



North Durham Clinical Commissioning Group
Durham Dales, Easington and Sedgfield Clinical Commissioning Group
Darlington Clinical Commissioning Group

**Improving Stroke Rehabilitation
For the People of County
Durham and Darlington**

*A review of stroke rehabilitation services within County
Durham and Darlington*

**Pre-Consultation Business Case
Darlington**

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1.0 Executive Summary

The following report outlines the commitment from the local health system within County Durham and Darlington to develop inpatient and community stroke rehabilitation services. In 2011 County Durham and Darlington stroke services were transformed in terms of the hyperacute (early stage of the pathway) model, where the outcome was a single site service based at University Hospital North Durham (UHND).

The quality and performance of this part of the stroke pathway have improved significantly, however it is recognised that the rehabilitation elements could be better. We have continued to talk to our patients and their families to understand their experiences and the feedback reflects the need to review and improve rehabilitation for this cohort of our local population. Therefore there is a commitment from the local health system to improve both inpatient and community rehabilitation for those who have had a stroke.

The scope of the project relates to the care currently delivered within the stroke rehabilitation ward at Bishop Auckland Hospital (BAH) and services within the community for this particular cohort of the local population. The project focuses on national and local clinical standards and best practice and assesses the gaps within the current service. The following business case outlines some of the challenges locally in terms of the limited specialist workforce as well as constraints within the current model which prevent more optimum care. The review then seeks to address these gaps in provision with proposals on how care could be delivered in the future.

The review was clinically led and as a result there are two options for consideration. An options appraisal process was undertaken with standardised criteria used to score each option against; this criteria is the same as that used during the hyperacute stroke review in 2011. Again this was a clinically led appraisal process. The outcome of the appraisal was the presentation of the preferred option - to consolidate acute rehabilitation onto one site at UHND with robust and effective community based rehabilitation in place. A major driver is to ensure care closer to home and effective use of resources.

Further to this, following extensive service improvement work within CDDFT, the service is confident that the capacity available could be reduced by eight beds as patients would be more effectively managed and discharged. This recommendation is a result of the implementation of a range of ongoing initiatives within the acute setting to manage patient flow and use the most appropriate care setting to manage people's conditions. A new model for community services was introduced in 2018 which strives to deliver more care closer to home.

The aim is to deliver the best possible care to gain the greatest opportunity to improve patient outcomes within the resource available and to deliver this care closer to home wherever possible. The following business case outlines the proposals for consultation and highlights any impacts, benefits and risks (with mitigations) of the preferred option. It demonstrates the impact on patients and their families, outlining what will be different if the proposed model of care was to be implemented.

2.0 Vision

Our vision and commitment is:

- To develop a person-centred model of care that delivers care closer to home
- To minimise variation and maximise the health outcomes of our local population
- To develop a service which retains and attracts an excellent workforce
- To ensure care is accessible and responsive to people's needs

2.1 Scope

To present a robust evidence based business case to review the model of care for acute and community based stroke rehabilitation across County Durham and Darlington.

The scope of this project relates to the rehabilitation elements following an acute episode due to stroke, whilst also highlighting developments across the whole stroke pathway. This includes prevention through to longer term assessment and care. CCGs and CDDFT have a major emphasis on community services focusing on;

- Prevention and maintaining independence
- Supporting patients with long term conditions
- Managing crisis and supporting a return to independence

2.2 Aims and Objectives

- To review the model of care across County Durham and Darlington
- To understand the effectiveness of care provided currently and to review appropriateness in line with national policy, standards and best practice
- To commission services which fully support patients through the stroke pathway, using the resource available to achieve the best possible outcomes
- To engage with patients and carers who have used stroke services to gain an understanding of their experiences and their views on a different approach to their care
- To outline a range of options for the provision of stroke rehabilitation within a hospital setting as well as the community
- To outline a preferred option for a new model of care which assesses impact on the system and individual patient care
- To reduce avoidable admissions into hospital and ensure care is delivered closer to home where possible
- To ensure care is planned, integrated and seamless
- To ensure people are given the opportunity to reach their full potential and their rehabilitation goals

3.0 Introduction and Background

Stroke, a preventable disease, is the fourth single leading cause of death in the UK and the single largest cause of complex disability (Stroke Association (2018) State of the nation: Stroke statistics). The number of stroke survivors living with disability will increase by a third by 2035 (Patel, A., Berdunov, V., King, D., Quayyum, Z., Wittenberg, R. & Knapp, M. (2017)).

Strokes are a blood clot or bleed in the brain which can leave lasting damage, affecting mobility, cognition, sight and/or communication.

The Stroke Association State of the Nation report, February 2018 key statistics show:

- There are more than 100,000 strokes in the UK each year. That is around one stroke every five minutes.
- There are over 1.2 million stroke survivors in the UK.
- Stroke is the fourth biggest killer in the UK.
- A third of stroke survivors experience depression after having a stroke.
- Almost two thirds of stroke survivors leave hospital with a disability.
- People of working age are two to three times more likely to be unemployed eight years after their stroke.
- The cost to society is around £26 billion a year.

The following pre-consultation business case (PCBC) outlines the stroke specific services currently being delivered across County Durham and Darlington. It demonstrates current performance and the drivers for the proposed change. Throughout the report there will be references to national and local policy and initiatives which have demonstrated a step change in the effectiveness of care delivered for those who suffer a stroke in our region.

A significant amount of work has been done on ensuring patients are seen as quickly as possible once a stroke is suspected. However it is recognised that there needs to be a continuation of that transformation in order to give people in our area the best possible outcomes longer term.

The following section demonstrates the level of need in County Durham and Darlington for robust stroke prevention, hospital based care, community rehabilitation and long term care.

3.1 Demographics and Prevalence

Stroke remains a major cause of death and disability across County Durham and Darlington with around 1,000 people suffering a stroke each year. These patients need access to high quality, specialist hospital and community based care to give them every opportunity to reach their very best recovery goals.

County Durham

The overall population of County Durham is growing and ageing, with an increase in population for those more vulnerable groups – children and older people. The 65+ age group is projected to rise by 36.8% (n37,300) between 2014-2030 and overall life expectancy for males and females is lower than the national average.

Stroke Specific prevalence – County Durham

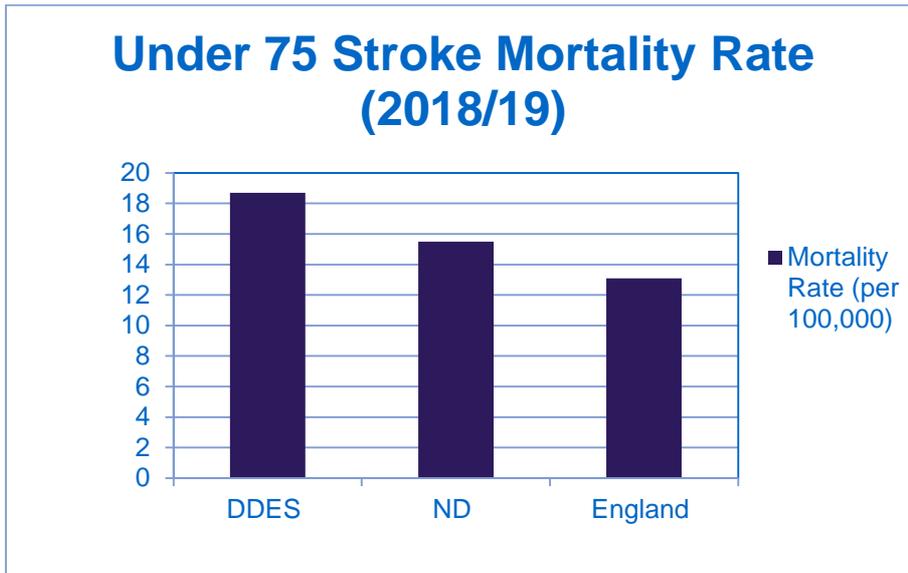


Figure one demonstrates that in both County Durham CCGs the under 75 mortality rate due to stroke is higher than the national average.

Figure 1

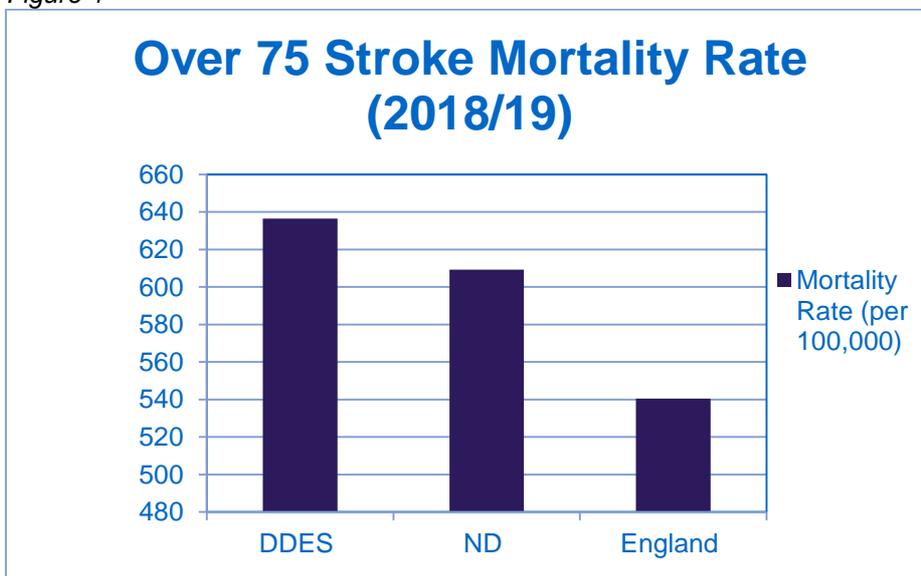


Figure two demonstrates that in both County Durham CCGs the over 75 mortality rate due to stroke is higher than the national average.

Figure 2

Both County Durham CCGs have a higher prevalence of stroke. The North Durham population has 2.2% prevalence whilst Durham Dales, Easington and Sedgefield (DDES) CCG have an average of 2.5% compared nationally to 1.8%

CCG	Admission Rate (actual) (per 100,000)	Admission Rate- National Average (per 100,000)
DDES	174.5	169.1
North Durham	198.1	

Figure 3

Darlington

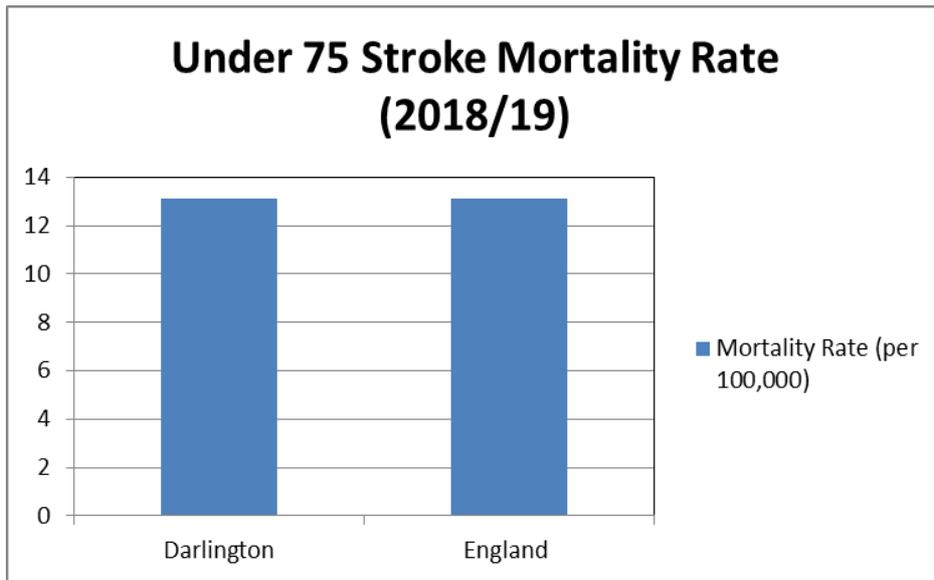


Figure four demonstrates that in Darlington the under 75 mortality rate due to stroke is the same at the national average (13.1)

Figure 4

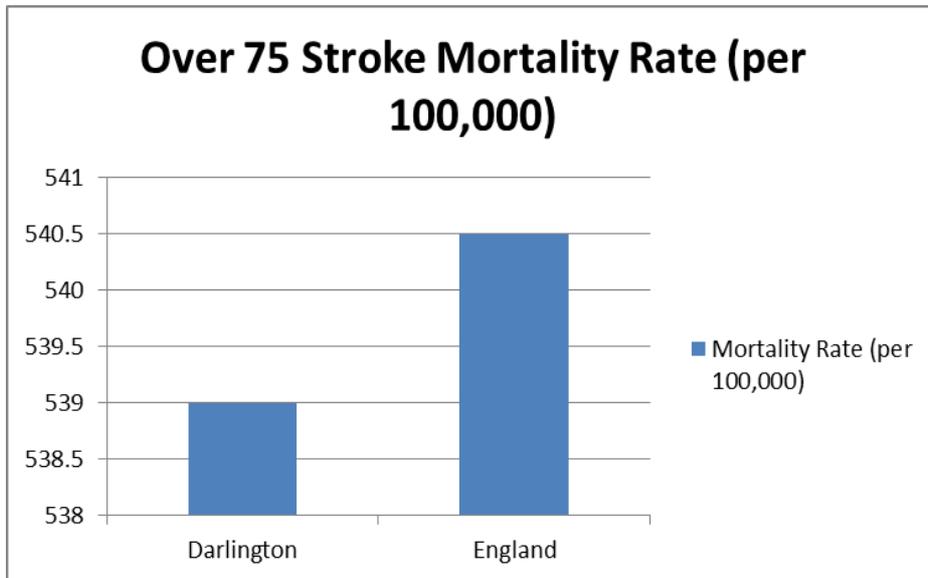


Figure five demonstrates that in Darlington the over 75 mortality rate due to stroke is slightly lower than the national average (539.0 vs 540.5))

Figure 5

Darlington has a higher prevalence of stroke (2.2%) compared to the national average of 1.8%.

CCG	Admission Rate (actual) (per 100,000)	Admission Rate- National Average (per 100,000)
Darlington	156	169.1

Figure 6

3.2 National Context & Evidence Base

NHS England's Long Term Plan (LTP) published in 2019, outlines the importance of access to specialist hyperacute stroke intervention, with availability 24/7. The changes made in 2011 to consolidate hyperacute stroke services at UHND secured this local provision, and locally this has had an impact on patient outcomes (please see section 4.1).

The LTP also highlights the aim of local systems to commission and deliver early supported discharge into the community. It is recognised that in order to improve patient outcomes and experience that specialist teams should provide seamless care from acute and into the community. There is also a commitment to delivering seven day services for stroke care in the next five years.

During the hyperacute phase there is also a commitment to ensure that patients receive the very latest in advanced techniques delivered by highly skilled specialist staff at the earliest opportunity. This in effect means that the local workforce need to be recruited and retained, developing clinical competencies and ensuring effective and efficient use of staff.

Longer term rehabilitation is a key area for improvement in the LTP. It is recognised nationally that currently patients are unable to access sufficient therapy to maximise recovery and it is particularly difficult to obtain vocational rehabilitation to help people get back to work. Not all longer term rehabilitation needs to be delivered by teams only treating stroke patients and not all patients will benefit from long periods of rehabilitation but there needs to be greater flexibility in provision. There needs to be the ability to meet the needs of individuals and there needs to be a standardised approach to the provision of care such that it is not influenced by where a patient lives.

The LTP sets out the ambition of having more intensive community based rehabilitation in place in order to reduce length of stay and hospital admissions in order to plough any cost efficiencies to improving direct patient care.

There is a strong commitment to improving rehabilitation services and in order to monitor the impact of this transformation the national dataset Sentinel Stroke National Audit Programme (SSNAP) will be modified to ensure measurement of outcomes across the whole pathway. Currently much of the focus is on the period of time shortly following a stroke, the move is to ensure performance drives quality throughout the patient pathway.

Stroke is a complex and devastating condition, the time needed for rehabilitation varies between people but will often need to continue long after leaving hospital, ideally in a person's own home.

For some people it can take months or even years to make a full recovery, while others have to live the rest of their lives with disability regardless of the quality of care provided. Evidence shows that rehabilitation at home is cost effective when delivered by specialist teams in the community as soon as the patient returns home.
(Reference SSNAP)

Length of stay has dropped considerably since the first national stroke audits began with many patients being discharged after less than a week. (Section 4.1 shows the average length of stay for stroke patients on ward 2 at UHND and ward 4 at BAH) Whilst this is encouraging it is widely recognised that most patients would prefer to continue their care at home if possible. However this also means that early supported discharge services and

wider community services need to be effectively organised to ensure smooth transitions of patient care from the hospital to the community. Community teams are best staffed with specialists in stroke care.

3.3 Best Practice and National Guidelines



There are various national best practice guidelines and clinical standards which promote the transformation of stroke services. Some of the key messages from the National Stroke Strategy (2007) and NICE guidance on stroke rehabilitation (2013) include:

- Intensive rehabilitation should occur in the community at the earliest opportunity
- Assessment should be ongoing and should happen at the earliest opportunity in the pathway to improve outcomes and ensure seamless transition
- The first two weeks following stroke should include short and frequent therapy in a community based setting
- Patients should have as few “hand offs” of care as possible
- Transfers of care from hospital to community should be seamless with a single multi-disciplinary team
- Discharge to assess is the best model to meet people’s needs, using the home first philosophy
- Ensure an integrated approach to rehabilitation

Community rehabilitation is a key element of stroke rehabilitation and is defined within National Strategy/NICE guidance with 2 key elements – Early Supported Discharge and on-going stroke specific community rehabilitation. Section 8.3 shows current best practice compared to our current service offer and highlights any gaps in provision against recognised clinical standards.

4.0 Local Context

There are three CCGs leading this review of stroke services across County Durham and Darlington, they are North Durham, Durham Dales, Easington and Sedgefield (DDES) and Darlington. The main provider of services for both acute and community is County Durham and Darlington NHS Foundation Trust (CDDFT) who are key partners/experts supporting the review of stroke rehabilitation services. They operate out of three main acute sites with a range of community hospitals and services delivered in local settings.

	Acute Sites	Community Hospitals
County Durham and Darlington NHS Foundation Trust	University Hospital of North Durham	Chester-le-Street Hospital
	Bishop Auckland Hospital	Shotley Bridge Hospital
	Darlington Memorial Hospital	Sedgefield Hospital
		Weardale Hospital
		Richardson Hospital

Figure 8

The overall population of County Durham and Darlington is just less than 650,000.

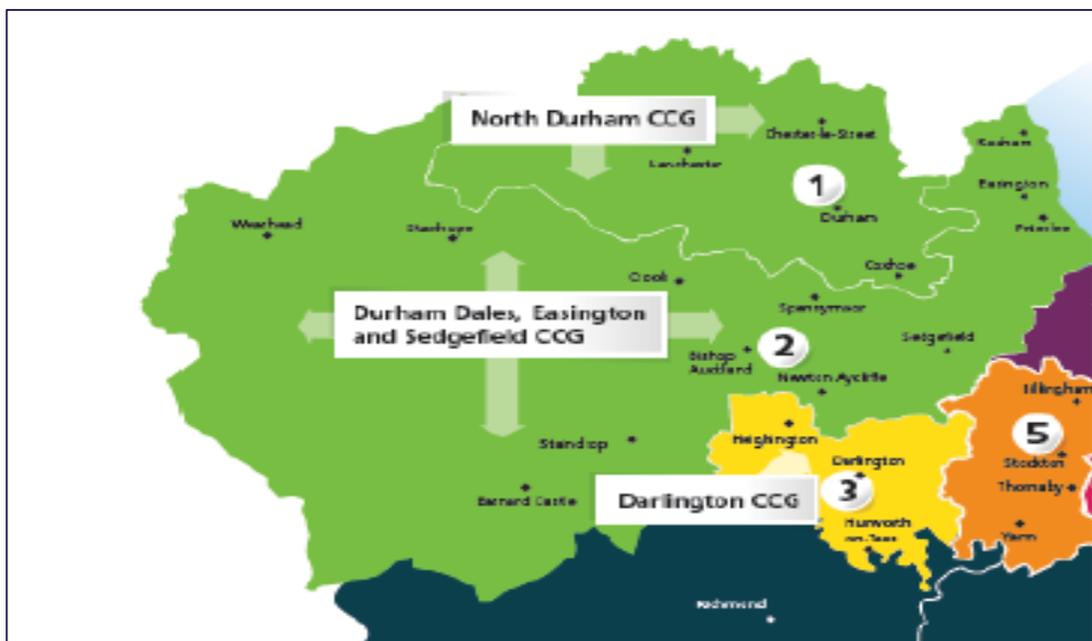


Figure 8

A public consultation took place during 2011 to consolidate hyper acute stroke care to one site based at University Hospital North Durham (UHND) and rehabilitation care at Bishop Auckland Hospital (BAH) for those patients requiring further inpatient therapy support.

The Department of Health's National Stroke Strategy for England (2007) identified care in a stroke unit as the single biggest factor to improve outcomes after stroke. Direct admission to a dedicated stroke unit remains the most important intervention we have for acute stroke. A major review, 'Organised inpatient (stroke unit) care for stroke', found that stroke patients who receive organised inpatient care in a stroke unit are more likely to be alive, independent, and living at home one year after the stroke. In addition to the access required to a specialist unit at the time of an emergency, it is also highlighted that robust discharge processes are needed to ensure people leave in a timely way with the support of an integrated team.

County Durham and Darlington CCGs have made a commitment to review the rehabilitation elements of local pathways any improvements made during the hyperacute stage are sustained throughout the patient’s journey to recovery.

There is an opportunity to improve both the quality and efficiency of the care we commission and provide. If we are to have a safe, sustainable stroke services that are set up to facilitate greater advances in care and outcomes we need to address three key factors:

- Changing patterns of need;
- Improving clinical standards of care;
- Making the best use of an expert workforce;

A change to the model of delivery for stroke rehabilitation care is a key initiative for County Durham and Darlington CCGs and County Durham and Darlington Foundation Trust (CDDFT) and supports recommended guidance and the #Next Step Home agenda. In line with CCG strategic aims and priorities the proposed service will:

- Secure the right services in the right place - the service will ensure patients are treated in the right place, at the right time, by the right clinician.
- Manage resources effectively - through reducing lengthy stays in secondary care providing a cost saving.
- Deliver a standard, equitable and appropriate stroke rehabilitation pathway.
- Make services more accessible and responsive to the needs of our communities

Organisation (provider)	Number of provider spells	Number of bed days	Average length of stay (LOS)
SOUTH TYNESIDE NHS FOUNDATION TRUST	37	199	5.38
CITY HOSPITALS SUNDERLAND NHS FOUNDATION TRUST	658	11745	17.85
THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	849	8396	9.89
NORTHUMBRIA HEALTHCARE NHS FOUNDATION TRUST	946	14016	14.82
SOUTH TEES HOSPITALS NHS FOUNDATION TRUST	659	10789	16.37
NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUST	567	6278	11.07
COUNTY DURHAM AND DARLINGTON NHS FOUNDATION TRUST	852	11612	13.63

Figure 9 – 2018/19

Figure 9 shows the average length of stay for inpatient stroke services at CDDFT across UHND and BAH. The data suggests that there is scope to reduce length of stay particularly in light of the focused transformation on community based services and the overall aim of delivering care closer to home.

CDDFT has been involved with a series of hospital-based improvement programmes including SAFER and PJ Paralysis. Both of these transformation programmes focus on the time spent during an acute episode ensures the benefits of hospital based care are maximised and that patients have a focus of recovery.

SAFER is a tool used to aid patient flow – that is the transition of care within a system, from the time a patient enters the hospital to the point at which they are discharged. The toolkit is designed to reduce unwarranted variation and to ensure care is delivered in a seamless way. The key elements of SAFER include

- Patients receiving a senior review before midday to ensure robust decision making and action
- All patients will have an expected discharge date at the earliest point in their care episode
- Early (supported) discharge will be delivered
- Where patients are in hospital longer than 7 days, a multi-disciplinary team will review patients with a clear 'home first' mindset

PJ Paralysis is an initiative aimed at getting patients out of bed and into a chair with their own clothes on wherever possible. This is proven to aid recovery, reduce length of stay, promote wellbeing and enable people to feel dignified. Staff on all wards throughout CDDFT were engaged in this work to ensure patients have the opportunity to gain the best possible outcomes from their care in hospital and to be discharged home at the earliest point.

We are supporting...

#EndPJparalysis #last1000days

NHS
County Durham and Darlington
NHS Foundation Trust

Help us, to help you.

Evidence shows that patients who get dressed during the day; recover quicker and feel better.

What can you do: If you are a patient or a loved one visiting a patient you can help by making sure there is a change of clothes available as well as a pair of sensible shoes rather than slippers.

Aiming for 1 million patient days dressed in own clothes & moving in 70 days. Let's help our patients get home back to loved ones

If you had 1000 days left, how many would you want to spend in Hospital? That's why EVERY DAY matters

PJ paralysis...

- FACT:** Reduces mobility
- FACT:** Loss in strength
- FACT:** Loss of independence
- FACT:** Longer stay in Hospital

with you all the way

www.cdft.nhs.net

Figure 10

Stroke is a national priority and the lack of standardised rehabilitation services within our CCG areas does not serve the rehabilitation needs of patients who have had a stroke.

During 2018/19 County Durham and Darlington CCGs conducted a whole scale review of community services which resulted in a procurement exercise in order to bring about positive change. Throughout this period multiple providers have been replaced with one major provider, who also delivers acute care in the locality. The advantage of having one provider across acute and community affords the local health system the opportunity to deliver transformational change in partnership with local clinicians and patients in a seamless way. As part of the mobilization of this new contract, work to prioritise service developments was undertaken and as a result stroke was identified as an area which needed some focused service development.

4.1 Quality and Performance

Organising stroke care effectively across a whole network is one of the main priorities for the NHS as outlined in the NHS LTP. This may mean that patients need to travel further to access the specialist care that they need but there is little point being admitted to a hospital that cannot provide the necessary treatments.

This work to consolidate specialist stroke units was done in County Durham and Darlington in 2011. The outcome of this work was the implementation of a single specialist stroke unit at University Hospital of North Durham (UHND) with hospital based rehabilitation being delivered out of Bishop Auckland Hospital and variability in terms of the community offer.

The **Sentinel Stroke National Audit Programme (SSNAP)** is a major national healthcare quality improvement programme, measuring the quality and organisation of stroke care in the England, Wales and Northern Ireland. This audit tool is completed by all organisations within the NHS providing stroke care and is based on nationally recognised clinical standards. NHS Trusts record data which is analysed and reported on by the national team so that clinicians, commissioners and members of the public can identify how well local services are performing. We have used this information (shown in figure 11) to identify areas for improvement as part of the review.

The **Getting It Right First Time (GIRFT)** programme is designed to reduce variation in care pathways, share best practice and use information to ask questions about the quality and efficiency of care being delivered. GIRFT looks at many different care pathways including surgery, cancer care and in this instance stroke care. The ambition of the programme is to identify examples of innovative, high quality and efficient service delivery. The national GIRFT team visited the North East on the 15th March 2019. Some of the information and discussion below includes the data shared with the team and outlines their recommendations as a result. The GIRFT team's recommendations focus on the work outlined within this business case. These recommendations will also be used to help shape a set of national guidelines which will be published by GIRFT in the next 12 months.

SSNAP Scoring Summary:		Team	University Hospital of North Durham
		Time period	Jan-Mar 2019
		SSNAP level	B
Patient-centred Domain levels:		1) Scanning	A
		2) Stroke unit	B
		3) Thrombolysis	B
		4) Specialist Assessments	B
		5) Occupational therapy	C
		6) Physiotherapy	A
		7) Speech and Language therapy	C
		8) MDT working	C
		9) Standards by discharge	A
		10) Discharge processes	C

Figure 11

Hyperacute phase

Since its implementation the quality of care and performance of the hyperacute service has significantly improved.

- ✓ For example UHND administers blood clot busting drugs (thrombolysis) within an average of 30 minutes, well below the national average of 50 minutes. In the last quarter the unit had the best performing clock stop to thrombolysis time in the country at 26 minutes.
- ✓ The Getting it Right First Time (GIRFT) team commended CDDFT for the process they have in place and for the performance of direct access 24/7 into a hyper acute unit and as a result the excellent door to needle times being achieved.
- ✓ The stroke unit at UHND were able to, on average, have a first consultant review within 7 hours, with the England national average at over 9 hours.

Therapy provision

- ✗ Due to the service currently operating across two sites it is a significant challenge to meet the standards associations with therapy due to a limited workforce.
- ✗ Therapists are unable to follow best practice currently in terms of following the patient from acute ad into a community setting
- ✗ The national target around swallow screening, which is meant to happen within four hours of admission, and being able to deliver a swallow assessment within 72 hours is not performing as well as it could.

- ✘ According to SSNAP data and following the recent GIRFT review there is a potential improvement to be made in terms of the percentage of people who are identified as having an Occupational Therapy (OT) requirement. In addition, of those people identified as having a need for OT, the ability to deliver the average of 40 minutes per day is not achieved (currently 32 minutes).
- ✘ University Hospital of North Durham are currently assessing fewer than 65% of patients deemed applicable for physiotherapy, compared to the national average of 87%. The number of minutes of physiotherapy received per day by patients was also lower than the national average of 35 minutes per day.
- ✘ Those assessed as being suitable to receive Speech and Language Therapy (SALT) is lower than average at just 25% compared to 50% nationally. However the minutes of SALT per day is higher than the national rate of 32 minutes per day and is in fact performing at 36 minutes per day.
- ✓ Performance regarding nutrition screen, and patients being seen by a dietician before discharge, was achieved by CDDFT.

Rehabilitation and long term care

- ✘ The latest regional GIRFT report showed that combined nursing therapy and rehabilitation goals, were achieved at a rate of above the national average of 65%, in all units apart from University Hospital of North Durham, and Cumberland Infirmary, where this was achieved in 46% and 47% respectively.
- ✘ There are very few CDDFT patients who are classed as being discharged into an Early Supported Discharge (ESD) Team and these are only within the Easington locality.
- ✘ Also currently although patients are being seen by the Stroke Association for their six month review, this information is not being recorded against the standard (please see section 7.5 for actions taken to remedy this).

Bed occupancy

	2017/18	2018/19
Ward 2 (UHND) and ward 4 (BAH)	92.11%	91.66%
Ward 2 (UHND)	86.06%	86.52%
Ward 4 (BAH)	97.98%	96.95%

Figure 12

Figure 12 outlines the bed occupancy for ward two at UHND and ward four at BAH. Bed occupancy has remained fairly static across the two years across both sites.

Length of stay

Ward	2017/18				2018/19			
	DDES	Dton	Durham	Other	DDES	Dton	Durham	Other
Ward 4 (BAH)	25.6	27.1	28.6	18.3	23.1	19.0	20.4	16.1
Ward 2 (UHND)	3.9	4.3	3.8	4.7	4.3	4.2	4.8	4.7

Figure 13

Figure 13 outlines length of stay (LoS) for both stroke wards for DDES, Darlington and North Durham. LoS is longer on ward 4 at BAH for all CCG localities than at ward 2 at UHND, the overall aim of the health system is to reduce LoS by delivering more care in the community. Families of those who stay on ward 4 at BAH for this length of time and who don't live close by may find it a challenge to access the hospital to visit. Although it is anticipated that the current LoS at UHND will increase due to the proposed change, the overall length of time required for inpatient based rehabilitation should reduce due to;

- the improved supported discharge process
- the enhanced levels of community based care

Stroke admissions by postcode

Postcode	Postcode area	2017/18	2018/19
DH1	Durham	51	56
DH2	Chester Le Street	37	42
DH3	Chester Le Street	27	35
DH6	Durham	65	47
DH7	Durham	56	63
DH8	Consett	55	63
DH9	Stanley	56	48
DL1	Darlington	66	70
DL12	Barnard Castle	24	26
DL13	Bishop Auckland	24	27
DL14	Bishop Auckland	56	80
DL15	Crook	38	45
DL16	Spennymoor	27	39
DL17	Ferryhill	53	32
DL2	Darlington	17	12
DL3	Darlington	56	65
DL4	Sildon	17	19
DL5	Newton Aycliffe	50	49
TS28	Wingate	1	2
TS29	Trimdon Station	1	0

Figure 14

Figure 14 shows stroke admissions by postcode area. There are a proportion of these admissions from ward 2 at UHND who are then transferred to ward 4 at BAH. The table has had the limited number of out of area admissions removed, so the data reflects admissions per postcode within the three CCG areas. As is evident there are admissions from across County Durham and Darlington who may require ongoing inpatient rehabilitation following their stay at UHND. Currently patients would be transferred to ward 4 at BAH which provides care closer to home for those in the Bishop Auckland area however not for those elsewhere in the county.

The GIRFT review process recognized the variability in community based rehabilitation and recommended a need to review in line with national policy and standards.

Further Recommendations from GIRFT Team

Therapy

- Increase therapy staffing on Acute stroke unit and provision for Early Supported Discharge (ESD) to facilitate discharge and reduce Length of Stay (LoS)
- **Consider ring fenced stroke therapy or Combined Stroke unit (acute and rehab) at single site**

Consultant Cover

- **Review of split site working to improve efficiency of medical workforce cover.**

6 month reviews

- To ensure data is captured on the SSNAP system

5.0 Patient Experience and feedback

CCGs and provider organisations have a duty to engage and consult on any potential major service change as described within the NHS Act 2006.¹

It was really important for the CCGs to understand people's experiences of stroke rehabilitation across County Durham and Darlington. The CCGs wanted to understand what currently works well and what could be improved, especially with regards to rehabilitation from a patient and carer perspective.

At this stage of the review the engagement needed to focus on people's experiences of services at UHND and BAH (if applicable) and within the community. This Pre-consultation Business Case (PCBC) outlines the preferred option in which to consult on. During this time there will be an outline of the current service and the proposal for future stroke rehabilitation services to seek views on.

The information below provides an overview of the different phases of engagement and a summary of some of the key themes which emerged as a result. The full communications and engagement report is available in appendix one.

¹ NHS Act 2006
www.legislation.gov.uk

Phase One

During November and December 2018, across County Durham and Darlington, a period of eight weeks engagement was undertaken by North Durham CCG and Durham Dales, Easington & Sedgefield CCG with past and current service users and local stakeholders to gather views about the rehabilitation services.

A range of engagement activities were carried out which included an online survey, local focus groups, service user engagement meetings and targeted engagement with groups with protected characteristics.

- There were over 160 responses to the engagement exercise
- Survey developed – used online and as a print out
- Spoke with existing community groups
- Patient survey carried out on the wards at BAH and UHND
- Social media used to publicise

Key Themes from Phase One

- Positive experiences of hospital care
- Limited dedicated community based stroke provision
- “Too many people involved in my care”
- People would value care closer to home
- People value peer support

What does good look like...patient engagement feedback

- Being cared for by one team during your hospital stay and into your home
- Providing information once, to a multi-disciplinary team
- Care is joined up and coordinated as part of a plan
- Known relationships with patient and family
- Improved patient experience and health outcomes

Phase Two

It has been recognised that further work was required to ensure that all views were captured from people who had recent experience of stroke services. The feedback that was received in phase one was comprehensive and to enhance this with more feedback from people who had had a stroke within the last year to gain further understanding.

As part of the review a patient engagement exercise took place with patients that have recently suffered a stroke. The engagement was carried out by the Stroke Association. The Stroke Association carry out holistic reviews of patients six months after they have had a stroke. This review provides the opportunity to assess whether a patient's needs have been met, to have their progress reviewed and future goals set and if further support is needed. This service is commissioned locally and both County Durham and Darlington patients were included in the dataset. Letters were sent to individuals with an

accompanying survey and pre-paid return envelope. During this engagement phase there were 79 responses.

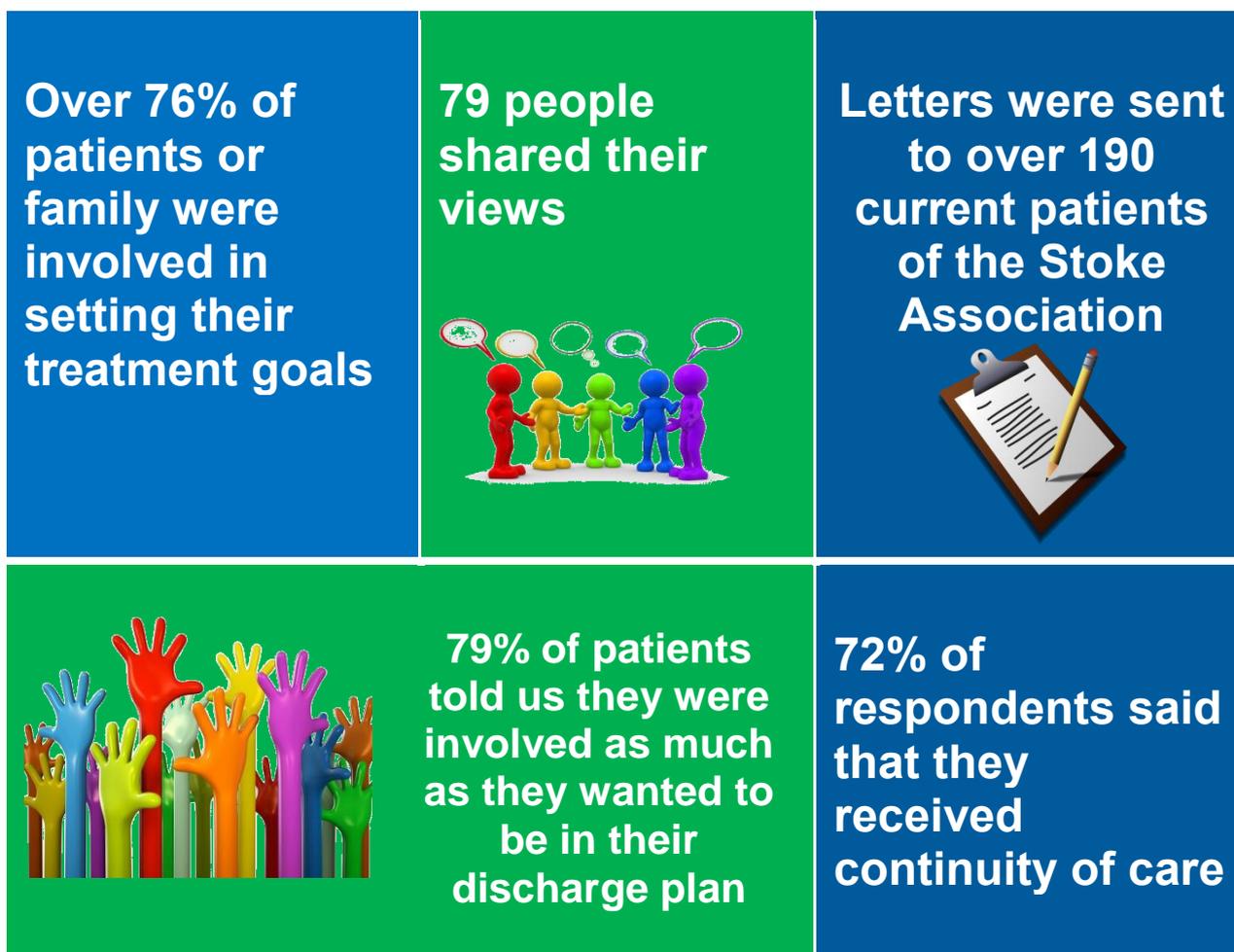


Figure 15

Key Themes from Phase Two

- On discharge from UHND the majority of patients 75% (45) patients went home, 22% (13) went to Bishop Auckland Hospital and 3% (2) went to intermediate care e.g.: a community hospital / residential home or another service.
- Many people felt they would have benefited from more therapy input both in a hospital and community setting
- Out of 59 respondents to the question, over 42% (25) said that they were contacted by a member of the Community Stroke Rehabilitation team within 24 hours of their discharge from hospital. Over 25% (16) said they were not and 30% (18) said they can't remember.

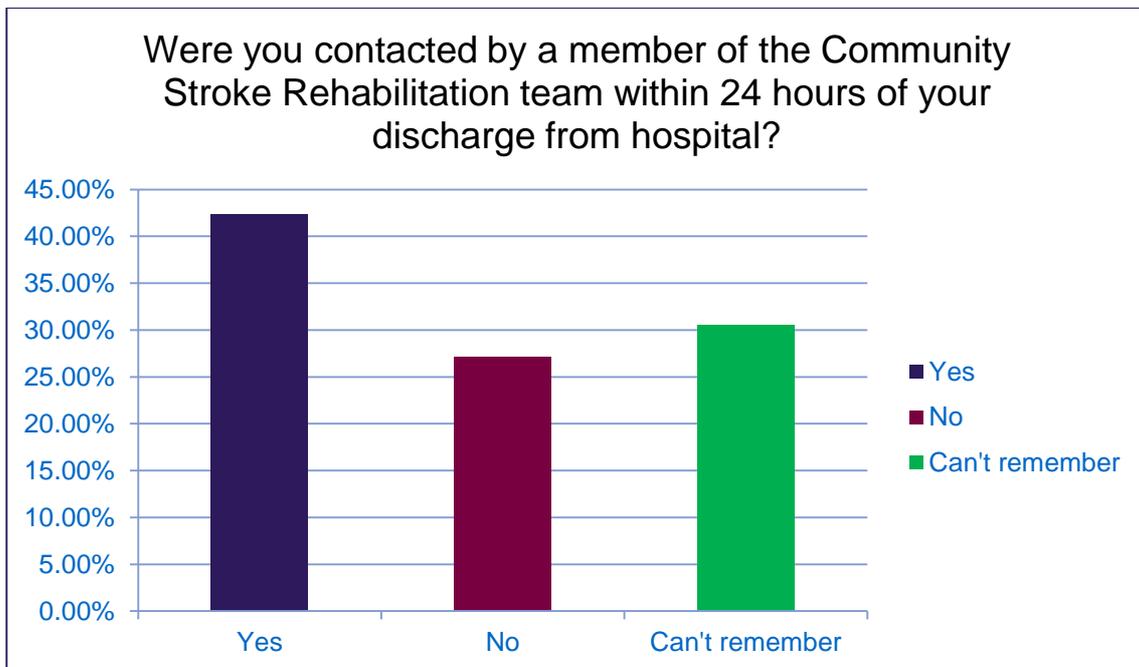


Figure 16

Some Comments

- “I was well looked after in both Durham and Bishop Auckland on both occasions and the help has helped me to remain positive”.
- “I received a lot more (therapy) at Bishop Auckland than at UHND”.
- “It was about four months before I received help from a very good speech therapist after returning home from Bishop Auckland Hospital”.

The information collected during phase one and two will be used to inform the overall decision making process regarding future provision for stroke rehabilitation across County Durham and Darlington.

6.0 Staff Engagement

Throughout the review of the stroke pathway, the CCGs have been working with staff across hospital and community based settings. We have had ongoing dialogue with the teams to understand the challenges faced and working with them to understand how stroke services could be maximised and improved for patients and their families.

The highly skilled staff within this area have been using their knowledge and expertise to outline where within the current service there maybe some gaps in terms of achieving the very best possible clinical outcomes. We have listened and involved them throughout this process (see options appraisal process section nine) and will continue to communicate and engage as we continue with this project.

7.0 Current State

This section outlines the current pathway for stroke services within County Durham and Darlington. The information below outlines the end to end pathway from prevention through to long term care, however the focus of this service review is on acute and community based rehabilitation (see section two).

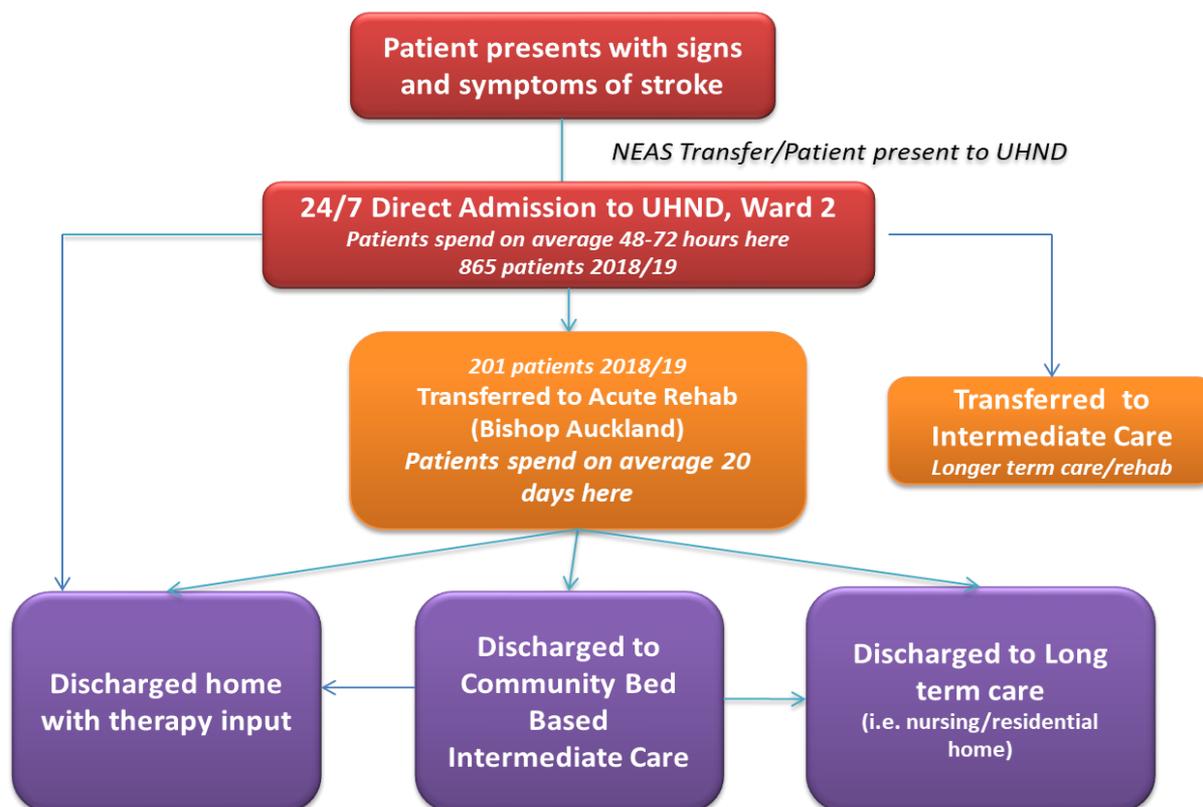


Figure 17

7.1 Stroke prevention

Atrial Fibrillation (AF) significantly increases the risk of someone suffering a stroke if left untreated. A programme of work is underway across local CCGs to improve the detection rates and treatment of AF. A programme of work has been rolled out within primary care to:

- Implement a local clinical pathway to reduce variation, improve clinical outcomes and reduce strokes
- Improve clinical confidence and knowledge across primary care networks
- To ensure medicines are optimised to treat and control patients diagnosed with Atrial Fibrillation and reduce the risk and incidence of AF related stroke

This work is being rolled out and evaluated in partnership with the Academic Health Science Network (AHSN).

7.2 Hyperacute Model of Care

People who are suspected as having had a stroke are taken as an emergency, usually via an ambulance directly to ward 2 which is a specialist hyperacute stroke unit at UHND. This unit has 24 beds currently. This service was implemented in 2011 and as the performance information (section 4.1) suggests the hyperacute elements are delivering high quality and high impact services.

It is expected that patients receive fast access to a specialist assessment from a senior clinician; they receive required diagnostics and are treated appropriately in a timely manner. Rehabilitation starts at the earliest opportunity and the ethos of recovery very much part of the culture. Discharge planning starts at an early stage with dialogue between clinicians, the patient and their family/carers.

The majority of patients (76%) are then discharged into the community for ongoing rehabilitation. Some are discharged for ongoing hospital based specialist rehabilitation on ward 4 at Bishop Auckland Hospital (24%).

7.3 Stroke Rehabilitation

There are currently 26 beds at BAH which are dedicated to inpatient based stroke rehabilitation, as detailed around 24% of patients currently use this facility from across County Durham and Darlington. There is however also an opportunity for other community hospitals to be utilised for rehabilitation. The current usage of these wards is shown in figure 18. This table identifies the number of admissions compared to the patient's location (broken down by locality).

Admitting Hospital	2018/19					
	Easington	Durham Dales	Sedgefield	Dton	Durham	Other
Weardale	2	209	26	20	87	2
Sedgefield	61	57	233	104	87	15
Richardson	1	291	58	216	8	32
Shotley Bridge	15	67	9	5	2294	81
Chester le Street	2	2	3		36	4
B16	2	20	21	9	19	3

Figure 18

Following the patient's hyperacute episode the majority of patients (76%) will be transferred home/residential care for ongoing community based specialist rehabilitation. For these patients there is variability in the level of care available depending on whereabouts in County Durham and Darlington the patient lives. Currently there is no transition between acute and community based services. At present the only stroke specific community service provided is within the Easington Locality.

There are also specialist neurological rehabilitation teams within North Durham. In the Darlington locality there is a Responsive Integrated Assessment Care Team (RIACT) in place to manage people in the community. There is generic therapy input as part of the community service throughout County Durham and Darlington, however currently the specialist stroke element is sporadic.

Currently some patients (24%) are transferred from the hyperacute ward at UHND to BAH (ward 4) for ongoing specialist rehabilitation. There are currently 26 beds on this ward. For these patients they are transferred by ambulance when they are clinically safe to do so and handed over to another team for the next phase of their care. Currently people stay on this ward on average for 20 days before then being discharged into the community.

In Darlington, 198 people had a stroke in 2017/18 and 216 in 2018/19. Of these 93% were admitted to CDDFT in 2017/18 and 91% 2018/19. People who have had a stroke in Darlington can receive rehabilitation and support through a number of services:

- RIACT which provides nursing and therapy services including specialist stroke and neuro but supports a broader therapy based need also across the community
- Rehabilitation beds – commissioned in block at Ventress Hall nursing home
- Stroke association – stroke recovery service
- DBC – Exercise after stroke

Rehabilitation provision in the community in Darlington is delivered via RIACT which is made up of a workforce which supports falls, stroke/neuro rehab and domiciliary rehab services including crisis response 8am-8pm, 7 days a week.

The service is made up of the following roles and WTE:

Role	WTE
Community Charge Nurse	1
Community Staff Nurse	4.5 (2 of these people are due to come into post) (3 of these roles rotate with DNs)
Associate Practitioner	3.8
Care and Support Worker	4.34
Clinical Lead Physiotherapist	0.56
Specialist Physiotherapist	2.2
Physiotherapist	1.45
Occupational Therapist	1
Specialist Occupational Therapist	1.45 (1 of these people are due to come into post)
Total	20.3

Figure 19

Overall activity for RIACT is as follows and demonstrates a 9% increase in referrals between 2017/18, and if activity continues as is in year, will see a further increase of at least 2% by the end of 2019.

	Total referrals to RIACT
2017	3302
2018	3605

2019 (up to 4th July 2019)	1837

Figure 20

The service acts as the first point of contact for RIACT and reablement service (DBC) and also manages access to the CCG fourteen commissioned rehabilitation beds also providing the rehabilitation support into these beds and additionally to those eligible for community RIACT services as part of an intermediate care model of care, for up to a period of 6 weeks.

Eligibility and exclusion criteria's for the fourteen rehabilitation beds is as follows:

Eligibility:

- Are aged 18 or over, with an identified rehabilitation need
- Do not require the involvement of a secondary care medical consultant
- Are medically optimised to be managed in the community by primary care (GP)
- Registered with a Darlington GP
- Is recovering from an acute health episode which no longer requires hospital care and can be safely managed in a rehabilitation bed
- Would benefit from a period of rehabilitation to enable onward discharge to home
- Are prepared to engage in a programme of rehabilitation
- Palliative patients with rehabilitation potential
- Cannot be supported by health domiciliary care or other community health services (continuing health care residents are excluded as the district nursing service now can commission independent sector placements/ domiciliary care)

This service will exclude the following: (not intended to be exhaustive or exclusive)

- Adults whose primary need is for specialist mental health care.
- Children under 18 years of age.
- Residents who require 24 hour nursing care.
- Residents who are not registered to a GP practice in Darlington.
- Individuals at high risk of self-harm to themselves or who may pose a risk of harm to others or who have behaviours that cannot be safely risk assessed and managed in Ventress Hall.
- People with End of Life Care needs.
- Residents who are able to be cared for in their own home.
- Residents where the sole reason for admitting is dementia or deterioration in cognitive functioning. (Physical Care needs must outweigh any mental health needs and must be the primary reason for admission. Increasing confusion due to a physical problem should not be excluded.)
- Carer crisis - these residents should be referred to Social Services
- Residents who require medical intervention other than that which can be provided by a GP/community services.
- Residents who are unable to participate in a rehabilitation programme due to an acute state of confusion such as delusion.
- Residents who refuse to engage in a rehabilitation programme

Capacity and Demand for current bed based rehabilitation beds is highlighted below and demonstrates that the usage is consistently in the region of 80% which means that the beds are not being used to capacity. However, in 2018/19 there is a pattern emerging of increased breaches, identifying a challenge in either discharging people from services in a timely manner, or being able to meet the needs of those within the service to meet their rehab potential within the allotted six weeks as part of the current intermediate care service:

Figure 21

	Total Number of Admissions	Percentage Occupancy (Average)	Number of Breaches (exceeding 6 weeks stay)
2017/18	211	83%	0
2018/19	190 ¹	81% ²	19

¹ March Admission figures for Eastbourne were not provided and are not included.

² Excludes March 2019 as Eastbourne LOS information was not provided.

	Total referrals to RIACT	Total referrals that were recorded as stroke/neuro	% of RIACT activity currently supporting stroke and neuro as coding does not go into more detail to allow detailed analysis
2017	3302	413 (average of 34 per month)	12.5%
2018	3605	434 (average of 36 per month)	12%
2019 (to 4th July)	1837	206 (average of 34 per month)	11.2%

Figure 22

7.4 Psychological Support

Currently there is no dedicated clinical psychological support available for people who have suffered a stroke; however patients have access to the Improving Access to Psychological Therapies (IAPT) service. Psychology will be reviewed at a later stage in this programme of work and links have already been made between the Stroke Consultants and local Psychologists to scope potential future provision.

7.5 Stroke Recovery Service

NHS Darlington CCG commissioned the Stroke Association to deliver an Advice and Support service for people living in Darlington who had been diagnosed as having had a

stroke. This service was commissioned following the decommissioning of a joint collaboration between North Durham and DDES CCG's. The service offers information, emotional support and practical advice and signposting to stroke survivors, their families and carers and is delivered by a single Support Coordinator employed by the National Stroke Association. The service is funded non-recurringly (£20000) via the Better Care Fund, which ends on 31st March 2020

People remain open to the service for up to 12 months, and the service has been undertaking the 6 month reviews as part of this offer, at the request of CDDFT. NICE recommend that 6 months after a patient suffers a stroke their health and social care needs should be reviewed to ensure any additional needs the patient may have are identified. This is done by the Stroke Association as part of the Stroke Recovery Service, who use the Greater Manchester Stroke Assessment Tool (GM-SAT) to complete the assessment. Both Health and Social Care needs should be assessed during this review; therefore CDDFT would be best placed to carry these out, as opposed to the stroke recovery service.

Source of referral	Total referrals 2018/19
GP	2
Health (except GP or TIA)	135
Self-referral	4
Speech and language therapy	1
TIA Clinic	1
Total	143 – represents 66% of those who have had a stroke in 18/19

Figure 23

7.7 Exercise After Stroke

The Exercise After Stroke Programme, is provided by Darlington Borough Council and funded non-recurringly (£9000) via the Better Care Fund, which ends on 31st March 2020. The service provides access to safe and effective exercise for patients diagnosed with Stroke and TIA, with the aim of giving patients increased confidence and skills to be physically active and to carry out activities of daily living. This is provided in the form of group sessions which guide people through a variety of exercises. For the small number of people who are able to, there is an option to go through to the gym to use the equipment, but this is dependent on the availability of one of the two suitably qualified instructors.

Referrals into this service must be made via a health professional to ensure that the patient is medically fit to undertake the exercises. Once the referral is received, an assessment is undertaken with the patient which determines which service is suitable for their needs, the Exercise After Stroke Service or the Health Referral Scheme (The Health Referral Scheme may be more appropriate for patients who are able to carry out more exercise than the Exercise After Stroke service offers).

Measures for Exercise after stroke	Total activity 2018/19
No of new referrals into the service from Stroke Association	22
No of new referrals into the service from GP's/ Practices	6
No of new referrals into the service from RIACT	0
No of new referrals into the service from other sources	0
No of sessions of 12 week programme	104
Total attendances for the 12 week programme	1156
No completing the 12 week programme	26
No. of people who progress from the 12 week programme to ongoing regular exercise programmes.	20

Figure 24

Referrals into the service represent 13% of the overall number of people who had a stroke in Darlington in 18/19.

8.0 Case for change – Stroke Rehabilitation

The current model of stroke rehabilitation care is inequitable across the county and not compliant with national evidence and best practice.

As you will see from figure 17 the majority of people are discharged from UHND into a community setting and receive varying levels of therapy input. There is also a proportion who require longer acute specialist rehabilitation who are currently transferred to BAH ward 4.

8.1 Acute based rehabilitation

The resource for acute based stroke services is currently stretched across two sites – this includes consultant, nursing and therapy based provision. Acute based rehabilitation is delivered from both UHND and BAH sites currently. The current LoS on ward 4 at BAH is 20 days and national best practice suggests this should be no longer than 7 days. It is recognised however that one of the major causes of this prolonged LoS is that currently clinicians do not feel confident in the level of provision being offered in the community. Clinicians feel that they “hold onto” people for longer in a hospital setting whereas if there was a robust and consistent community based rehabilitation service in place they would discharge people at an earlier opportunity.

8.2 Community based rehabilitation

During 2018/19 a total of 865 patients suffering a stroke were admitted to UHND, a significant proportion of which would require some level of stroke rehabilitation in the community each year.

National research suggests 41% of stroke patients would benefit from community stroke rehabilitation, a total of approximately 354 of the 865 patients would be requiring community rehabilitation in our area recognising that the physical and mental capacity to participate in rehabilitation varies widely from person to person.

Within the North Durham, Durham, Dales Easington and Sedgefield and Darlington CCG areas there are differences in the community therapy rehabilitation provision for patients who have sustained a stroke and who require rehabilitation following their in-patient stay.

Historically community stroke services have been formed in an unstructured way in an attempt to cope with demand but with limited funding opportunities. To reduce the impact of this postcode lottery in terms of provision, and for the benefit of the patient population group we serve, there is a need to provide a standardised community rehabilitation pathway for patients who have suffered a stroke to follow.

Additionally the current geographical inconsistencies in provision cause difficulties in managing expectations and the opportunity to optimize rehabilitation potential.

There is currently a designated stroke community service operating within Easington locality, however in the other Localities there is a variable levels of community stroke rehabilitation delivered as part of a wider therapy service provision. Those gaps / limitation of community rehabilitation provision contribute to increased length of stay in hospital.

8.3 Gaps within current state vs. best practice

Policy Context	Key Theme	Gap in Current Provision
Stroke Strategy 2007	Hand offs of care	The current pathway promotes multiple transfers of care
NHS England's Quick Guide: Discharge to Assess and benefits for older, vulnerable people.	Discharge to assess	Therapy assessment takes place within a hospital setting rather than in the person's home setting
Stroke Guidelines 2016	Equity of access to comprehensive specialist community rehabilitation	Current community based rehab services are inequitable across County Durham
SSNAP Audit 2016	Levels of recommended therapy input	Rehabilitation within the community doesn't provide the intensity required as detailed in national guidance

SSNAP Audit 2016	Levels of recommended therapy input	Patient based outcomes could be improved upon e.g. time for therapy based interventions
Stroke Specific Education Framework	Efficient use of clinical staff	Currently staff have to cover two sites, for example medical rotas for consultants are difficult to manage and sustain with limited workforce
NICE guidelines - continuity of care and relationships in adult NHS services	Continuity of care	Currently many patients are handed off to another team so patients don't have the familiarity of staff
Stroke Specific Education Framework	Effective recruitment and retention of staff	The expertise is diluted currently across two sites and staffing levels are limited – lack of contingency
Stroke Guidelines 2016	Early supported discharge	Currently not in place

8.4 Workforce challenges

As described the current service model for acute stroke rehabilitation is spread across two sites – UHND and BAH. This means that staffing is stretched across different locations and there is an inability to operate as “one team”. In terms of medical staffing, there is a requirement to have consultant leadership in place across both sites. Due to the limited medical workforce this creates a further difficulty in relation to planning rotas and the sustainability of this longer term. As discussed in a recent GIRFT visit it was highlighted that although CDDFT were managing to ensure clinical standards were upheld they did share their concern regarding the ability to maintain medical cover on multiple sites in the longer term. Staff time isn't used as efficiently as it could be due to travel time required between sites.

Within the current model there is a reduction in the levels of contingency in place across all staffing groups. The sense of “team” is somewhat lost, particularly in relation to training and team working. Ideally all staff groups would benefit from caring for people throughout their acute episode, learning from each other and creating development opportunities for staff. The service feels that the current model potentially inhibits their ability to effectively recruit and retain staff, particularly in relation to the therapies workforce.

They will also lead to an exacerbation of the workforce challenges we are already facing. Staff frustration at being unable to provide the care to the standard they know is needed can lead to lower morale, recruitment and retention problems, leading ultimately to reduced staff productivity, and reliance on high-cost bank and agency staff.

County Durham and Darlington stroke services want to promote their model of care to demonstrate that it is a great place to work; to retain and attract the very best in terms of highly skilled and competent staff.

8.5 Financial challenges

- Inefficient care models are driving up costs. Insufficient focus on prevention and treating people in the wrong care setting both push up the cost of care. This is most obvious in the occupation of acute beds by patients who could have been better treated in community settings, discharged sooner, or whose admission could have been avoided in the first place.
- The current service model means that there are two sets of running costs dual to the dual site model.
- The cost of bank and agency staff has an impact on all services. Any initiative implemented to improve the recruitment and retention of staff, means that limited resources can be used to provide high quality direct patient care.
- Unwarranted variation in clinical practice is increasing the cost of care, increasing opportunity cost through increased claims on clinical time, or both.

9.0 Options Criteria & Process

A clinically led group was set up to develop options for the future model for acute stroke rehabilitation across County Durham and Darlington. Representation on the group included specialist stroke consultants, matron, ward sister, therapy leads, operational managers and commissioners. Alongside this the group had access throughout to the feedback received from the engagement work which was done with patients and their families who have recently had experience of local stroke services.

The criteria, which was used to measure options against, was the same used during the exercise completed in 2011 for the reconfiguration of hyperacute stroke services (see section 4). The criteria used are shown in the table below, were chosen to help ensure a high quality, long term acute stroke rehabilitation service for County Durham and Darlington.

Clinical quality	Maintains or improves clinical outcomes; timely and appropriate services; minimises clinical risk	Patient, Public and carer Engagement – Experience and Feedback
Sustainability/flexibility	Ability to meet current and future demands in activity; ability to respond to local/regional/national service changes	
Equity of access	Reasonable access for urban and rural populations	
Efficiency	Delivers patient pathways that are evidence based; supports the delivery though access to resources	
Workforce	Provides environments which support the recruitment/retention of staff; supports clinical staffing arrangements	
Functional suitability	Provides environments suitable for delivery of care; clinical adjacencies with other relevant services/dependencies e.g. imaging	
Acceptability	Acceptable to service users, carers, relatives, other significant partners	
Cost effectiveness	Provides value for money	

Each option was assessed against the range of criteria identified by the multi-disciplinary group with supporting information used from the patient engagement exercise carried out.

9.1 Options Appraisal

The table below outlines the options that were assessed. There were further scenarios which were explored but they were discounted on the grounds of being unable to meet core clinical safety standards at an early stage. This included the inability to house both hyperacute and acute rehabilitation at BAH. The main reason for this being disregarded as an option is the fact that there are no critical care facilities available at this site. Without critical care the unit would be unable to accept people at the point of emergency i.e. immediately following a stroke.

On this basis there are essentially two options to consider, one of which includes continuing to deliver the current model of service.

Option	Description
1	Do nothing
2	Co-locate in-patient rehabilitation care within hyperacute facility (UHND) and develop an effective and seamless community rehabilitation service.

The options appraisal process was undertaken and each option was assessed against the criteria and given a score out of 10 for each component. The table below summarises some of the key points raised and outlines the scores for each element.

Option one – do nothing

Criteria	Score (out of 10)	Narrative
Clinical quality	5	<ul style="list-style-type: none"> Majority of SSNAP indicators met Issues in relation to therapy quality indicators unable to be met Unnecessary hand-offs between teams on each site
Sustainability/flexibility	4	<ul style="list-style-type: none"> As medical advances continue, length of stay reduces and there is an emphasis on care closer to home i.e. in the community Operating two sites is not sustainable in terms of workforce Loss of clinical time available due to travel
Equity of access	8	<ul style="list-style-type: none"> BAH is closer for acute rehab for those who live in the South of County Durham and Darlington Currently those in the North are travelling to BAH All patients have access to same level of inpatient care
Efficiency	6	<ul style="list-style-type: none"> Increased length of stay, which could be improved by more effective discharge processes and community provision Transport required to transfer patients between sites

Criteria	Score (out of 10)	Narrative
Workforce	6	<ul style="list-style-type: none"> • Staff are diluted across two sites • Limited consultant workforce required to cover multiple rotas • Learning and development opportunities reduced • Workforce complement doesn't provide medical cover 24/7 at BAH
Functional suitability	6	<ul style="list-style-type: none"> • Facilities at BAH suitable for rehab • Where a patient becomes medically compromised there may be a need to transfer back to UHND
Acceptability	6	<ul style="list-style-type: none"> • The level of care experienced by patients and their families at both sites is good overall • People in the south of the county and in Darlington benefit from the location
Cost effectiveness	5	<ul style="list-style-type: none"> • Operating two stroke acute sites is not cost effective • The money could be better used to firm up staffing to enable contingency • The cost of transport in relation to transfers across sites needs to be taken into account
Total	46	

Option two – Co-locate in-patient rehabilitation care within hyperacute facility (UHND) and develop an effective and seamless community rehabilitation service.

Criteria	Score (out of 10)	Narrative
Clinical quality	5	<ul style="list-style-type: none"> • Majority of SSNAP indicators met • Issues in relation to therapy quality indicators unable to be met • Unnecessary hand-offs between teams on each site
Sustainability/flexibility	4	<ul style="list-style-type: none"> • As medical advances continue, length of stay reduces and there is an emphasis on care closer to home i.e. in the community • Operating two sites is not sustainable in terms of workforce • Loss of clinical time available due to travel

Criteria	Score (out of 10)	Narrative
Equity of access	8	<ul style="list-style-type: none"> • BAH is closer for acute rehab for those who live in the South of County Durham and Darlington • Currently those in the North are travelling to BAH • All patients have access to same level of inpatient care
Efficiency	6	<ul style="list-style-type: none"> • Increased length of stay, which could be improved by more effective discharge processes and community provision • Transport required to transfer patients between sites
Workforce	6	<ul style="list-style-type: none"> • Staff are diluted across two sites • Limited consultant workforce required to cover multiple rotas • Learning and development opportunities reduced • Workforce complement doesn't provide medical cover 24/7 at BAH
Functional suitability	6	<ul style="list-style-type: none"> • Facilities at BAH suitable for rehab • Where a patient becomes medically compromised there may be a need to transfer back to UHND
Acceptability	6	<ul style="list-style-type: none"> • The level of care experienced by patients and their families at both sites is good overall • People in the south of the county and in Darlington benefit from the location
Cost effectiveness	5	<ul style="list-style-type: none"> • Operating two stroke acute sites is not cost effective • The money could be better used to firm up staffing to enable contingency • The cost of transport in relation to transfers across sites needs to be taken into account
Total	46	

9.2 Preferred Option

Following consideration of the necessary risks and challenges for each option, option two is the preferred model for future service delivery.

The preferred model will be assessed using NHS England's four key tests in relation to major service change which is fundamental to any proposed transformation.²

1. Strong public and patient engagement
2. Consistency with current prospective need for patient choice
3. Clear clinical evidence base
4. Support for proposals from clinical commissioners

The preferred model will need to provide assurance against the fifth test affecting bed reconfiguration:

- Demonstrate that sufficient alternative provision, such as increased GP or community services is being put in place alongside or ahead of bed closures and that new workforce will be there to deliver it.
- Show that specific new treatments or therapies, such as new anti-coagulation drugs used to treat strokes, will reduce specific categories of admissions.
- Where a hospital has been using beds less efficiently than the national average, it has a credible plan to improve performance without affecting patient care for example Getting it Right First Time Programme (GIRFT)

The preferred option following the appraisal for a new model for specialist stroke rehabilitation services is to consolidate services at UHND. This recommendation follows a process of evaluation on a range of options based on the information available at that time. The service will deliver better care, value and quality for our local population and wider neighbouring geographical areas.

The proposal moves inpatient stroke rehabilitation from ward 4 at BAH and re-provides the service at UHND as a specialist stroke unit with supported discharge. Retaining ward 2 at UHND is important to the stroke pathway as it is on the ground floor of the building with quick access to radiology for urgent CT scanning, has access to a gymnasium on the unit and close access to other rehabilitation facilities within the OT and physio department. By combining the two units and applying the better value efficiencies of 20%, there will be an average length of stay reduction to 9.09% days.

The better values for stroke applied are based on:

- One site provision with combined therapy resource gives immediate benefit of a consistent parent team and reduces handovers and waste.
- Eradicates the need to transfer patients between sites.
- Earlier therapy intervention will improve the frequency of ward based treatment which will enable reduced length of stay.
- A clinician will follow the patient home for up to two visits to support discharge.

² Planning, assuring and delivering service change for patients
NHS England
www.england.nhs.uk

The net reduction in stroke is eight beds as compared to the current model. However there has been a review of current bed utilisation across all CDDFT estate to ensure that all acute and community bed provision is optimised and care is delivered closer to home wherever possible. The Trust have given assurance that they could house the additional beds if BAH stroke rehabilitation unit was to move to UHND due to their clinical effectiveness and efficiency programmes and bed reconfiguration measures.

The better value calculation (of 20%) is based on innovation and improvements to productivity, of which the Trust is currently implementing several initiatives for example SAFER (explained in section four); which has been rolled out across stroke, care of the elderly and medical wards.

CDDFT has increased the trusted assessor resource to facilitate “Discharge to Assess”, and “Assess to Admit”, along with recent improvements to internal discharge facilities to allow an increase in the daily usage of discharge lounges.

The investment in community services has also been taken into account. By developing the specialist community stroke rehabilitation provision acute clinicians will feel confident in discharging patients in a timely manner, which will ultimately reduce length of stay. Overall proposed changes to bed numbers across CDDFT:

CDDFT are currently reviewing the levels and location of all of their beds across County Durham and Darlington to ensure that they best meet the needs of the local population. The realignment of beds would mean that there are a higher proportion of people who require inpatient rehabilitation who would be treated within a community hospital closer to home.

9.2.1 Community Stroke Rehabilitation

The ward based stroke therapists will provide two home based therapy interventions in the first two weeks post discharge. This will ensure a more streamlined and coordinated hand-over to a stroke specific community pathway (provided by designated community staff) delivering ongoing community based care.

Darlington patients will utilise the community based service model as described in section seven.

10.0 Benefits Realisation

What are the benefits to patients of consolidating specialist inpatient rehabilitation onto the hyperacute site with a transition model into the community?

The main aim of the proposal is to deliver best practice and service provision which includes rehabilitation for stroke sufferers on one site and allows care to be delivered in the home rather than at hospital at the earliest opportunity.

Delivery of patient care on two sites is no longer fit for purpose and this is reflected in the deterioration in SSNAP data for therapies. The two site model does not facilitate delivery of the seven day service for all patients. Stroke patients will benefit hugely having care centered in one place as they will be admitted directly to UHND, receive acute care and move toward rehabilitation on the same site. This will eliminate the need to transfer patients to BAH for rehabilitation. Transfer does cause a delay and confusion for many patients, as a further assessment of their condition takes place and a new team is allocated to manage their care.

The benefits of a Combined Stroke Unit will include:

- Patients not being transferred around the system
- Medics would see patients across the whole pathway
- Redirection of resources in therapy staff
- Patients would see other patients recover helping to promote a positive mindset
- Reducing stress on patients having to move across sites
- Sometimes patients are unable to do swallow assessment with x-ray before discharge to BAH, the patient then has to return to have assessment at UHND. This causes stress to the patient and family and additional nurse time is required (for a minimum of 2 hours per patient) and the requirement of an ambulance
- Patients who deteriorate overnight are currently assessed by an Advanced Nurse Practitioner (ANP) at BAH. At UHND this is a consultant who can provide a more skilled assessment and urgent treatment if required.
- Ongoing consistent access to specialist stroke consultants, including out of hours assessment by specialist stroke consultants and the necessary multi-disciplinary team
- This model would enable joint acute and rehabilitation patient goals
- There would be a single joint care plan from the outset improving the clinical outcomes which would enhance patients' recovery following stroke
- The model would support an earlier discharge from hospital
- The model would provide continuity of care from hospital to home
- The ability to provide a more equitable service for all patients

Workforce

- Team training, team building and so greater understanding of roles that will aid a patients care pathway.
- Easier to plan medical rotas and more efficient use of staff

- Consolidating therapy staff onto one site means that posts are easier to recruit to – there is a better skill mix, support and feeling of team, contingencies in place and concentration of expertise, creating a learning and development culture.
- The preferred model could improve the reputation nationally and regionally for the stroke service
- Improved relationship with community team and social care with only one discharging site, ensuring the patient remains at the centre of the pathway
- Improved recruitment and retention of all staff
- Six month review service – currently the Stroke Association (SA) have to visit two sites, (3 times per week at UHND and once per week at BAH) a single site would allow further support/developments with SA and improve MDT working.

Better use of resources

- It would enable capacity to deliver reduced length of stay from supported discharge
- Enable compliance with national best practice on ALoS for stroke rehabilitation
- It would be a more cost effective service for the whole system
- Clinicians feel it would help to improve SSNAP compliance
- Increase in therapy complement due to better use of resources

Quality and performance

- Greater ability to sustain hyper acute performance
- The model would help to improve SSNAP rehabilitation data
- Preventing admissions to hospital (for acute rehab) where appropriate.
- Facilitating and supporting discharge from hospital in a timely manner

Further details of benefits realisation for therapy support are highlighted below:

- Consolidating the whole Stroke MDT will allow more efficient proactive scheduling of all therapy provision giving patients an individualised patient focussed rehabilitation plan as well as allowing better cover for unplanned staffing absence.

Speech and Language Therapy (SALT)

- The Speech and Language Therapy workforce fully support this stroke service transformation. Centralising Stroke services on one site will have a number of patient experience/patient outcome benefits for communication and swallowing impaired patients. Communicating basic every day needs and consenting for treatments for this patient group can be a daily struggle where a patient has suffered both comprehension and verbal communication disabilities (dysphasia, dyspraxia, dysarthria, and dysphagia) in addition to other new disabilities.
- Transitioning to another hospital part way through the stroke pathway is less than ideal for this vulnerable population as both nursing and AHP staff will have built-up rapport with the patient and their families/ carers and begun to use effective communication strategies in the hyper-acute phase. If the patient is then

transferred this all needs to be re-established with a new MDT team on a different site which can be very frustrating for a patient with word-finding difficulties.

- Consolidating existing SALT staffing from both sites will help to increase the amount of available SALT provision to the combined unit, improving SNAPP scores from a consistent poor grade E mark so that those patients who require 5 x 45 minutes will receive a higher intensity of Speech Therapy which complies with National RCP Guidelines. This will improve patient outcomes in both communication and swallowing function, reducing the risk of social isolation, depression, long-term tube-feeding costs as well as reducing the burden on the overall healthcare economy and social care costs.

Occupational Therapy (OT)

- With the preferred model there would be less duplication on handover, a greater level of consistency in therapy staff involved with each patient and their families (i.e. key therapist).
- Less distress associated with the physical transfer between hospital sites.
- Less risk of belongings becoming lost in transit.
- Pooling of staff resource on one site will aid 'spreading cover' during annual leave, staff absence due to sickness/ training/and when staff are off the ward on community visits it is easier to manage and plan.
- Co-location of a larger staff group lends itself to improved colleague support/ communication.

Dietetics

- The preferred model would enable dedicated nutritional intervention and care planning for stroke patients; it is known malnutrition is the biological substrate for frailty.
- Pre stroke a patient may not be malnourished, if not appropriately assessed and treated nutritionally with individualised care plans the stroke patient may be unable to maximise their rehabilitation potential.
- With the aim of optimisation of recovery from stroke, the dietetic role will be to support patients home when their nutritional status is still uncertain, correct dietary intake may not yet be clear to the patient and their carers and the nutritional supplement choice may require change.
- Appropriate advice on alerted consistency diets will aid quality of life for this patient group and this will be facilitated by dedicated dietetic time within the stroke team.
- Full assessment and follow up care planning will enable improved rehabilitation with physiotherapy and occupational therapy to be optimised as the patient will have an optimised nutritional status.

Physiotherapy

- The preferred model enables the ability for the same staff to be involved for the patient's whole pathway.
- Improved familiarity with staff as rehabilitation progresses aiding acceptance of change due to condition and preparing for discharge home.
- Improved relationships for families with medical team as no change between sites.

- Team training can occur, team building and so greater understanding of roles that will aid a patients care pathway.
- Improved relationship between community team and social care ensuring the patient remains at the centre of the pathway from one discharging site.

Estates benefits

- CDDFT value BAH site, which is a pivotal resource in delivering patient care particularly for the frail and elderly population.
- We do not anticipate depleting this hospital resource but allocating wards to stroke rehabilitation on a separate site to acute stroke care impedes the delivery of best practice for patients who have suffered a stroke.
- The preferred single site option increases capacity at BAH to deliver excellent patient care relating to other services, particularly the growing frail elderly population.

11.0 Risks

The associated risks with the preferred option have been reviewed and mitigations would be actioned if it was agreed to commission the proposed model of care. The table below details these risks and accompanying mitigations.

Risks Associated with Preferred Model	
1	Risk – Demand on beds outstrips capacity
	Mitigation – The clinical team have used best practice guidance which confirms that LoS is reduced where teams are consolidated and robust community services are in place. The service will be intensely monitored if the new model is rolled out.
2	Risk – Patient flow is compromised due to site pressures
	Mitigation – Modelling work has been undertaken to ensure the optimum level of beds is achieved. Service implementation will be carefully monitored to ensure that any delays in the system are addressed at the earliest opportunity.
3	Risk – The proposed model doesn't achieve its ambition in terms of improving recruitment and retention levels
	Mitigation – CDDFT will work with the service to explore ways of promoting the new model of care and set out a clear OD plan for delivery

12.0 Testing out the Preferred Option

In addition, the PCBC seeks to demonstrate compliance with the NHS England four tests of service reconfiguration:

- strong public and patient engagement;
- appropriate availability of choice;
- clear, clinical evidence based; and
- clinical support.

What this means for patients

Overall 26% of all stroke cases from UHND currently transfer to BAH, 217 patients who currently transfer to BAH are:

- 38% are from North Durham locality,
- 36% are from DDES locality,
- 21% from Darlington locality
- 4% from out of area.

The removal of the transfer to another site reduces the amount of time patients need to be in hospital.

It is important to note that at present all stroke patients are admitted to UHND for acute stroke assessment and treatment. With this proposal, all patients requiring stroke rehabilitation will remain on the same ward in the CSU rather than transferring to another site. Continuing on the pathway in UHND will ensure that patients receive specialist dedicated stroke rehabilitation from one single MDT. If on-going stroke rehabilitation is needed, the primary aim is to discharge the patient home with outreach from Stroke ward therapy staff.

The single site model negates the need for transfer to BAH where multiple handoffs don't add value to patient care. With this proposal we can assure patients of best practice stroke care for optimising their recovery however, 'Patient Choice' can be incorporated into the proposal.

Patients will be presented with the evidence that a single, combined pathway is the option with the best outcomes for patients who have suffered a stroke and will be encouraged to follow the pathway which will enable those best outcomes to be achieved. This is based on intensive, daily rehabilitation therapy post stroke 7 days per week.

The patients who are cared for on the CSU will demonstrate a shorter LoS than now with earlier discharge facilitated by offering stroke rehabilitation at home from the therapy staff based on the combined stroke unit. These staff will offer up to 2-3 home visits to enable stroke rehabilitation at home and, if deemed necessary, transfer on-going follow-up to the community from RIACT staff.

There may be some patients who are too vulnerable to be discharged home for stroke rehabilitation and, whilst this is anticipated to be the vast minority, those patients must be offered an alternative. There may also be a small number of patients who do-not wish to go home for stroke rehabilitation, for whatever reason, and these patients must also be offered an alternative demonstrating our commitment to patient choice.

That alternative is a choice of community hospitals, wherever possible, for their rehabilitation care but it must be noted that this does not comply with best evidence

(reference). BAH is one of the hospitals that will be offered as a possible place for rehabilitation as described.

This model will continue to fit with the plans for developing specialist frail elderly pathways of care as the beds freed up by combining stroke rehabilitation from BAH and ward 2 at UHND, will be utilised for direct admission from the community team, to facilitate more appropriate care for this growing number of frail patients within County Durham and Darlington. It is anticipated that the beds at community hospitals, including BAH, will be fully utilised from this pathway development but every effort will be made to accommodate those patients who express a preference for rehabilitation following a stroke outside their place of residence.

Such follow on care for those people who have suffered a stroke will take place on wards 6 or 16 at BAH, Francizca Willer Ward at Sedgefield, Starling ward at Richardson or Weardale Community Hospital; it must be noted that these facilities offer only general rehabilitation and not dedicated stroke rehabilitation. The staff from ward 2 (CSU) at UHND will offer the first 2 or 3 stroke rehabilitation visits as they would for those patients going home but then instead of handing rehabilitation care to the RIACT staff, should it still be required, will hand over continuing care to the general rehabilitation staff.

At this point it is not possible to calculate how many people will choose to follow this pathway for stroke rehabilitation but current under-utilisation of some community beds will enable those people who choose a community hospital for their rehabilitation to be accommodated. However, this model does not follow documented best practice and this will be discussed with patients at the time on an individual basis.

The CCGs and CDDFT are proposing to co-locate stroke rehabilitation in-patient provision to the one site at UHND. This service delivery change will bring CDDFT in line with the approach of other Trusts delivering stroke services with acute stroke assessment and rehabilitation on one site (avoiding disruption to patient flow and supporting continuity of treatment).

Patients will be discharged home with care and support from the stroke community rehabilitation team. For the small proportion of patient that require in-patient provision for a longer period of time, will be transferred to the Community Hospitals across the County close to their home, for example Weardale, Richardson and Sedgefield Community Hospitals.

Patients' value therapy and the effect it can have on their recovery. There is strong evidence to show that skilled therapy provided at the right intensity can greatly improve outcomes. Some patients, especially soon after stroke, are not well enough for therapy, or get very tired, and cannot tolerate much. Many patients, though, feel they do not get enough therapy on the stroke unit that is productive, especially at the weekend. It is recognised by the NHS that stroke patients need to be offered greater intensity of rehabilitation after their stroke both in hospital and when their care is transferred to home.

The proposed model contributes towards the CCG's priorities to provide high quality care closer to home.

13.1 Service Model

Patients will be discharged home with care and support for a period of time by the acute therapy teams before being transferred to the community stroke rehabilitation team. The proposed service model (figure 25) outlines the need to shift the emphasis of stroke rehabilitation care from an inpatient setting into the community – delivering care closer to home.

For the small proportion of patients that require in-patient provision for a longer period of time, they will be transferred to the Community Hospitals across the County close to their home, for example Weardale, Richardson and Sedgfield Community Hospitals.

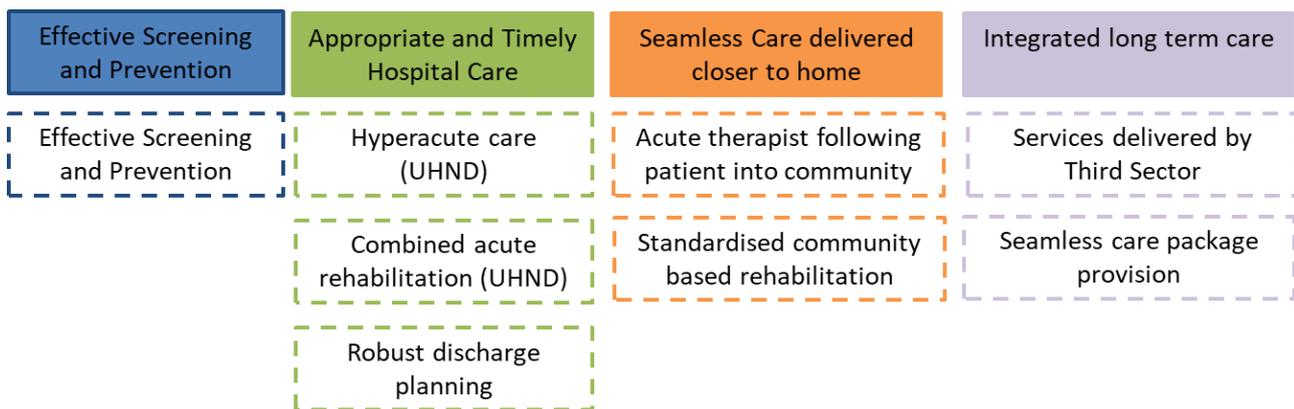


Figure 25 - Stroke Proposed Model of Care

13.2 Referral and Access

Patients registered with a member GP practice of Hambleton, Richmond and Whitby CCG may also have their rehabilitation care transferred to BAGH following in-patient stroke care at James Cook University Hospital (JCUH). Discussions have taken place with the CCG regarding the proposal to co-locate rehabilitation care to the UHND site therefore provision for this population will be considered as part of the consultation process.

13.3 Specific Measurable Outcomes

Focusing on outcomes is one way of enabling the transformational change required in the healthcare system. Outcomes need to be meaningful to people who use rehabilitation services and enable them to maximise their potential, manage their healthcare themselves and promote independence. The Government's Mandate to NHS England for 2016-17³ has an expectation that improvements will be demonstrated against the NHS Outcomes Framework⁴ so as to provide evidence of progress and enable comparison of services locally.

Consideration will be given to the level of outcome data to collect which demonstrates a patient centred approach and impact upon their individual rehabilitation goals.

³ The Government's Mandate to NHS England for 2016-17
www.gov.uk/government/publications/nhs-mandate-2016-to-2017

⁴ NHS Outcomes Framework
 Department of Health (2014) The NHS outcomes framework 2015/16
www.gov.uk/government/publications/nhs-outcomes-framework-2014-to-2015

Outcome measurement tools need to be appropriate for the client group, health condition and method of service delivery.

Data collection should allow for benchmarking against other services and show how existing inequalities have been reduced in terms of access to services, experiences of services and if outcomes have been achieved.

Nationally, two large groups of rehabilitation teams, the UK Rehabilitation Outcomes Collaborative (UKROC)⁵ and Sentinel Stroke National Audit Programme (SSNAP)⁶, have already established systems to record service level, patient dependency level and individual patient function and ability. This now allows national benchmarking and comparisons of both care and rehabilitation pathways.

The following key areas will be covered:

- Key performance indicators
- Monitoring of service and patient outcomes (quarterly meetings and evaluation metrics)
- Patient waiting times (assessment and treatment)
- Patient satisfaction
- Clinical governance

Continuous improvement of the service and impact upon the length of stay and will be reviewed through existing governance arrangements and mechanisms.

Where are we now? (BASELINE)	Where do we want to be? (OBJECTIVE)	How will we know if we have got there? (MEASURES)
Admissions to Ward 2 / Transfers to BAH Ward 4	Reduce patient transfers / handoffs to improve patient care.	Admission data - Weekly
Average LoS for rehabilitation is 23.2 days	Reduce average LOS to 9.09 days	LoS data - Weekly
Two site MDT approach to assessment and management for all patients with stroke.	Develop a single MDT approach to assessment and management for all patients to the stroke unit	Admission data Occupancy figures Single site model implemented SSNAP data

⁵ UK Rehabilitation Outcomes Collaborative
www.ukroc.org/NCASRI

⁶ Sentinel Stroke National Audit Programme
www.strokeaudit.org

Where are we now? (BASELINE)	Where do we want to be? (OBJECTIVE)	How will we know if we have got there? (MEASURES)
Multiple pathways based upon 2 site approach and services available at the site specific.	Review and revise the Streamlined patient pathway to deliver improved outcomes and equitable service for all patients	SSNAP data
No alternative to in-patient rehabilitation.	Implement supported discharge and community based care	SSNAP data
Need to ensure any change to model doesn't have a negative impact on quality of care	Readmission rates reduced	Trust data
Limited therapy input throughout pathway	45 minutes of stroke rehabilitation therapy for a minimum of 5 days a week	SSNAP data

13.4 Performance Management

Focusing on outcomes is one way of enabling the transformational change required in the healthcare system. Outcomes need to be meaningful to people who use rehabilitation services and enable them to maximise their potential, manage their healthcare themselves and promote independence. The Government's Mandate to NHS England for 2016-17 has an expectation that improvements will be demonstrated against the NHS Outcomes Framework so as to provide evidence of progress and enable comparison of services locally.

Consideration will be given to the level of outcome data to collect which demonstrates a patient centred approach and impact upon their individual rehabilitation goals. Outcome measurement tools need to be appropriate for the client group, health condition and method of service delivery.

Data collection should allow for benchmarking against other services and show how existing inequalities have been reduced in terms of access to services, experiences of services and if outcomes have been achieved.

Nationally, two large groups of rehabilitation teams, the UK Rehabilitation Outcomes Collaborative (UKROC) and Sentinel Stroke National Audit Programme (SSNAP), have already established systems to record service level, patient dependency level and individual patient function and ability. This now allows national benchmarking and comparisons of both care and rehabilitation pathways.

The performance management framework for this service will be implemented through contract management arrangements.

The following key areas will be covered:

- Key performance indicators
- Monitoring of service and patient outcomes (quarterly meetings and evaluation metrics)
- Patient waiting times (assessment and treatment)
- Patient satisfaction
- Clinical governance

Continuous improvement of the service and impact upon the length of stay and will be reviewed through existing governance arrangements and mechanisms.

14.0 Project Plan

The Director of Commissioning Strategy and Delivery for Durham Dales, Easington and Sedgfield and North Durham CCGs will sponsor this project with the support of colleagues from CDDFT, Local Authorities and Commissioning and Delivery Team to implement the preferred model.

A consultation plan accompanies this business case (see appendix two). It is proposed to consult between the 7th October – 12th December 2019.

The governance arrangements in place to deliver this project are below (figure 25). The Systems Assurance Group meets on a regular basis with senior teams from both CCGs and CDDFT on the membership.

A transformation Steering Group has been set up to oversee three major transformations – one of which is the acute stroke rehabilitation project. This Group has representation from CDDFT, CCGs and Local Authorities at director level. The group is designed to oversee progress and identify and manage any risks to successful project implementation.

A dedicated project team is in place to manage the project. The project team is multi-disciplinary with strong clinical leadership. Its role is to ensure due process is carried out to ensure successful completion of the stroke project and to provide assurance to the Transformation Steering Group.

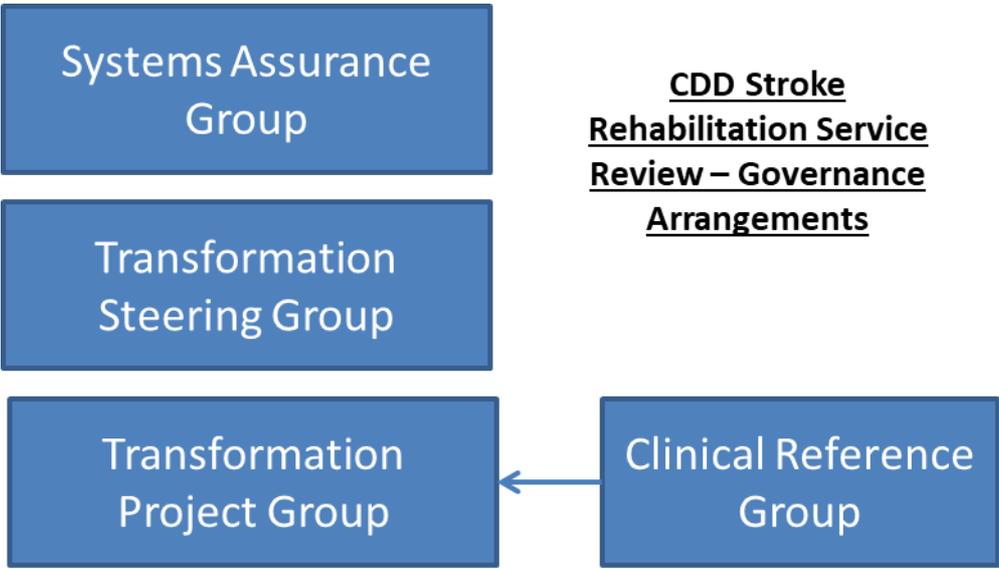


Figure 26