER & NIHSS). Eligible patients will have presented within 3 hours of symptom onset and fulfil the set criteria for stroke thrombolysis

3.2 Service requirements

The service must provide the following:

- Coordination of a Network rota of identified on call stroke physicians available at all times during operational hours

- The technical capability to carry out videoconferencing and remote access to CT head images during operational hours

- Access to advice following the initial consultation within operational hours for the management of complications or other queries relating to eligible patients

- Monitoring of the quality of both the clinical, technical service, through patient experiences and the generation of clinical and management reports

- The employment of an administrator to administer the Telestroke rota, produce patient experience activity and audit reports, coordinate MDT and teaching videoconferences

- A clear timely mechanism for the handover of patients from the on call stroke physician to the local stroke physician

3.3 Patient Pathways

Although the patient pathways may vary between participating sites the Lead provider must ensure, in collaboration with all other providers, that the Network Standards For Stroke Thrombolysis are adhered to.

3.4 Quality

3.4.1 Standards

As stroke thrombolysis is a time constrained service patients must be treated without delay.

The National Stroke Strategy Quality Marker 8 states that
- Patients with suspected acute stroke receive an immediate structured clinical assessment from the right people
- Patients requiring urgent brain imaging are scanned in the next available slot in working hours and within 60 minutes of request out of hours with skilled radiological and clinical interpretation being available 24 hours a day (this mirrors the recently published NICE guidance for head injuries)

Quality Marker 9

- Hyper-acute stroke services provide as a minimum, 24 hr access to brain imaging, expert interpretation and the opinion of a consultant stroke specialist and thrombolysis is given to those that will benefit.

The Telestroke Service must adhere or exceed accepted guidance for best practice (current and future) and have been developed in line with the following:

- NICE Clinical Guideline 68 – Stroke (2008)
- RCP National Clinical Guideline for Stroke (2008)

All patients who receive thrombolysis following a Telestroke assessment must be entered into the SITS MOST register.

3.4.2 Administration standards

The lead provider must ensure, in collaboration with all other providers,

- That record keeping by the remote stroke physician is in line with the GMC Good Medical Practice Booklet (2004) and that arrangements are made for the transfer of these documents into the patient's health care records within the next 15 hours.

- The production of an annual report to the Lancashire & Cumbria Collaborative Working Board.

3.5 Governance

Governance is the framework of accountability to users, stakeholders and the wider community, within which organisations take decisions and lead and control their functions, to achieve their objectives (Audit Commission 2003).

The lead provider, in collaboration with all other providers and the CSNLC will ensure effective governance arrangements are implemented for the Telestroke service. The role of the lead provider for the Telestroke service in relation to governance will be

- To hold responsibility for managing indemnity
- To hold the operational policies for Telestroke
- To ensure that the Medical Director of the lead provider acts as Medical Director for Telestroke. This is likely to be in collaboration with the Medical Directors of the other providers.
- To facilitate mechanisms for appraisal and feedback for stroke physicians working on the Telestroke rota, and to link to the employing Trusts if there are any performance concerns
- To employ a clinical lead for the Telestroke in the event of the dissolution of the CSNLC
- To supply the Caldicott Guardian for Telestroke
- Ensure quality is delivered
- Ensure appropriately trained staff available
- To have lead responsibility for the investigation of any patient safety incidents involving Telestroke, in collaboration with any individual Trusts involved
- To hold the honorary contracts for Consultants working on the Telestroke rota
- To take responsibility for leading the Business Continuity process

3.5.1 Clinical and Information Governance

Clinical governance is the system through which healthcare organisations are accountable for ensuring continuous improvement and outcomes in the quality of their services and safeguarding high standards of care, by creating an environment in which clinical excellence will flourish (Department of Health, 2003).

The lead provider, in collaboration with all other providers and the CSNLC shall have an effective system of clinical governance. The provider shall nominate a person on each service site who will have responsibility for ensuring the effective operation of the system of clinical governance, including audit.

3.5.2 Patient Experience

The lead provider, in collaboration with all other providers and the CSNLC will be required to develop in partnership with the PCTs a patient experience survey, which will be routinely carried out and an annual report produced which will feed into the provider's quality accounts. These surveys should include a measure of the quality of service delivery.

An annual evaluation report detailing the results of the survey, the key themes that have emerged will be shared with the Lancashire & Cumbria Collaborative Working Board., along with an action plan of how concerns and issues raised by patients will be addressed.

3.5.3 Dignity

The lead provider, in collaboration with all other providers shall ensure that patients are treated with privacy, dignity and respect at all times and all care and treatment provided will respect the individuality of each patient.

The lead provider, in collaboration with all other providers shall ensure that all aspects of their service comply with the Ten Key Components of The Dignity Challenge (Department of Health 2007).

The lead provider, in collaboration with all other providers will ensure that documentation containing confidential patient information will be stored, filed, disposed of in an appropriate manner in adherence to local Trust policy. All staff involved in the management of patient records must adhere to the data protection act and confidentiality codes of practice.

3.6 Informed consent

The lead provider, in collaboration with all other providers shall comply with the NHS Requirements in relation to obtaining consent from each Patient to the provision of Services (Informed Consent) and in particular:

- Department of Health Reference Guide to Consent for Examination or Treatment;
- Health Service circular HSC 2001/023;
- Seeking Patients Consent: The Ethical Consideration: GMC November 1998

4 WORKFORCE

4.1 Introduction

As outlined in section 4.2, the service is to be provided by a Network rota of stroke physicians who are appropriately trained and experienced in the management of acute stroke.

The lead provider, in collaboration with all other providers will be required to provide sufficient qualified and appropriately trained stroke physicians to deliver a comprehensive out of hours Network rota as well as appropriate administration requirements.

4.2 Core skills and competencies of stroke physicians

The following core skills and competencies are required for the stroke physicians working within the Telestroke service. For the for the purpose of this document stroke physicians are defined as physicians with experience of stroke, who are trained in the procedures used to identify patients who may benefit from stroke thrombolysis. This group of clinicians may include, but are not limited to, neurologists and emergency physicians:

- Advanced clinical assessment skills in relation to acute stroke management
- In-depth knowledge and understanding of thrombolytic treatment for acute stroke including having attended a recognised training course
- A responsibility to deliver care based on current evidence, best practice and, where applicable, validated research
- A responsibility to work according to agreed Network standards, guidelines and protocols
- A responsibility to provide evidence of professional development in stroke

4.3 Standards

The lead provider, in collaboration with all other providers will be required to ensure that all stroke physicians working on the Telestroke Network rota hold a substantive consultant contract with a provider within either Lancashire and Cumbria or at Southport & Ormskirk Hospital NHS Trust).

The lead provider must ensure appropriate validated checks are carried out to assure the appropriateness and quality of the service provided.

4.3.1 Competency assessment

The lead provider, in collaboration with all other providers will be required to ensure there is an appropriate competency assessment process for relevant staff who will be using the Telestroke equipment. It should ensure the equipment used is up to date and appropriate for a modern service.

4.3.2 Doctors

The lead provider, in collaboration with all other providers will be required to ensure that all stroke physicians working on the Telestroke Network rota:

- Are registered with the GMC on the appropriate register;
- Are members of the appropriate Royal College, having passed the appropriate Royal College Postgraduate examination or have obtained Membership by Assessment of Performance **(MAP)**.

4.4 Staff management

4.4.1 Employee Relations

The lead provider, in collaboration with all other providers will be required to ensure that stroke physicians on the Network rota are treated in accordance with evidenced good practice principles including employee wellbeing, equality and diversity, anti-discriminatory practice, equity and fairness, communication, involvement, team working and confidentiality.

4.4.2 Health and safety

The Provider must have a comprehensive health and safety policy that complies with the Health and Safety at Work Act 1974 and Management of Health and Safety at Work Regulations (1992). The Provider must ensure that the health and safety policy includes:

- The written statement (as required by section 2(3) of the Health and Safety at Work Act 1974 and regulation 4 of the Management of Health and Safety at Work Regulations 1992) (or EU member state equivalent) of the organisation;
- The name and status of the person responsible for the implementation of the organisation's health and safety policy;
- A description of how the Provider will manage its obligations in respect of health and safety at work; and
- A description of how health and safety responsibilities are allocated within the organisation.

In addition, the Provider's policy must include a description of its approach to managing:

- Health and safety risks;
- Health and safety improvement measures;
- Occupational health and counselling services for employees
- Working Time Regulations and safe systems of work;
- Staff consultation
- Safety audit;
- Accident reporting; and
- Health and safety record keeping and reporting.

4.4.3 Staff Performance Management

The lead provider must be aware of the provisions for handling performance and conduct concerns of doctors in the NHS.[1]

The lead provider will be required to facilitate appraisal and feedback for stroke physicians working on the Telestroke rota, and to link to the employing Trusts if there are any performance concerns

4.4.4 Workforce information systems

The lead provider, in collaboration with all other providers should ensure that the Telestroke Network management information system is capable of providing information for providers monitoring compliance with the Working Time Regulations.

4.5 Contingency arrangements

The Provider must have in place contingency plans and arrangements to ensure continuity of service and adequate, available cover in place of any:

Planned and unplanned Staff Absences
IT breakdown
Equipment malfunction
Other major incident
Increased or unexpected demand

5 INFORMATION MANAGEMENT AND TECHNOLOGY SECTION

5.1 Information Management and Technology

The role of the lead provider for the Telestroke service in relation to IM &Twill be to

- To act as the lead Trust in a collaborative procurement of the Telestroke equipment (hard and software) in line with the agreed Outline Business Specification (OBS) contained in Appendix 1
- To act as the IT lead for asset management and allocations, contract maintenance and system monitoring
- To coordinate access to PACS (CT) for Consultants working on the Telestroke rota, addressing technical and security issues
- To have lead responsibility for Equipment Refresh as appropriate e.g. five year cycle (funding)
- In collaboration with the Network develop an Operational and Technical User Handbook, which will be maintained by the lead provider
- To provide help and service desk requirements
- Responsible for the IT security requirements of the service
- Responsible for digital storage device, including management and authorised access in compliance with NHS IG and IT security arrangements
- Responsible for business continuity as detailed in 5.5 above

5.2 Information Governance

The lead provider must put in place appropriate Information Governance and security for IM&T systems to safeguard patient information for the Telestroke service. The lead provider, in collaboration with all other providers must ensure the IM&T systems and processes comply with statutory obligations for the management and operation of IM&T within the NHS.

The provider will be required to operate patient safety management systems for information systems development and operation as defined in national standards.

5.2.1 Costs

Payment will be received by the admitting provider within HRG tariff.
Revenue costs will be paid by PCTs collaboratively until such time as the existence of a best practice tariff requires renegotiation. NHS Central Lancashire will lead this process on behalf of the L&C CWB and lead commissioners as appropriate.

5.2.2 Due Diligence

The lead provider, in collaboration with all other providers must ensure that all equipment purchased and used within the service must comply with all health and safety legislation, including equipment C.E. marking policy / status and is fit for purpose. There must be a maintenance policy for all equipment to ensure that the equipment is fully operational.

5.3 Insurance

The lead provider, in collaboration with all other providers will ensure that the stroke physicians participating in the Telestroke Network will be provided with:

- Employers liability
- Public liability
- Professional Indemnity

6 CONTRACT MANAGEMENT

6.1 Activity monitoring

6.1.1 Records

The lead provider will be required to provide a facility for the archiving of records including digital storage, in-line with NHS requirements

6.1.2 Activity Monitoring

The lead provider will be required to supply the following information:

- Referral data
- Media digital storage
- Time and duration of call
- National data requirements
- Adhoc monitoring reports as and when required

6.1.3 Monitoring Information

The service will be reviewed at 6 monthly intervals for the first year followed by an annual review.

An annual report, the content of which is to be agreed, is to be provided to the Collaborative Working Board (CWB) in a timely manner.

Monthly figures to be provided for the clinical leads

Quarterly reports to be provided to the governance board

6.2 Performance Management

Providers will be expected to comply fully with the NHS Standards for Acute Services Contracts and with the implementation of technology appraisal guidance from NICE.

- Commissioners and Providers should agree additional quality requirements, including clinical quality performance indicators with clear methods of measurement and defined consequences for failure to remedy performance problems.

- Clinical Quality Reviews Clause 33 of the Contract continues to have a requirement for clinical quality reviews. The Lead Commissioner will chair a quarterly meeting with the Lead Provider to review clinical performance and identify any performance problems.

- A joint clinical investigation will be conducted into any clinical performance problem which has not been resolved, leading to the agreement and implementation of a remedial clinical action plan. Any consequences for failure to achieve the required improvement will be related to the implementation of this plan.

6.3 Contract management and reporting

Collaboration between the Lead Provider and Lead commissioners is an essential part of the contract, any contract is expected to comply fully with the NHS Standards for Acute Services Contracts and with the implementation of technology appraisal guidance from NICE.

- The service will be reviewed at 6 monthly intervals for the first year followed by an annual review.

- An annual report, the content of which is to be agreed, is to be provided to the Collaborative Working Board in a timely manner.

- Monthly figures to be provided for the clinical leads

- Quarterly reports to be provided to the governance board

6.4 Contract forma and payment mechanism

To be determined fully on the appointment of the Lead provider in collaboration with the Lead commissioner.

The contract will be awarded for a three year period with an option to extend annually for a further two years.

An annual contract review will be conducted. The provider must provide the detailed PCT information to reassure all PCTs that the service continues to deliver value for money and that the terms and conditions of the contract are still valid.