Joined Up Care Derbyshire

Derby & Derbyshire Community Stroke Rehabilitation

Case for Change

Joined Up Care Derbyshire

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1. Executive Summary

Community stroke services across Derby and Derbyshire are at capacity with patient demand and limited resource, with little or no provision of Early Supported Stroke Discharge in some areas.

The need for the transformation of stroke rehabilitation services across the Integrated Care System (ICS) is made clear from the recommendations made by the East Midlands Integrated Stroke Delivery Network (ISDN) Regional Benchmarking Report in November 2022.

An overview of the recommendations given are to:

- Review the commissioning of stroke services across Derbyshire.
- Improve access for all stroke patients.
- Address key Integrated Community Stroke Service (ICSS) recommended service gaps.

To support this, ICS stakeholders, such as service providers, teams and clinical leads, and commissioning managers have been asked to review the current provision of stroke rehab services across Derby and Derbyshire by developing a milestone plan and identifying the key stages of a pathway review.

2. Introduction and Context

2.1 Definition

A stroke happens when the blood supply to part of the brain is cut off, killing brain cells. Damage to the brain can affect how the body works. It can also change how people think and feel. The effects of a stroke depend on where it takes place in the brain, and how big the damaged area is. Stroke can be life changing. It can happen to anyone of any age and affects people in different ways[1].

Stroke can be debilitating and life changing, resulting, at times in long term care needs for stroke survivors. Rapid identification, treatment and timely rehabilitation can reduce some of the ill effects of a stroke and enable patients to live fulfilling lives after stroke.

Rehabilitation therapy is long-term (length of time dependent upon individual circumstances) support to help people regain their independence and cope with any remaining disabilities after a stroke. Stroke rehabilitation is a program of different therapies and treatments designed to help people to relearn skills lost after a stroke, these may include:

- Physiotherapy
- Occupational Therapy
- Speech and Language Therapy
- Psychological Support
- Diet and nutritional support
- Nursing support

[1] https://www.stroke.org.uk/what-is-stroke

2.2 National Context

Almost 100,000 people have a stroke each year, and there are one million stroke survivors. Two-thirds of stroke survivors leave hospital with a disability.

It is estimated that 1 in 6 people will have a stroke during their lifetime; social care costs of stroke survivors to the UK economy are estimated at £5.2 billion annually not including the costs of informal social care. Timely, co-ordinated care after a cardiovascular event, such as a stroke can reduce the risk of recurrence, hospital admission, disability, and death.

Nationally it has been reported the stroke specialist workforce is currently under significant pressure. Over half (52%) of stroke sites across England, Wales and Northern Ireland had unfilled stroke consultant positions in 2021.[2]

Many people with long-term cardiovascular conditions will have many related conditions, such as high blood pressure or diabetes, and require care by different clinical teams, co-ordinated across multiple providers and services. Access to rehabilitation services, for those with a stroke can improve quality of life and reduce hospital admissions for recurrences[3].

Many of those who survive a stroke, with appropriate and timely rehabilitation and support, can make a full and complete recovery. However, a third will be left with some form of long-term disability, affecting mobility, cognition, vision, psychological wellbeing, or communication.

Recovery can continue for many years after a stroke, therefore considerations on how to provide a seamless transfer of care and access to services over the long term must be made[4].

Stroke rehabilitation is for eligible people who have had a stroke, for the purpose of the service recognised in this document, this is for stroke survivors over the age of 18.

The level of disability and dependence for post stroke patients is measured by a Modified Rankin Score. This evaluation helps clinicians support patients' needs in the best way for them. Different 'scores' constitute different dependence and disability and help decide on the care required for that patient.

Scoring: Rated from 0 to 6, where:

0: No symptoms.
1: No significant disability; able to carry out all usual activities.
2: Mild disability; able to look after own affairs without assistance.
3: Moderate disability; requires some help but can walk unassisted.
4: Moderately severe disability; unable to walk without assistance and requires help with daily activities.
5: Severe disability; bedridden, incontinent, and requires constant nursing care.
6: Dead.

Patients with a mild to moderate disability score are eligible for Early Supported Discharge.

There is strong evidence for the effectiveness of early supported stroke discharge for those who have mild-to-moderate disability, with trials and observational studies demonstrating that early supported stroke discharge can reduce admission to hospital and reduce the length of hospital stay.

[2] www.stroke.org.uk/sites/default/files/new_pdfs_2019/our_policy_position/psp_stroke_workforce.pdf
[3] cvd report web.pdf (informatix.loc)
[4] stroke-integrated-community-service-february-2022.pdf (informatix.loc)

Early supported stroke discharge is a 6-week rehabilitation programme available for patients who suffer mild to moderate effects of stroke. This is around 40% of patients.

Patients undergoing rehabilitation after stroke who are not eligible for early supported discharge should be referred to community stroke rehabilitation if they have ongoing rehabilitation needs when transferred from hospital. National Clinical Guidelines for Community Stroke Rehabilitation [5].

The other patients who suffer moderate to severe effects of stroke, and those going into residential, or nursing homes need access to community stroke rehabilitation within 72 hours of discharge.

2.3 National Guidance

The guidance documents below give insight to how a comprehensive stroke service should work, this includes stroke rehabilitation.

The review of the stroke rehabilitation pathway will take into account these guidance and recommendations.

- **NHS Long Term Plan**

The NHS Long Term Plan identifies cardiovascular disease as a national clinical priority, with specific commitments on the implementation and further development of higher intensity care models for stroke rehabilitation. This is expected to show significant savings that can be reinvested in improved patient care. This includes reductions in hospital admissions and ongoing healthcare provision. Out of hospital, more integrated and higher intensity rehabilitation for people recovering from stroke, delivered in partnership with voluntary organisations including the Stroke Association, will support improved outcomes to six months and beyond.

- **National Service Model for An Integrated Community Stroke Service**

The guidance set out in the National Service Model for an Integrated Community Stroke Service identifies the need for community stroke rehabilitation services to provide specialist stroke rehabilitation following transfer home from hospital, including access for those going into residential or nursing homes. There is strong evidence for the effectiveness of early supported discharge for those who have mild-to-moderate disability, with trials and observational studies demonstrating that Early Supported Stroke Discharge can reduce long-term dependency and admission to institutional care and reduce the length of hospital stay.

Early Supported Stroke Discharge is only suitable for a proportion of the stroke population, around 40% of patients, so the others, usually those with more complex disabilities, and those going into residential or nursing homes need access to community stroke rehabilitation within 72 hours of discharge.

An Integrated Community Stroke Service (ICSS) model will help to ensure that all discharged stroke patients are seen in a timely way by an integrated multidisciplinary team (MDT), regardless of their disability. It will help to build on the principles and practice of Early Supported Stroke Discharge as well as the available evidence and guidelines[6].

[5] https://www.strokeguideline.org/
[6] www.england.nhs.uk/wp-content/uploads/2022/02/stroke-integrated-community-service-february-2022.pdf

- **NICE Stroke Rehabilitation Guidelines**

As part of the Derbyshire Stroke Rehab pathway review of the NICE Stroke Rehabilitation Guidelines (Oct 23) are required to be considered. This guideline covers rehabilitation after stroke for over 16s. It aims to ensure people are assessed for common problems and conditions linked to stroke and get the care and therapy they need. It includes recommendations on the organisation and delivery of rehabilitation in hospital and the community.

The previous NICE guideline on stroke rehabilitation was first published in 2013.

- **The National Stroke Model**

The National Stroke Model was launched in 2021 and includes detail of the Integrated Community Stroke Service (ICSS). The Integrated Community Stroke Service provides recommendations to support health systems to effectively coordinate the transfer of care from hospital and providing home-based stroke rehabilitation through a specialist multidisciplinary team structure.

Key features of the ICSS model include:

- Integration - The Integrated Community Stroke Service brings existing service configurations together, including Early Supported Stroke Discharge and community stroke rehabilitation, into one integrated seamless service.
- Responsive and intensive rehabilitation – Early Supported Stroke Discharge for mild-to-moderate stroke survivors and community stroke rehabilitation to stroke patients requiring a lower level of intensity.
- Integrated Community Stroke Service should be provided for up to six months with the option for re-referral after discharge.
- Pathways of care - The Integrated Community Stroke Service should offer pathways of care tailored to patient need.
- Seven days a week service - Monday to Sunday (exact hours of service should be locally agreed).
- Team composition - The Integrated Community Stroke Service should be sufficiently staffed.
- Specialist service - Stroke specialist care is defined as that provided by healthcare professionals with the necessary knowledge, skills, and experience in managing stroke, evidenced by a suitable qualification and training.
- Education and training - Specific education and training should be developed and provided in accordance with the Stroke-Specific Education Framework[7].

2.4 Local Context

There are currently approximately 23,600 survivors of stroke in Derby and Derbyshire (2.1% of adults registered with a Derbyshire GP) which is 0.3% above the England average[8].

The Derby and Derbyshire Stroke Rehab Review aligns with the Derby and Derbyshire NHS' Five Year Plan 2023/24 , supporting the need to change the way in which the NHS targets the conditions that impact the Derby and Derbyshire population the most.

[7] https://www.strokeguideline.org/

[8] https://www.bhf.org.uk/-/media/files/health-intelligence/health-area-reports/england/bhf-derby-and-derbyshire-health-area-report-2022.pdf?rev=fd6d538d83884ffdbbd6a1d9f09057cc&hash=3396008D0A72D5AA60FEDB026C3D7EC0

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Joined Up Care Derbyshire - Team Up

As the community and primary care services team up and integrate into neighbourhood teams, we will explore how elements of the community stroke rehabilitation pathway might be integrated into this transformation. Team Up Derbyshire is creating one team across health and social care in Derby and Derbyshire who see all the people in a neighbourhood who are currently unable to leave home. The team provides care for people at home, with the aim to reduce the need for them to have to be admitted to hospital wherever possible. The team provides reactive / urgent care and is developing preventative care – anticipating health issues before they occur.

The table below show the percentage of patients in that area who have had a stroke as of 2022/23.

ICB Area	Patient living with a stroke
Derbyshire	2.3%
Nottinghamshire	1.9%
South Yorkshire	2.2%
Staffordshire	2.1%
East Midlands	2.0%
England	1.8%

**Data Source: Public Health Profiles Fingertips* which is a large public health data collection*; QoF Prevalence of Stroke 2022/23*

Below is a map of Derbyshire, this identifies the number of strokes for each Primary Care Network (PCN) for 2019/20 - 2020/21 (**Fig 1**).

A PCN is a group of practices that work together with community, mental health, social care, pharmacy, acute and voluntary services in their local areas to support their patient population. PCNs build on existing primary care services and enable greater provision of proactive, personalised, coordinated and more integrated health and social care for people close to home.

Fig 1 – Stroke Activity by PCN Area – Number of strokes in each area – Derby & Derby City – 19/20 – 20/21

(See Fig 2 below which gives the population size for each Primary Care Network)

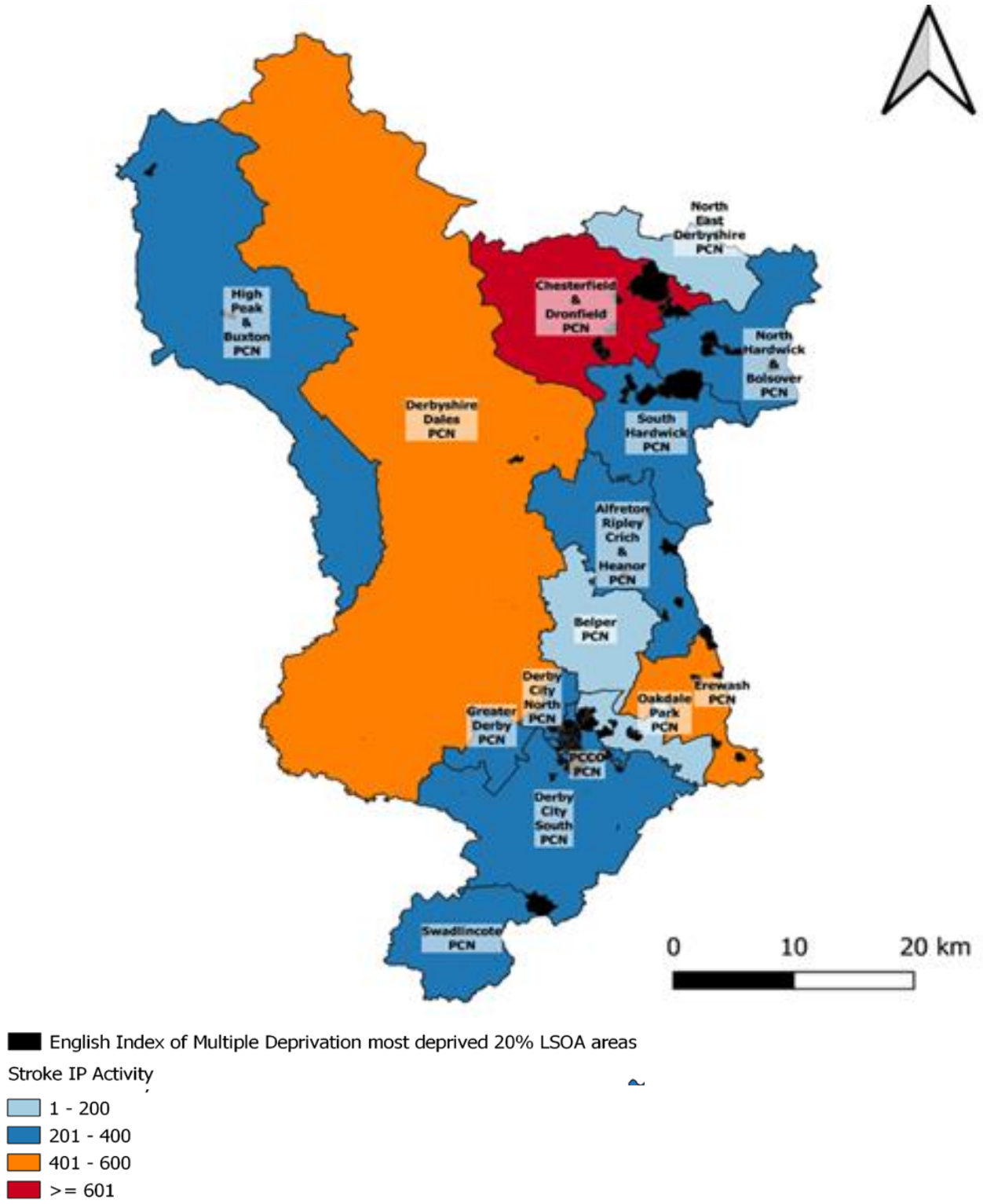
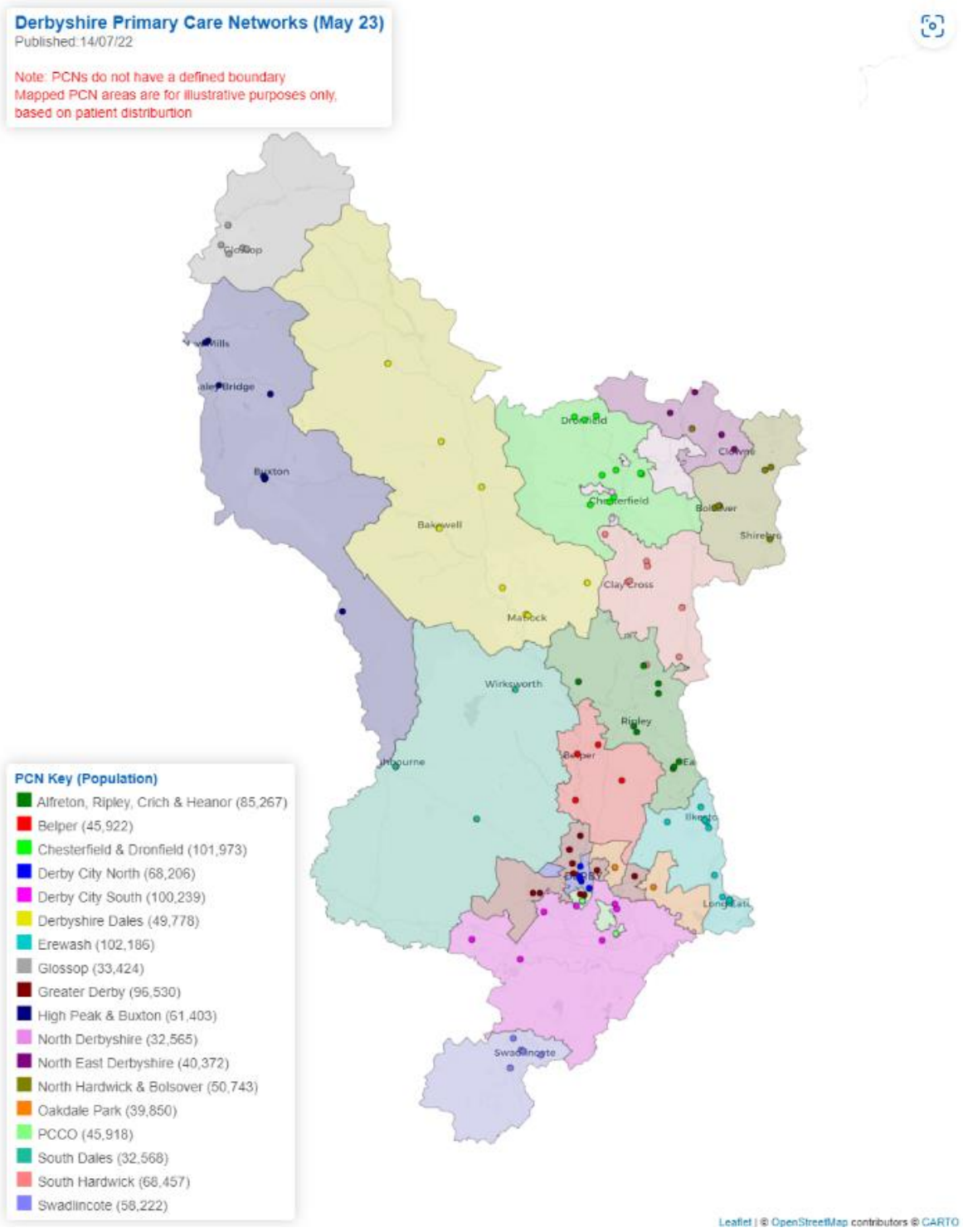


Fig 2 – Primary Care Networks (PCNs) Population

The following illustrates the population numbers in each Primary Care Network (PCN) which provides some context linked to the number of Strokes per Primary Care Network as shown above.



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Derbyshire 23/24 Stroke Activity and Rate / 000 of population

Primary Care Network (PCN)	No of Patients who have had a Stroke	PCN Patient Population	Weighted Population by age & gender to reflect a fair comparison between the PCNs	No of people who have had a Stroke per 1000 of the weighted population by age & gender to reflect a fair comparison
Alfreton Ripley Crich & Heanor PCN	196	85,369	91,295	2.15
Belper PCN	112	45,864	49,048	2.28
Chesterfield & Dronfield PCN	265	102,233	109,330	2.42
Derby City North PCN	119	68,784	67,350	1.77
Derby City South PCN	192	100,671	100,518	1.91
Derbyshire Dales PCN	132	49,694	53,144	2.48
Erewash PCN	199	102,267	109,366	1.82
Glossop PCN	57	33,366	35,682	1.60
Greater Derby PCN	192	96,883	94,863	2.02
High Peak & Buxton PCN	111	61,504	65,773	1.69
North Derbyshire PCN	68	32,500	34,756	1.96
North East Derbyshire PCN	107	40,388	43,192	2.48
North Hardwick & Bolsover PCN	101	50,774	54,298	1.86
Oakdale Park PCN	71	39,717	38,889	1.83
Friar Gate Surgery (Not part of a PCN)	14	4,907	4,805	2.91
PCCO PCN	67	46,398	45,430	1.47
South Dales PCN	53	32,552	34,812	1.52
South Hardwick PCN	161	65,760	70,325	2.29
Swadlincote PCN	114	58,364	62,415	1.83
Total	2331	1,117,995	1,165,289	2.00

Data Source: SUS – Secondary Uses Service

3. Current Community Stroke Rehabilitation

Historical commissioning arrangements across Derby and Derbyshire have left the current community stroke rehabilitation pathway across the Integrated Care System, fragmented and complex with multiple providers delivering a patchwork of services. The pathway in the North of the county, differs from the South and City, causing unwarranted variation in care for patients across Derby and Derbyshire.

In May 2022, an assessment of services was undertaken with stroke rehabilitation services providers, which identifies the pathways and challenges for hospital and community care providers.

At the point of being discharged from hospital after a stroke, patients access one of four pathways dependent upon need;

- Early Supported Stroke Discharge – for patients with mild to moderate effects of stroke – for approximately 6 weeks.
- Direct referral to community rehabilitation services – for patients with moderate to severe effects of stroke.
- Hospital out-patient services - for patients with moderate to severe effects of stroke.
- Discharged with no further rehabilitation requirements – patients who require no further support.

It is important to note that patients may access more than one pathway at a time.

3.1 What is Early Supported Stroke Discharge?

Early supported stroke discharge is available for patients who suffer mild to moderate effects of stroke.

The aims and objectives of a stroke early supported stroke discharge team are:

- To provide patients with a specialised and coordinated rehabilitation service at home / care home following discharge from hospital.
- Patients with stroke achieve safe living in their home environment / care home earlier than they would do under normal service provision, reducing the need for further social care intervention.
- To set achievable goals for each patient referred to the service.
- To improve patients' independence / functional ability and their quality-of-life following stroke.
- To reduce length of stay in hospital and community setting for appropriate patients following stroke.
- To ensure that timely information is provided to patients and their families at a time it is most required.

Early Supported Stroke Discharge is provided by

- Derbyshire Community Health Services in:

  - Amber Valley
  - Erewash
  - South Derbyshire

- Derby City
- South Dales

- Chesterfield Royal Hospital:

  - North Derbyshire
  - Bolsover
  - Chesterfield
  - Northeast Derbyshire
  - North Dales

Early Supported Stroke Discharge is not available for patients living in the Derbyshire High Peak area as the majority of stroke patients living in this area would have been admitted to Stepping Hill Hospital in Stockport and are discharged into a non specialist community rehabilitation service.

Patient outcomes for Early Supported Discharge are recorded and audited by the Sentinel Stroke National Audit Programme (SSNAP). See 3.7 for more information.

Shown in Appendix 1 of this document are four patients journeys provided by the Stroke Rehabilitation Early Supported Discharge team at Derbyshire Community Health Services.

3.2 What is Community Stroke Rehabilitation?

Community stroke rehabilitation is not just for moderate to severe strokes who are ineligible for Early Supported Stroke Discharge Stroke. It is also for those that have been through Early Supported Stroke Discharge and still have ongoing goals and needs beyond 4-6 weeks and should be up to 6 months post stroke. It is mentioned below but worded as may access rather than should have access.

The referrals are sent through a Community Access Point (CAP) and are triaged by non-specialist clinicians. Patients may also access these services following discharge from Early Supported Stroke Discharge if ongoing rehabilitation support is required.

The services includes:

- Derbyshire Community Health Services - Community Specialist Rehabilitation (Stroke and Neurology).
- Derbyshire Community Health Services - Community Non-Specialist Rehabilitation.
- Derbyshire Community Health Services - Outpatient Rehabilitation and Neurology Outpatient Service.

Hospital Services

Hospitals based rehabilitation services include:

- Chesterfield Royal Hospital - Inpatient Rehabilitation Service.
- Chesterfield Royal Hospital - Neurological Rehabilitation Outpatient Services.
- University Hospitals Derby & Burton - Royal Derby Hospital - Inpatient Rehabilitation Service
- University Hospitals Derby & Burton - Neurological Outpatient Therapy Service.

This service is available to patients who are admitted to hospital after a stroke, and also provides a continuation of rehabilitation once patients are home, this service is also relevant for patient's neurology conditions.

3.3 Provision in Derby and Derbyshire

While services aim to provide the best care they can for stroke patients, it is important to note that community rehabilitation services, both specialist stroke and non-specialist services, are stretched. Some areas have little to no provision of Early Supported Stroke Discharge. Some patients are not able to access out-patient facilities due to the severity of their stroke or their on-going issues i.e. fatigue.

There is also no capacity in Derby or Derbyshire for specialist community stroke rehabilitation services to see patients at home.

Community stroke rehab services are not currently meeting the standards set by National Guidance, this, along with local benchmarking exercises, key challenges within each service provider and disjointed pathways of care across Derby and Derbyshire, means patients are at a disadvantage and service provision should look to be improved to meet this national guidance.

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Stroke Rehabilitation Services Across Derby & Derbyshire

Service	Provider	Area Covered	Key Features
Early Supported Stroke Discharge **South**	Derbyshire Community Health Services	Amber Valley Erewash South Derbyshire Derby City South Dales	• The service aims to meet the needs of those mild to moderate stroke patients who qualify for Early Supported Stroke Discharge on discharge from acute. • The service does not have capacity to 'in reach' (visit patients in hospital) into Royal Derby Hospital although weekly meetings between therapy teams occur. • The Early Supported Stroke Discharge team can access medical support from a Stroke Consultant based at Royal Derby Hospital. • Patients are retained in service for up to 6 weeks, though, where appropriate and where capacity allows, this can be extended.
Early Supported Stroke Discharge **North**	Chesterfield Royal Hospital	North Derbyshire Bolsover Chesterfield Northeast Derbyshire North Dales Note- High Peak area is not covered.	• The service aims to meet the needs of those mild to moderate stroke patients who qualify for Early Supported Stroke Discharge on discharge. • There is an integrated approach to rehabilitation, sharing the same core staff team across Inpatient and Outpatient services and Early Supported Stroke Discharge services. • Early Supported Stroke Discharge accepts as many patients as possible to help ensure patients can access timely rehabilitation. • Early Supported Stroke Discharge endeavours to ensure that recovery outcomes can be maintained with support in the patient's usual place of residence.
Community Specialist Rehabilitation (Stroke and Neuro)	Derbyshire Community Health Services	County wide	• The service aims to meet the needs of those moderate to severe stroke patients who do not qualify for Early Supported Stroke Discharge on discharge from acute. • Specialist community stroke and neuro rehabilitation is a non-commissioned service. • It brings together community specialist teams and outpatient services into a single management structure. • The team takes referrals from Chesterfield Royal Hospital and Royal Derby Hospital, covers all of Derbyshire and is an integrated Stroke and Neuro specialist service, covering all neurological conditions in addition to stroke specialist rehabilitation. • The service includes Occupational Therapy and Physiotherapy, with links to wider support services such as Speech and Language Therapy and Dietetics. • The service accepts referrals for ongoing rehabilitation after Early Supported Discharge, where required.

Community non-specialist rehabilitation (Non-specific rehabilitation e.g., general physiotherapy services that do not specialise in stroke support)	Derbyshire Community Health Services	County wide	• Derbyshire Community Health Services deliver non-specialist rehabilitation to patients not able to access specialist services due to the significant capacity challenges in the specialist community teams. This is not an officially adopted element of the pathway and is something that has been developed out of a need to ensure patients receive at least a minimal level of care. • Patients are seen by non-specialist teams including Occupational and Physiotherapists, generally to ensure they receive some rehabilitation while they wait for specialist services. These patients have access to Speech and Language Therapy. • Patients are referred to the Clinical Access Point in Derbyshire Community Health Services where their referral is triaged, and they are placed on the general waiting list. Patients will then be assessed and placed on a community team waiting list before being seen to commence therapy. • The service accepts referrals for ongoing rehabilitation after Early Supported Discharge, where required.
Outpatient rehabilitation	Derbyshire Community Health Services & Chesterfield Royal Hospital	Chesterfield Royal Hospital Amber Valley Erewash North-East Derbyshire & Chesterfield	• Derbyshire stroke and neuro patients are eligible to access rehabilitation via specialist community teams. • Chesterfield Royal Hospital and Derbyshire Community Health Services also receive referrals from patients who are being treated in non-Derbyshire counties. • The service includes Physiotherapy and Occupational Therapy with links to Speech and Language therapy. • Chesterfield Royal Hospital Stroke Rehab does not provide an Occupational Therapy outpatient service, physiotherapy is provided.
University Hospitals Derby & Burton - Neurological Outpatient Therapy Service	Florence Nightingale Hospital		• The service provides specialist neurological assessment, therapy interventions, and self-management advice for adults who have been diagnosed with a neurological condition of an acquired or progressive nature. • Patients who have accessed Early Supported Stroke Discharge or who have been discharged to a community team can access this service via referral, with stroke patients making up 50% of this workload.
Inpatient Rehabilitation	Chesterfield Royal Hospital		• Services is for patients who are medically unfit after being moved from Hyper Acute Stroke Unit to Acute Stroke Unit – These are specialist stroke units within the hospital where a patient is admitted when they have had a stroke. • Rehabilitation is delivered by an integrated occupational therapy and physio team, along with dietetics and speech and language therapy. • The integrated team works across inpatient, Early Supported Stroke Discharge and outpatient services. • This integration allows greater flexible working across rehabilitation services by shifting staff depending upon service capacity.
Inpatient Rehabilitation	Royal Derby Hospital		• Inpatient rehabilitation is delivered across the acute stroke and stroke rehab wards by a team of occupational therapists, physiotherapists and speech and language therapists.

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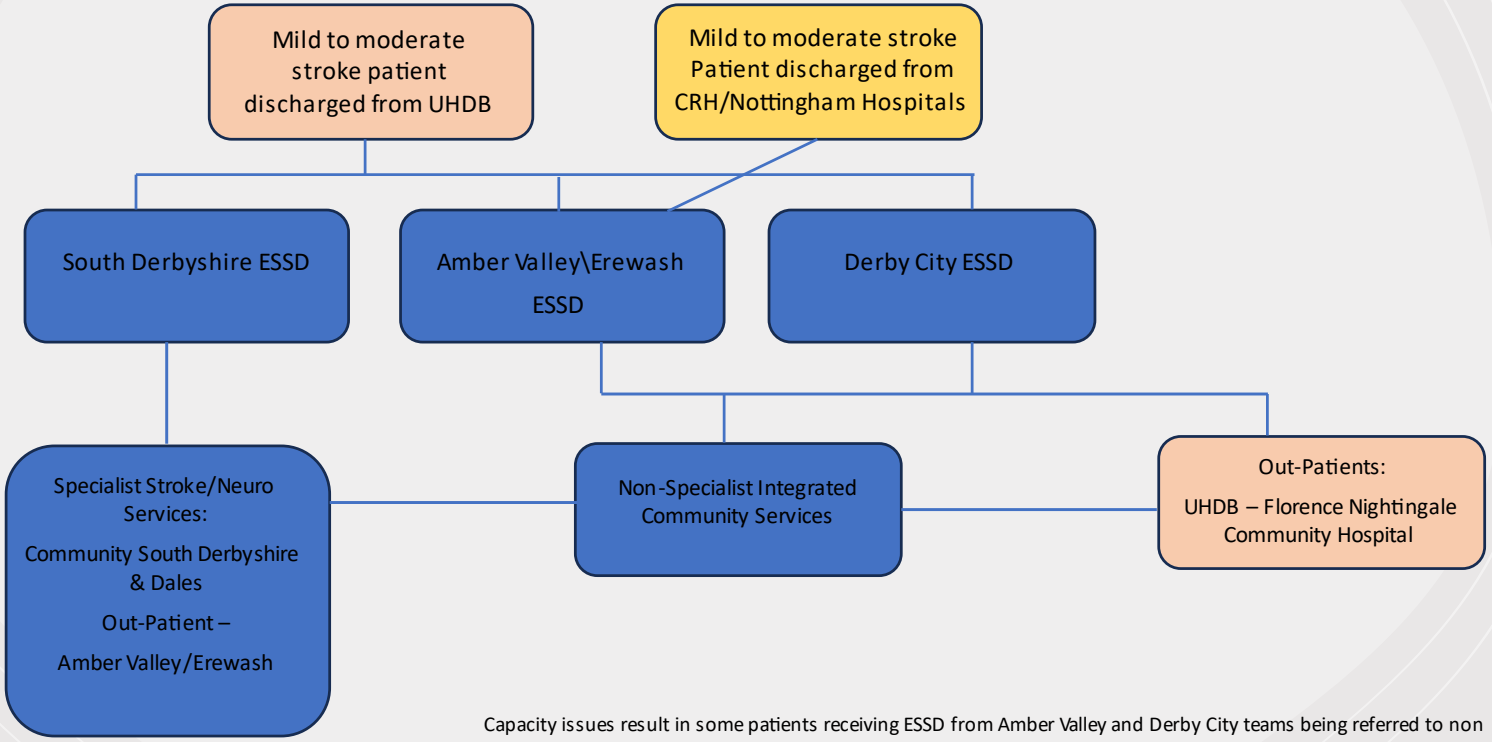
4. Stroke Rehabilitation Pathways

Derbyshire Community Health Service – Stroke Rehabilitation for Patients Eligible for EARLY SUPPORTED STROKE DISCHARGE (ESSD).

Derbyshire Community Health Service– Stroke Rehabilitation Pathway– ESSD Patients

Patients with mild to moderate stroke symptoms who are eligible for Early Stroke Supported Discharge



Capacity issues result in some patients receiving ESSD from Amber Valley and Derby City teams being referred to non -specialist community teams for on-going therapy while they are on waiting lists to be seen by specialist out -patient services either DCHS or Florence Nightingale (UHDB)

Sometimes their intervention will come to an end without being seen by the specialist Out -Pt service.

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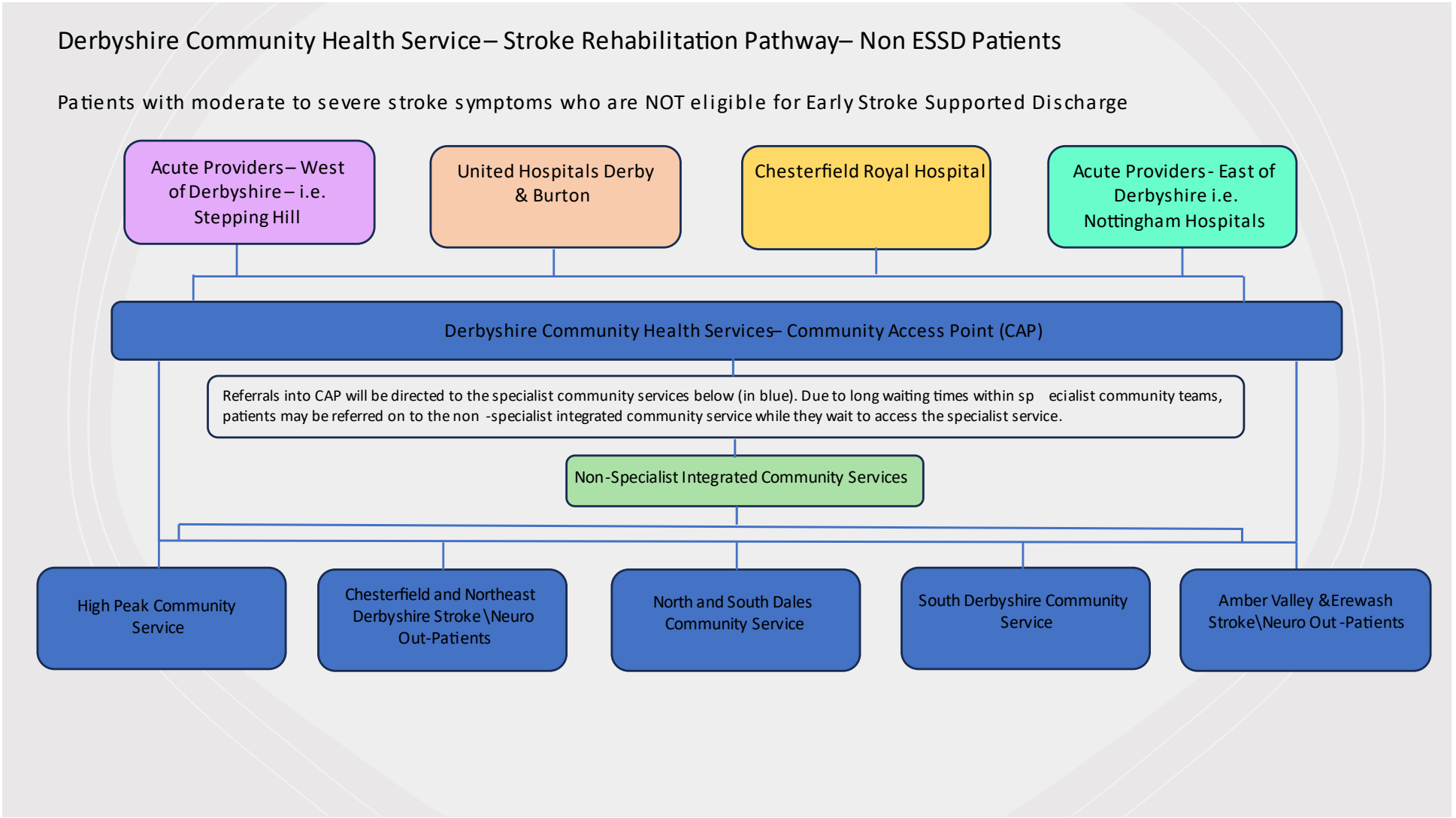
Derbyshire Community Health Service – Stroke Rehabilitation for Patients NOT Eligible for EARLY SUPPORTED STROKE DISCHARGE.



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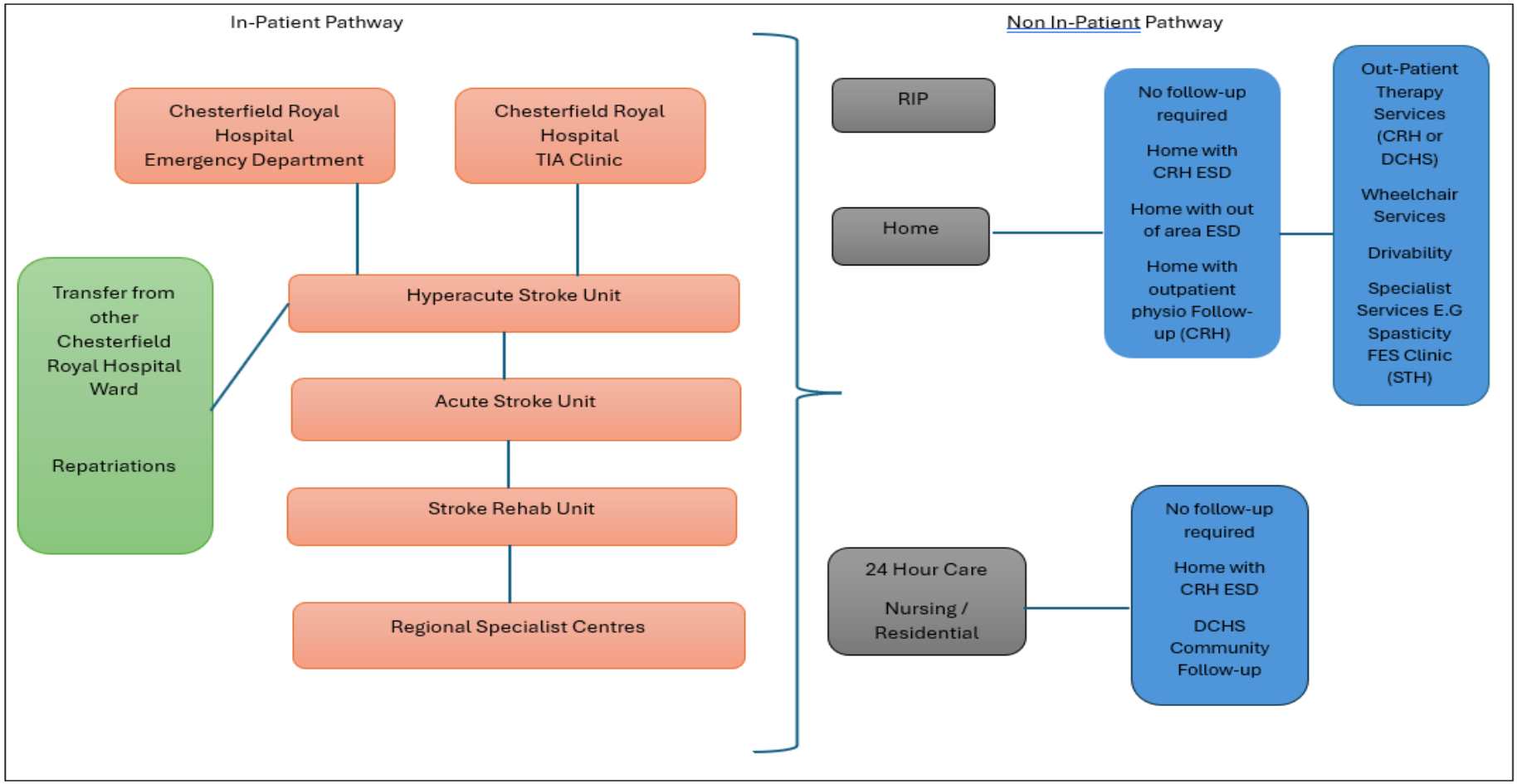
Chesterfield Royal Hospital – Stroke Rehabilitation Pathway



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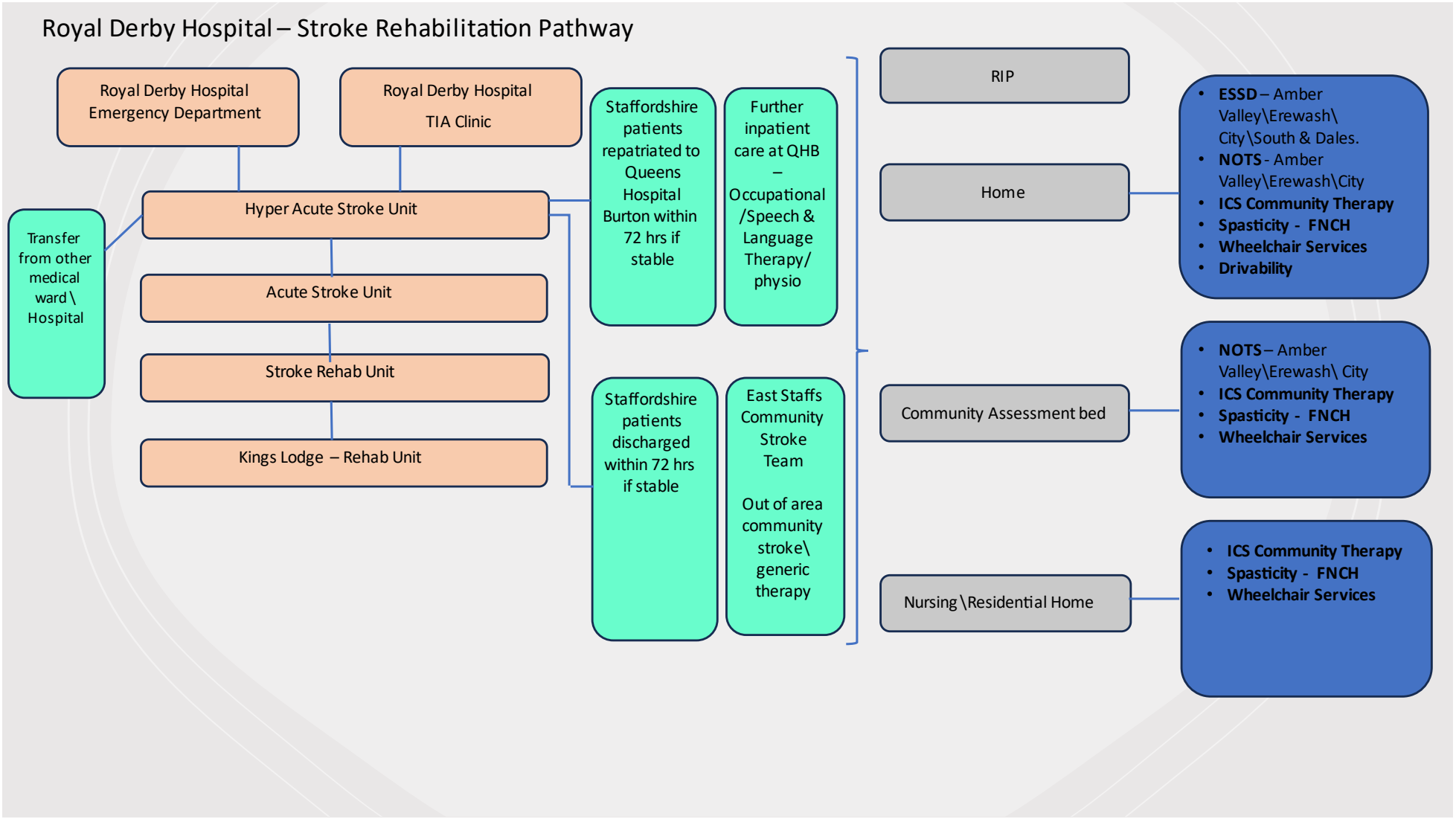
Royal Derby Hospital – Stroke Rehabilitation Pathway



Glossopdale Stroke Rehabilitation Service

On 1 July 2022 Glossopdale health commissioning moved from Tameside and Glossop Clinical Commissioning Group / (Greater Manchester Integrated Care System) into Derby and Derbyshire Integrated Care System.

Glossopdale now falls under the Joined Up Care Derbyshire umbrella for commissioning health services and therefore the review of the Stroke Rehabilitation service will also look to scope how the Stroke Rehabilitation pathway works for Derbyshire patients living in Glossopdale. Historically the Stroke Rehabilitation services have been commissioned by Greater Manchester ICB, and this currently remains the case. We are not actively looking to change this arrangement but as part of this review we are looking to ensure Derbyshire patients living in Glossopdale receive a fair and equitable service.

Derbyshire patients living in Glossopdale are admitted to Tameside General Hospital on the outskirts of Ashton-under-Lyne or Stepping Hill Hospital in Stockport following a Stroke. Tameside General Hospital's non-routinely admitting stroke unit offer stroke rehabilitation to all patients admitted following a Stroke. A non-routine admitting stroke unit means the hospital only directly admits less than 50% of their patients through their Emergency Department as Tameside General Hospital does not have a Hyper Acute Stroke Unit.

Derbyshire Stroke patients living in Glossopdale access Derbyshire County social care, this can lead to a delay in access to equipment where required on discharge. Patients have the same access to Tameside & Glossop Wheelchair Services as the Tameside population.

As part of in reach into the acute hospital and on discharge patients have access to the Community Neuro Rehabilitation team in Tameside which provide psychological support if required.

Service Aims & Objectives

- Evidence based care pathways with access for patients being discharged from hospital or living in the community, using clinical consensus or single case study outcomes when no evidence exists.

- Equality of patient experience across the conurbation through access to appropriate, timely care including shared decision making with patients and carers.

- A consistent, flexible and needs-led approach with integration between inpatient and community rehabilitation teams, as well as other NHS providers (e.g. primary care).

- Involvement of other providers such as the voluntary sector to develop a more blended, asset based approach to rehabilitation care that addresses the wider needs of the patients and carers.

- Timely discharge from the service using community assets effectively to continue longer term goals and ensuring there is capacity to provide responsive assessment and treatment times following referral to the service.

- Outcome measures and Key Performance Indicators (KPIs) that are a mixture of process indicators and measures that include patient reported experience and outcome.

Overall this service is:

- Responsive and needs-led.
- Community-based but with in-reach to support discharge from intermediate neuro-rehabilitation units (INRUs).
- Clearly signposted in and out of the service.
- Person-centred.
- Co-ordinated.
- Continuously in touch with the individual's and family's realities.
- Adept at person and family-centred approach to risk management.
- Open to feedback from users.
- All members are accountable and performance managed by a single line manager with respect to service provision. In addition, team members will access professional line management as appropriate.
- They work towards a common goal with shared objectives, performance indicators and outcomes.
- Each member makes a contribution based on specific competencies.
- In addition, each team member contributes to the expertise of the team as a whole.
- Most service users have needs that can be met by the team in its entirety and rejected referrals should be clearly indicated how it could not be met by the team.
- The team is real, not virtual and meets regularly and has a physical base.
- Staffing is sufficient to sustain teamwork during predictable periods of staff absence.
- Communication and sharing of information is regular and continuous. Internal referrals not needed.
- Each member is contractually committed to the team with dedicated periods of time not shared with other responsibilities.

Derbyshire patients also have access to the Stroke Association service in Tameside described below.

Derbyshire patients living in Glossopdale also have access to Bureau Social Prescribing. Social Prescribing is a unique approach to healthcare that addresses the social, emotional, and practical needs of individuals in addition to their physical health. By connecting individuals with non-medical services and support in their community, social prescribing aims to improve overall health and wellbeing. Patients can self-refer to Bureau Social Prescribing via a dedicated website.

Stroke Association Services – Glossopdale

The Stroke Association provide the Stroke Recovery Service (SRS) in Glossopdale which is designed to support stroke survivors, their families and carers in their recovery by providing tailored support from the acute setting back to their home or community and into the longer term.

Support will begin following a stroke and continue on a needs-led basis for an average of one year. A holistic assessment will be offered to identify the support needs of the stroke survivor and their carer or family. A Stroke Recovery Coordinator will work with the individual to develop a personalized Stroke Recovery Plan and will support in identifying the actions needed to achieve these outcomes. As part of the discharge process the coordinator will direct, and where appropriate, support service users to access peer support or social activities in the community via networks of local voluntary services, stroke support groups and volunteers.

At the 4-8 months review point a formal six-month review is delivered and recorded on the SSNAP database.

Service Aims

- To enable people living with stroke to make the best possible recovery and supporting those around them, so that they can live their life to the full following stroke.
- To maximize independence through applying a personalised model of care underpinned by reablement principles
- To provide support and reablement for people who develop speech and language problems as the result of a stroke.
- To improve quality of life by building confidence and by giving encouragement and emotional support to families and carers.
- Take an asset-based approach to the delivery of care, recognising and making use of personal and community assets.

Objectives

The objectives of the Stroke Recovery Service are to:

- Provide fast-track referral route from Acute and Community Stroke Services
- Deliver an effective transition of care into the service
- Provide a comprehensive assessment of need of the Stroke Survivor, carer or family at the earliest possible point following discharge
- Provide intensive support to those at highest risk of readmission
- Identify individuals desired outcomes and support them to reach those outcomes
- Support Stroke Survivors to navigate the health and social care system, including links with GP and hospital services
- Provide personalised information and support
- Provide emotional support
- Provide stroke prevention advice and support individuals to self-manage
- Provide practical advice and support
- Provide support to address social isolation through a community assets approach to the local community network

- To provide support to people who have communication difficulties as a result of a stroke.
- To support stroke survivors and their carers in 24-hour care to achieve their desired outcomes
- To assess stroke survivors ongoing health and social care needs during discharge planning from the service
- To help to maintain the independence of the Stroke Survivor by working in partnership with other agencies and service providers.

5. Stroke Association Services – Derby & Derbyshire

There are currently two life after stroke services in Derbyshire and Derby City for stroke patients, they are currently commissioned to run until April 2025, and will then be reviewed.

- Stroke Navigator service - covering North Derbyshire,
- Communication support - South Derbyshire covering Derby City and South Derbyshire

- **Stroke Navigator Service**

Is a 'Light touch' service providing signposting and low-level support for up to 12 months. The service accepts anyone who has had a recent stroke and is registered to a North Derbyshire GP.

An initial assessment is offered to the stroke survivor, carer or family to determine their level of need. The needs assessment covers all aspects of stroke recovery including physical and emotional wellbeing and the needs of the carer or family.

Following identification of needs, a recovery plan is put in place to meet the assessed needs and determine the level of support an individual requires. The recovery plan records an individual's needs and desired outcomes and details the support and actions needed from staff, volunteers, and others to achieve those outcomes.

Coordinators work with individuals to meet identified needs and achieve their desired outcomes. Support may include coordination and navigation; addressing social isolation; support to self-manage, active listening and problem solving; representation and advocacy and in some cases brokering support from other agencies.

The service is contracted to deliver the following outcomes:

- Stroke survivors are equipped to achieve the best possible level of recovery and be able to better meet their own needs
- Carers feel supported, informed and have confidence to continue providing care.
- Stroke survivors and their Carers have improved connection to wider services, resources and support networks
- People affected by stroke receive a high-quality service.
- People affected by stroke receive an inclusive service.

- **Communication Support Service**

The service gives intensive, focused support to enable stroke survivors to improve their ability and confidence to communicate, reduce the impact of communication difficulties and provide

practical support to reintegrate back into local communities promoting independence and recovery. The service accepts referrals for stroke survivors with communication needs as a result of their stroke, and who are registered to a GP in South Derbyshire.

The service delivers the following outcomes:

- Stroke survivors are enabled to achieve the best possible level of communication whilst improving confidence and independence.
- Carers are better equipped to support the people they care for, and to be able to communicate with them more effectively.
- Stroke survivors and their Carers have improved connection to wider services, resources and support networks
- People affected by stroke receive a high-quality service.
- People affected by stroke receive an inclusive service.

There is an inequity of service across the system due to the delivery of differing services, Stroke Navigator in the North and Communication support only in the South and Derby City. Commissioning of these services also runs on a 12-month cycle, this causes issues with staff recruitment and retention as well as forward planning of the future service.

6. Service Performance Data and Patient Outcome Measures

To support patient care and service development, data relating to stroke care is entered on to a clinical computer system. Data for patients who are seen as part of an Early Supported Stroke Discharge pathway is measured by the Sentinel Stroke National Audit Programme - SSNAP.

SSNAP measures both the processes of care provided to stroke patients, as well as the structure of stroke services against evidence-based standards. Services providing care via an Early Supported Stroke Discharge pathway must participate in this national audit programme.

There are no current national or local data entry standards for services providing care via other pathways, such as specialist and non-specialist community services. Each service records patient information via the clinical computer system in their own way.

Data collection for stroke rehabilitation services is extremely challenging, this is due to different services using different systems and processes to enter the data relating to patient activity. This makes tracing the patient journey difficult and ultimately patient outcomes are difficult to gather.

A review of community service data is ongoing with the view to producing an audit to provide information on how more accurate patient outcomes can be identified.

Data below identifies stroke admissions from April 2021 – March 2024 for both Royal Derby Hospital and Chesterfield Royal Hospital.

- **Admissions**

Data shows there has been an overall increase in stroke admissions over the three-year period. The number of people having a stroke will increase by almost half, and the number of stroke survivors living with disability will increase by a third by 2035[9].

[9] https://www.longtermplan.nhs.uk/online-version/chapter-3-further-progress-on-care-quality-and-outcomes/better-care-for-major-health-conditions/stroke-care/

Different data sources have been used for University Hospitals of Derby & Burton and Chesterfield Royal Hospital owing to some historic data anomalies which have been addressed going forward.

UHDB	2021-22	2022-23		2023-24	
	Activity	Activity	Variance	Activity	Variance
Trust wide (all patients)	1379	1422	3%	1454	2%
Derbyshire Patients	989	995	1%	1034	4%

Source: UHDB local admissions data

Chesterfield Royal Hospital	2021-22	2022-23		2023-24	
	Activity	Activity	Variance	Activity	Variance
Trust wide (all patients)	670	700	4%	737	5%
Derbyshire Patients	651	673	3%	709	5%

** Source CRH SSNAP data*

Derbyshire Patients	2021-22	2022-23		2023-24	
	Activity	Activity	Variance	Activity	Variance
Derbyshire Providers	1640	1668	2%	1743	4%
Out of Area providers*	540	553	2%	588	6%
All Derbyshire Patients	2180	2221	2%	2331	5%

** Source SUS data - includes Glossop patients - Source: SUS – Secondary Users Service data – which is a nationally mandated clinical data set.*

Length of Stay (LoS)*

Derbyshire stroke patients' length of stay	2021-22	2022-23		2023-24	
	LoS - Days	LoS - Days	Variance	LoS- Days	Variance
UHDB	17.1	19.24	13%	17	-12%
CRH	12.2	13.7	12%	16.8	23%
Out of Area providers	9	9.7	8%	11.4	18%
Total	14.9	16.7	12%	15.7	-6%

**SUS and local Trust data*

Data shows a decrease of 0.1 day in length of stay for patients over the three-year period at Royal Derby Hospital, and a 0.8 day increase at Chesterfield Royal Hospital.

The LoS will include the stroke rehabilitation within the Trust as long as it is a continuous stay. If patients are transferred to DCHS for example, then they would not be.

Glossop Patients Admitted to Tameside General Hospital	January 2023 to May 2024
31	

Data Source: SSNAP (Sentinel Stroke National Audit Programme)

Glossop Patients Admitted to Stepping Hill Hospital, Stockport	March 2023 to April 2024
125	

***Data Source: A Patient Administration System (PAS) which is a computer software program that helps healthcare providers in the NHS track and manage patient information. PAS systems are used in hospitals and other care settings to record patient details and activity across care settings, including inpatient, outpatient, and emergency cases**

Derbyshire Community Health Services

Number of referrals to Early Supported Discharge Services provided 1 April 2023 to 31 March 2024:

	Amber Valley & Erewash	Derby City	South Derbyshire & Dales	Totals
Referrals Accepted	**117**	**99**	**46**	**262**
Seen by Occupational Therapists	106	98	45	249
Seen by Physiotherapists	99	89	42	230
Seen by Speech & Language Therapists	45	49	26	120

There were 959 referrals made to the Stroke Neuro service between April 23 and March 24, this figure is the total number of referrals made not the individual patients, therefore there is data quality impact in that there will be some duplication of referrals for individuals who have been referred in for both Occupational Therapy and Physiotherapy. Some patients will have been referred to non-specialist services – some will have also been referred to Stroke Neuro services, and therefore there will be duplication.

****Data Source – SystmOne - A clinical record system used to record patient care electronically (Patients' health records).***

Waiting Times (as at July 24)

Early Supported Stroke Discharge

Average waiting time (South Derbyshire)	1 week

Specialist Stroke / Neuro Services

Maximum waiting times	Range 26-53 weeks
Average waiting times	Range 5-17 weeks
% waiting over 18 weeks	Range – 10%-52% of waiters

Average waiting times broken down across areas for Specialist Stroke / Neuro Services:

Service Area	Average waits in weeks	Maximum wait in weeks	% of waits that were over 18 weeks
Speech and Language Therapy - Stroke and Neuro	5	21	0%
Chesterfield and North East Derbyshire – Physiotherapy	13	32	30%
Chesterfield and North East Derbyshire - Occupational Therapy	17	28	44%
Amber Valley / Erewash - Physiotherapy	22	54	56%
Amber Valley / Erewash – Occupational Therapy	25	41	62%
South Derbyshire and Dales – Physiotherapy	11	27	12.5%
South Derbyshire and Dales – Occupational Therapy	14	56	39%
High Peak - Physiotherapy	27	48	73%
High Peak – Occupational Therapy	11	42	20%
North Dales – Physiotherapy	20	70	40%
North Dales – Occupational Therapy	14	31	25%

There is considerable variance across different geographical elements of the service, the shortest and longest times are provided.

Data Source – SystmOne Clinical Record System

Chesterfield Royal Hospital

The average number of referrals into Early Supported Stroke Discharge is 300 patients 1 April 2023 to 31 March 2024 (including 20 referrals from out of area hospitals):

Ave referrals / year	
Physiotherapy	250
Occupational Therapy	250
Speech & Language Therapy	93

Some patients require physiotherapy and occupational therapy, with some patients only requiring input from one of the professions referred to above.

**** Data Source: SystmOne Therapies and Dietetics dashboard and the stroke units' Sentinel Stroke National Audit Programme (SSNAP) data.***

Waiting Times as at July 24

Early Supported Stroke Discharge

Patients are usually seen on the day (unless it is over a weekend), all patients are seen within 72 hours of referral.

Stroke & Neurological Outpatients

There are approximately 45 Patients on the waiting list
The average wait is 15.4 weeks
95% of patients are seen within 22.9 weeks

****Data Source: Clinical Record System and SystmOne Therapies and Dietetics Dashboard***

Derbyshire Health Care Foundation Trust

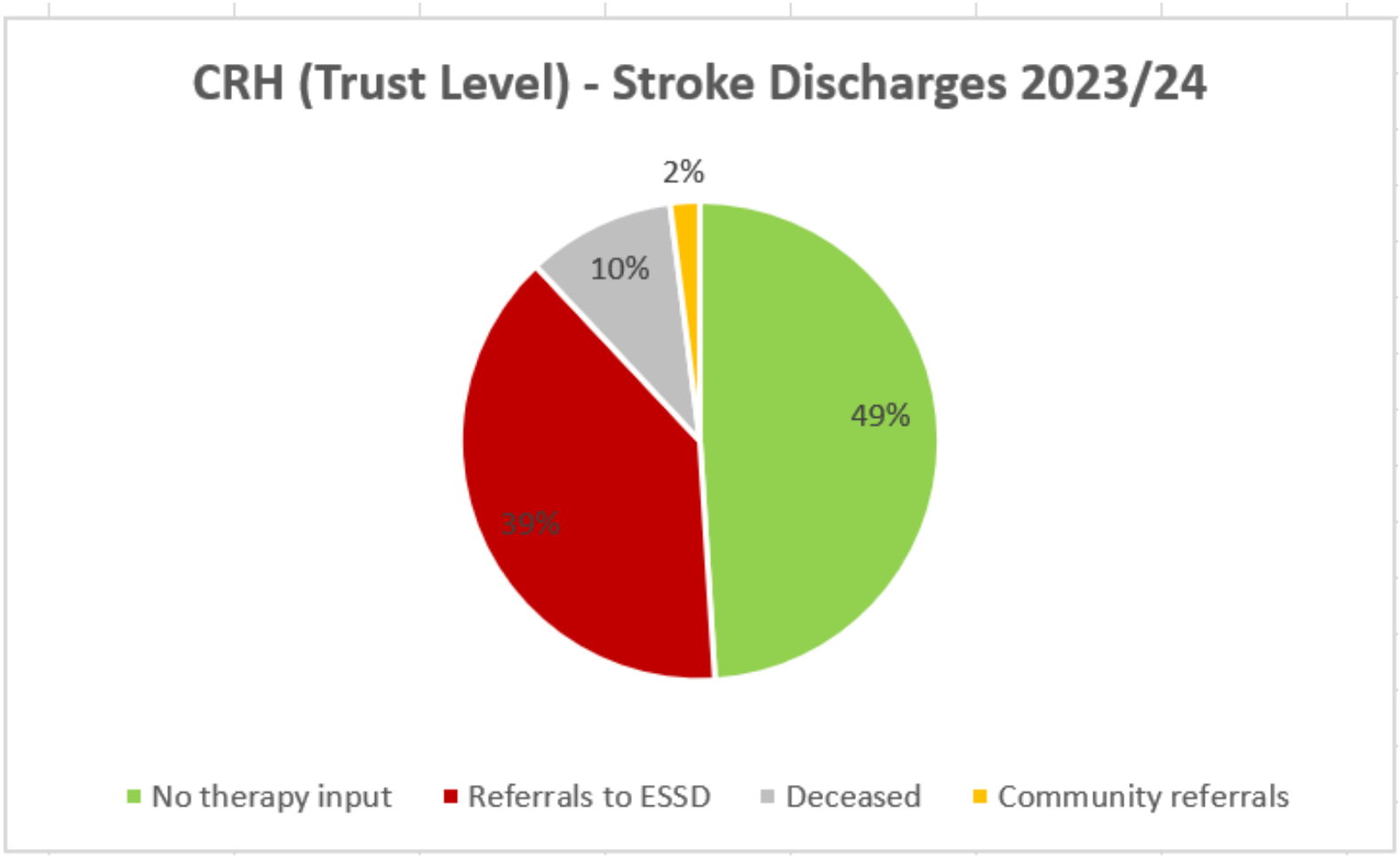
Referrals for Psychological Support	**1 April 23 – 31 March 2021**
63	

The above table illustrates a 40% increase from the pre-COVID period.

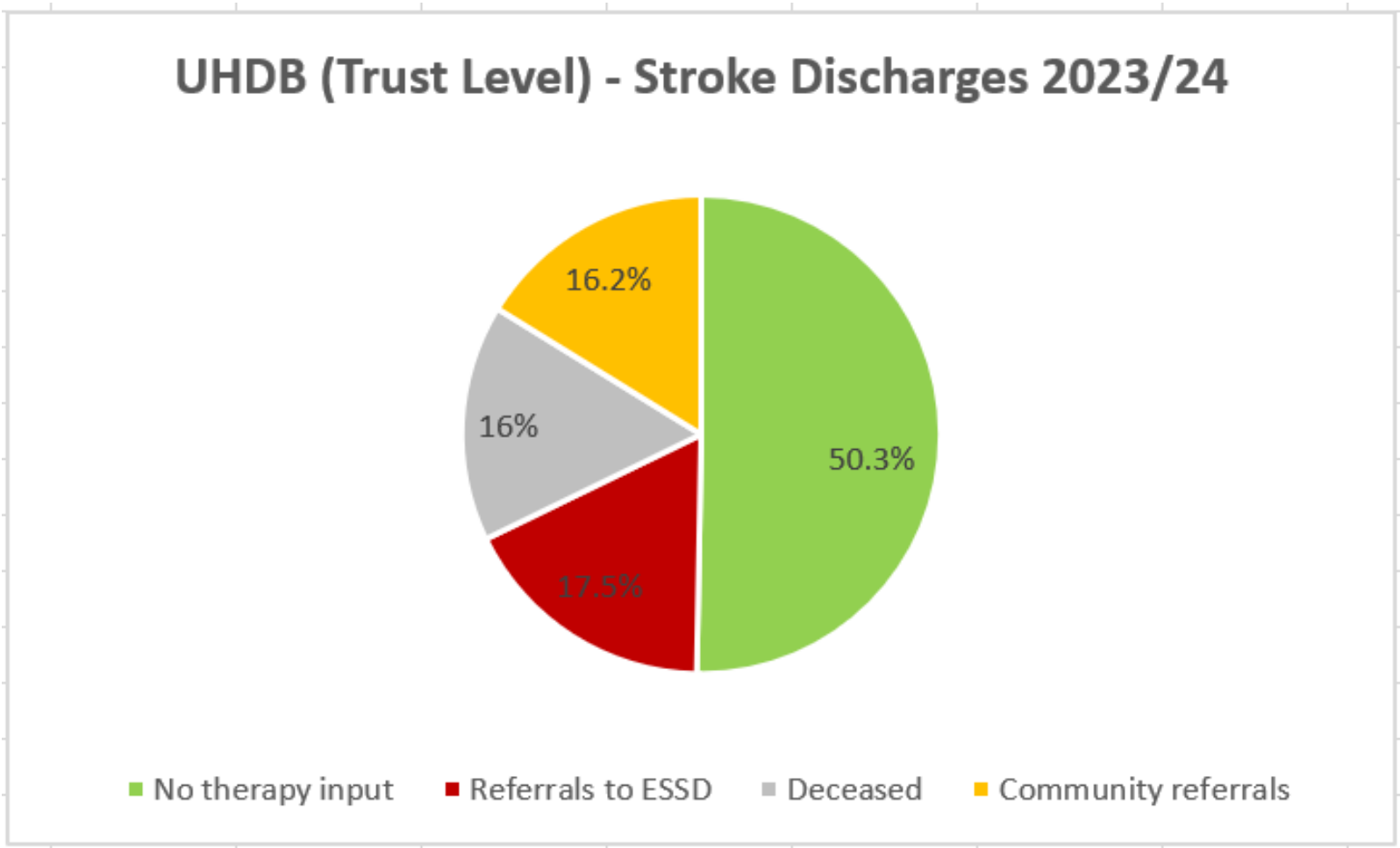
The waiting list has grown from 26 weeks to just under a year as at July 2024.

****Data source: SystmOne***

- **Discharges**



Data Source: SystmOne and Sentinel Stroke National Audit Programme (SSNAP)



**** Data Source: Sentinel Stroke National Audit Programme (SSNAP)***

Joined Up Care Derbyshire

Derby & Derbyshire – Stroke Patient Centred Performance Table Quarters 1 - 4 – 1st April 2023 to 31st March 2024

		Number of patients		Overall Performance				Patient Centred Data											Six Month Assessment*			
Quarter	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	PC KI Level	Number Applicable	% Applicable	Number Assessed	% Assessed
Apr-Jun23	Chesterfield Royal	155	161	C	A	A	C	C	E	D	D	A	B	E↓	B	A↑	A↑	C	415	90%	409	99%
Apr-Jun23	Royal Derby Hospital	329	325	C↑	A	A↑	C	A↑	D↑	C	B	C↓	B	C	E	B	B	C	561	98%	38	7%
Jul-Sep23	Chesterfield Royal	166	157	C	A	A	C	B↑	E	D	D	A	A↑	C↑↑	B	B↓	A	B↑	208	81%	207	100%
Jul-Sep23	Royal Derby Hospital	369	363	C	A	B↓	C	B↓	D	C	B	C	B	B↑	E	C↓	B	C	586	98%	36	6%
Oct-Dec23	Chesterfield Royal	172	172	C	A	A	C	C↓	E	D	E↓	B↓	A	D↓	B	B	A	C↓	188	80%	160	85%
Oct-Dec23	Royal Derby Hospital	332	322	D↓	A	B	D↓	C↓	E↓	D↓	C↓	C	C↓	C↓	E	B↑	B	D↓	543	99%	25	5%
Jan-Mar24	Chesterfield Royal	162	179	C	A	A	C	C	E	C↑	D↑	C↓	B↓	C↑	B	A↑	A	C	305	93%	198	65%
Jan-Mar24	Royal Derby Hospital	330	323	D	A	B	C↑	A↑↑	E	C↑	C	C	C	C	E	B	B	C↑	586	99%	34	6%

Data Source: Sentinel Stroke National Audit Programme (SSNAP)

The above is a colour-coded performance table which is a concise, visual representation of a hospital's performance across 10 key aspects of stroke care; an overall SSNAP score is also given from A – E. 'A' being the highest level of performance and 'E' being the lowest level. The traffic light colours signify light green as the highest level of performance and red as the lowest. It is an easy access version report written specifically for stroke survivors and their carers, using simple language and colour coded maps to display results across each domain of care. Providers work to make improvement where the lowest level of performance id indicated.

Following is an explanation of the acronyms used in the table above:

D1 = Scan
D2 – Stroke Unit
D3 = Thrombectomy
D4 = Stroke Unit
D5 = Occupational Therapy
D6 = Physiotherapy
D7 = Speech & Language Therapy
D8 = Multi-Disciplinary Team
D9 = Standard Discharge
D10 = Discharge Procedure
PC KI Level = Patient-Centred Total Key Indicator Level

The Sentinel Stroke National Audit Programme (SSNAP) is a major national healthcare quality improvement programme based in the School of Life Course and Population Sciences at King's College London. SSNAP measures the quality and organisation of stroke care in the NHS and is the single source of stroke data in England.

The aims of the SSNAP clinical audit are:

- to benchmark services regionally and nationally
- to monitor progress against a background of organisational change to stroke services and more generally in the NHS
- to support clinicians in identifying where improvements are needed, planning for and lobbying for change and celebrating success
- to empower patients to ask searching questions

More details regarding SSNAP and how and why data is collected from providers can be found via the following link: https://www.strokeaudit.org/About-SSNAP.aspx

Stroke Patient Reported Experience Measures (PREMs) Report

We have also attached as **Appendix 1** in this document (see Appendices at the end of this paper) a copy of the PREMs report for Derbyshire & Derbyshire for the year 2022 to 2023.

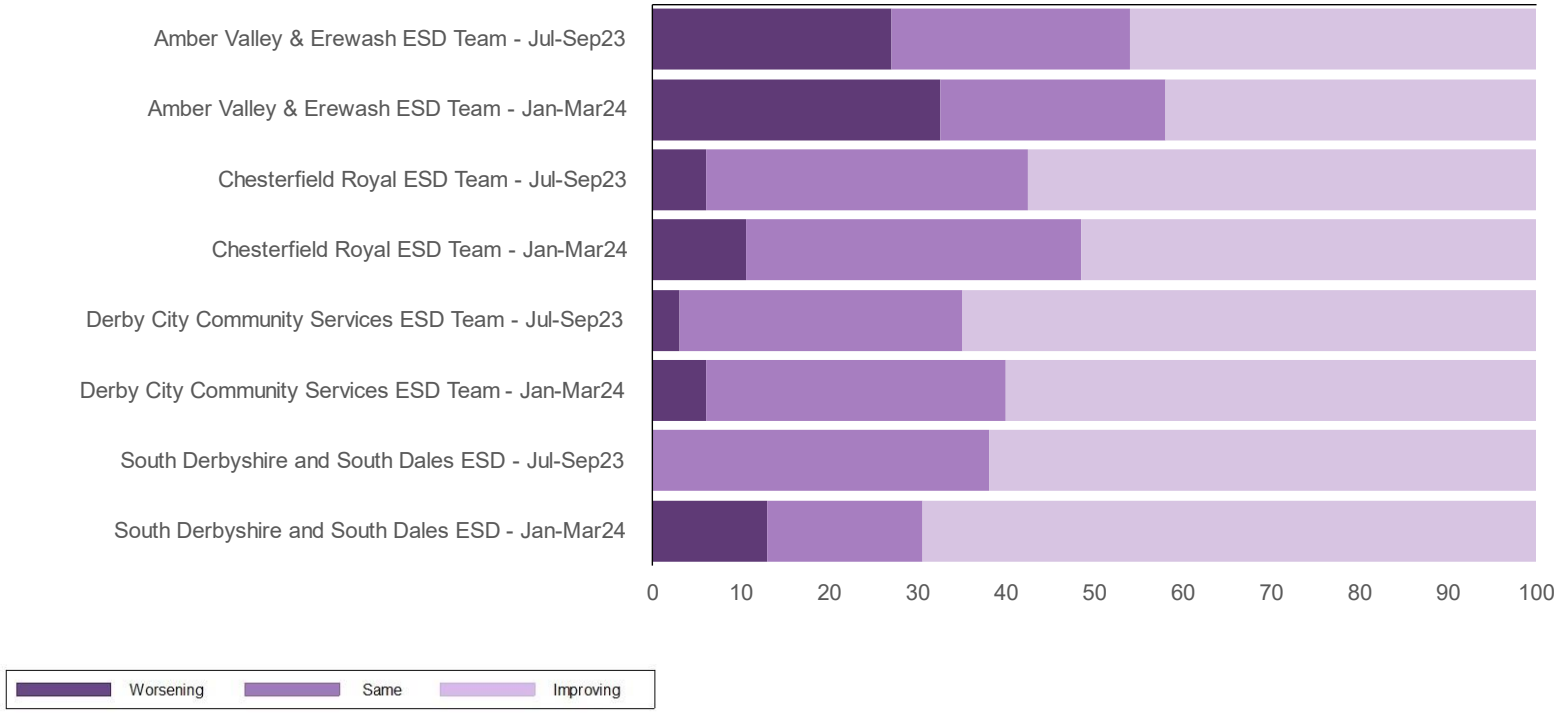
This survey, run by the Stroke Association in partnership with NHS England, is the first national Stroke Patient Reported Experience Measures (PREMs) survey undertaken in England. The purpose has been to undertake a national survey across England which captures the patient experience of stroke care; to use the survey findings to inform quality improvement activity at local, regional, and national level – in line with the NHS's statutory responsibility for quality improvement.

This initial survey is a pilot survey and the intention is that learnings will be taken forward into the implementation of an annual survey programme. The survey has been developed in partnership between the Stroke Association and NHS England and with the Stroke PREMs Advisory Group, made up of clinicians from across the stroke pathway, Integrated Stroke Delivery Network (ISDN) managers and stroke survivors. Quality Health, an IQVIA business, was commissioned to advise on methodology and undertake the fieldwork and analysis of the survey data.

Joined Up Care Derbyshire

Early Stroke Supported Discharge Audits

Derby & Derbyshire
Change in mRS from discharge from inpatient care and discharge from your team for Stroke patients
Quarters 1 – 4 – 2023 / 2024

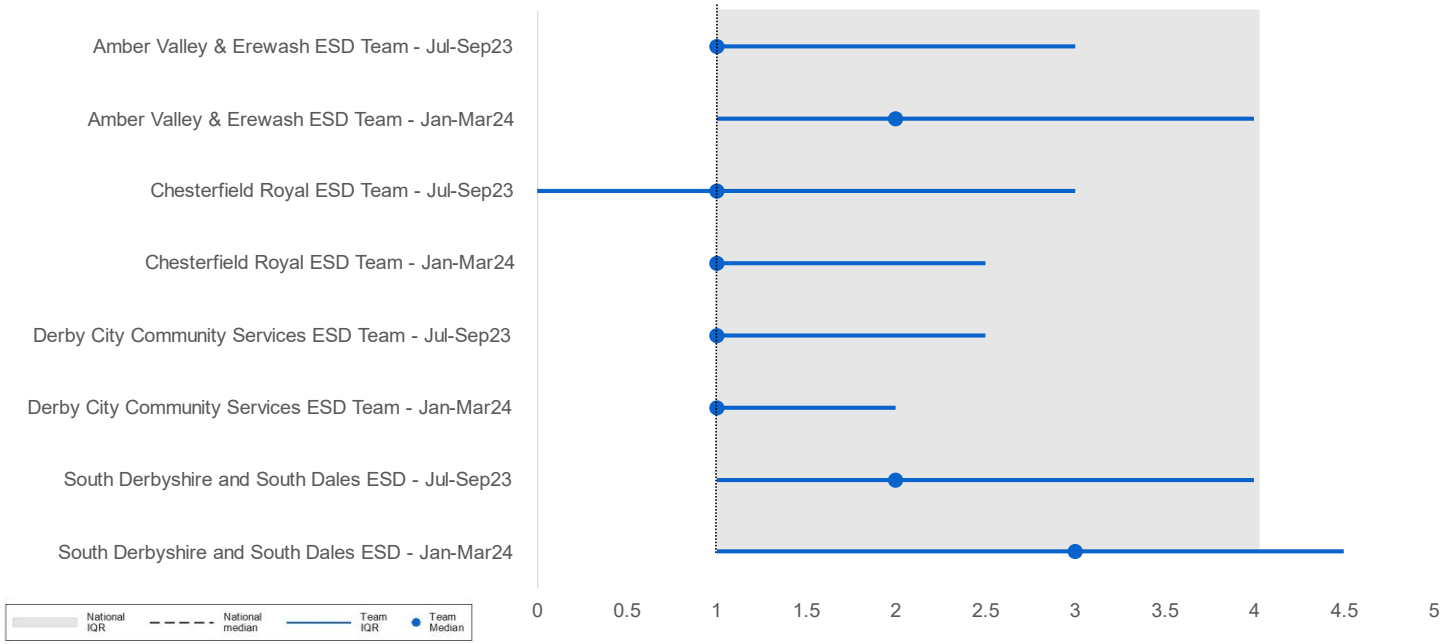


**** Data Source: Sentinel Stroke National Audit Programme (SSNAP***

Joined Up Care Derbyshire

Early Stroke Supported Discharge Audits

Derby & Derbyshire
Days from inpatient discharge to arrival at team for Stoke patients
Quarters 1 – 4 – 2023 - 2024



**** Data Source: Sentinel Stroke National Audit Programme (SSNAP)***

7. Health Inequalities

National Context

Health inequalities are unfair and avoidable differences in health across the population, and between different groups within society. These include how long people are likely to live, the health conditions they may experience and the care that is available to them.

The conditions in which people are born, grow, live, work and age can impact their health and wellbeing. These are sometimes referred to as the wider determinants of health.

Wider determinants of health are often interlinked. For example, someone who is unemployed may be more likely to live in poorer quality housing with less access to green space and less access to fresh, healthy food. This means some groups and communities are more likely to experience poorer health than the general population. These groups are also more likely to experience challenges in accessing care.

The reasons for this are complex and may include:

- the availability of services in their local area.
- service opening times.
- access to transport.
- access to childcare.
- language (spoken and written).
- literacy.
- poor experiences in the past.
- misinformation.
- Fear

Risk factors for stroke include[10]

- Lifestyle factors:
    - Smoking
    - Alcohol misuse and drug abuse
    - Physical inactivity
    - Poor diet
- Cardiovascular disease e.g.:
    - Hypertension
    - Atrial fibrillation
    - Infective endocarditis
    - Valvular disease
    - Carotid artery disease
    - Congestive heart failure

[10] https://cks.nice.org.uk/topics/stroke-tia/background-information/risk-factors/

- Other medical conditions e.g.:
    - Hyperlipidaemia
    - Diabetes mellitus
    - Sickle cell disease
- Older age
- Male sex
- Ethnicity
- Family history of stroke

Age

- Strokes are occurring at an earlier age in the UK with the age of onset falling between 2007 and 2016 from 70.5 to 68.2 in males and 74.5 to 73.0 years in females. It is important to remember that although the risk of stroke increases with age, over a third of strokes occur in adults aged 40 to 69 years[11].

Secondary prevention

- The risk of recurrent stroke is 26% of within 5 years of having a first stroke. Secondary prevention of stroke is therefore also an important component of aftercare and management to address modifiable risk factors for stroke[12] and reduce morbidity and mortality.

CVD, including stroke, is the second biggest killer in England. In 2021, 125,445 people died from CVD and 30% of these people died prematurely. There are an estimated 6.4 million people with CVD conditions (see British Heart Foundation Statistics Factsheet, England' at Heart Statistics – British Heart Foundation www.bhf.org.uk/-/media/files/for-professionals/research/heart-statistics/bhf-cvd-statistics-uk-factsheet.pdf) and an additional 3.6 million people with a diabetes diagnosis. Diabetes overlaps with both CVD specifically and multimorbidity generally: a person with diabetes is twice as likely to have heart disease or a stroke than someone who does not, and at a younger age. We also know that:

- CVD is a major driver of health inequalities. People living in England's most deprived areas are 4 times more likely to die prematurely than someone in the least deprived.
- When compared to the least deprived areas, the most deprived areas in England have:
    - Higher death rates from cardiovascular disease.
    - Lower uptake of rehabilitation.
    - Higher hospital admissions rates for emergency care
- CVD and Diabetes have big impacts on the economy and labour markets. In England, the cost to society for CVD was approximately £15.8 billion in 2015, and

[11] https://cks.nice.org.uk/topics/stroke-tia/background-information/prevalence/

[12] https://fingertips.phe.org.uk/search/stroke#page/4/gid/1/pat/15/ati/502/are/E10000007/iid/212/age/1/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1

to healthcare services £7.4 billion in 2017(see 'BHF Statistics Factsheet, England' at Heart Statistics, BHF. Around one in 4 strokes occur in working age people.

Morbidity

- In the UK there are over 1.2 million stroke survivors. Two thirds of stroke survivors leave hospital with a disability[13].

- After experiencing a stroke many people are impacted by long-term complications[i]. Impacts are varied and can include[14][15]

    - Psychological and wellbeing impacts: including anxiety and depression.
    - Cognitive impacts: for example, problems with communication, memory and concentration.
    - Musculoskeletal problems: including spasticity, contractures and pain.
    - Continence problems
    - Fatigue
    - Swallowing, nutrition, and hydration
    - Oral health
    - Sexual dysfunction

Impacts to healthcare, social care and wider society

- Acute care after stroke as well as subsequent after care results in a significant cost to the NHS, social care system and wider society.

- In 2015 it was estimated that the average societal cost of stroke per person was £45,409 in the first 12 months after stroke, plus £24,778 in subsequent years. This was estimated to translate to £25.6 billion attributed to stroke in the UK per year. 29% of the costs were NHS costs, 11% social care, 57% informal care and 3% lost productivity. It was predicted that the overall costs of stroke in the UK for those aged 45 years and over would rise from £26 billion in 2015 to £43 billion in 2025 and £75 billion in 2035.

- A large study based in the UK found strong evidence that people living in more deprived areas have a higher risk of first-ever ischaemic stroke and intracerebral haemorrhage for which they are hospitalised and that they experience stroke earlier in life, compared to those living in less deprived areas[ii]. Studies have also shown an association between socioeconomic status and disability after stroke.

[13] https://fingertips.phe.org.uk/search/stroke#page/4/gid/1/pat/15/ati/502/are/E10000007/iid/212/age/1/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1

[14] https://fingertips.phe.org.uk/search/stroke#page/4/gid/1/pat/15/ati/502/are/E06000015/iid/212/age/1/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1/page-options/car-do-0

[15] https://observatory.derbyshire.gov.uk/wp-content/uploads/reports/documents/health/jsna/Derbyshire_JSNA_Summary_Report2023.pdf

This shows there is potential to make significant gains against our commitments on increasing healthy life expectancy, closing the gap between richest and poorest, and addressing economic inactivity, by delivering on the targets set out in the NHS LTP to prevent 150,000 strokes, heart attacks and cases of dementia by 2029.

The NHS Long Term Plan also sets out how the NHS will improve quality of treatment and outcomes for people living with type 1 or type 2 diabetes.

Local Context

Evidence shows that those living in the most deprived areas of England face the worst healthcare inequalities in relation to healthcare access, experience and outcomes.

People living in areas of high deprivation – such as the Chesterfield and Dronfield or Bolsover, Derby City areas, those from Black, Asian and minority ethnic communities and those from inclusion health group, for example people who are homeless, are most at risk of experiencing these inequalities.

Where patients do not access psychology support following a Stroke, they can become depressed, and this can impact on their ability to participate in the Stroke Rehabilitation service. Stroke teams sometimes spend a lot of time supporting patients' mental health which can sometimes impact on addressing and improving their physical needs. There is a recognised gap in terms of psychology support offered to patients as part of the Derby & Derbyshire Stroke Rehab offer.

It is recognised there are some unequal pockets of service delivery across Derby & Derbyshire due to different delivery models as a result of historic commissioning and that there is a mix of pathways that are either outpatient focused or home based focused. This creates inequality of service delivery and can impact on Stroke patients living in the most deprived areas. For example, transport to outpatient clinics, in particular those living in the rural areas across Derbyshire and those with limited income to spend on bus fares. There are some community-based transport options to help these patients get to their appointments.

A change to the age profile has been seen with younger people experiencing Stroke. In Derby & Derbyshire it is recognised as part of the proposed review of the service model, the pathway has to consider the needs of younger Stroke patients. This includes looking to ensure vocational rehab is part of the new pathway for supporting those patients who are looking to return to work following a Stroke.

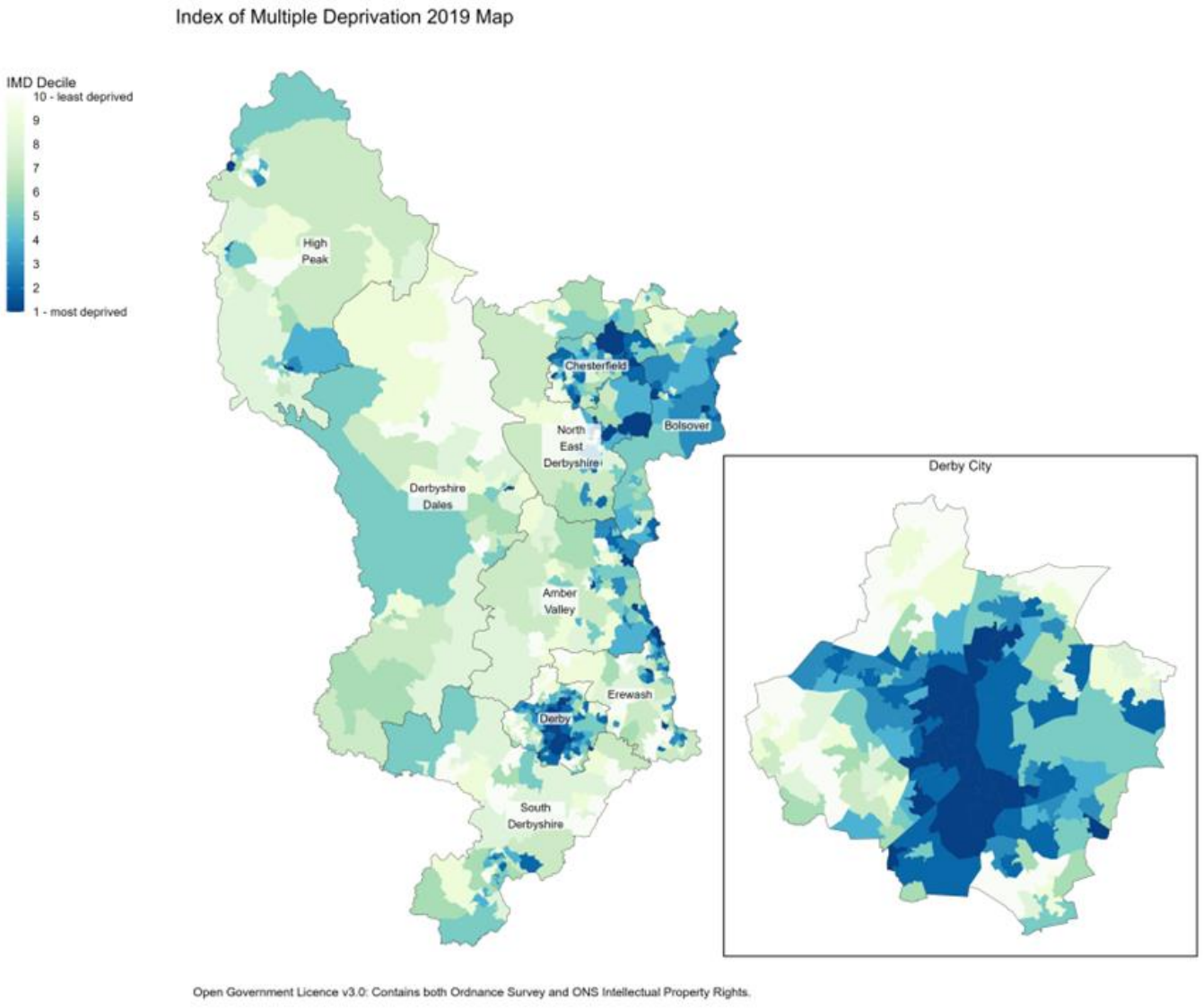
The existing Stroke rehab workforce across Derby & Derbyshire are sensitive to the personalised needs of all patients, including culture, faith and belief, and adapt their services to suit each individual patient needs.

The prevalence of stroke in Derbyshire (2.3%) is significantly higher than the England average (1.8%). Risk factors for stroke include smoking, high blood pressure, obesity, high cholesterol – too much fatty substance in the blood, diabetes, excessive alcohol intake, atrial fibrillation – irregular or abnormally fast heart rate, age, family history and ethnicity.
Source:
https://www.stroke.org.uk/stroke/statistics#Stroke%20prevalence%20in%20England .

The map below shows the most to least deprived areas in Derbyshire and Derby City

Light areas are the least deprived areas and dark is shown as the most deprived areas. The most deprived areas include:

- North Hardwick and Bolsover PCN
- Chesterfield and Dronfield PCN
- South Hardwick PCN
- Derby City North PCN
- Greater Derby PCN



There is very little information in respect of Health Inequalities and Stroke Rehabilitation, however, the map below shows death from stroke in wards across Derbyshire and Derby city. Showing that patients from deprived areas are more likely to suffer from a stroke.

As we move through the review more information will be added to this section.

Joined Up Care Derbyshire

Cardiovascular Disease - Derby & Derbyshire Ward Variation

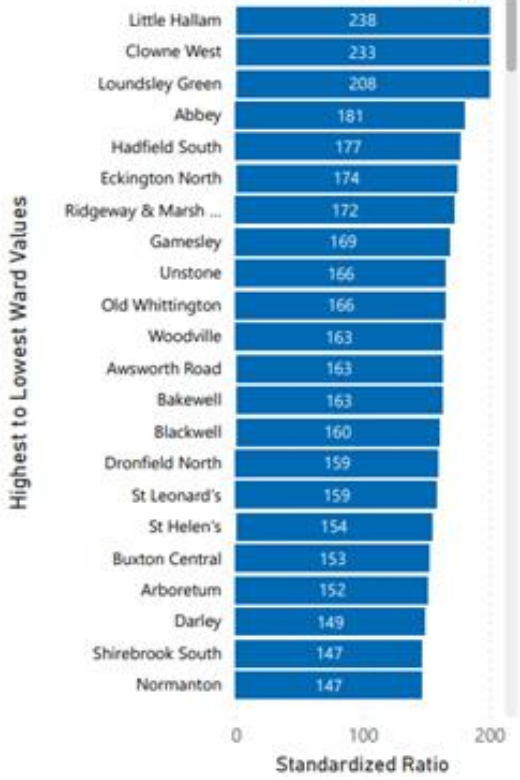
IndicatorName

Deaths from coronary heart disease, all ages, standardised mortality ratio	**Deaths from stroke, all ages, standardised mortality ratio**	Emergency hospital admissions for coronary heart disease, standardised admission ratio	Emergency hospital admissions for myocardial infarction (heart attack), standardised admission ratio	Emergency hospital admissions for stroke, standardised admission ratio

Deaths from stroke, all ages, standardised mortality ratio - Derby & Derbyshire 2016/17 - 20/21

Individuals living in the **most deprived areas** are **more likely** to die prematurely or be hospitalized due to CVD than those in the least deprived areas in Derby & Derbyshire - 2016/17 - 2020/21

Derby & Derbyshire IMD map



Joined Up Care Derbyshire

The following illustration is taken from the Derbyshire Joint Strategic Needs Assessment published in July 2023 and links to Stroke prevalence across Derbyshire.

Stroke

Healthy People>Physical health conditions

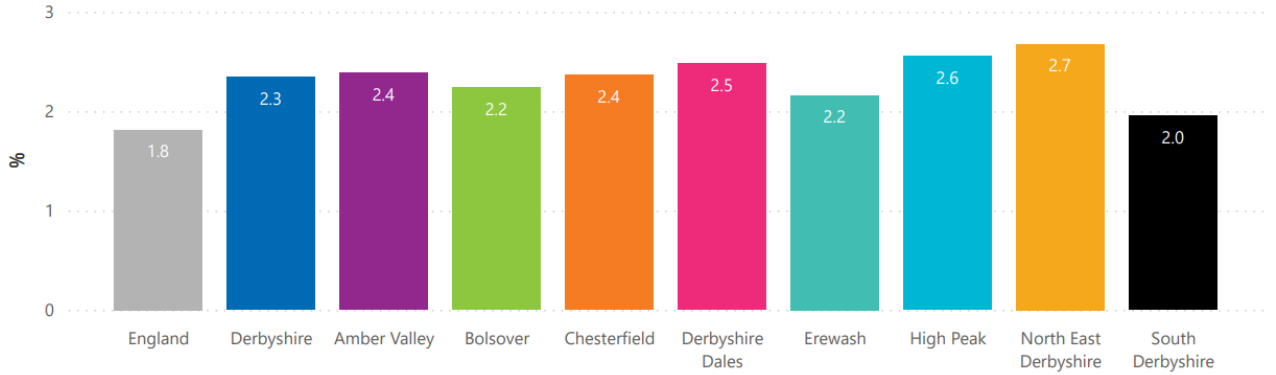
Stroke
Stroke is the third most common cause of death in the developed world. One quarter of stroke deaths occur under the age of 65 years. There is evidence that appropriate diagnosis and management can improve outcomes.

What is happening locally?

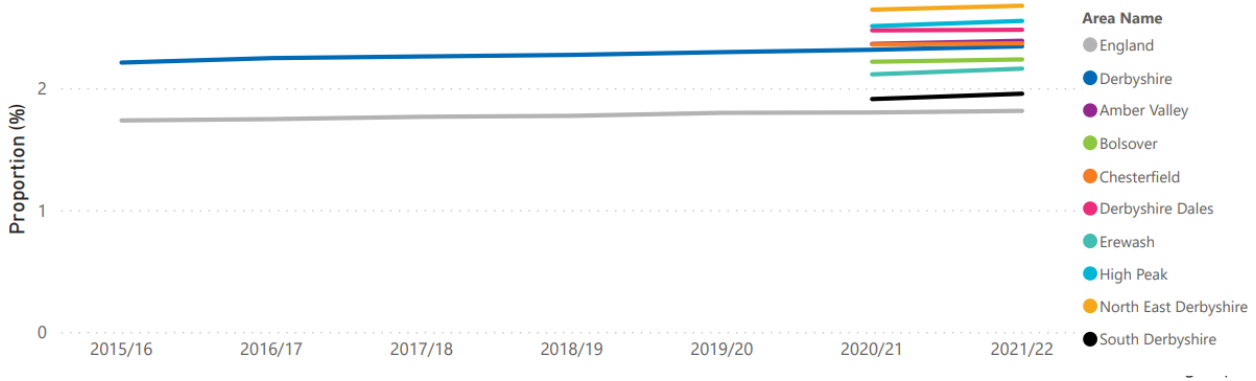
In 2021/22 19,189 Derbyshire patients with stroke ortransient ishchaemic attack (ITA) where record on practice disease registers. This represents 2.3% of patients registered to a Derbyshire practice and is higher than the England rate of 1.8%.

At a district and borough area level values range from 2.0% in South Derbyshire and 2.7% in North East Derbyshire

Stroke: QOF prevalence (all ages), 2021/22 (Persons)



Stroke: QOF prevalence (all ages), 1y (Persons)



Key Drivers for Change

7.1 Patient Experience

The ICB and providers are keen to listen and gain feedback from patients and the public regarding the current service and future service opportunities. (e.g., access, quality of care). Engagement activities are being planned to ensure feedback is used to influence service opportunities and the decision-making process.

As part of the Pathway review, we have contacted various sources for information on patient and public experience, these include:

- DDICB Patient Experience Team
- The ICB Business Intelligence Team
- The Joined Up Care Derbyshire (JUCD) Patient and Public Insight Library Joined Up Care
- Derbyshire Public and Patient Insight Library - FutureNHS Collaboration Platform.
- Healthwatch Derbyshire
- Healthwatch Derby
- The providers of the stroke rehab services – who will have their own method of collecting patient experiences.
- Local organisations such as the Voluntary, Community and Social Enterprise (VCSE) sectors –such as stroke associate, patient groups, social media groups.

The ICB successfully recruited a patient and public partner (a key member of the community with lived experience of stroke rehabilitation, or a carer for someone with lived experience) in December 23, who has been invited to attend the Stroke Rehab Task & Finish Group, a monthly meeting for key stakeholders to come together and discuss the Stroke Rehab Pathway Review. The patient and public partner will also be invited to attend additional future meetings and workshops as appropriate to contribute to the options appraisal process. We are also working alongside The Stroke Association to recruit another patient representative who has lived experience of Stroke rehabilitation.

Insights will be reviewed in conjunction with the previous patient engagement work completed in 2023. This work included reaching out to patients & system partners to obtain insights regarding stroke services as well as conducting interviews with patients on the stroke unit at Royal Derby Hospital (14 patients) and a couple of patients who experienced a stroke some months previously.

- **Summary of key themes emerging from the patient engagement work undertaken – Engagement with patients at Royal Derby Hospital:**

The need for:

- Personalised care.
- Effective communication with patients at various stages of care, and with their families/carers.
- Equity in access to services, particularly with regards to rehabilitation and provision of community stroke services.
- Joined-up care across health and social care.

- Provision of information, support and advice - particularly with regard to wellbeing and Mental Health.
- Carer involvement.
- Improved awareness of the impact of co-morbidities.

- **Areas for improvement based on patient feedback:**

- The need for a Community Stroke service - delivering equitable services across the ICS.
- Better integration of Stroke services across UHDB hospitals, specifically between RDH and QHB, for both patients and staff.
- Improved wellbeing and support services / signposting for patients and for their families/carers.
- To understand patients' expectations around their rehabilitation .
- To address health inequalities - around community rehabilitation - and how it is delivered.
- Improved engagement with GPs.
- Reduce waiting times for follow up appointments.

- **Insight obtained from The Stroke Association – Lived Experience of Stroke Report – National (18880 respondents). Respondents fed back the following:**

- Support for many stroke survivors stops when they leave hospital. They are not given the vital and ongoing support they need to rebuild their lives. For some, the support just is not there. Others are not told about services which could help. Sometimes the quality of care is poor.
- One in four stroke survivors said they did not receive enough support when they needed it most. A third of stroke survivors felt that support was restricted to focusing on their medical conditions rather than them as an individual.
- A half of stroke survivors felt they needed support for longer or more frequently. A quarter also said they failed to receive enough support when they felt they needed it most.
- 40% of survivors said they needed longer or more frequent support from physiotherapy services than was provided. A third needed more support from speech and language or occupational therapy.
- People living with a more severe impact of stroke were more likely to say they did not receive enough support.
- Many stroke survivors felt they had more help with other health conditions than their stroke. 51% of stroke survivors told us that the support they had received had been more focused on their other health conditions than it had on stroke.
- A stroke can affect every part of a person’s life, yet a third of stroke survivors said that support was restricted to focusing on their medical condition rather than them as an individual.
- A worrying number of survivors fail to receive the rehabilitation therapies they need for long enough, despite guidelines saying they should be given for as long as they’re showing signs of benefit. 77% of stroke survivors said they had experienced problems with mobility and 70% with speech and communication.

To note, this is national insight, local insight will continue to be gathered to inform the review. Patient insight will continue to be gathered through the journey of the stroke rehabilitation pathway review.

Engagement work will continue to gain insight into patient experience across the Derby and Derbyshire region.

PREMS data into patient experience of stroke care. (National survey broken down into ICB reports):

For Derby and Derbyshire 143 surveys were completed. For example:

- 23% reported they would have liked psychology, psychiatry and counselling and were not offered this.
- 26% disagreed that their community therapy started quickly following hospital.
- 22% would have liked programmes to help with healthy lifestyle i.e. smoking, diet and exercise.

7.2 Service Challenges

Each service has its own key challenges to delivering stroke rehab across the ICS. Common themes across most services include:

Key Challenges
Inequity of service across the Integrated Care System
Lack of specialist community provision of stroke rehabilitation care
Incomplete and inconsistent stroke rehabilitation pathways
Long waiting lists and increased demand
Patients not being referred to the specialist service that best meets their needs
Lack of integrated social care support
The current staffing levels and skill mix is a barrier to implementing a fully integrated community stroke service
Difficulty with recruitment

8. Benchmarking and Reviews

8.1 Integrated Stroke Delivery Network (ISDN) Benchmarking Recommendations

The East Midlands ISDN was formed in November 2022 and is seeking to standardise and improve the quality of stroke services across the East Midlands. The ISDN works collaboratively with ICB commissioners and providers and is a member of the Stroke Delivery Group.

The ISDN completed a gap analysis of Derbyshire & Derby City community stroke rehabilitation services and benchmarked against the ICSS.
Services include:

- Derby Early Supported Discharge (ESSD) (Derbyshire Community Health Services NHS Foundation Trust)
- Amber Valley & Erewash ESSD Team

- Derby City Community Services ESSD Team
- South Derbyshire and Dales ESSD Team
- Chesterfield Royal Hospital ESSD Service (Chesterfield Royal Hospital NHS Foundation Trust)
- Stroke Neuro Community Services and Outpatients (Derbyshire Community Health Services NHS Foundation Trust)
- North Derbyshire Community Stroke Psychology Team North Derbyshire Stroke Recovery Service (Stroke Association)
- South Derbyshire Communication Support Service (Stroke Association)

The gap analysis highlights significant deficiencies in workforce capacity across Derbyshire & Derby City compared to similar stroke pathways across the East Midlands region and against the National staffing minimal guidelines set out in the ICSSM. With all services below the recommended service capacity.

It was highlighted that no service had the recommended social care, psychology, or physician provision within their services.

The ISDN provided the following recommendations:

- Review the commissioning of stroke services across Derbyshire.
- Improve access for all stroke patients.
- Address key ICSS recommended service gaps:
    - 7-day service
    - Needs based model – EARLY SUPPORTED STROKE DISCHARGE 24, CST 72hrs treatment no longer than 7 days.
    - In-reach to acute hospital
    - 6-month reviews
    - Flexible working (therapy outside of core working hours)
- Identify health inequalities and access to services across ICS.
- Address low staffing levels and recruit to key ICSS roles.
- Consideration should be given to improve access to psychology across the stroke pathway.
- Address and improve SSNAP data submission for services to improve case ascertainment and improve data collection.
- Review commissioning of voluntary sector services that provide support and advice for

The recommendations will be considered throughout the project and will help to shape the future pathway options.

8.2 Royal College of Physicians Invited Service Review

An invited Service Review between University Hospitals of Derby & Burton (UHDB) and the Royal College of Physicians in October 2022 showed that discharge arrangements for stroke patients were variable across the two sites of Royal Derby Hospital and Queens Hospital Burton. The Sentinel Stroke National Audit Programme (SSNAP) data reported that the percentage of patients treated by an Early Supported Stroke Discharge team had reduced over time (25.4% Royal Derby Hospital) and comparatively the national average had been gradually increasing (47.1%) over the last five years. The Early Supported Stroke Discharge service was described as inequitable and inconsistent. However, where it was available the service was very good but that it was only provided for six weeks and following this there was no community stroke team.

For patients with moderate strokes, the outpatient services had delays of four to six months.

The review recommended that the University Hospitals of Derby & Burton Foundation Trust should collaborate with commissioners to further develop the provision of Early Supported Stroke Discharge for the remaining catchment areas that do not have coverage with the aim to double the number of patients discharged directly home with Early Supported Stroke Discharge.

An Invited Service Review between Chesterfield Royal Hospital and the Royal College of Physicians in September 2020 focused Stroke Units only. No recommendations were provided for stroke rehabilitation at that stage.

9. Vison and Aims

To provide an integrated multidisciplinary Stroke rehabilitation service with quality and safety at its heart, driven by highly skilled clinicians which is aligned to the NHSE National Service Model for an Integrated Community Stroke Service[iii].

Integrated care for people who have had a stroke is key for transforming stroke care across the ICS.

By developing access to treatment in specialist stroke units and increasing the availability of high-quality rehabilitation and ongoing community care to rebuild patients' lives after a stroke. By making improvements, we have the opportunity to provide an end-to-end care pathway for stroke patients and give hundreds of stroke survivors the chance of a better recovery.

Pathway transformation for stroke rehabilitation services will result in:

- A reduction in readmissions across bed days.
- A reduction in length of stay across hospital settings.
- Support sustainability in services / roles with an 'invest to save' approach.
- Address existing and increasing demand and capacity issues.
- An Integrated Commissioning System (ICS) wide commissioned service that helps reduce health inequalities and supports equitability.

This work is linked to productivity and patient outcomes.

To date the Stroke Rehabilitation Task and Finish group have mapped services and captured data to support this Case for Change. It is acknowledged by the group that progress has been slow and there was a need to set clear timescales and objectives.

10. Next Steps

In September 2023 key stakeholders developed a milestone plan, identifying the key stages of the pathway review to be delivered. These milestones include:

- Case for Change
- Public Engagement
- Options Development

- Business Case & Options Appraisal (to include a summary of the engagement approach once finalised – about how people can get involved)

Quality Equality Impact Assessments

The ICB is committed to ensuring that commissioning decisions and business cases are appropriately evaluated for any potential impact on quality and equality.

Quality and Equality Impact Assessments (QEIA) is a continuous process that ensures that business plans / decisions are assessed. All potential consequences on quality or protected characteristic groups are considered and any necessary mitigating actions are outlined in a uniformed way.

For the options appraisal process each service option will be required to complete a QEIA to inform the decision-making process.

Joined Up Care Derbyshire

Appendices

Appendix 1 – Stroke Patient Reported Experience Measures Report – Derby & Derbyshire 2022/23

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3-ICBPREMsSystemRe

Appendix 2 – Examples of four patient journeys where support from the Derbyshire Community Health Services Early Supported Stroke Discharge team was provided.

Stroke Rehabilitation
- Patient Journeys - C

Appendix 3 – Stroke Rehabilitation – Stakeholders involved in the development of the Case for Change

Stakeholders - Stroke
Rehabilitation - Case f

Appendix 4 – Stroke Rehabilitation Review – Case for Change & Public Engagement Timeline

Stroke Rehabilitation
Review - Engagement

[i] Long-term complications of stroke and secondary prevention: an overview for primary care physicians - PMC (nih.gov)
[ii] Socioeconomic disparities in first stroke incidence, quality of care, and survival: a nationwide registry-based cohort study of 44 million adults in England (thelancet.com)
[iii] https://www.england.nhs.uk/publication/national-service-model-for-an-integrated-community-stroke-service/