A Stroke Care Pathway for Halton and St Helens

A new ambition for local stroke services.

A Draft Strategic Pathway for Engagement

Strategy Version 1: October 2009

Further information about this document:

Document name	**A Stroke Care Pathway for Halton and St Helens**
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This document should be read in conjunction with	**National Stroke Strategy (December 2007)** **NICE clinical guideline 68 - Stroke: diagnosis and initial management of acute stroke and transient ischaemic attack (TIA) (July 2008)**
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Draft Stroke Pathway for Halton and St Helens **Draft Version 2**	Circulated to clinical staff and managers in Halton and St Helens (Commissioners and Providers), Local Authority partners, NHS Knowsley and NHS Warrington and Cheshire & Merseyside Stroke Network	**October 2009**

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Notes

Throughout this Strategy dates marked with ***** are indicative and approximate only and will be dependent upon the clinical requirements of individuals

Foreword

This report sets out the model of Stroke Services that NHS Halton and St Helens proposes to commission for the people of Halton and St Helens from 2009-2014 with the ambition to ensure the development and provision of world class Stroke services.

The key, evidence based, platforms from which the proposals have been developed are the "National Stroke Strategy", published in December 2007 and "Stroke: national clinical guideline for diagnosis and initial management of acute stroke and transient ischaemic attack (TIA)" published by the National Institute for Health and Clinical Excellence in July 2008.

The proposals support the emerging key priorities for NHS Halton and St Helens in 2009-2010;

Staying healthy for longer and early detection of major illness -

- ✓ reducing the number of TIA patients who go on to have a Stroke
- ✓ promoting healthy lifestyle choices for those identified as being at greatest risk of stroke
- ✓ enhancing long term support to those who have had a stroke

Improving access to psychological therapies -

- ✓ ensuring rapid and sustained access to appropriately trained staff to support patients and carers

Access to health checks -

- ✓ offering support to those identified as at risk through the vascular screening programme for adults aged 25+

Care without Walls -

- ✓ developing a Multidisciplinary Stroke Rehabilitation Service (MSRS) to provide support and active interventions to patients in all settings, including hospital
- ✓ operating a range of options for treatment location according to clinical need and patient choice

Managing variation -

- ✓ supporting improvements and consistency in the diagnosis and timely referral of TIA and Stroke patients
- ✓ providing enhanced and standardised long term support for Stroke and TIA patients in all GP practices

Comments are invited on the proposed model of Stroke Services as described in this report, to be received by **30th September 2009.** Comments should be sent to Janet Dunn, Head of Partnership Commissioning, NHS Halton and St Helens, Victoria House, Holloway, Runcorn WA7 4TH or by email to janet.dunn@hsthpct.nhs.uk If you would like to discuss the report or to arrange for someone to meet with an organised group please call 01928 593676.

Definitions

A&E	Accident & Emergency Department or Accident & Emergency Service
Acute Stroke Unit (ASU)	An acute stroke unit is a discrete area in the hospital that is staffed by a specialist stroke multidisciplinary team. It has access to equipment for monitoring and rehabilitating patients. Regular multidisciplinary team meetings occur for goal setting. (NICE, July 2008)
Carotid Endarterectomy	Two carotid arteries provide the main blood supply to the brain. These arteries are particularly prone to developing narrowing and blood clots can form in the narrowed areas. If the blood clot breaks off it goes into the blood stream and may then block an artery in the brain causing a stroke or a TIA. Carotid endarterectomy is an operation designed to remove the narrowing in the carotid artery before it can cause a stroke.
Community Stroke Rehabilitation Unit (CSRU)	An in-patient Unit or Hospital Ward with dedicated therapy facilities, within which patients receive an active programme of rehabilitation or reablement in order to maximise their personal potential and quality of life.
CT	Computerised Tomography (CT), sometimes also called a CAT scan, takes pictures of the body and uses a computer to put them together. A CT scanner uses X-rays and is a painless procedure. A series of X-rays are taken of the body at slightly different angles, to produce very detailed pictures of the inside of the body. (NHS Choices)
CTA	A Computed Tomography Angiography (CTA) scan gives a view of specific blood vessels (arteries and veins). CTA is often included in a CT exam.

Map of Medicine	A web-based visual representation of evidence-based patient care journeys covering 28 medical specialties and 390 pathways providing an online clinical knowledge resource to help healthcare professionals plan the best possible treatment programmes for patients.
MRA	A Magnetic Resonance Angiogram (MRA) scan is carried out exactly the same as an MRI scan apart from the use of dye which is administered through a needle in the back of a hand. This scan gives a clear picture which may show parts of the brain or other arteries that haven't shown up well on other tests. The dye used in this test has no side effects.
MRI	Magnetic resonance imaging (MRI) uses a strong magnetic field and radio waves to produce detailed pictures of the inside of the body. MRI scans can show muscles, joints, bone marrow, blood vessels, nerves and other structures within the body. The images the scans produce are usually two-dimensional but, in some cases, several different scans can be taken to build up a three-dimensional image that can be displayed on a computer screen. (NHS Choices)
Multidisciplinary Stroke Rehabilitation Service (MSRS)	A multidisciplinary team of Specialist Stroke trained professionals providing support and rehabilitation to Stroke and TIA patients throughout the Service Pathway, including in-reach intervention from the beginning of treatment, supported and early supported discharge and continuing rehabilitation within a wide range of community settings. The MSRS comprises a core team and an extended team to provide the widest and appropriately focussed care. (NHS Western Cheshire)
NHS Improvement	NHS Improvement is a newly formed (April 2008) national improvement programme working with clinical networks and NHS organisations to transform, deliver and sustain improvements across the entire pathway of care in cancer, cardiac, diagnostics and stroke services.
NSF for Older People	National Service Framework for Older People published May 2001 by the Department of Health

PbR	Payment by Results (PbR) aims to provide a transparent, rules-based system for paying trusts. It is intended to reward efficiency, support patient choice and diversity and encourage activity for sustainable waiting time reductions. Payment is linked to activity and adjusted for casemix. The system aims to ensure a fair and consistent basis for hospital funding rather than being reliant principally on historic budgets and the negotiating skills of individual managers. (Department of Health)
QOF	The Quality and Outcomes Framework (QOF) is a voluntary annual reward and incentive programme for all GP surgeries in England, detailing practice achievement results. It is not about performance management but resourcing and then rewarding good practice.
SAP	The single assessment process (SAP) was introduced in the National Service Framework for Older People. The purpose of SAP is to ensure that people receive appropriate, effective and timely responses to their health and social care needs and that professional resources are used effectively. In pursuit of these aims, SAP should ensure that the scale and depth of assessment is kept in proportion to people's needs; agencies do not duplicate each other's assessments; and professionals contribute to assessments in the most effective way. The system under which SAP is operated in Halton and St Helens is also known as 'Easy Care'.
Stroke	A 'brain attack' caused by a disturbance to the blood supply to the brain. There are two main types of stroke: • Ischaemic: the most common form of stroke, caused by a clot narrowing or blocking blood vessels so that blood cannot reach the brain, which leads to the death of brain cells due to lack of oxygen. • Haemorrhagic: caused by a bursting of blood vessels producing bleeding into the brain, which causes damage. (National Stroke Strategy, December 2007) --- A clinical syndrome consisting of 'rapidly developing clinical signs of focal (at times global) disturbance of cerebral function, lasting more than 24 h or leading to death with no apparent cause other than that of vascular origin'. (World Health Organization, 2004)

Transient Ischaemic Attack (TIA)	Transient ischaemic attack (TIA), also known as minor stroke, occurs when stroke symptoms resolve themselves within 24 hours. (National Stroke Strategy, December 2007) --- A transient ischaemic attack (TIA) is defined as stroke symptoms and signs that resolve within 24 hours. (World Health Organization, 2004)
Thrombolysis	The use of drugs to break up a blood clot, where this can be safely used for suitable patients. It has to be given within 3 hours of the onset of stroke symptoms
Ultrasound	Carotid Ultrasound is a test that shows the carotid arteries (vessels in the neck that provide blood flow to the brain), as well as how much blood flows and how fast it travels through them. Ultrasound waves are used to make an image of the arteries. This image can be used to find out if there is an abnormality or blockage of the carotid arteries that could lead to stroke.
Vital Signs	Measures of progress against the national priorities for the NHS.

Introduction

The Stroke Care Pathway for Halton and St Helens is designed to ensure that services within Halton and St Helens are responsive to local needs and provide for the best patient outcomes in terms of prevention, treatment and long term care. This involves the identification and implementation of the ideal Stroke care pathway, including services for the prevention of Stroke, those at risk of Stroke, for patients who have had a Stroke and those recovering from Stroke.

NHS Halton and St Helens published its 5 year 'Ambition for Health' Strategy in March 2009. This is an extract from the introduction of the plan.

Our mission:

We believe our contribution to the well being of the people we serve in Halton & St Helens is to enable them to have the best possible health and health care. To achieve this, we have set ourselves three ambitions:

- To improve and tackle inequalities in health.
- To deliver effective and efficient health and related services.
- To be the Best in Class.

Why change:

In comparison to the rest of England, in Halton & St Helens, our local population has high levels of:

- Economic deprivation (within the worst 10%).
- Worklessness (21% with 11% receiving incapacity benefits).
- Smoking, obesity and alcohol & drug misuse.

Each of these factors is a significant determinant of health. Taken together they largely explain why our population has comparatively poor health and significantly lower life expectancy, in particular due to high levels of heart disease & cancer. Our Joint Strategic Needs Assessment clearly shows the unequal impact these issues have within our local population and in comparison to the average health experience of the people of England. This health inequality is unacceptable and must be tackled by significantly changing how we go about improving the health of our local population.

Our vision:

To improve the health of our local population…
We will focus on helping people to stay healthy. We will engage and enable people to take greater responsibility and control of their own health and care.
Whilst this is simple to say, we recognise that this is a huge change in emphasis from 'treating sick people' to 'helping people to prevent ill health'. This challenge will only be met by working in partnership with other local agencies. Also, it requires us to enable our staff to form different personalised relationships with patients. In particular it will require targeted, innovative actions to engage 'hard to reach' groups.
Alongside the focus on staying healthy, we will continue to increase the range & scale of our programmes to **detect illnesses earlier**.

Finally, we will also **improve the quality and safety of our health care services**. Poor quality care (which is ineffective and costly) must be addressed both to improve health outcomes and patient experience and to make saving to enable us to afford to increase our investment in ill health prevention and early detection.
Based on this vision, we have identified six ambitions (or goals):

- Supporting a healthy start in life.
- Reducing poor health resulting from preventable causes.
- Supporting people with long term conditions.
- Providing services to meet the needs of vulnerable people.
- Making sure our local population has excellent access to services and facilities.
- Playing our part in strengthening local communities.

This commissioning strategy '***Ambition for Health***' describes, for each of the goals, what we will deliver by 2013. It identifies major priorities that we will tackle through focused initiatives. It describes how we will ensure that we are delivering the initiatives and other 'business as usual projects' and that overall, we are achieving the improvements in health outcomes

Goal 12: By 2013 people with risk factors for heart disease and stroke will be identified and treated to reduce their risk of either event. For people with coronary heart disease or stroke we will have excellent long-term care in place to support them.

Quote from NHS Halton and St Helens Commissioning Strategic Plan.

The current situation / historical context

The National Audit Office report "Reducing Brain Damage: Faster access to better stroke care", published in 2005, outlines the national picture. Key points made by the report are;

- 11% of the deaths in England and Wales each year are due to Stroke (the third largest cause of death);
- awareness of stroke and how to recognise symptoms is low;
- between 20% and 30% of people who have a Stroke die within a month;
- every five minutes someone in England will have a stroke;
- around one in four people can expect to have a stroke if they live to 85;
- over 900,000 people who have had a stroke living in England, about half of whom are left dependent on others for everyday activities
- Stroke affects all age groups, with a quarter of Strokes occurring in people aged under 65;
- people of African or Caribbean ethnicity are at higher risk of Stroke, especially of having Strokes while young;
- Stroke mortality rates have remained constant, at approximately 24%, between 1992 and 2002, while for heart attack patients the chance of dying from their heart attack declined by about 1.5% each year.

There is high variability in the average lengths of stay across acute hospitals. On average one fifth of acute hospital beds, and a quarter of long term beds, are

occupied by stroke patients. Stroke patients occupy one of the largest numbers of acute hospital bed days of any patient group – over 2.6 million per year.

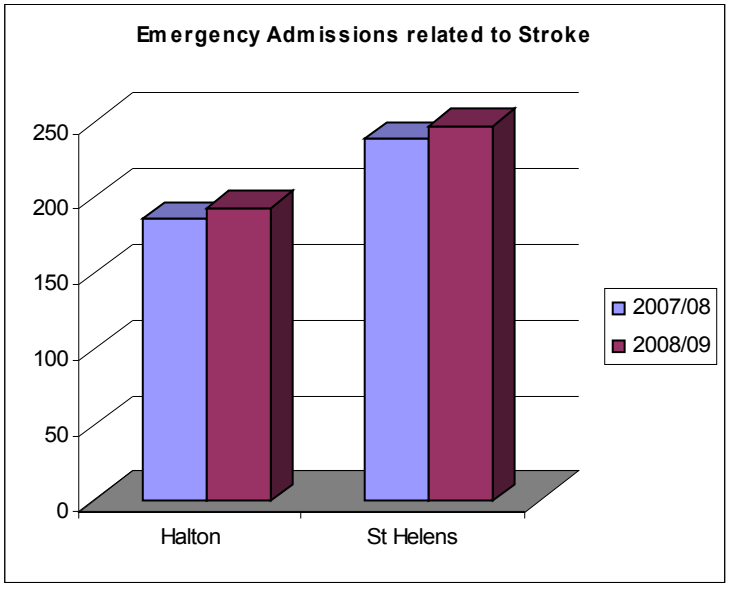
Stroke will become increasingly expensive as the number of people living with stroke increases. People aged 65 years and over increased by nearly four million between 1952 and 2002 and the percentage of older people in England is projected to rise from 16% in 2003 to 23% in 2031. It is predicted that the total costs of stroke care will have risen in real terms by 30% between 1991 and 2010.

Patients cared for in a defined stroke unit with organised stroke services are more likely to survive, have fewer complications, return home and regain independence than patients that stay on a general medical ward.

The Halton and St Helens Perspective

The prevalence of Stroke and TIA as reported through the Quality Outcome Framework (QOF) in 2008/2009 was 5900. The incidence of Stroke in Halton and St Helens is 1.6%; this is 0.2% higher than the current rate for England as a whole. It is predicted that across Halton & St Helens 1152 patients over the age of 65 years have a longstanding health condition caused by a stroke.

In 2008/2009 the number of Stroke emergency admissions was 440, accounting for 7138 bed days. This was a 0.2% increase from 2007/08 figures. A borough split is shown below.



The number of deaths due to Stroke in 2007/08 was 232.

<u>Health Inequalities and Stroke.</u>

- The incidence of stroke in Halton and St Helens is predicted to rise at a greater rate than the rise in heart attack incidence and to rise above that of the national rate. In addition the incidence of stroke predicted to be greater in Halton compared to St Helens (see Table 1 below). Stroke patients have commented that cardiac care has been given greater attention over the past 10 years compared with stroke care.

Table 1: Predicted increase in the incidence of Stroke compared to Heart Attacks in the population aged 65+ between 2008 and 2025

Location	Stroke	Heart Attack
England	**49.4%**	**41.5%**
Halton	**60.1%**	**52.1%**
St Helens	**47.9%**	**36.6%**
Halton and St Helens combined	**52.3%**	**42.3%**

Data source: PCT Public Health and POPPI

The Department of Health National Support Team (NST) for Health Inequalities visited Halton and St Helens in February 2009 and provided the PCT and Council partners with a set of priority actions to help reduce mortality from Cardio Vascular Diseases.
This plan incorporates those key priority areas and it is important to note that the NST also recognised areas of good practice picked up during it's their visit and these were:-

1. Local Acute Providers have demonstrated improvements in Stroke care as evidenced in the 2008 National Sentinel Stroke audit results compared to the results from the same audit conducted in 2006.
2. The PCT has designated Stroke as a commissioning priority
3. A thriving local stroke club in Halton

Drivers for Change

The publication of the National Stroke Strategy by the Department of Health in December 2007 has provided a focus for reviewing the provision of Stroke Care services within Halton and St Helens with local health, social care and third sector partners.

The newly formed "NHS Improvement", established April 2008, includes Stroke as one of the five clinical areas for its 2008/2009 priorities. It has been established to support Stroke Networks and the implementation of the National Stroke Strategy.

Further advice to support the Pathway's development has been made available through the publication of National Institute for Clinical Excellence guidelines, in July 2008. This has supported the framework for a review of the Stroke pathway.

The development of the Pathway also provides the opportunity to review the status of local services in relation to Standard 5 – Stroke within the National Service Framework (NSF) for Older People.

Objectives

The proposed Pathway outlines an ambitious programme of challenges to providers of services for the restructuring and enhancing of Stroke services for the population of Halton and St Helens. It seeks to transform the approach taken to the treatment of Stroke and TIA in order to deliver significant improvements in the outcomes of treatment and the long term support and quality of life which Stroke patients and their carers should expect from World Class healthcare provision.

The overall long term objectives will be the reduction of incidence in Stroke/TIA within the population, improvements in access to timely acute/specialist interventions and appropriate access to rehabilitation and long term support to raise the quality of life outcomes for those with Stroke.

It is NHS Halton and St Helens intention that the proposed pathway will deliver World Class Stroke services to meet the aspirations of the *National Stroke Strategy* (December 2007), the standards of the NICE Guidelines *Stroke: Diagnosis and Management of Acute Stroke and Transient Ischaemic Attack (TIA)* (July 2008) and the accreditation of Acute Stroke services to meet the standards of a Level 3 Stroke Centre, as defined by the British Association of Stroke Physicians (BASP).

Progress towards a World Class Stroke Service will be measured against national indicators (Vital Signs Stroke Indicators) and local outcome targets based on the framework of twenty Quality Markers (QMs) identified in the National Stroke Strategy.

There is also the intent to recognise the stroke pathway as one of a number of key areas of service transformation within the local 'Transforming Community Services' along side the need for the stroke pathway to help deliver the policy changes and service improvements associated with 'Putting People First' and the Transformation of Adult Social Care and The National Carers Strategy (2008).

Transforming Community Services and Putting People First and Outcome Based Accountability (OBA) what does this mean for individuals? The following is a list of expected outcomes for people who have suffered a stroke and their carers:-

- Timeliness (rapid access)
- Optimum recovery support
- Flexible service delivery
- Personalised care
- Open ended / lifelong support
- Support to manage the condition

The Model of Services for Halton and St Helens

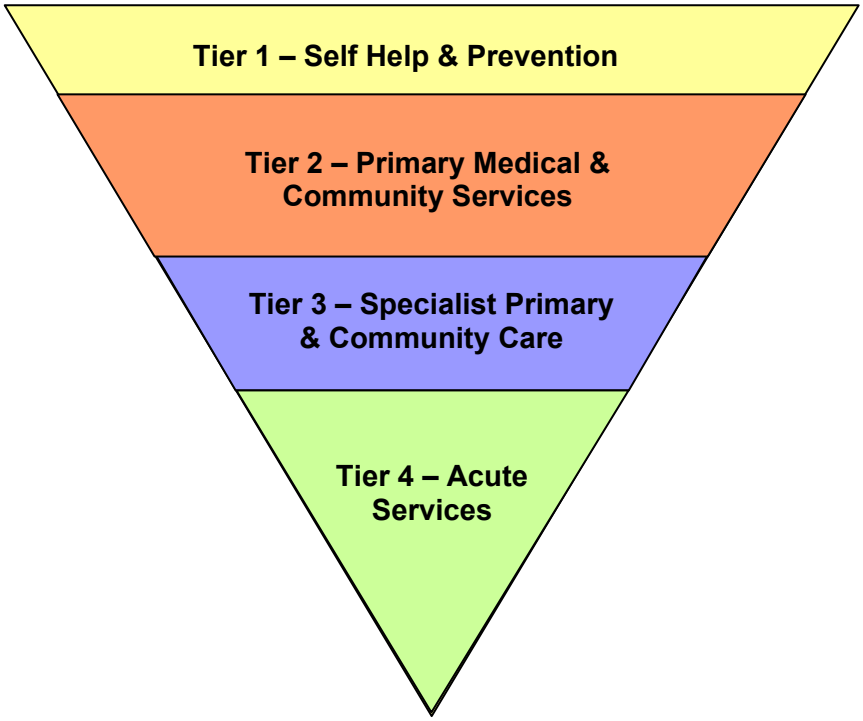
In order to deliver its objectives NHS Halton and St Helens proposes to commission the following Service Model Pathway commencing from April 2010, with a target of full implementation by April 2014.

Wherever possible and appropriate, NHS Halton and St Helens will jointly commission stroke services with partner organisations to support the best possible range of services for stroke patients and their carers and relatives. This will be achieved by working with Halton and St Helens Councils, through a Joint Strategic Needs Assessment supporting the development of NHS Halton and St Helen's Strategic Commissioning Plan and Halton and St Helens Community Services Commissioning Strategy.

The model of care is predicated on a tiered approach. This is in line with 'Our Health, Our Care, Our Say' (DH 2006) which recommends a greater use of self care, telemedicine and telecare and the provision of care either at home or closer to home to promote independence and good health. There are also requirements for improvements in quality, safety, productivity and efficiency. **Patient care will however be of consistent quality and evidence based, as determined by the clinical pathway**

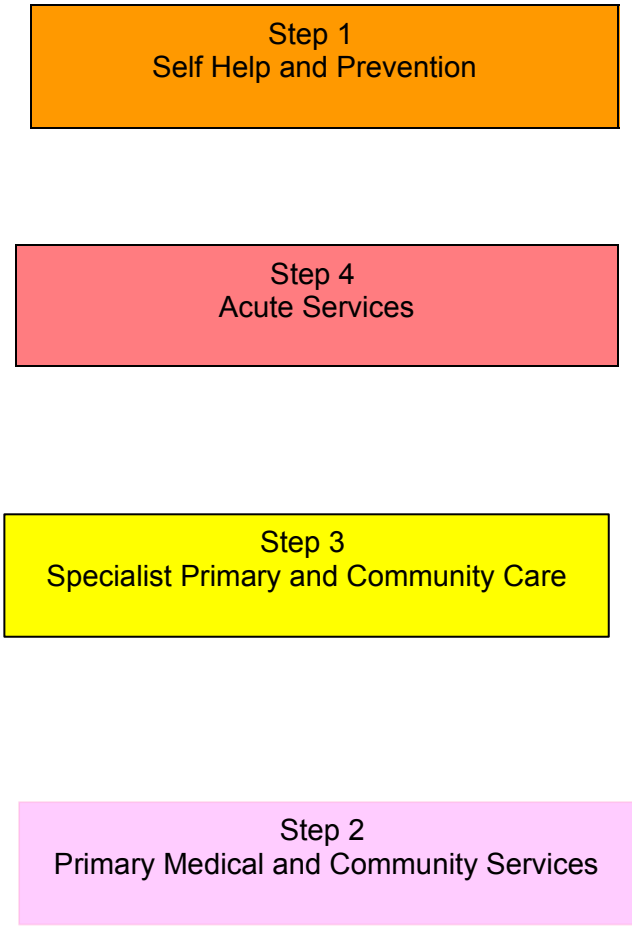
This changes the locations for care, providing more services in community settings closer to where people live and creating a greater concentration of specialist care on the acute hospital site.
The model will enable people with who have had a TIA or stroke to receive more of their care in their local communities and their homes. It will change the way in which care and support is delivered to make best use of the opportunities of technology, improving methods of access for patients and increase efficiency. This may range from telephone consultations to use of decision-support systems and point-of-care testing. It will therefore result in changes in the nature and location of activity.
This tiered approach is entirely consistent with the local health economy's model of care and is demonstrated in the diagram below:

Tiered approach diagram

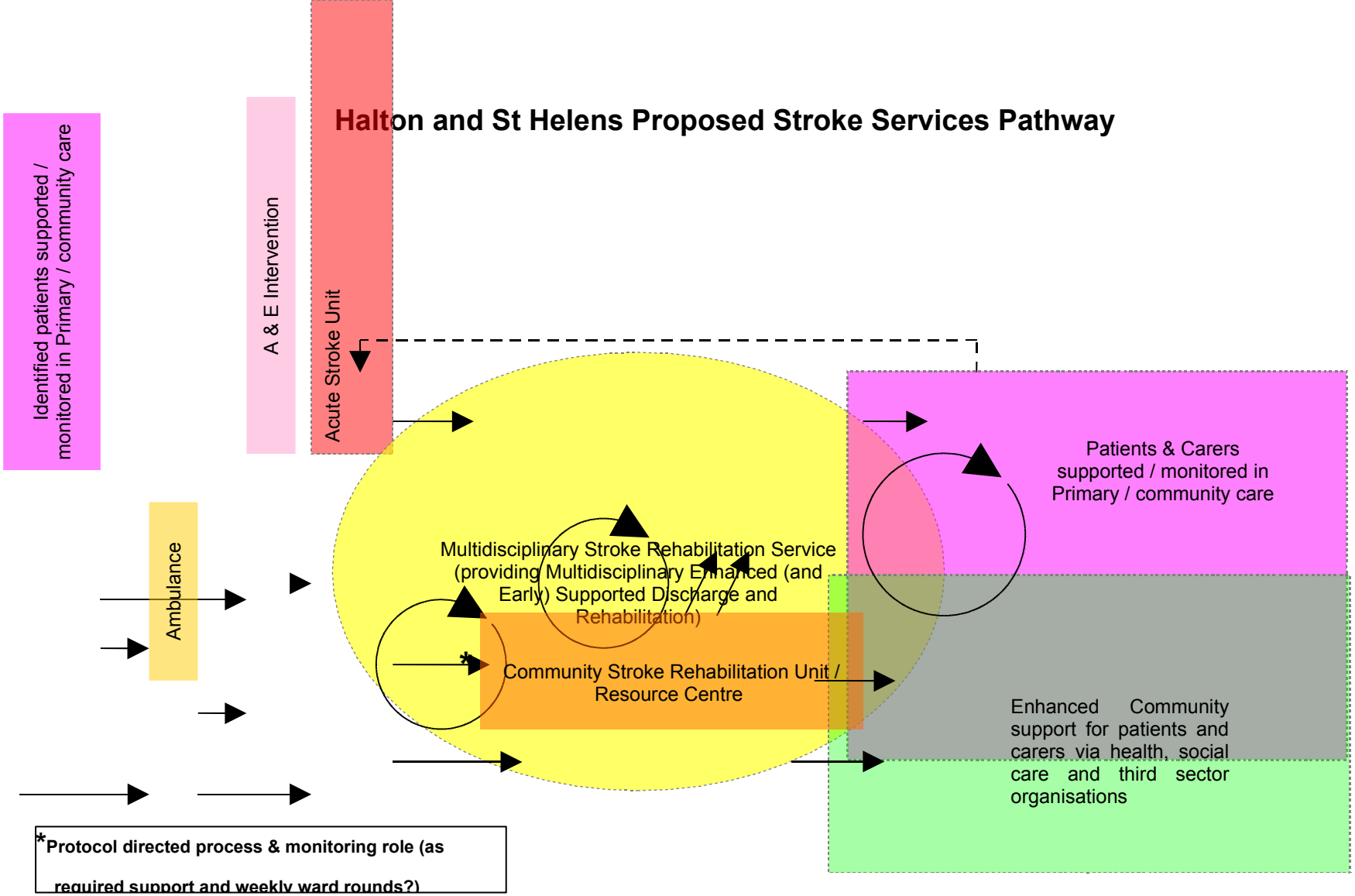


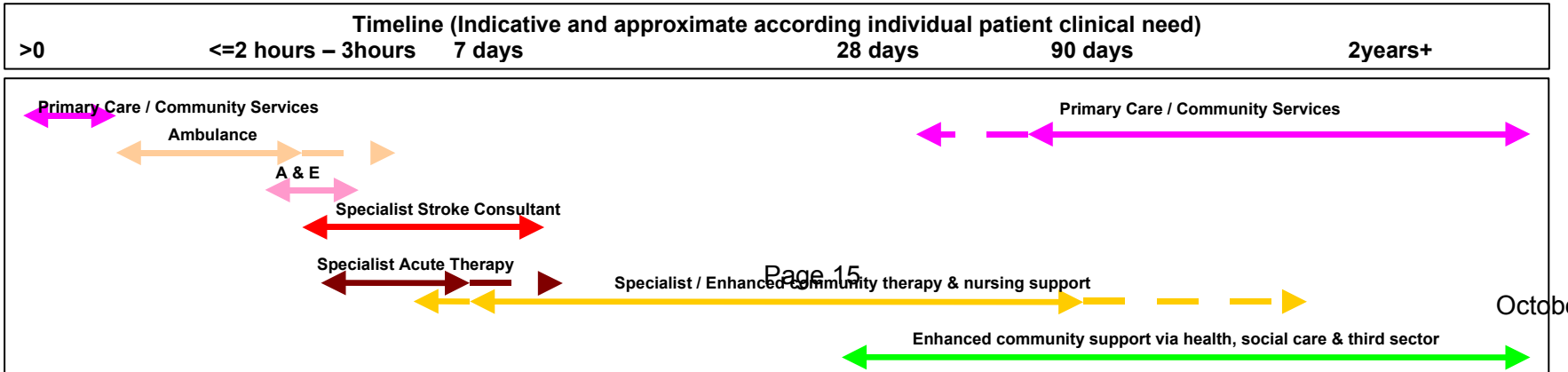
Stroke Care Route Diagram

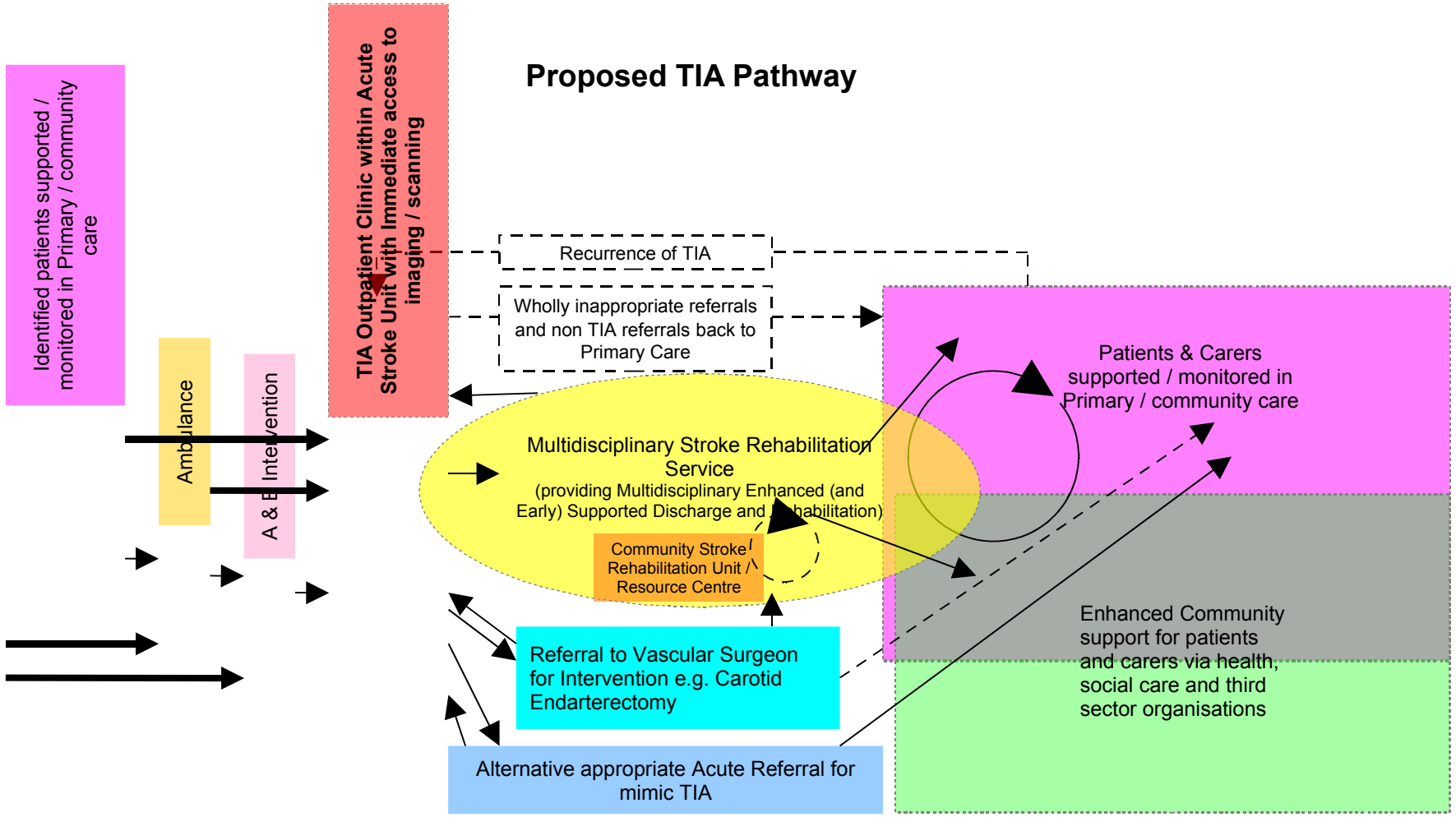
In order to place Stroke within the Tier of Care model, we have broken this down to reflect the proposed Stroke Care Route in line with the new Pathway, as such;

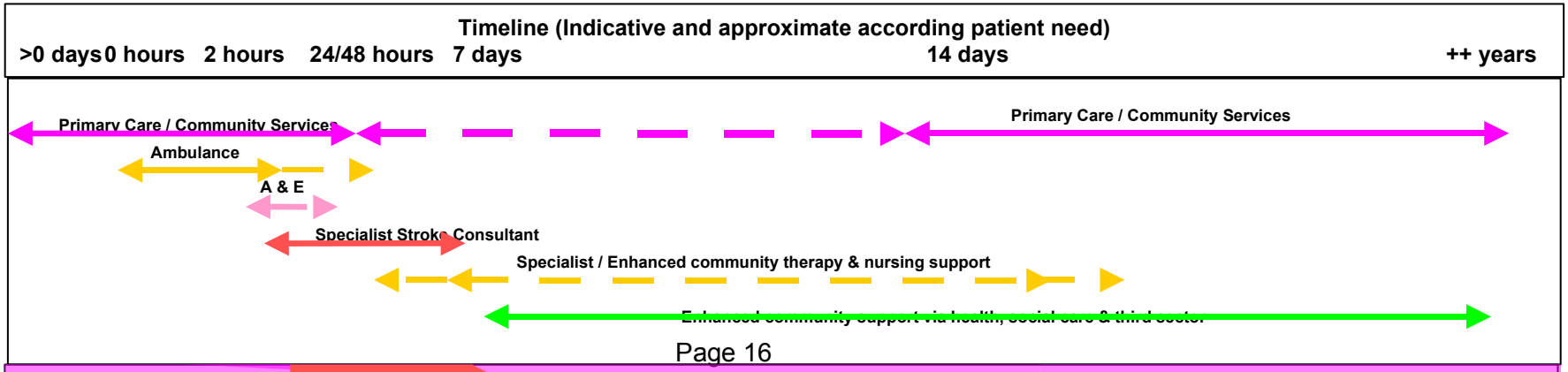

Step 1
Self Help and Prevention
Step 4
Acute Services
Step 3
Specialist Primary and Community Care
Step 2
Primary Medical and Community Services

Halton and St Helens Proposed Stroke Services Pathway






Proposed TIA Pathway
Identified patients supported / monitored in Primary / community care
TIA Outpatient Clinic within Acute Stroke Unit with Immediate access to imaging / scanning
Recurrence of TIA
Wholly inappropriate referrals and non TIA referrals back to Primary Care
Ambulance
A & E Intervention
Multidisciplinary Stroke Rehabilitation Service
(providing Multidisciplinary Enhanced (and Early) Supported Discharge and Rehabilitation)
Community Stroke Rehabilitation Unit / Resource Centre
Patients & Carers supported / monitored in Primary / community care
Enhanced Community support for patients and carers via health, social care and third sector organisations
Referral to Vascular Surgeon for Intervention e.g. Carotid Endarterectomy
Alternative appropriate Acute Referral for mimic TIA


Timeline (Indicative and approximate according patient need)
>0 days
0 hours
2 hours
24/48 hours
7 days
14 days
++ years
Primary Care / Community Services
Ambulance
A & E
Specialist Stroke Consultant
Specialist / Enhanced community therapy & nursing support
Primary Care / Community Services

Pathway Overview

Pre-Stroke/TIA care and prevention

Working with General Practitioners, the Practice Based Commissioning Consortia, Halton Council and St Helens Council and other partners, NHS Halton and St Helens will seek to improve recognition, understanding and preventative treatment of Stroke within the local population .

Through other work being undertaken by the PCT to meet its Corporate Objectives, including specific related work streams, the ambition is to reduce the incidence of Stroke and TIA through improved general health for the local population;

NHS Halton and St Helens will commission;

- Shared information arrangements throughout the patient pathway using the Single Assessment Process (SAP) as the model to ensure that consistent and informed patient focussed quality care can be delivered by both health and social care providers.
- Stroke services based on detailed patient / clinical pathways developed using *"Map of Medicine"* as the standard pathway structure.

Acute Care/Immediate Care (or Short Term) Rehabilitation

Ambulance Services – The PCT will work with North West Ambulance Service NHS Trust to ensure that protocols are in place to meet the standards outlined in the National Stroke Strategy.

NHS Halton and St Helens will commission the following;

- Accident & Emergency Services – services to provide 24 hour a day support to urgent response protocols and for Specialist Stroke Consultant/s and Stroke Specialist Nurses to be available at all times to ensure immediate direct access to a local Acute Stroke Unit.
- Acute Stroke Unit – a Dedicated Acute Stroke Unit staffed with specialist Stroke trained staff for direct admission from Ambulance and A&E, with adequate capacity for all Stroke patients – and desirably, patients admitted with TIA as a main condition - to be managed within the Unit throughout their stay.
- Specialist Stroke Consultant/s – services for the required minimum number of Consultants trained to the required standard in Stroke care based within SHKHT and WHHFT respectively (to meet BASP standards) . This will ensure the availability of staff with the skills and capacity to provide 24 hour Acute Stroke Consultant cover for Emergency Stroke admissions, working in partnership with A&E to deliver Thrombolysis to an increasing number of

patients and provide access to TIA clinics within 24/48 hours for high risk patients.

- Specialist Acute Stroke Care trained Nursing Staff – services for all stroke patients to be supported by specialist Stroke trained nursing staff with a high level of skills to care for patients in the Acute Stroke Unit and the capacity to train other clinical staff within the Acute Hospital setting.
- Imaging – services for the provision of immediate access to MRI/CT/Ultrasound for all Stroke patients admitted to the Accident & Emergency department and Acute Stroke Unit and urgent access for suspected TIA patients (to meet the standards in "*Implementing the National Stroke Strategy – an imaging guide***"** (Department of Health, June 2008).
- Dedicated Stroke Therapists – a specialist multi-disciplinary team of therapists forming a Multidisciplinary Stroke Rehabilitation Service (providing Multidisciplinary Enhanced (and Early) Supported Discharge and Rehabilitation throughout the pathway both in the hospital and community) to be responsible for the care of stroke patients from admission to the Acute Stroke Unit and throughout the pathway.
- availability of immediate & direct access to the above services for 24 hours a day, 7 days a week (in partnership with other hospitals as appropriate, based on the principle of "service to patient not patient to service" to reduce/minimise patient travel, time and stress).
- A 7 day a week service for key therapies to assess and commence treatment as soon as patient is stable and no more than 24 hours after admission.
- Services to include arrangements for patient & carer involvement in Care Planning from Day One of admission to the Acute Stroke Unit.
- Services for Social Care and Stroke Association Family & Carer Support Service engagement at the earliest possible stage following admission to the Acute Stroke Unit. (This will be dependent upon individual patient need).
- Flexible access to a Specialist Stroke Consultant led TIA Clinic – TIA services to give access for suspected TIA patient's access to be seen by an Acute Stroke Consultant within 24/48 hours, or 7 days, according to urgency.

Stroke Rehabilitation Service

NHS Halton and St Helens will commission the following;

- A Multidisciplinary Stroke Rehabilitation Service (providing Multidisciplinary Enhanced (and Early) Supported Discharge and Rehabilitation throughout the pathway both in the hospital and community) to ensure patients can be safely discharged from the Acute Stroke Unit/Inpatient Rehab Unit to an appropriate setting, with full support to ensure continuity of care and continued treatment. (The Service Team will include; Lead Nurse, Medical, Nursing, Occupational Therapy, Physiotherapy, Speech & Language Therapy, Psychology, Dietetics, Podiatry, Continence, Tissue Viability, Social Care, Health Support workers)
- Community Stroke Rehabilitation Unit – the provision of a community Stroke Rehabilitation Unit as part of the Multidisciplinary Stroke Rehabilitation

Service. The Unit will be staffed by specialist stroke rehabilitation trained nursing and therapy staff. The Multidisciplinary Stroke Rehabilitation Service Team will plan and manage admissions to the Unit, care throughout patients' stay and following discharge. *(this might be part of an existing Intermediate Care Unit)*

- Support from Specialist Stroke Consultants/or specialist stroke nurse – protocols for Specialist Acute Stroke Consultants to participate in patient management in support of the Multidisciplinary Stroke Rehabilitation Service, including the Community Stroke Rehabilitation Unit (CSRU), with arrangements, for example, for weekly ward round.
- These services to be organised on a 7 day a week basis to provide availability of immediate & direct access to the Multidisciplinary Stroke Rehabilitation Service and CSRU.
- Stroke Association Family & Carer Support Service engagement from Day One involvement by the Multidisciplinary Stroke Rehabilitation Service.
- The Stroke Association's Communication Service engagement in discharge planning (as soon as need is identified by the Multidisciplinary Stroke Rehabilitation Service) and from discharge.
- Primary Care/Community Stroke nurse in discharge planning and responsibility for ensuring continuity of patient care and carer support from the point of discharge from the Acute Stroke Unit.
- Patient & carer involvement in Care Planning and discharge planning throughout the involvement of the Multidisciplinary Stroke Rehabilitation Service.

Long Term Patient and Carer Support Services

NHS Halton and St Helens will commission the following;

- Primary Care / Community Matrons – long term support to be delivered by Primary Care services and caseload management by Community Matrons to stroke patients and their carers.
- Access to the Multidisciplinary Stroke Rehabilitation Service – services to ensure that patients and carers following discharge from active treatment by the Multidisciplinary Stroke Rehabilitation Service can directly or via Primary Care (dependent upon patient/carer choice) access the service for advice, support, review and re-admission to the Multidisciplinary Stroke Rehabilitation Service Team's caseload (including access to the Community Stroke Rehabilitation Unit), as appropriate.
- Access to these services 7 days a week.
- Annual reviews (as minimum), enhancing where appropriate, contracts with the Stroke Association Family & Carer Service and Communication Service and any other future third sector providers.
- Resources for long term Patient & Carer support group / activities (e.g. funding for accommodation, refreshments, transport and capacity for facilitation, where

necessary, via PCT, Social Care and Stroke Association staff) working in partnership with Social Care and the Stroke Association.

Acute Care and Immediate Care (or Short Term) Rehabilitation

NHS Halton and St Helens will commission Acute Stroke Services as follows;

- an Acute Stroke Unit with
  - ✓ hyper-acute capabilities, as a discrete (separate) Unit or Ward
  - ✓ capacity that is adequate to enable stroke / TIA patients to be accommodated from admission to discharge
  - ✓ located with easy access from A&E and, where appropriate, for admissions direct from Ambulance
  - ✓ All Stroke and TIA patients to be admitted under the Acute Stroke Consultant/s. Patients should be admitted directly to the Acute Stroke Unit or, if via A&E, transferred directly to the Acute Stroke Unit as soon as possible.
  - ✓ Hyper-acute facilities in order for hyper-acute treatment during the first 24 hours to be available within the Acute Stroke Unit, where appropriate supported by A&E.
  - ✓ staffing by a dedicated team of nursing staff, trained in the acute management of stroke and as a minimum meet Quality Markers 18 and 19 from the National Stroke Strategy (Leadership and Skills and workforce review and development)
- immediate access to MRI/CT/Ultrasound for all Stroke patients admitted to Acute Stroke Unit, essential during the first 24 hours to meet the standards in *"Implementing the National Stroke Strategy – an imaging guide"* (DoH, June 2008)
- Patients already admitted and identified with Stroke or TIA as the primary diagnosis to be transferred to the ASU immediately and to the Acute Stroke Consultant/s.
- Rehabilitation provided by the Multidisciplinary Stroke Rehabilitation Service on an in-reach basis to operate as a seamless continuation following completion of acute stroke and rehabilitation care.
- a core Acute Stroke Team comprising Acute Stroke Consultant/s, Stroke nurse specialists, and Multidisciplinary Stroke Rehabilitation Service staff as a core, with immediate access to others, including, Orthotists, Prosthetists, Orthoptists, for advice, support, care planning, working together to deliver World Class Acute Stroke services.
- 7 day availability of key therapies, from the Multidisciplinary Stroke Rehabilitation Service, to assess and commence treatment as soon as patient is stable and no more than 24 hours after admission to the Acute Stroke Unit.
- Patient & carer involvement in Care Planning from the earliest possible stage after admission to the Acute Stroke Unit, this might be on day of admission or later, depending on the medical stability of the patient

- Social Care and Stroke Association Family & Carer Support Service engagement from earliest possible stage after admission to the Acute Stroke Unit.
- thrombolysis protocols (based on NICE guideline TA122, June 2007, *Alteplase for the treatment of acute ischaemic stroke*) to be agreed with Ambulance, A&E & Imaging to ensure that urgent response to Emergency admission enables patients to maximise the opportunity to consider the option of thrombolysis.
- protocols to be agreed for the planning of care and discharge from the Acute Stroke Unit in conjunction with the Multidisciplinary Stroke Rehabilitation Service, including the continuity of care, prior to discharge with the patient and carer present to ensure confidence in care arrangements. The protocols must include provision for the whole pathway support of patients by the Multidisciplinary Stroke Rehabilitation Service and to manage demand for Acute Stroke Unit beds to enable Emergency Stroke Patients to be admitted directly to the Acute Stroke Unit. Where, in exceptional circumstances, any patients, pending discharge, are temporarily displaced from the Acute Stroke Unit (which should occur only during periods of high demand for Stroke services) protocols to provide for them to be supported by the Multidisciplinary Stroke Rehabilitation Service until discharged home or to another facility under the support of the Service.
- Consultant to Consultant Transfer protocols to be in place for patients identified as having a primary diagnosis of Stroke or TIA to be transferred within 24 hours to the Acute stroke Unit and to be clinically managed by an Acute Stroke Consultant.

Stroke Rehabilitation Services

NHS Halton and St Helens and Halton and St Helens Councils will jointly commission Stroke Rehabilitation Services as follows;

- a Multidisciplinary Stroke Rehabilitation Service with core 'Team' services consisting of specialist Stroke trained staff and as a minimum comprising Occupational Therapists, Physiotherapists, Speech & Language Therapists, Psychologists, Social Services staff, Nurses and Health Support workers .
- additional community support arrangements for the Multidisciplinary Stroke Rehabilitation Service core 'Team' to be supported by direct access to others including Dietetics, Podiatry, Continence, Tissue Viability, Prosthetists, Orthotists, Orthoptists, all with specialist Stroke training and skills.
- A Community Stroke Rehabilitation Unit (CSRU) as part of the Multidisciplinary Stroke Rehabilitation Service
  - ✓ Staffed by specialist stroke rehabilitation trained nursing staff.
  - ✓ the Multidisciplinary Stroke Rehabilitation Service to plan and manage a caseload of individuals, by developing and maintaining close links with the in-patient stroke team throughout stay and following discharge
  - ✓ therapy to be delivered by Multidisciplinary Stroke Rehabilitation Service
  - ✓ Protocols to be in place to provide for patient transfer from Acute / Immediate Care Rehabilitation, admission and readmission from normal place of residence based on a pre planned programme of rehabilitation and re-enablement which can only be delivered more effectively than at the patient's normal place of residence.
- Protocols for Specialist Stroke Consultants/stroke nurse specialist to participate in patient management in support of the Multidisciplinary Stroke Rehabilitation Service, including the Community Stroke Rehabilitation Unit (CSRU), with arrangements, for example, for weekly ward round.
- 7 day a week availability of immediate direct access to Multidisciplinary Stroke Rehabilitation Service, Community Stroke Rehabilitation Unit and Specialist Acute Stroke Consultant/s. This will include ensuring that there is adequate capacity to ensure patients can be assessed, transferred between the tiers of stroke services and receive active support and rehabilitation irrespective of the day they enter, or require review within, the service.
- Stroke Association Family & Carer Support Service engagement at earliest possible stage after admission under the Multidisciplinary Stroke Rehabilitation Service.
- Stroke Association Communication Service engagement in discharge planning and from discharge with early involvement identified within the care planning process.
- Primary Care / Community Matron engagement in discharge planning and in supporting patients and carers following discharge from the Acute Stroke Unit.

- Patient & Carer involvement in Care Planning and discharge plan throughout the involvement of the Multidisciplinary Stroke Rehabilitation Service.
- the Multidisciplinary Stroke Rehabilitation Service to have capacity and protocols in place to support patients to meet individually assessed needs in a wide variety of locations including the patients usual place of residence – e.g. home or care home, non acute unit locations within Whiston and Warrington and Halton Hospitals and local community hospitals e.g. Newton Community Hospital and Halton Intermediate Care Unit
- Resources to support temporary admission of patients for respite care to be included in a Multidisciplinary Stroke Rehabilitation Service Resource and Delivery Plan, which must be developed jointly with partner organisations (e.g. Social Care). The delivery plan will facilitate arrangements in appropriate community based environments and be linked to continued support from the Multidisciplinary Stroke Rehabilitation Service during the episode of respite care. Admission to the Community Rehabilitation Unit will not be used for carer respite.

Long Term Patient and Carer Support Services

NHS Halton and St Helens and its council partners will commission Life Long Patient and Carer Support services as follows;

- The development of a wider range and capacity for life long support to patients and carers.
- continuing regular monitoring of recovering stroke patients and their carers carried out as a regular process within primary care as part of the GP Quality and Outcomes Framework, this might include intervention by other community nurses such as Community Matrons, to ensure that progress with recovery or stabilisation is maintained and that the required support is identified to prevent, wherever possible, crises and breakdown of care.
- life long access to the Multidisciplinary Stroke Rehabilitation Service (core and extended) in order to ensure the monitoring role in Primary Care can effectively be delivered through protocols for direct re-referral to the Multidisciplinary Stroke Rehabilitation Service for advice, support, review, re-admission to the Service or Community Stroke Rehabilitation Unit, as appropriate.
- 7 day a week access to Primary Care, Community Matrons and the Multidisciplinary Stroke Rehabilitation Service.
- Contracts with local voluntary and community and faith sector organisations e.g. the Stroke Association Family & Carer Service to be adequate to provide long term and peer support in order to supplement or provide an informal alternative to the Multidisciplinary Stroke Rehabilitation Service.
- the contract with the Stroke Association Communication Service to be adequate to enable this to be provided in different formats according to patient need, e.g. group or individual, and to support a transition plan for patients moving from this service onto a long term peer support arrangements.
- partnership arrangements to be established and resourced for long term Patient & Carer support group / activities, including identifying and managing funding for accommodation, refreshments, transport and capacity for facilitation, where necessary, via NHS Halton and St Helens, Social Care and Stroke Association and Carers' Association staff to enable appropriate peer support groups for patients and carers.

End of Life Care

A significant theme of the development of the Stroke Care Pathway and the service developments which are proposed to support its implementation are focussed on the prevention of stroke, effective treatment to minimise the impact of Stroke when it happens and the provision of long term support to maximise the quality of life for those recovering from Stroke and their carers, leading to a reduction in deaths from Stroke. In some circumstances the need for end of life care to be provided may be appropriate in circumstances where active rehabilitation would not be appropriate.

NHS Halton and St Helens will commission end of life care as follows;

- Provision of services in line with best practice guidance outlined in the National Stroke Strategy.
- contracts with providers to meet the standards of quality requirement 9 of the "*National Service Framework for Long Term Conditions: 'Palliative Care'* "
- The development of a separate review of services based on the "*End of Life Care Strategy: Promoting high quality care for all adults at the end of life"* published by the Department of Health in July 2008.

TIA Specific Services

NHS Halton and St Helens will commission specific services for TIA patients, as follows (in addition to those commissioned within the general stroke pathway);

- flexible access to a daily Stroke Consultant led TIA Clinic – services to be in place to give access for suspected TIA patients to be seen by an Acute Stroke Consultant within 24/48 hours or 7 days, according to urgency, of referral from General Practitioner, Primary Care, Out of Hours service, A&E, (based on the NICE guidelines definition of high and low risk).
- Standardised and consistently applied protocols used by GPs in primary care to ensure that all patients presenting with TIA symptoms are referred within the appropriate timescale to the TIA clinics, this includes the harder to reach patients such as those who live in care homes, are housebound.
- access to imaging to meet the current NICE clinical guideline 68,*"Stroke: diagnosis and initial management of acute stroke and transient ischaemic attack"*, together with advice provided in *"Implementing the National Stroke Strategy – an imaging guide"* (Department of Health, June 2008), for both interventions and timescales
  - ✓ carotid imaging (Doppler Ultrasound, magnetic resonance angiogram (MRA) or a computed tomography angiogram (CTA) to be, preferably, carried out in all eligible TIA or minor Stroke patients (approximately 80% of patients) during the Consultant TIA Clinic attendance or no more than 24 hours after attending the Clinic.
  - ✓ MRI, including diffusion-weighted imaging (DWI), gradient echo imaging (GRE) and magnetic resonance angiogram (MRA), as appropriate, to be performed on all patients seen at a Consultant TIA Clinic, where there is uncertainty about diagnosis, vascular territory or underlying cause.
  - ✓ Echocardiography and electrocardiogram (ECG) to be performed within 24 hours (if deemed necessary) or within 48 hours of initial assessment by the Acute Stroke consultant, for those patients with a clinical need.
  - ✓ Protocols for patients with suspected non-disabling stroke or TIA who, after assessment by the Acute Stroke Consultant/s, are considered as appropriate candidates for carotid endarterectomy to be referred directly, within 7 days of the onset of symptoms, for assessment by a Vascular Surgeon and undergo surgery within 14 days of the initial onset of symptoms.
- All patients with residual symptoms after TIA or minor stroke to be referred from the Acute Stroke Consultant TIA clinic to the Multidisciplinary Stroke Rehabilitation Service and Stroke Association Family & Carer service, as part of a planned support and stroke prevention programme.
- the Multidisciplinary Stroke Rehabilitation Service to ensure that a follow up review of all TIA or minor stroke patients has taken place one month after the onset of symptoms. This follow up will be carried out by the Acute Stroke Consultant or Stroke Nurse Specialist, Primary Care/Community Matron or the

Multidisciplinary Stroke Rehabilitation Service itself and that any identified follow up action will be completed.

Financial Implications

The commissioners will work with the provider organisations through which it will commission the delivery of services in this Strategy to ensure that;

- effective use is being made of existing resources for Stroke and TIA services
- additional resources required to deliver the Strategy are identified and agreed (e.g. through Payment by Results tariff setting for Acute Services), together with a timetable for implementation
- Performance will be measured through the Quality and Outcomes Framework for Stroke currently being developed by the Halton and St Helens Core Stroke Strategy Implementation Group.

How Progress will be Measured

The Stroke Strategy Group will monitor performance and service quality through a range of measures based on National Indicators (mandatory) and local Indicators (derived from the Quality Markers of the National Stroke Strategy.

In order to support the Stroke Pathway the following should provide a basis for measuring success / outcomes of the Pathway

Vital Signs Monitoring (National) - Mandatory

Patients who spend at least 90% of their time on a stroke unit (VSA14_02).

	2008/2009	2009/2010	2010/2011
National Target	**65%**	**70%**	**80%**
Local NHS Halton and St Helens Target	**65%**	**70%**	**80%**
Actual Performance WHHFT	**56%**		--
Actual Performance SHKHT	**48%**	**At Q2 77%**	--

Higher risk TIA patients who are scanned and treated within 24 hours (VSA14_06).

	2008/2009 Full year final	2009/2010	2010/2011
National Target	**25%**	**45%**	**60%**
Local NHS Halton and St Helens Target	n/a	tba	tba
Actual Performance) WHHFT *	**Data not available**	--	--
Actual Performance) SHKHT	**Data not available**	--	--

***** *Baseline data for WHHFT in 2007/08 was 19% of the high risk TIA patients (Halton and St Helens) were scanned within 24 hours.*

Data on the number of TIA referrals who were deemed to be in the 'high risk' category suggests that overall there were approximately **130 patients** across Halton and St Helens who required rapid access to specialist assessment during 2008/09.However care needs to be taken when estimating the potential caseload

as we need to understand how effective the identification and referral processes are within primary care.

Local targets will also need to be set if the ambition is to exceed the National minimum.

Vital signs recording which contributes to the above reporting:

- No. of people who spend at least 90% of their time on a stroke unit (VSA14_02)
- No. of people who have had a stroke who were admitted to hospital (VSA14_01)
- No of people who have a TIA who are scanned and treated within 24 hours (VSA14_05)
- No. of people who have a TIA who are at high risk (VSA14_04)

Local Performance Measures, based on the National Stroke Strategy

In order to measure progress, performance and success with this Strategy locally determined measures based on the Quality Markers within the National Stroke Strategy will be incorporated within the Quality schedules of the contracting process with service providers.

An appropriate set of local performance measures will be developed, agreed, prioritised and monitored based on the following (the anticipated source of the data is noted in brackets ( ) after the measure);

- Proportion of individuals who seek medical attention within two hours of stroke symptom onset (Primary Care, A&E/ASU)
- Proportion of individuals with suspected acute stroke seen within three hours (A&E, ASU)
- Proportion of people who have had a TIA (or minor stroke) who have received specialist assessment and brain scan within 24 hours (ABCD2 score $\geq$4 or with non-cardioembolic carotid-territory minor stroke) and 48 hours (carotid intervention, echocardiography and 24 hour ECG, where clinically indicated) or 7 days (lower risk) (A&E, ASU)
- Proportion of TIA referrals for 'Carotid imaging' (Doppler Ultrasound, MRA or CTA) scanned within 24 hours of clinical assessment (A&E, ASU)
- Proportion of patients having major stroke prior to investigation (Primary Care, A&E,ASU)
- Proportion of TIA patients started on aspirin (or approved alternative) immediately after clinical assessment (Primary Care, A&E, ASU)
- Proportion of people with TIA identified following 'Carotid imaging' (within 24 to 48 hrs)who receive appropriate Carotid intervention (e.g. Carotid Endarterectomy) within (14 days) (A&E, ASU, Surgery)
- Proportion of Stroke patients scanned within 1 hour of arrival (A&E, ASU)

- Proportion of Stroke patients screened for swallow disorders, by an appropriately trained healthcare professional, within 24 hours of admission (A&E, ASU)
- Proportion of Stroke Patients admitted to ASU on day of admission (ASU)
- Proportion of patients eligible receiving thrombolysis (A&E, ASU) – *national aspirational figures suggest between 4 – 10%*
- Percentage of TIA patients receiving assessment, advice and support in the Acute Clinic. Those with residual symptoms being referred to the Multi-disciplinary Stroke Rehab Service. (MSRS)
- Number and proportion of Stroke patients being supported by the Multidisciplinary Stroke Rehabilitation Service in their usual place of residence from discharge from the Acute Stroke Unit (MSRS)
- Proportion of stroke patients whose assessed needs are being met from joint health & social care arrangements. (MSRS)
- Proportion of patients living independently in their usual place of residence 6 months and 12 months following discharge from the MSRS (with or without intervention from the MSRS during the intervening period) (MSRS, Primary Care)
- Proportion of TIA and stroke patients re-admitted to acute care (Acute Stroke Unit, Primary Care)
- Proportion of patients who die as a result of stroke (A&E, ASU, MSRS, Primary Care) – *national target reduction by 40%*
- Performance reports from third sector organisations (e.g. Stroke Association)
- Number of patients and carers accessing health and social care funded long term peer group activities (MSRS, Primary Care, Social Care, Third Sector)
- Number of stroke patients reporting positive readjustment to their lives following psychological support/counselling. Outcome measures might include early detection and prevention of depression
- Number or proportion of Stroke patients who (*are supported to*) return to work or other opportunities, e.g. volunteering.
- Number of stroke patients receiving regular follow up reviews at 6 weeks, 6 months and 12 months in Primary Care.

Implementation

This plan has been developed by the Halton and St Helens Stroke Strategy Implementation Group and the group comprises a wide stakeholder membership.

The group has identified a number of priorities for early implementation of the local stroke plan and these are as follows:

Priority Development	Key drivers/outcomes	Delivery leads
Extend Thrombolysis for Stroke	Saving lives; improved outcomes for individuals; reduce health inequalities	The Stroke Strategy Group Acute Hospital Trusts
Reduce the incidence of Stroke through prevention and targeted and early intervention and Social Marketing/Public Awareness raising	National Health Checks Programme; Healthy Lifestyle Choices; Tackling Smoking and Obesity; Primary Care Stroke and Heart Disease management ; Self Management of Cardio vascular disease; reduce health inequalities.	GP practices and Primary Health care teams. All stroke specialist teams PCT CSP programmes for Early Detection; Tackling Smoking and Obesity Department of Health media campaigns Local information and awareness raising events
Extend access for patients experiencing symptoms of TIA/Stroke to high quality rapid access assessment and treatment services	Improving access for patients; reduce incidence of stroke and repeat strokes; reduce the overall burden of ill-health and disability; improve quality of life	The Stroke Strategy Group CSP Early Detection programme GPs and Acute Stroke Teams
The development of community stroke rehabilitation to include early supported discharge; communication support and psychological support	Flexible and personalised care for individuals and carers; Care closer to home; Transforming Community Services programme.	The Stroke Strategy Group Community health and social care teams through joint commissioning PCT CSP Early detection of Depression programme
Develop and improve peer support for individuals recovering and resuming their lives after stroke.	Flexible and personalised care for individuals and carers; Care closer to home; Transforming Community Services programme	The Stroke Strategy Group Local Councils Community health and social care teams through joint commissioning