NHS
South East
Clinical Networks

Stroke Service Specification

Author: **South East Stroke Clinical Advisory Group**
Website: **www.secn.nhs.uk**
Email: **england.secn@nhs.net**
Twitter: **@SEClinNets**
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1 Introduction

1.1 Purpose

The following service specification document sets out the criteria, as recommended by the South East Stroke Clinical Advisory Group (CAG), of the stroke pathway that needs to be met to deliver high-quality care to patients in order to achieve the South East Stroke Standards[1]. These are the expected standards commissioners should utilise when commissioning stroke care services.

This service specification is based on the national stroke toolkit guidance specification[2] released in 2015 and aims to build on clinical best practice and provide clarity on the system requirements for stroke services without prescribing the clinical service model to be adopted locally.

1.2 Overview

The National Stroke Strategy (2007)[3] provides the foundation for defining stroke services and outlines what is needed to create the most effective stroke services in England. The strategy identifies major stages in the stroke patient's pathway and stresses a need to reorganise the way in which stroke services are delivered, from prevention through to longer term support for those who have experienced a stroke.

A whole pathway approach to the provision of stroke services is crucial in order to maximise the clinical outcome for patients, their quality of life and experience of stroke services. The first 72 hours of care are vital to ensure the optimum clinical outcome for stroke survivors. This needs to be underpinned by an effective whole system pathway from hyper-acute stroke unit admission to subsequent rehabilitation and longer term support if applicable.

Improving the outcomes from stroke services is core to NHS England's ambition to provide access to the highest quality services. Although there have been significant improvements in stroke services across the South East over the last three years, there remains scope for further improvement; demonstrated by the variation in performance as measured against the Sentinel Stroke National Audit Programme (SSNAP).[4]

1.3 South East Vision for Stroke Services

The South East Stroke Service Specification aims to achieve a step change improvement in the quality of stroke and transient ischaemic attack (TIA) services and outcomes for patients. The overarching vision for stroke services across the region is to ensure that all patients who experience a stroke / TIA have access to high-quality acute care 24/7 and high quality life after stroke rehabilitation as part of a stroke pathway focused on providing patient and carer centric care, empowerment and facilitation of self-management leading to meaningful participation in daily life after stroke.

1.4 Objectives and Expected Outcomes

The objectives are to:

- Provide a fully integrated, end-to-end stroke service for the South East of England
- Implement the recommendations of the National Stroke Strategy
- Meet the service standards and specifications set by the Royal College of Physicians, NICE and the locally agreed SE CN Stroke Service Standards
- Ensure that stroke services deliver:
  - » Improved clinical outcomes e.g. reduced mortality
  - » Improved quality of life outcomes e.g. return to usual place of residence
  - » An excellent patient and carer experience.
- Provide equity of service outcomes and experience, particularly where variance of service provision has been highlighted.

In meeting the above objectives, the expected outcomes will be that any patient presenting with acute stroke / TIA symptoms will receive the most appropriate care for their condition. Placing patients on the correct pathway (TIA, hyper-acute or acute) will increase the likelihood of best possible outcomes and allow providers to use resources effectively across the region. The specific performance standards are listed in each section, but the general expected outcomes are:

- Improved clinical outcomes of stroke patients, by reducing the levels of death and disability following a stroke
- Reduced length of stay of stroke patients in bed based services
- Improved patient experience and enhanced recovery following a stroke through long-term support and follow-up
- A service that is sustainable and provides good value for money through effective use of resources
- Access to the services and the quality of care provided is equitable across the region
- Provide high-quality stroke specialist professional development.

1.5 Evidence Base

Stroke is the third biggest killer in England and the main cause of adult disability - stroke was the cause of death for more than 33,000 people in 2012 in England and over 2,400 in the South East.

Mortality rates attributable to stroke fell by 28 per cent between 1999 and 2008, owing in part to improved acute care and better control of risk factors. Around two thirds of people will survive their stroke, but half of stroke survivors are left with long-term disability and dependent on others for everyday activities. However, it is projected that there will be an extra 22,000 stroke-related deaths per year by 2020 because of expected increases in population size, lifespan and the prevalence of lifestyle choices that increase the risk of a stroke.

The most recent academic and National Audit Office analyses estimate that the direct care cost of stroke to the UK is £3-4.4 billion; this rises to £8-8.9 billion if informal care costs (costs of nursing home care and care borne by the patients' families) and those to the wider economy are included (income lost to mortality and morbidity and benefit payments).

This service specification is based upon a comprehensive and current evidence base and agreed best practice, including:

- NHS Stroke Services: Configuration Decision Support Guide (2015)
- Atrial fibrillation: the management of atrial fibrillation NICE guidelines [CG180] June 2014
- National Stroke Strategy (2007) Department of Health
- National Clinical Guideline for Stroke (2016) Royal College of Physicians
- Quality Standards Programme: Stroke (2010) National Institute for Clinical Excellence.
- Stroke Service Standards (2014) British Association of Stroke Physicians
- Quality and Outcomes Framework for 2015/16 NHS Employers
- The NHS Outcomes Framework 2015 to 2016 Department of Health
- A Public Health Outcomes Framework for England 2013-2016 (2012) Department of Health
- The Adult Social Care Outcomes Framework 2014/15 Department of Health.

The service specification is divided into phases of the care pathway for stroke patients:

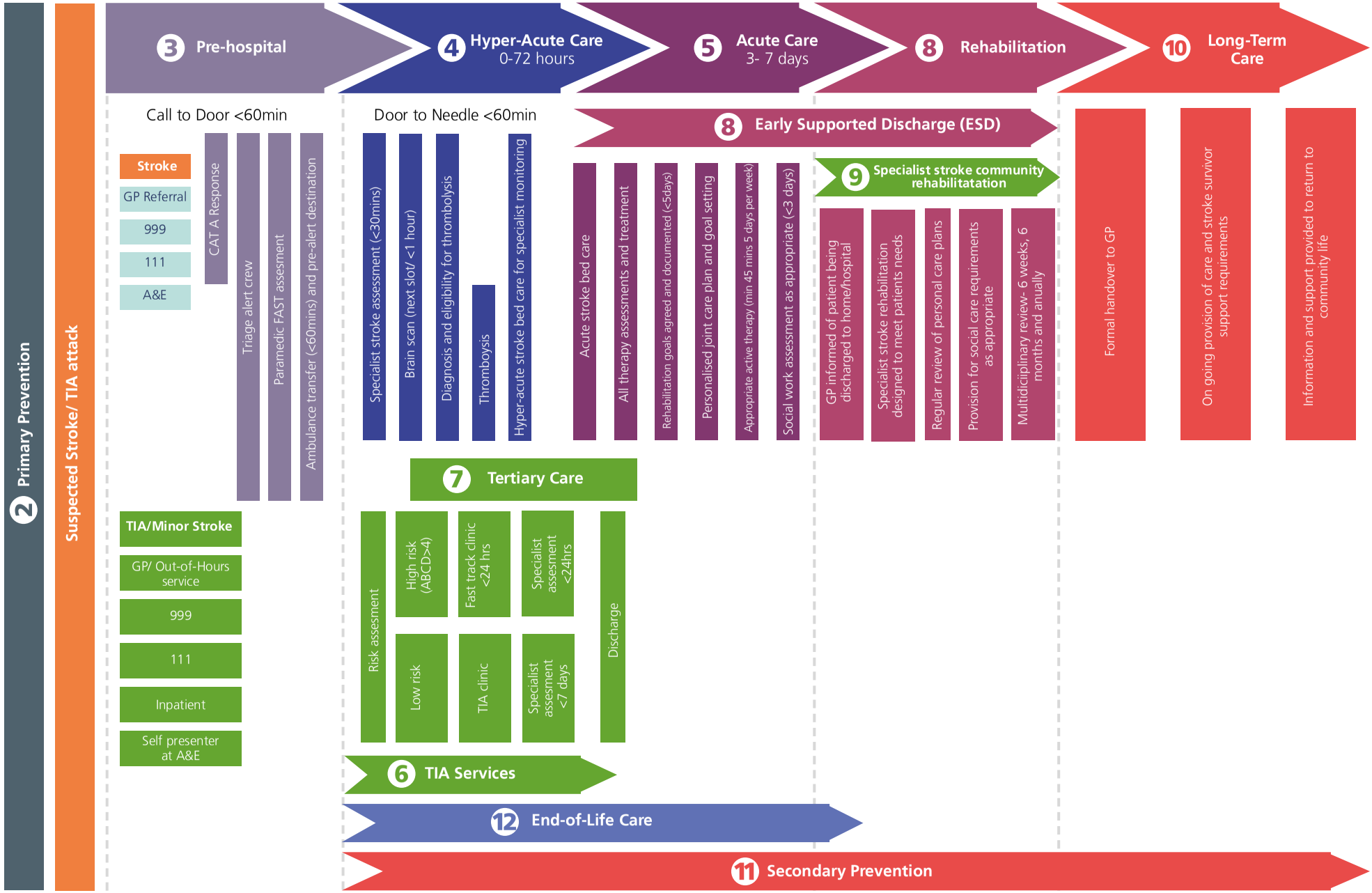
This document is structured according to the stroke pathway phases below. In addition, expectations that apply across the whole pathway are described at the outset.

- **Primary prevention**
- **Pre-hospital**
- **Acute phase**
  - » Hyper-acute stroke care
  - » Acute stroke care (including in-hospital rehabilitation services)
  - » Transient Ischaemic Attack (TIA) services
  - » iTertiary care services (e.g. neuro and vascular surgery referrals)
- **Rehabilitation**
  - » Early Supported Discharge (ESD)
  - » Stroke specialist rehabilitation (both inpatient and community)
- **Long-term care and support**
- **Secondary prevention**
- **End-of-life.**

The performance standards specified for each pathway stage are defined according to the definitions of the national audits (e.g. SSNAP, QOF etc.)

The diagram overleaf summaries the pathway according to the patient movement across the phases since they are not necessarily linear and not all phases or services are applicable to all patients.

Numerical values refer to chapters in the document



Across the entire pathway, stroke care must be underpinned by several universally applicable components to improve the quality of care e.g. appropriate communication; improved patient experience; data collection and continuous audit; and service improvement. These elements that apply across the whole pathway are described in this section.

1.6 Patient Experience

- Patients and their carers are informed throughout the care pathway and on a regular and timely basis of:
  - Diagnosis, progress and prognosis (where appropriate)
  - What is likely to happen to them next e.g. how soon they will be seen, frequency of contact, contact information for any new team, how goals will be carried over
  - Who is taking care of them and who is responsible for their care
  - What they need to be doing to facilitate their care and recovery e.g. advice and information about exercises or other activities that they can practise independently.
- Patients and carers are able to access information provided to them i.e. provided in an appropriate format/medium, and in relevant languages other than English; and that is specific to the phase of recovery and their needs at that time
- Patients and carers receive instruction and guidance regarding any prescriptions – verbally and supported by written information
- Families and carers are actively involved in day-to-day care, rehabilitation and decisions about the planning and delivery of their care
- Patients are directed to relevant voluntary service organisations
- The service has in place a process for incorporating patient/carer feedback into quality improvement service developments.

1.7 Engagement and Communications

- Awareness raising activities are proactive and ongoing e.g. FAST awareness across primary care, care homes and providers and the general public
- Providers of stroke services are actively engaged with their local stroke network/s e.g. to ensure that each stroke unit is linked to a regional neurosciences centre for emergency review of local brain imaging
- Clinical teams proactively communicate between themselves and with anyone who takes over responsibility for a patient's care, while the processes used to manage care involve all relevant people and support seamless transitions between services along the pathway
- Clinical team members communicate regularly with patients and carers in appropriate ways for their condition and needs
- Formal links exist with patient and carer organisations e.g. local users' forum, Stroke Association groups, community stroke clubs.

1.8 Data Transfer and Information Sharing

- Accurate and explicit records of patients are recorded and shared using agreed protocols between all hospital, community and social care practitioners and individuals in a timely way.

1.9 Data Collection and Monitoring

- Clinically accurate submission to SSNAP (Sentinel Stroke National Audit Project) and coded data held in HES, by all providers of stroke services
- All clinical services take responsibility for all aspects of data collection and participating in national stroke audit (SSNAP), either directly or via upload of equivalent local data that enables comparison with regional and national peers
- A sustainable system of coding for stroke patients is in place. Local guidance should be in place to support the collection of data between community and across service providers
- All organisations will need to develop a robust system for collection and validation of reliable and accurate stroke data with a lead responsible individual to approve and sign off the data. This may involve investment in data systems and personnel to avoid the burden of data collection responsibility on clinical staff
- An assessment of patient and carer experience across the stroke pathway is required at regular intervals. This information should be used to inform the improvement of local services and results submitted to inform commissioners on the progress in improving patient experience.

1.10 Innovation and Research and Development

- To be part of a research network, have a dedicated stroke research lead and actively participate in research
- Work with the Kent, Surrey, Sussex Academic Health Science Network and the South East Clinical Research Networks
- Be open to performing and participating in national and international locally adopted clinical trials through the stroke research network.

1.11 South East Stroke Clinical Network Hyper-Acute Stroke and TIA Service and Quality Standards

The SE CN Stroke Clinical Advisory Group has developed and agreed service and quality standards for a hyper-acute stroke and TIA service based on current national guidance.These standards were revised in 2016 after the release of the revised RCP stroke guidelines so are based on the current evidence base and agreed best practice. These will ensure the delivery of a high-quality stroke service and are recommended as the expected standards commissioners should utilise when commissioning stroke services.

2 Primary prevention

Lack of awareness of stroke and TIA – lifestyle causes, risk factors, prevention and symptoms – can be a significant challenge to the realisation of a successful outcome for someone who goes on to experience a stroke or TIA. A proactive approach by all healthcare professionals to recognise patients at risk of stroke or TIA and subsequent mitigation against those risks will support the prevention of stroke and TIAs. Delivering a step change in primary prevention is an important component of the stroke pathway and thus included at high-level for completeness to ensure it is recognised as part of a pathway-wide approach to managing stroke.

REQUIREMENTS

SERVICE OUTCOMES

Identification, diagnosis and evidence-based management of atrial fibrillation (AF) and hypertension.

Identifying AF (whether paroxysmal or persistent) and reducing the risk of stroke through anticoagulation where appropriate. For example, GRASP-AF is a tool used in primary care to help GPs identify patients who may have AF and promote the assessment of the risk of AF-related stroke, facilitating effective management of AF in these patients. It was developed as part of the NHS Improvement AF in primary care national priority projects.

Primary care and other healthcare professionals (e.g. opticians, ophthalmologists) are effective in:

- Identifying patients at risk of stroke or TIA
- Making every contact count; carrying out manual pulse, weight and BP checks at every opportunity. This will include contact within other healthcare settings, e.g. secondary care, as an inpatient or outpatient. Any cases of new AF or raised blood pressure should be communicated to the individual's primary care provider urgently and within seven days
- Promoting the "Know your Pulse" campaign and other national/regional campaigns
- Advising at risk patients of lifestyle choices and treatments to minimise risk of stroke and TIA.

REQUIREMENTS

Social care staff in domiciliary care, care homes and day centres, together with personal assistants are:

- Effectively trained in the symptoms and signs of stroke and TIA and aware of the consequences of delay
- Conduct routine pulse checks
- Able to recognise when a referral to emergency care is needed, and able to contact such services quickly
- Able to reassure service users while the emergency services are on the way.

Patient/public awareness, education and training

Members of the public are able to recognise and identify the main symptoms of stroke and TIA and know it needs to be treated as an emergency[2]. Local health economy, including voluntary organisations, communicates basic information to patients on the symptoms, emergency treatment, risk factors, lifestyle factors and treatments.

3 Pre-hospital phase

A fast response to stroke reduces the risk of mortality and disability – "Time is Brain". The identification of potential stroke and TIA patients and their timely assessment at an appropriate stroke centre is a critical stage of the care pathway. Promotion among healthcare professionals, the public and carers of stroke symptom awareness (e.g. FAST) that prompt emergency treatment can improve health outcomes through timely access to stroke care and specialist treatments such as thrombolysis and mechanical thrombectomy, which must be administered within a few hours of the onset of symptoms.

REQUIREMENTS

SERVICE OUTCOMES

Clinical assessment by ambulance staff:

- Patients with suspected acute stroke (sudden onset of neurological symptoms of probable vascular aetiology) are screened using a validated tool to diagnose stroke or assess TIA risk
- All patients with suspected acute stroke are immediately transferred by ambulance to a hospital with facilities to manage hyper-acute stroke (to include FAST positive or where stroke is suspected by ambulance service staff even if FAST negative)
- Higher risk TIA (on anticoagulation or with crescendo TIA) is treated as an emergency, being at greater and imminent risk of stroke, undergoes specialist assessment within 24 hours of presentation to healthcare professional
- All suspected stroke patients are assessed and managed in accordance with best clinical practice and monitored for AF and other dysrhythmias

Ambulance transfer to hospital:

The aim of South East Coast Ambulance Service (SECAmb) transfer to the appropriate stroke centre is to minimise time from call to needle to a recommended standard of within 120 minutes.

REQUIREMENTS

- All patients with suspected acute stroke are immediately transferred by ambulance to a stroke centre offering hyper-acute stroke services
- Call to door time as soon as possible, less than 60 minutes.
- If within 5.5 hours of onset, suspected stroke cases are assigned "Category A" 999 response (and meet Category A ambulance service standards – two person response with the ability to transport patient. If symptoms exceed 5.5 hours this may change the response time)
- The ambulance paramedic links with the receiving hospital when they have a suspected stroke patient, providing a system of pre-alert to enable potential stroke patients (FAST positive) to be met on arrival by a member of the stroke team
- Action plans are in place to improve ambulance response and reduce on-scene times.

EDUCATION AND TRAINING

All ambulance and triage staff follow best practice clinical guidelines in the recognition of and handling of stroke patients e.g. FAST.

- All ambulance crews are trained in stroke recognition using validated tools (e.g. FAST)
- Stroke experience is included in paramedic training and staff are able to prepare patient appropriately for admission to hyper-acute stroke service according to agreed protocols
- Communication training provided to help manage patients with aphasia
- Ongoing stroke specific training is included as part of Continuous Professional Development (CPD)
- Ambulance service has an established method of obtaining and implementing new guidance for stroke care
- Ambulance service participates in local Stroke Research Network trials and studies.

WORKFORCE

- There is sufficient and appropriate stroke skilled capacity in the ambulance service to provide the service to the required population to the defined performance standards
- There is an identified clinical lead for stroke within the ambulance service
- All operational staff have the facility to reach back via EOC (Emergency Operations Centre) to senior clinicians for advice and guidance as required.

4 Hyper-acute stroke care

Hyper-acute services provide expert specialist clinical assessment, rapid imaging and the ability to deliver intravenous thrombolysis 24/7, typically for no longer than 72 hours after admission. These services must be provided in a specialist hyper -acute stroke unit. A minimum of 500 confirmed stroke patient admissions per year are required to provide sufficient patient volumes to make a hyper-acute stroke service clinically sustainable, to maintain expertise and to ensure good clinical outcomes. People with acute stroke will receive an early multidisciplinary assessment, including swallow screening and, for those that continue to need it, have prompt access to high-quality stroke care.

REQUIREMENTS

SERVICE OUTCOMES

Clinical assessment:

All patients (including self/ GP / SECAmb referrals) with suspected stroke are admitted to a hospital with hyper-acute services and seen immediately by a stroke team to receive immediate structured assessment by appropriately trained staff in a consultant-led team to determine diagnosis and suitability for thrombolysis and ongoing care needs:

- Hyper-acute service alerted prior to patient arrival (where appropriate)
- Hyper-acute service has sufficient capacity for all stroke admissions
- Patients are seen and assessed by a member of the specialist stroke team without delay and within 30 minutes of arrival.
- Patients diagnosed with stroke receive early multidisciplinary assessment:
  - Receive CT scan urgently and within at least one hour of arrival at hospital
  - Interpretation of acute stroke imaging by appropriately trained healthcare professionals
  - Patients eligible for endovascular treatment shoud have immediate access to CTA from aortic arch to skull vortex at the time of initial CT. Patients should be assessed and transferred in accordance with locally agreed referral pathways within agreed timescales
  - Eligibility for thrombolysis/thrombectomy
  - Swallow screening (within four hours of admission) with ongoing management plan for provision of adequate nutrition. Patients who fail swallow screen to be assessed by Speech and Language Therapist within 24 hours
  - Assessment for malnutrition and need for nasogastric tube or gastrostomy within 24 hours of admission
  - Protocols for assessment and management of other causes of stroke: intracerebral haemorrhage, subarachnoid haemorrhage, acute arterial dissection, cerebral venous thrombosis.

REQUIREMENTS

- Agreed protocol for treating patients arriving at a hyper-acute stroke unit with non-stroke diagnosis.
  - » Patients with ischaemic stroke found to be in atrial fibrillation should be anticoagulated (once intracranial bleeding excluded by imaging) at the discretion of the prescriber, but no later than 14 days from the onset
  - » Patients with TIA and AF should be anticoagulated immediately
  - » Appropriate reversal or treatment of patients on prior anticoagulation
  - » Patients with stroke are assessed and managed by stroke nursing staff and at least one member of the specialist rehabilitation team within 24 hours of admission to hospital
  - » Ensure all patients with stroke are given an antiplatelet immediately after scanning unless contraindicated
  - » Diagnosis discussed with patient and carer and plan of care clearly written in patient notes
  - » Adherence to locally agreed protocols for blood pressure lowering if indicated.

Thrombolysis:

Intravenous thrombolysis should be provided 24/7 to confirmed stroke patients who are suitable for thrombolysis with an appropriate protocol in place to screen patients against the medical criteria for thrombolysis:

- Hyper-acute-trained stroke physician available 24/7 to make decision as to whether to thrombolyse, either in person or via telemedicine, with a sustainable on-call rota
- Appropriate stroke patients, identified as potentially eligible for thrombolysis treatment, to be scanned immediately and at the next available CT slot
- Appropriate stroke patients to be scanned and receive thrombolysis, ideally within 30 mins and certainly within 60 mins of admission (door to needle time)
- Thrombolysis should be conducted within the criteria specified within the RCP National clinical guideline for stroke 2016.

Monitoring:

Protocols or pathways in place that ensure appropriate monitoring of stroke patients by stroke-trained staff in the hyper-acute phase of care:

- All hyper-acute patients should be monitored according to a protocol post stroke for 24 hours (ie continuous cardiac rhythm and rate monitoring, oxygen saturation, blood glucose and blood pressure monitoring) and then according to patient's needs
- Any thrombolysed patient should be closely monitored by stroke-trained staff according to a specific post thrombolysis protocol for the first 24 hours post-thrombolysis in a monitored bed.

Mobilisation:

- All admitted patients who have difficulty moving should be assessed as soon as possible within 24 hours by appropriately trained professional
- All admitted patients who have difficulty moving should be mobilized 24-48 hours after stroke onset and offered frequent daily mobilization
- Mobilisation within 24 hours should only be for patients who require little or no assistance to mobilise
- Mixed gender wards may be used for critical or highly specialised care in-line with Department of Health guidelines for mixed sex accommodation.

REQUIREMENTS

- All patients should have an assessment of veno embolic risk determined and where appropriate IPC prescribed from 3-30 days in accordance with NICE recommendations 2015 and current RCP guideline 2016.

Access to support services:

Hyper-acute services have onsite access to the following support services and clinical interpretation:

- Brain imaging (MRI and CT) – patients are scanned in the next scan slot within usual working hours, and within a maximum of 60 minutes of request if out-of-hours with skilled radiological and clinical interpretation being available 24/7
- Carotid imaging (e.g. ultrasound, MRA, immediate CTA access), within 24 hours where appropriate.

Immediate access (onsite or via clear pathway) is also available to tertiary care services with clear protocols to provide:

- Intra-arterial clot extraction (thrombectomy)
- Neurosurgery e.g. MCA infarction who meet criteria for decompressive hemicraniectomy, treatment of hydrocephalus, haematoma evacuation, treatment of SAH
- Vascular surgery.

Repatriation/patient transfer:

- If patient transfer is required from hyper-acute to acute care services, appropriate pathway protocols are in place and followed
- Protocols will cover situations where patients may need to travel across organisational boundaries for repatriation
- A system is in place to reduce delays in patient transfers.

EDUCATION AND TRAINING

Hyper-acute service staff have comprehensive knowledge of the stroke pathway:

- Clinical staff assessing stroke admissions are trained in the care of hyper-acute stroke patients, thrombolysis and interpretation of brain imaging
- In-house multidisciplinary team stroke training programmes provided
- External stroke training available
- Stroke physicians and non-medical specialist/expert practitioners attend BASP thrombolysis training
- Communication training provided to help manage patients with aphasia
- All staff aware of the Mental Capacity Act and its implications
- Specific education and training is developed and provided.

Consultant stroke specialist-led:

Access to consultant stroke specialist decision making for all hyper-acute stroke related issues, including thrombolysis 24/7:

- In person or via telemedicine
- Sustainable on-call consultant with stroke training rota
- At least daily consultant stroke specialist rounds, seven days a week.

REQUIREMENTS

WORKFORCE

Multidisciplinary team:

Hyper-acute services have a sufficient multidisciplinary team on rota to provide service outcomes with an identified consultant stroke specialist clinical lead:

- 24/7 availability of appropriately trained staff for assessment of all patients, including thrombolysis eligibility assessment
- Specialist stroke nursing is available for the care and monitoring of all hyper-acute service patients
- Meet at least once per week to exchange information about individual patients.

Staffing numbers:

Hyper Acute Stroke Unit minimum staffing (7/7) of:

- 6 BASP thrombolysis trained physicians on a rota 24/7
- 2.9 WTE nurses per bed to comply with 80:20 trained vs untrained skill mix and 1:2 nurse: patient ratio
- 0.73 WTE physiotherapist per 5 beds (respiratory and neuro)
- 0.68 WTE occupational therapist per five beds
- 0.34 WTE speech and language therapist per five beds
- 0.2 WTE clinical psychologist/neuropsychologist per five beds
- 0.15 WTE dietician per five beds
- Access to social worker.

5 Acute stroke care

Acute stroke care immediately follows the hyper-acute phase, usually after first 72 hours after admission. Acute stroke care services provide continuous specialist day and night care, with daily multidisciplinary care, continued access to stroke trained consultant care, access to physiological monitoring and access to urgent imaging as required. In-hospital rehabilitation should begin immediately after a person has had a stroke. Rehabilitation services should continue for as long as required, to ensure the best recovery and the minimisation of any disabilities though these are likely to extend beyond time in-hospital. Rehabilitation goals should be agreed between the multidisciplinary team and stroke patients and carers.

REQUIREMENTS

SERVICE OUTCOMES

Acute stroke care:

All stroke patients should have access to high-quality stroke care and spend the majority of their time in hospital under specialist stroke care:

- Patients have access to a stroke trained nurse at all times
- Protocol in place for the promotion of bladder and bowel continence including a policy to avoid urinary catheters and prevention of pressure sores
- Daily consultant or specialist registrar ward rounds at least five days a week
- Protocols are in place for receiving and discharging patients seven days a week in a timely manner
- All patients with stroke to be assessed for mobilisation as soon as possible after admission and mobilized to current RCP guideline
- All patients to be mobilised out of bed on day of admission unless contra-indicated and offered frequent opportunity to practice functional activities with a trained healthcare professional
- Rehabilitation commences as soon as possible following admission into the acute stroke pathway
- Social work assessment as soon as possible and within a maximum of three days from referral, if appropriate
- Stroke trained MDT available seven days a week
- All patients should have a veno embolism risk assessment with appropriate prescription of IPCs where justified in accordance with NICE recommendations.

REQUIREMENTS

Access to support services:

Acute stroke services have access (not necessarily onsite) to the following support services and clinical interpretation:

- Brain imaging (MRI and CT (must be onsite))
- Carotid imaging (including ultrasound/MRA/ CTA)
- Based on carotid imaging/stenosis, CEA should be undertaken as soon as possible and within seven days of symptoms.

Access is also available to tertiary care services (onsite or offsite with clear protocols) to provide:

- Neuro surgery
- Vascular surgery.

Rehabilitation planning in hospital:

Rehabilitation programmes are built around the individual needs with patient agreed goals:

- Patients assessed by specialist rehab team within 72 hours, with documented multidisciplinary goals agreed within five days
- Personal care plan which is patient-centred, goal-led and implemented from admission. The expected date of discharge will be planned and worked towards and shared with patient and carers
- Multidisciplinary meetings at least once a week to plan patient care.

Rehabilitation services available:

Rehabilitation services that provide specialist stroke care seven days a week:

- Assessment by specialist therapists (physiotherapist, occupational therapist, speech and language therapist) within 72 hours of admission
- Stroke survivors offered active therapy at a level appropriate for obtaining rehabilitation goals for as long as they are continuing to benefit from the therapy and are able to tolerate it (target for 45 mins per discipline, five days a week)
- Access to a service capable of appropriately managing mood, behaviour or cognitive disturbance following a stroke
- Rehabilitation services that provide specialist stroke care seven days a week
- Identification of cognitive and perceptual problems within seven days via a cognitive and psychological assessment using a validated screening tool for all patients by appropriate therapist
- Screening of all patients to identify mood disturbance and cognitive impairment prior to discharge or within six weeks
- Specialised neuro-rehabilitation services e.g. spasticity, orthotics, continence, driving, vocational etc. prior to discharge
- Stroke survivors with continued loss of bladder control two weeks after diagnosis are reassessed and agree an ongoing treatment plan involving both patients and carers
- Comprehensive secondary prevention advice and treatment is provided
- A dysphagia management service is available including Percutaneous Endoscopic Gastrostomy (PEG).

REQUIREMENTS

Preparation for discharge:

- Planning for care after discharge undertaken with stroke patients and their carer/s as soon as possible to enable domiciliary care support and adaptations to be arranged in good time and in context of pre-admission status and family/ carer support available
- Protocols are in place to ensure patients and families are fully informed and participate in the process of transfer of care
- Discharge planning protocols ensures information handover with clear direction for community rehabilitation requirements, discharge destination (e.g. home, care home) with full participation of the ESD/ community rehabilitation team
- Stroke survivors receive advice and support to enable a return to previous level of activities
- A formal discharge summary report should be shared with the referrer, GP and stroke survivor (if requested) within seven days of discharge.

EDUCATION AND TRAINING

All staff of the MDT are knowledgeable of the care standards and protocols of the stroke pathway:

- In-house and external training provided, with staff released for training as required, including a stroke specific in-house induction training programme
- Staff skill mix supports supervision of junior and trainee personnel
- All registered nursing staff in stroke units trained in urinary and bowel continence
- Specific education and training is developed and provided in accordance with a recognised competency framework
- Health and social care professionals should ensure that they are up to date with the current guidance from the DVLA
- Staff are aware of the Mental Capacity Act and its implications
- Communication training provided to help manage patients with aphasia
- The practice development team incorporates stroke in education and training plans.

REQUIREMENTS

WORKFORCE

Acute stroke services:

Sufficient capacity to provide the service to the performance standards set:

- Consultant specialist stroke physician available five days a week
- Consultant to see all new patients on the next working day following admission and provide five day a week consultant or specialist registrar review
- Provide a means for a consultant review of a deteriorating patient out-of-hours
- 24/7 provision of stroke trained nurses
- Identified clinical leads (i.e. one A&E Clinical Stroke Lead and one Radiology Stroke Lead)
- Seven day provision of stroke trained multidisciplinary therapists
- Regular stroke physician to input into the review and medical management of patients.

Acute stroke unit minimum staffing (7/7) of:

- 1.35 WTE nurses per bed (65:35 trained to untrained skill mix) to give 1:3 nurse: patient ratio
- 0.84 WTE physiotherapist per 5 beds
- 0.81 WTE occupational therapist per 5 beds
- 0.40 WTE speech and language therapist per 5 beds
- 0.2 WTE clinical psychologist/neuropsychologist per 5 beds
- 0.15 WTE dietician per 5 beds
- Social workers
- Access is available to a range of additional professionals, including those in:
  - Oral health
  - Orthoptics
  - Orthotics
  - Pharmacy.

Note: where combined stroke units are used, it is expected that beds are designated as hyper-acute and acute, then staffed according to the hyper-acute service and acute service standards outlined.

OTHER

Equipment and aids:

- All equipment and aids (e.g. wheelchairs, continence equipment etc.) should be reviewed and ordered before discharge
- Open referral system in social services for assessments of home adaptations and equipment needs.

6 TIA services

The risk of a stroke is high following a TIA. Approximately 4-10 per cent of patients who have a TIA will go on to have a stroke within seven days.

TIA services should provide a full and rapid diagnostic assessment urgently without further risk stratification and have access to specialist care for high-risk patients thereby lowering the risk of a subsequent stroke.

REQUIREMENTS

SERVICE OUTCOMES

TIA identification:

- Referrers should discontinue the practice of triaging patients according to risk stratification tools and ensure that all patients with suspected TIA are assessed and diagnosed urgently.

TIA service:

Specific TIA service is provided for those identified with TIA:

- Access seven days a week, 365 days a year
- The TIA service has both the facilities to diagnose and treat people with confirmed TIA, plus the facilities to identify and appropriately manage (which may include onward referral) people with conditions mimicking TIA
- All TIA referrals must receive specialist assessment and investigation within 24 hours of presenting to a healthcare professional and be started on an antiplatelet (e.g. aspirin), a statin immediately and anticoagulation if appropriate (ie if in AF)
- Patients with suspected TIA that occurred more than a week previously should be assessed by a specialist physician as soon as possible and within seven days
- Patients who had a stroke over one week ago will be seen within one week
- Patients with acute neurological symptoms that resolve completely within 24 hours (i.e. suspected TIA) should be given the most appropriate antiplatelet immediately and assessed within 24 hours by a specialist physician in a neurovascular clinic or acute stroke service
- Patients with suspected TIA should be assessed by a specialist physician before a decision on brain imaging is made, except when haemorrhage requires exclusion; i.e. in patients taking an anticoagulant or with a bleeding disorder when unenhanced CT should be performed urgently
- For patients with suspected TIA in whom brain imaging cannot be undertaken within seven days of symptoms, T2 MRI imaging should be the preferred means of excluding haemorrhage.

REQUIREMENTS

- TIA service has access to:
  - Blood tests
  - ECG
  - Brain scan (if vascular territory or pathology uncertain) – MRI is preferred mode of imaging
  - Provision of an antiplatelet, statin and anticoagulation as appropriate
  - Control of blood pressure
  - Written information and advice provided regarding stroke risk and secondary prevention.
  - Carotid imaging performed within 24 hours where indicated.

Referral for carotid surgery where indicated, which should be undertaken within seven days of onset of TIA.

SECONDARY PREVENTION

Patients with non-disabling stroke or TIA should receive treatment for secondary prevention introduced as soon as the diagnosis is confirmed, including:

- Discussion of individual lifestyle factors (smoking, alcohol excess, diet, exercise)
- Clopidogrel 300 mg loading dose followed by 75 mg daily
- High intensity statin therapy with atorvastatin 20-80 mg daily
- Blood pressure-lowering therapy with a thiazide-like diuretic, long-acting calcium channel blocker or angiotensin-converting enzyme inhibitor.

Patients with non-disabling stroke or TIA in AF should be anticoagulated as soon as intracranial bleeding has been excluded and with an anticoagulant (preferably a NOAC) that has rapid onset, provided there are no other contraindications.

EDUCATION AND TRAINING

- Specialist stroke practitioner assessing TIA patients have training, skills and competence in the diagnosis and management of TIA. This should be consistent with the UK Stroke Forum for Stroke Training
- Education and training for primary care staff in recognition and management of TIA patients
- Specific education and training is developed and provided in accordance with the Stroke-Specific Education Framework or recognised competency framework.

WORKFORCE

- The service should be led by a specialist stroke consultant and provided by a specialist in vascular services with access to the stroke consultant lead (where appropriate).

7 Tertiary care

Specialist neurosurgical and vascular procedures are sometimes necessary to prevent further damage following a stroke, or prevent stroke altogether. Effective and timely referrals are necessary to ensure that patients suffering a stroke receive the most appropriate care as quickly as possible to improve their long-term outcome.

REQUIREMENTS

SERVICE OUTCOMES

Access to tertiary services:

Surgical services are provided as early as possible through early recognition of the need for surgical intervention. All patients with a suspected non-disabling stroke or TIA have urgent access to comprehensive neurovascular services. Neurovascular services include:

- Neurosurgical services
- Vascular surgical services
- Access to tertiary services may be on-site or off-site. For offsite services, clear protocols must be in place for a commissioned pathway of care.

Neuro surgical services:

There are relatively few indications for neurosurgical intervention in patients with stroke. However, specific cases of stroke may require urgent management. For example:

- Cases of middle cerebral infarction at risk of developing malignant MCA syndrome should be referred within 24 hours and treated (e.g. decompressive hemicraniotomy) within 48 hours
- Treatment for aneurysm (endovascular embolisation or surgical clipping) should be available within 48 hours.

Vascular surgical services:

- Carotid intervention (e.g. carotid endarterectomy) for recently symptomatic severe carotid stenosis should be regarded as an emergency procedure in patients who are neurologically stable, and be performed within seven days of a TIA or minor stroke symptom onset
- High-risk TIA that require carotid endarterectomy should be admitted for urgent investigation and surgery within 48 hours of diagnosis.

REQUIREMENTS

EDUCATION AND TRAINING

- Staff trained to recognise when specialist referral is required.

WORKFORCE

- Stroke physicians input to the multidisciplinary management of appropriate cases.

8 Early supported discharge (ESD)

Early supported discharge (ESD) enables appropriate stroke survivors to leave hospital 'early' through the provision of intense rehabilitation in the community at a similar level to the care provided in hospital. An ESD team of nurses, therapists, doctors and social care staff work collaboratively as a team and with patient and families, providing intensive rehabilitation at home or place of residence, such as integrated care centre or residential home, for up to six weeks as required, thereby reducing the risk of re-admission into hospital for stroke related problems and increasing independence and quality of life with support from the carer and family.

REQUIREMENTS

SERVICE OUTCOMES

ESD service:

All identified patients to be screened/assessed for appropriateness and discharged to the ESD service within 24 hours of referral:

- Appropriate rehabilitation programme to be started within 24 hours of discharge to ESD.
- Rapid response, same day ESD service provided seven days a week at a stroke survivors place of residence to facilitate timely discharge from hospital for a period of up to six weeks
- Stroke survivors offered required active therapy, to an intensity equivalent to hospital rehabilitation, but reflective of ability to meet individual patient needs and goals
- Single point of contact provided to patients, carer and families (into rehab).
- Carers are appropriately educated and trained to recognise common causes of illness that result in avoidable admissions e.g. constipation, urinary tract infection
- Collaboration with health and social services, the independent and third sectors to enable a stroke survivor to develop a greater quality of life and independence
- Access is provided to community rehabilitation services/ long-term care provision following ESD if required
- Seven day a week ESD service is available but provided in accordance with patient wishes
- Full contribution to SSNAP.

REQUIREMENTS

EDUCATION AND TRAINING

- Specific education and training is developed and provided in accordance with the Stroke-Specific Education Framework (SSEF)
- To include the wider rehab team, nurses and carers in integrated rehabilitation facilities and residential homes.

WORKFORCE

- A stroke ESD multidisciplinary team composition should include as a minimum (WTE per 100 cases per year):
  - Occupational therapist (1)
  - Physiotherapist (1)
  - Speech and language therapist (0.4)
  - Clinical psychologist/clinical neuropsychologist (1)
- The stroke ESD team has access to support from:
  - Stroke physician (0.1)
  - Stroke specialist nurse
  - Nurse (0 - 1.2)
  - Social worker (0 - 0.5)
  - Rehabilitation assistants (0.25)
  - Dieticians
  - Orthotics
  - Orthoptics
  - Continence team
- There are coordinated stroke skilled ESD teams working in partnership with local authorities and other health and third sector providers
- ESD team meets weekly as a minimum to plan and manage patient care.

OTHER

Equipment and aids:

- All equipment and aids (e.g. wheelchairs, continence equipment) should be reviewed and ordered during ESD service
- Open referral system in social services for assessments of home adaptations and equipment needs.

9 Rehabilitation: specialist stroke inpatient or community

Stroke survivors' rehabilitation starts within acute stroke units and continues either through ESD (see above), within further specialist stroke inpatient rehabilitation wards (for those patients who require higher levels of nursing care than can be delivered through ESD), or within the community (after the initial ESD period) with the support of specialist stroke rehabilitation community teams. These services enable stroke survivors to develop a greater quality of life and independence following stroke. Community stroke rehabilitation services include the transfer of care from hospital to home and time at home provided through collaboration with health and social services, the independent and third sectors.

REQUIREMENTS

SERVICE OUTCOMES

Requirements for specialist stroke inpatient rehabilitation wards:

A facility that provides treatment for inpatients with stroke should include:

- An inpatient stroke unit capable of providing stroke rehab for all people with stroke admitted to hospital
- A geographically-defined unit
- A coordinated multidisciplinary team that meets at least once a week for the exchange of information about inpatients with stroke
- Information, advice and support for people with stroke and their family/carers
- Management protocols for common problems, based upon the best available evidence
- Close links and protocols for the transfer of care with other inpatient stroke services
- Early supported discharge teams and community services
- Training for healthcare professionals in the specialty of stroke
- The GP and other relevant community services are informed that a stroke survivor has been discharged home or to another.

Requirements for specialist stroke community rehabilitation team:

- Single point of contact provided when patients leave hospital
- Age appropriate provision made for the social care requirements of stroke survivor prior to discharge, e.g. domestic tasks (such as shopping and laundry)
- All stroke survivors discharged from hospital who have residual stroke-related problems are followed up within 72 hours by specialist stroke rehabilitation services for assessment and ongoing management
- Community leisure and exercise classes are available and promoted to stroke survivors, who are then supported to attend

REQUIREMENTS

- Stroke survivors are aware of and offered options to promote wellbeing, including peer-led support groups, engagement in community activities and professional psychological therapies including IAPT and community mental health services
- Telephone counselling support available for three months.

Requirements for both inpatient and community rehab:

- Comprehensive social care is provided to all patients and their carers that need it
- Transfers of care for people with stroke between different teams or organisations should be seamless and occur without delay at the appropriate time with relevant information transferred
- Any stroke survivors referred to a social worker will receive an assessment within 72 hours of receipt of the referral
- Goals incorporated into a personalised care plan that allows the patient to take ownership of their rehabilitation and reviewed regularly (every four to six weeks) with the patient throughout the treatment period
- People with stroke should accumulate at least 45 minutes of each appropriate therapy every day, at a frequency that enables them to meet their rehabilitation goals, and for as long as they are willing and capable of participating and showing measurable benefit from treatment
- In the first two weeks after stroke, therapy targeted at the recovery or mobility should consist of frequent short interventions every day, typically beginning between 24 and 48 hours after stroke onset
- Multidisciplinary stroke teams should incorporate the practising of functional skills gained in therapy into the person's daily routine in a consistent manner, and the care environment should support people with stroke to practise their activities as much as possible
- Healthcare staff who support people with stroke to practise their activities should do so under the guidance of a qualified therapist
- Initial assessment of the stroke patient is carried out by a qualified professional (some of the care may be delivered by rehabilitation assistants under the supervision of a qualified therapist)
- Training in self-management, goal setting and problem solving skills is available
- Screening for mood and cognitive disturbance should occur within six weeks of stroke and at six and 12 months using validated measures – adapted for aphasia and cognitive impairment
- Adult social services provide advice on aids and adaptations to daily living
- Review of home environment, usually by a home visit by an occupational therapist, to adapt to patient needs where patient remains dependent in some activities
- A carer assessment should be completed for each carer with links to carer support groups made and family support organisations and followed up
- Where appropriate, carers should be included in any intervention by offering advice, information and support (either face to face, written or other appropriate format)
- Appropriate safeguarding must be in place.

REQUIREMENTS

The following should be assessed and treated either in specialist stroke inpatient rehabilitation service or community rehabilitation service (depending on patient need):

- Mobility and movement (including assessment weakness and ataxia, balance, falls and fear of falling; walking treatment to include exercise programmes, gait retraining, mobility aids, psychological interventions and orthotics)
- Upper limb rehabilitation (arm function)
- Management of spasticity and contractures
- Sensory impairment screening and sensory discrimination training
- Falls prevention (including assessment of bone health, progressive balance training and aids)
- Cognitive rehabilitation (including assessing and addressing impairment in attention and concentration, memory, spatial awareness, perception, praxis and executive function)
- Communication (including aphasia support during the first four months, techniques or aids for dysarthria and apraxia, training for carers in communication, information about local groups)
- Everyday activities, including provision of daily living aids and equipment (e.g. dressing, washing, meal preparation) – training of family/carers in how to help the person with stroke
- Mood and wellbeing (e.g. including specialist biopsychosocial assessment of anxiety, depression, psychological distress, adjustment difficulties, changes in self-esteem or self-efficacy, identity. Treatment offered as part of matched care model for psychological interventions and/or medication as appropriate)
- Emotionalism (assessed by specialist member of team and offered anti-depressants treatment monitored over four months)
- Mouth care
- Swallowing (including swallowing rehab, maintenance of oral and dental hygiene, nasogastric tube feeding, gastrostomy)
- Skin integrity (i.e. pressure care and positioning)
- Nutrition and hydration (including specialist nutritional assessment, nutritional support)
- Visual disturbance (including – visual acuity, hemianopia, eye movement)
- Continence (bladder and bowel) - urinary/bowel incontinence should be reassessed if continued after two weeks, and behavioural interventions such as timed toileting should be offered
- Social interaction, relationships and sexual functioning (including psychosocial management or medications). Patients and partners asked soon after discharge and at their six month and annual reviews if any concerns
- Pain (e.g. neuropathic pain, musculoskeletal pain, shoulder pain and subluxation) assessed regularly using validated score, referred to specialist where indicated
- Home assessment (including need for larger scale equipment or adaptation)
- Return to work (including referral to specialist in employment or vocational rehabilitation)
- Fatigue
- Driving
- Financial management and accessing benefits
- Mental capacity (whole specialist MDT should be involved in making decisions about mental cacpty, and should provide info and advice to person with stroke and family/carers when appropriate).

REQUIREMENTS

EDUCATION AND TRAINING

- Specific education and training is developed and provided in accordance with a recognised competency framework
- Staff are aware of the Mental Capacity Act and its implications
- Carers receive training in care, for example, moving, handling and dressing; receive written information on management plan and point of contact for stroke information
- Services for people with stroke should provide training to ensure that clinical staff have awareness of psychological problems following stroke and the skills to manage them.

WORKFORCE

For the inpatient rehabiliation team:

An inpatient stroke rehabilitation unit should have a single MDT including specialists in:

- Medicine
- Nursing
- Physiotherapy
- Occupational therapy
- SALT
- Dietetics
- Clinical neuropsychology/clinical psychology
- Social work
- Orthoptics.

With easy access to pharmacy, orthotics, specialist seating, assistive technology and information, advice and support for people with stroke and their family/carers.

For the community rehabilitation team :

There are established stroke skilled, multidisciplinary community rehabilitation teams. Composition of the team should include as a minimum:

- Physiotherapist
- Occupational therapist
- Speech and language therapist
- Clinical psychologist
- Community nursing
- Social care
- Rehabilitation assistants.

The community rehabilitation team has access to support from:

- GP
- Dieticians
- Orthotics
- Orthoptics
- Vocational rehabilitation.

OTHER

Equipment and aids:

- All equipment and aids (e.g. wheelchairs, continence equipment etc.) necessary to ensure a safe environment should be available at discharge and appropriate training provided to stroke survivors and carers
- Open referral system in social services for assessments of home adaptations and equipment needs
- Service governance and quality improvement – clinicians should participate in national stroke audit and local audit which involves people with stroke and their carers/family
- Assessment measures used in stroke rehab should be relevant, reliable and sensitive and transferable.

10 Long-term care

Stroke survivors and their carers should be enabled to live a full life in the community over the medium and long-term (>3 months). Support is required from local services to ensure appropriate, tailored support is provided to assist re-integration into the community and maximise the quality of life experienced by stroke survivors, their carer/s and families. SE Stroke CN has produced commissioning guidance to support stroke survivors in the longer term. Life after stroke commissioning guidance is aimed at supporting commissioners to enable stroke survivors to re-engage in active citizenship, such as returning to work, establishing links with support groups or regaining autonomy, control and a positive sense of identity following a stroke. The Six Month Reviews Commissioning Information Pack is for use in conjunction with the generic Six Month Review Service Specification and is aimed as an aid in decision-making and contracting discussions with providers to ensure a quality review and needs assessment service for all stroke survivors and their carers. The guidance can be found at: **www.secn.nhs.uk/our-networks/cardiovascular/stroke-clinical-advisory-group/**

REQUIREMENTS

SERVICE OUTCOMES

Provision of information and support for stroke survivors, carers and families:

- Introduction of the 2014 Care Act – Carers assessment
- The primary carer(s) of a person with stroke should be offered an educational programme which includes the following:
  - » Teaches them how to provide care and support.
  - » Gives them opportunities to practise giving care.
  - » Provides advice on secondary prevention, including lifestyle changes.
- The carer should have their need for information and support reassessed whenever there is a significant change in circumstances (e.g. if the health of the carer or the person with stroke changes)
- Ongoing physical, speech and language, continence and other required therapies are provided where clinically appropriate to meet patient needs
- Carers of stroke survivors with stroke are provided with a named point of contact for stroke information, written information about the stroke survivors
- diagnosis and personal care plan, and sufficient practical training to enable them to provide care
- Carers are provided with clear guidance on how to find help if problems develop
- All eligible users of social care services should have access to a personal budget
- Carers have the opportunity to access long-term emotional and practical support though peer support groups facilitated by charitable or voluntary groups.

REQUIREMENTS

SERVICE OUTCOMES

Regular review and needs assessment:

- The patient and family will be aware of their single named point of contact
- All stroke survivors receive a review and onward referral to appropriate MDT members at six weeks, six months, 12 months and then annually that facilitates a clear pathway back to further specialist review, risk factor screening, advice, information, support and rehabilitation where required, is provided
- Information from reviews should be shared across the entire team involved in delivering care to the stroke survivor, including with the stroke survivor themselves, their GP and consultant (if applicable)
- Stroke survivors and their carers are enabled to participate in paid, supported and voluntary employment
- People with stroke in care homes should be offered assessment and treatment from community stroke rehabilitation services to improve quality of life
- People with stroke living in care homes with limited life expectancy, and their family where appropriate, should be offered advance care planning
- Written handover and therapy guidance for patients going to care homes.

EDUCATION AND TRAINING

- Staff seeing stroke survivors know where to go to obtain information on other local services, charities in the area and how the stroke survivor may access financial, emotional, social, and vocational support
- Staff are aware of the Mental Capacity Act and its implications
- Health and social care professionals should ensure that they are up to date with the current guidance from the DVLA
- Staff caring for people with stroke in care homes should have training in the physical, cognitive/ communication, psychological and social effects of stroke
- Staff have the details of the local IAPT service so that those that need it can access the service
- Carers involved with the care management process from the outset, and encouraged to participate in an educational programme (on stroke, care and management, prevention)
- Service should include staff with expertise and competence in assessing, treating and monitoring people with behavioural and cognitive disturbance.

WORKFORCE

- Staff working in long-term care should have access to support and guidance from skilled stroke staff.

11 Secondary prevention

Healthy lifestyles and management of specific risk factors reduce the risk of an initial stroke and the risk of a subsequent stroke. For those who have already had a stroke or TIA, prevention advice is equally important. This means assessing individuals for their risk factors and giving them information about possible strategies to modify their lifestyle to reduce their risk. GPs should actively manage these conditions in-line with national guidelines.

REQUIREMENTS

SERVICE OUTCOMES

Assessment (according to current RCP guidance):

After stroke, stroke survivors and their carers need to be offered a review from primary care services of their health, social care and secondary prevention needs:

- All stroke survivors will have their risk factors assessed as soon as possible and certainly within one week of stroke. This will be documented and a personal care plan for secondary prevention produced as part of the stroke team's assessment which is passed onto primary care
- Monitored regularly in primary care on a yearly basis at minimum
- Protocols in place for education to prevent secondary stroke and encouraging better compliance with end result of reduced recurrent stroke
- People with evidence of non-symptomatic cerebral infarction on brain imaging (silent cerebral ischaemia) should have an individualised assessment of their vascular risk and secondary prevention.

Monitoring:

This specification does not attempt to define all risk factors, though significant risk factors and assessment include the following:

- Managing hypertension so systolic blood pressure is below 130 mmHg; treatment should be initiated prior to discharge or at two weeks
- Anticoagulation according to NICE CG 180 (Warfarin/NOAC) for individuals with atrial fibrillation and where not contraindicated; prescribed before discharge or plans to anticoagulate as outpatient whichever aligns with guidelines to administer less than two weeks following stroke onset
- All patients with ischaemic stroke, not in atrial fibrillation, to have anti-platelets medication unless contraindicated
- All patients who have had an ischaemic stroke or TIA should be offered a statin drug unless contraindicated
- Smoking cessation, alcohol, tailored exercise programmes and healthy lifestyle advice for all stroke/TIA survivors.

REQUIREMENTS

Risk management:

Risk factors, including hypertension, obesity, high cholesterol, atrial fibrillation ,diabetes and possible structural heart disease, are managed according to clinical guidelines, and appropriate action is taken to reduce overall vascular risk.

- Participating GPs produce and maintain a register of patients who have had a stroke or TIA, forming a suite of indicators to provide quality of care
- Measures for secondary prevention introduced as soon as the diagnosis is confirmed, including discussion of individual risk factors
- Information and advice strategies to ensure that clear, consistent, culturally sensitive messages are being given to those who have had a stroke, their families and those at high risk
- Practices can produce a register of patients with stroke or TIA.

Information and advice:

Those at risk of stroke and stroke survivors are assessed for and given information about risk factors and lifestyle management issues (exercise, smoking, diet, weight and alcohol), and are advised and supported in possible strategies to modify their lifestyle and risk factors.

- Stroke survivors given named contact to help them plan and manage their long-term care
- Meet individual needs, tailoring for a variety of ages, ethnicities and lifestyles
- Access to leaflets in variety of formats (i.e. different languages, large print, braille, dysphasia friendly).

EDUCATION AND TRAINING

- All primary care professionals maintain and update their knowledge of national guidelines and implement them in practice, targeting high-risk patient groups.

12 End-of-life care

Stroke is the UK's third biggest killer. Patients with stroke may enter the end-of-life pathway at many stages of the stroke pathway, in different care settings. Clear decisions will indicate when a patient's prognosis means that an end-of-life pathway is appropriate. It is important that this decision is made by the appropriate skilled and experienced individual, taking account of the needs and choices of the patient, carer and family.

REQUIREMENTS

SERVICE OUTCOMES

End-of-life care:

- Decision to enter a patient into an end-of-life pathway should be taken by an appropriate and experienced individual, taking account of the needs and wishes of the patient, carer and family
- Patients and carer offered opportunity to be discharged home for end-of-life care
- Palliative and end-of-life care will be provided in line with clinical practice guidance and the local service specification for end-of-life care. This may include referral to specialist palliative care services
- The five priorities of care are embedded in the care provided.

'Five priorities for the care of dying people'

» The possibility that a person may die within the next few days or hours is recognised and communicated clearly, decisions made and actions taken in accordance with the person's needs and wishes, and these are regularly reviewed and decisions revised accordingly

» Sensitive communication takes place between staff and the dying person, and those identified as important to them

» The dying person, and those identified as important to them, are involved in decisions about treatment and care to the extent that the dying person wants

» The needs of families and others identified as important to the dying person are actively explored, respected and met as far as possible

» An individual plan of care, which includes food and drink, symptom control and psychological, social and spiritual support, is agreed, coordinated and delivered with compassion.

- Patients considered to be in the last 12 months of life are recommended for inclusion on the GP's GSF register.

REQUIREMENTS

EDUCATION AND TRAINING

- Preferred Priorities for Care (PPC) document shared with all health and social care staff involved in their care along with where to access the locally agreed version
- Application of the five priorities of care
- Communication training provided to support practitioners to initiate and engage in conversations about end-of-life care.

WORKFORCE

- Patients receiving end-of-life care do so from a workforce with appropriate skills and experience in all care settings.

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