APPENDIX A

NHS

Barking and Dagenham, Havering and Redbridge Clinical Commissioning Groups

Improving Stroke Rehabilitation Services across Barking & Dagenham, Havering and Redbridge

Pre – Consultation Business Case

Contents

1 Executive Summary

The purpose of the pre consultation business case is to:

- Provide evidence of the case for service change including service performance and public/patient engagement to date.
- Propose the need for consultation on the future model of post–acute phase stroke rehabilitation services.
- Provide detail of the options appraisal and the identified preferred option of CCGs and stakeholders.

In November 2014 the Clinical Commissioning Groups (CCG) of Barking and Dagenham, Havering and Redbridge (BHR) identified a gap in the provision of stroke rehabilitation services and established the BHR Stroke Transformation Project. In June 2015, a Case for Service Change (CfSC) was approved by all BHR Governing Bodies.

The Case for Service Change found that:

- In the year 2014-2015, 967 patients suffered a stroke in BHR. With advancements in treatment and improved stroke survival, the demand for stroke rehabilitation services is anticipated to grow by 35% in the next 20 years.
- The current model of stroke rehabilitation services in BHR is disjointed and inequitable. The service provision between the three boroughs has become a 'postcode lottery' for stroke survivors.
- With the anticipated growth in demand, the current clinical model is unable to efficiently support patients to achieve best clinical outcomes in the post-acute stroke care phase. To continue to 'do nothing' will result in inadequate provision of stroke rehabilitation services for future stroke patients.

Cumulative evidence has proven that rehabilitation at home provided by an Early Supported Discharge (ESD) service delivered by coordinated, multidisciplinary teams can significantly reduce the length of in-hospital stay and improve long-term functional outcomes for patients with mild to moderate stroke. National Institute for Health and Care Excellence (NICE) clinical guidance recommends that 40% of all stroke rehabilitation should be delivered through ESD. This would result in an increase from the current delivery of 20% ESD across BHR.

While the primary aim of the project was to review the provision of stroke rehabilitation services in the community, the project team identified that these could not be reviewed in isolation of inpatient rehabilitation services. The project team took this opportunity to review the model and location of all stroke rehabilitation services.

Following the approval of the CfSC, BHR CCGs in partnership with key stakeholders developed a list of options in response to the challenges raised. An options scoring process was conducted through a stakeholder workshop and a subsequent affordability assessment in October 2015 which identified a preferred model of care that includes the following features:

- **A shift towards more rehabilitation provided at home**
- **Streamlining the ESD service with one provider**
- **Extending ESD provision to the whole of Redbridge**
- **Enhancing community service to provide high quality specialist stroke multi-disciplinary teams**
- **All patients will receive up to 6 weeks of ESD based on need**
- **Common service provider with common standards covering all of BHR**

- **Combining the provision of Early Supported Discharge and Community Rehabilitation Services across BHR.**
- **Inpatient stroke rehabilitation services to be located at King George Hospital with access through a single set of criteria**

The Governing Body is now asked to;

1 Endorse the recommendation of the preferred option;

2 To formally consult on proposals to change the delivery of stroke rehabilitation services;

3 To note that subject to the agreement of point 1 and 2, the consultation will launch the week commencing 4 January 2016 for 12 weeks;

4 To note the intention for the Governing Body to receive a Decision Making Business Case in June 2016.

2 Background

2.1 Description of stroke

Stroke is a brain attack when supply of blood to the brain is cut off. The impact of a stroke is both instant and unpredictable. Risk factors include age, smoking, high blood pressure, diabetes, high cholesterol, ethnicity and atrial fibrillation (irregular heart rate) [1].The nature and the severity of the effects depend on the amount of damage caused and the part of the brain that has been affected. Since the 1960's advancements in stroke care means more people are surviving each year.

A stroke can occur in a variety of areas of the brain, consequently there is a very wide range of difficulties people can experience as a result. 30% of people who have had a stroke will have persisting disability, and consequently require access to effective rehabilitation services.[2] The table below describes the range and types of difficulties stroke survivors may face following their stroke and the proportion of stroke survivors who have been affected by that particular difficulty[1].

Difficulty	% of people affected
Upper limp/arm weakness	77%
Lower limb/leg weakness	72%
Visual problems	60%
Facial weakness	54%
Slurred speech	50%
Bladder control	50%
Swallowing	45%
Aphasia	33%
Sensory loss	33%
Depression	33%
Bowel control	33%
Inattention/neglect	28%
Emotionalism within 6 months	20%
Reduced consciousness	19%
Emotionalism post-6 months	10%
Identified dementia one-year post stroke	7%

Key Statistics [1]

- Stroke occurs approximately 152,000 times a year in the UK; that is one every 3 minutes 27 seconds.
- First-time incidence of stroke occurs almost 17 million times a year worldwide; one every two seconds.
- Stroke is the largest cause of complex disability – half of all stroke survivors have a disability.
- Over a third of stroke survivors in the UK are dependent on others, of those 1 in 5 are cared for by family and/or friends.
- For every cancer patient living in the UK, £241 is spent each year on medical research, compared with just £48 a year for every stroke patient
- There are around 1.2 million stroke survivors in the UK.

[1] Stroke Association (2015) State of the Nation – Stroke Statistics
[2] NICE Clinical Guidelines: Stroke rehabilitation – 162

2.2 Stroke care services

Treatment of people who have had a stroke is split in to two distinct phases;

i. Acute stoke care
ii. Stroke Rehabilitation (also referred to as post – acute stroke care)

Acute stroke services

The acute phase of stroke care focuses on providing the patient life-saving treatment and then stabilising the patient's condition sufficient enough so that they are ready for rehabilitation. The acute phase initially takes place in a Hyper-Acute Stroke Unit (HASU) which are 24 hr centres providing high quality expertise in diagnosing, treating, and managing stroke patients. On arrival, a person is assessed by a specialist, has access to a brain scan and receives clot-busting drugs (thrombolysis) if appropriate, all within 30 minutes[3]. Most patients are then transferred to an Acute Stroke Unit (SU) after one or two days of intensive treatment. SUs, provide multi-therapy (physiotherapy, occupational therapy, speech and language therapy) rehabilitation and ongoing medical supervision.

The introduction of HASUs and ASUs as the primary access point into the stroke pathway has taken place over the last five years and has significantly improved the survival rates for people having a stroke.

Most residents in Barking & Dagenham, Redbridge and Havering will receive their acute care in the HASU and ASU located at Queen's Hospital in Romford, although there are small numbers of patients being treated in the HASU at the Royal London Hospital and the ASU at Whipps Cross Hospital.

However this pre consultation business case specifically focusses on stroke rehabilitation services.

Stroke rehabilitation services

People who have survived their initial stroke and stabilised are either transferred from the HASU, or the SU to community stroke rehabilitation services. The aim of stroke rehabilitation is to support the stroke survivor to overcome and adapt to their physical, mental and social complications which have been adversely affected by stroke.

The range of difficulties experienced by patients after a stroke means that rehabilitation support needs to be provided by a multi-disciplinary team of healthcare professionals that should include:

- Physiotherapists
- Occupational therapists
- Speech and language therapists
- Rehabilitation support workers
- Nurses
- Doctors
- Psychologists

[3] London Strategic Clinical Networks (2014) Stroke acute commissioning and tariff guidance.

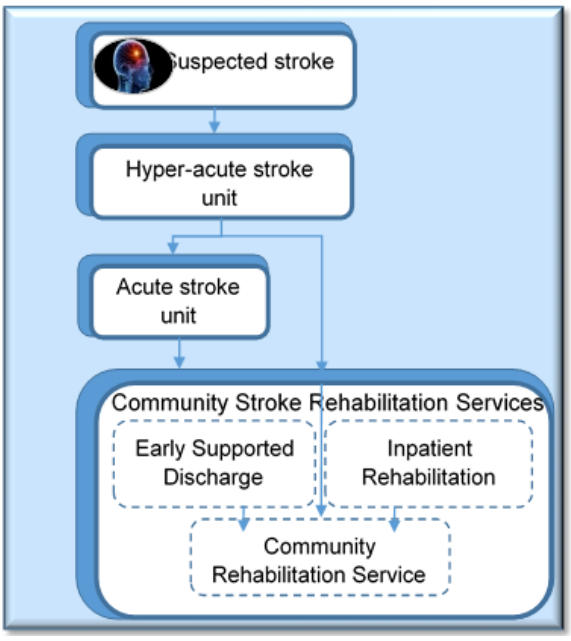
There are three types of stroke rehabilitation services:

Service Type or Function	Description
Early Supported Discharge (ESD)	• Aimed to provide patients with rehabilitation at home at the same intensity of inpatient care. • Designed to improve transfer of care arrangements, offer patient choice, deliver efficiencies in acute bed usage and deliver improved clinical and wellbeing outcomes. • Cumulative evidence has proven that ESD services delivered by coordinated, multidisciplinary teams can significantly reduce the length of in-hospital stay and improve long-term functional outcomes for patients with mild to moderate stroke.
Community Rehabilitation Services (CRS)	• Patients who are ready for discharge but deemed unsuitable for ESD are often referred to a CRS. • Provides needs - led rehabilitation within the home environment to maximise functional ability and independence and facilitate reintegration in the community. • The community rehab team is multi-disciplinary and assesses the stroke survivor's needs (where possible with family and/or carers) and develops a treatment programme with the stroke survivor
Inpatient Rehabilitation (IR)	• Patients who require further non-acute care after their condition has stabilised are treated in specialist stroke rehabilitation units. • NICE describes these units as "an environment in which multidisciplinary stroke teams deliver stroke care in a dedicated ward which has a bed area, dining area, gym, and access to assessment kitchens.' • Delivered by a multi-disciplinary team. • Typically, stroke survivors follow an individually tailored programme based on their goals set by the survivor and their family and carers to help those for whom it is appropriate get back to work or other meaningful activity.

A patient's journey through the stroke pathway will vary according to the nature and severity of their individual needs. Some patients will respond well to ESD and should be discharged from hospital early to have their intensive care at home. Other patients will have greater levels of need and may need to receive rehabilitation care in hospital for longer.

The core principle that should be applied is that access to all stroke rehabilitation services should be based on patient needs assessment and not on the availability of services in each area.

The diagram below illustrate the simple patient pathway for stroke care:



3 The BHR stroke pathway transformation project

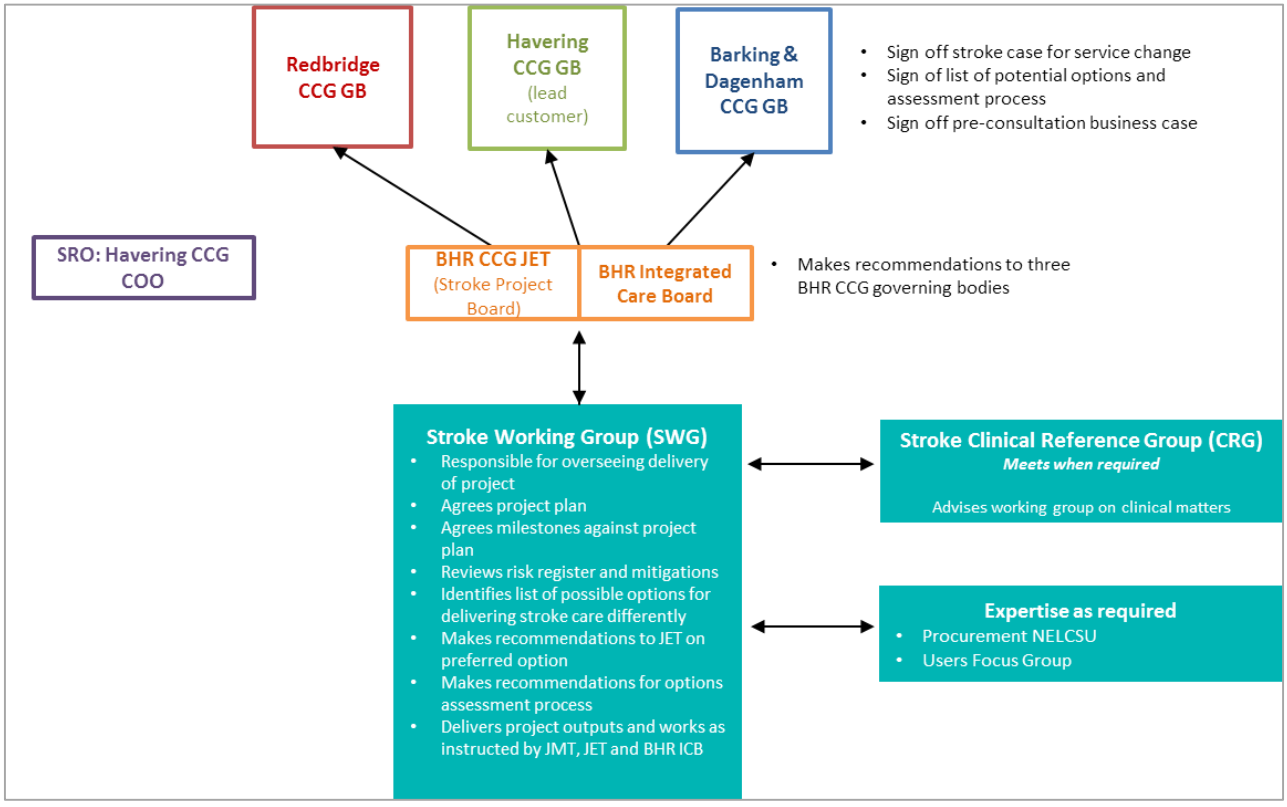
The BHR SPT project was established in 2014 following recognition that patients who needed stroke rehabilitation services were enduring a 'postcode lottery' depending on where they lived and as a result people who have had a stroke were not achieving the best possible outcomes.

The purpose of the project was to:

- Review access to each of the elements stroke patient rehabilitation services
- Review delivery of stroke patient rehabilitation services
- To understand how existing resources for stroke rehabilitation are currently being used to ensure they are being used in the most efficient way in the future
- Identify the best model for stroke rehabilitation locally that ensures that all local people have equal access to this model of care, so that no matter where they live, stroke survivors are able to achieve the best possible outcomes.

3.1 Governance of the stroke project

The diagram below illustrates the governance structure adopted by BHR CCGs to oversee the project:



3.2 Project progress to date

Collecting and reviewing evidence: November 2014 – June 2015

The first task for the project was to collect evidence about good practice for stroke services and the range of services available to the residents of BHR. In particularly:

- What services were available
- How patients accessed those services
- How the services interacted with each other

- How services compared to models of best practice
- Where services needed to be different

This culminated in the presentation of a Case for Services Change (CfSC) that was presented to the Governing Bodies of BHR CCGs in June/July 2015. The findings of the CfSC are considered in section 4 below. In summary the CfSC identified that although all three types of community stroke rehabilitation exist within BHR, there is:

- Variation and inequity in provision of and access to services
- Variation in quality in comparison to best practice
- An unnecessarily complex configuration of services that has led to a confused patient pathway and service inefficiencies
- A lack of information about costs, patient numbers and outcomes.

The variation in service configuration and quality and the lack of information is impacting on patient outcomes.

Considering options for improving services: July 2015 – November 2015

The project went on to consider the areas where services should be improved. In September 2015 the CCG Governing bodies agreed a shortlist of options for changing the configuration of services and a process for agreeing the preferred option.

In October 2015 these options were critically assessed by a selected group and a preferred option was selected. Based on the conclusions of this assessment this business case has been prepared.

The options and the assessment process are described in section 5 and 6.

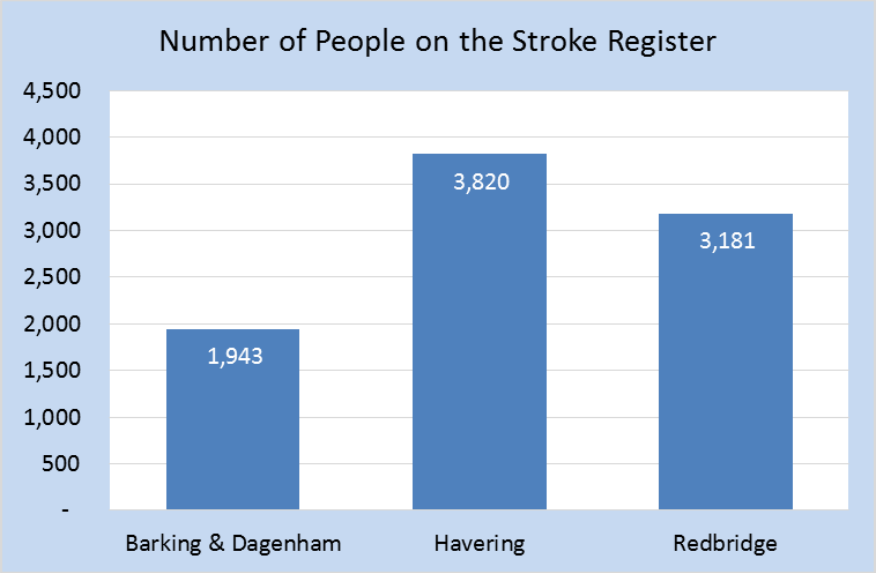
4 The case for changing stroke rehabilitation services in BHR

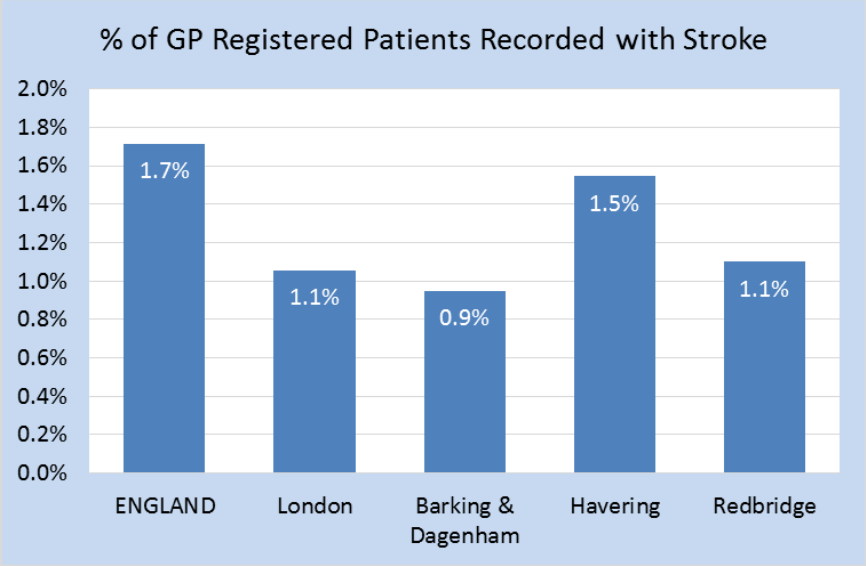
This section brings together the national and local context to set out why changing the way that post-acute stroke care is commissioned and delivered across BHR will improve the outcomes for people living with the effects of stroke.

4.1 The local picture for stroke in Barking and Dagenham, Havering and Redbridge [4]

In 2013-14 there were 8,944 people registered as having had a stroke in BHR. The highest number of patients are in Havering, which is to be expected given the age profile of the population.

Age is the primary determinant of stroke in the population. The proportion of the population over the age of 65 varies across the three boroughs with Havering having the highest at 17.9%, Redbridge 11.9%, and Barking & Dagenham the lowest at 10.3%. As a consequence the prevalence of stroke is highest in Havering.





[4] All data in this section from HSCIC unless otherwise stated

Numbers of stroke patients BHR[5]

Figures in the table below demonstrate the number of people who had a stroke in 2014-15 and were taken to one of the London HASUs, and the number of those who went on to be treated by one of the ESD teams.

Borough	Stroke Numbers 2014-15	ESD Numbers 2014-15
Havering	408	82 (20%)
Barking & Dagenham	263	53 (19%)
Redbridge	296	59 (23%)
Total	967	194 (20%)

Future demand for stroke care

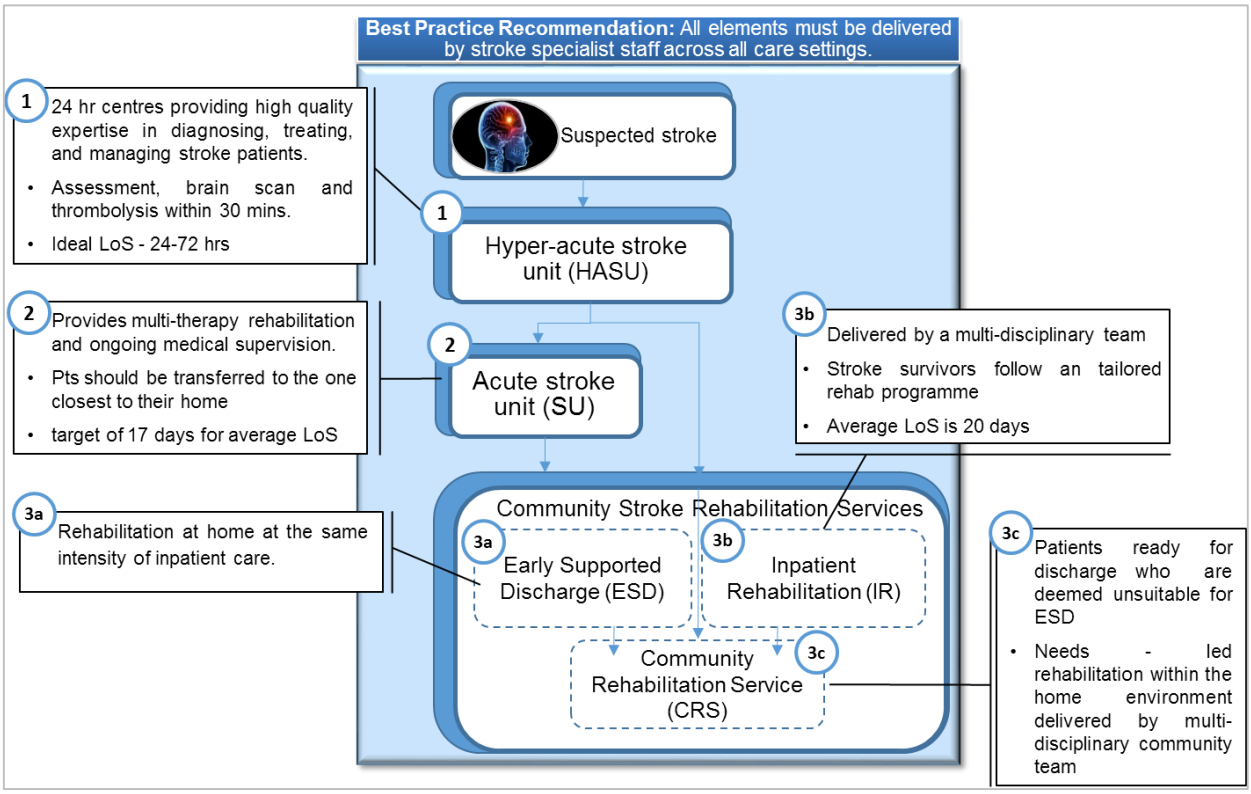
The numbers of people having strokes in the area will increase over the next twenty years as the population grows older. In the twenty years from 2011 to 2031 it is expected that the numbers of people aged 65 or more will increase by 38% and the number of people aged 85 or more will increase by 47%. The highest increase will be in Havering.

In total it is estimated that demand for stroke rehabilitation services will increase by around 35% over the next twenty years. By 2031 services will need to provide ESD for 115 more people per year and other types of stroke rehabilitation for 180 more people per year.

[5] SSNAP (Sentinel Stroke National Audit Programme) 2014

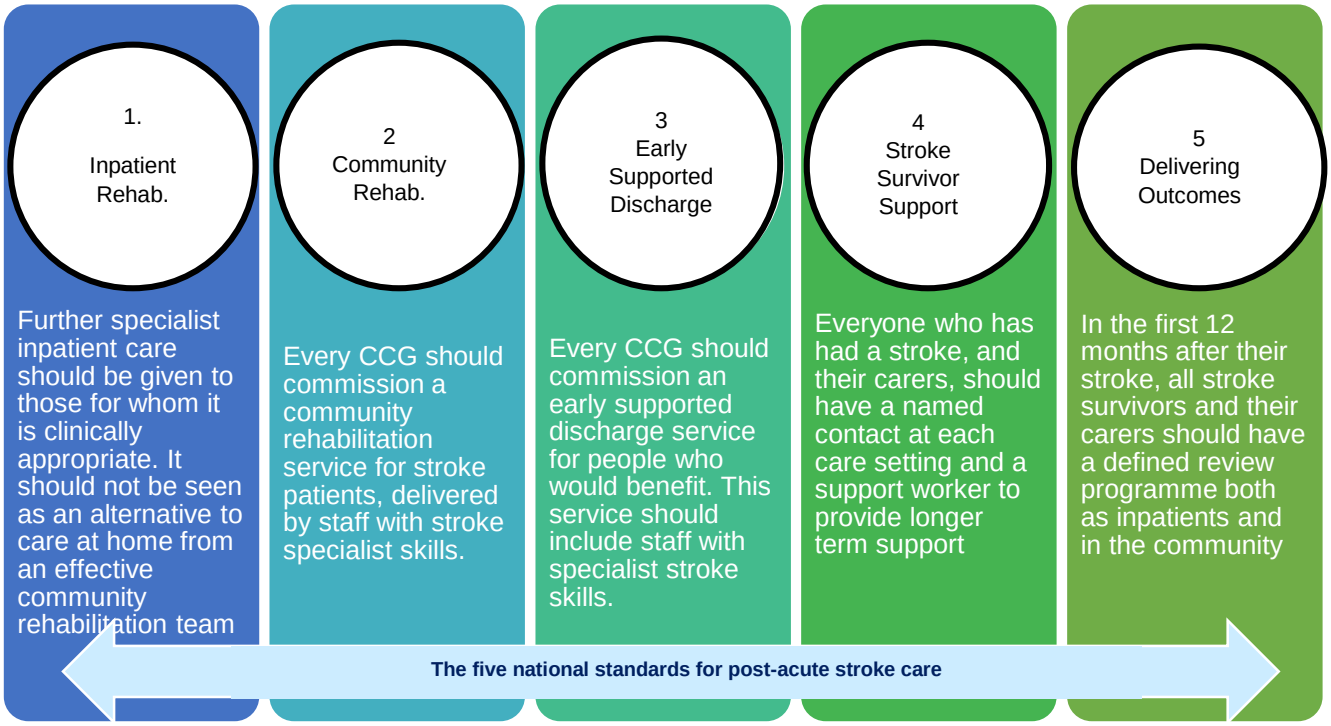
4.2 Best practice stroke care

Commissioning Support for London and the Royal College of Physicians have published a number of commissioning guides in relation to both the acute and post-acute elements of good stroke care. In 2010 the London acute stroke reconfiguration programme defined a nationally recognised stroke pathway delivered through a 'hub and spoke' model of acute stroke care to achieve the best possible outcomes for patients (figure below).



There is clear evidence nationally to suggest that mortality has improved with the introduction of a hub and spoke model through the London Acute Stroke Care reconfiguration in 2010-2012. Survival at 30 days post stroke has vastly improved, from a position of 13% mortality from stroke at 90 days in 2010 in to 7% from Barking and Dagenham, Havering and Redbridge University Trust (BHRUT) in 2013/14.

The figure below describes the ideal configuration of post-acute stroke care, both in relation to the three specific types of rehabilitation, as well as ongoing support through six and twelve monthly reviews for people living with the effects of stroke in their communities.



Based on national good practice, each CCG should ensure people living with the effects of stroke have adequate access to all three types of post-acute stroke care, or stroke rehabilitation. There is also a requirement for CCGs to ensure everyone living with the effects of stroke have longer-term support identified once they are discharged from their community stroke rehabilitation. This is because research has shown improvement in levels of disability can be seen up to 12 months from the initial stroke, therefore this needs to be identified at both 6/12 and 12 month intervals following a person's stroke to ensure all of their ongoing health and social care needs are met.

Benefits of Early Supported Discharge

"Patients who receive Early Supported Discharge services will return home earlier and are more likely to remain in the home long term and regain independence in daily activities"

Early rehabilitation is effective when provided as part of an Early Supported Discharge (ESD) service. Evidence shows improved clinical and well-being outcomes after 6 months and 1 year as well as reduced costs through shorter hospital stays[6]:

- ✓ ESD for up to 50 per cent of patients to a stroke specialist and multi-disciplinary team (which includes social care) in the community, but with a similar level of intensity of care as a stroke unit, can lower overall costs and reduce long-term mortality and institutionalisation rates[7].
- ✓ An individual patient data meta-analysis concluded that appropriately resourced ESD services, provided for a selected group of stroke patients can reduce long term dependency and admission to institutional care as well as reducing the length of hospital stay[8].
- ✓ A 2012 Cochrane systematic review of ESD services concluded that patients who received ESD services showed significant reductions in the length of hospital stay equivalent to approximately

[6] National Audit Office (2010) Progress on improving stroke care; a good practice guide
[7] DH (2007) National Stroke Strategy
[8] Langhorne (2005) Early supported discharge services for stroke patients: a meta-analysis of individual patients' data

seven days and were more likely to remain at home in the long term and to regain independence in daily activities [9].

✓ In 2009, the service reduced the average length of stay for 32% of all Camden strokes in 2009 by 10 days on average, leading to a potential £307,161 saving in acute bed-day costs. In 2011/2012 the service reduced the average length of stay for 41.3% (74/179) of all strokes in Camden by 10 days on average, leading to a potential £277,800 saving in acute bed-day costs[10].

The case study below describes an example of how an ESD service calculated the capacity they required to deliver quality stroke ESD and demonstrated improved outcomes to their patients[11].

Case study: Good Practice of ESD Provision
Camden stroke reach early discharge service (REDS) [10]

Intervention

→ Stroke REDS developed from within a community stroke rehabilitation team, which is considered best practice to be able to flex with demand.
→ Operates an 'in-reach' model to assess, facilitate and complete a discharge within 24 hours of referral, including escorting the stroke survivor home using Stroke REDS transport.
→ Conducts comprehensive 6 month reviews after discharge from the service to measure outcomes and review existing stroke survivorship support.

Outcomes

✓ Improved patient independence - achieving 81% of all goals set with stroke survivors using goal attainment scaling (GAS)
✓ Reduced home care packages and dependence on social services by an average of 15 hours a week post 6 week rehabilitation with Stroke REDS.
✓ 100% of clients maintained or improved their Barthel score.
✓ 100% of clients maintained or improved their Canadian Model of Occupational Therapy (COPM) Performance score
✓ 96.6% of clients maintained or improved their COPM Satisfaction score.
✓ 87% of clients maintained or improved their Nottingham extended Activities of Daily Living score.
✓ 70% of clients maintained or improved their score on the Stroke Quality of Life 39 Questionnaire

National Quality Standards

The National Stroke Strategy (2007) and the NICE clinical guideline for Stroke Rehabilitation (CG 162) detail several quality markers for post-acute stroke care. These include:

- After stroke, people should be offered a review of their health, social care and secondary stroke prevention needs, typically within six weeks of leaving hospital, before six months have passed and then annually. This will ensure it is possible to access further advice, information and rehabilitation where needed.
- Offer initially at least 45 minutes of each relevant rehabilitation therapy for a minimum of five days per week to people who have the ability to participate, and where functional goals that can be achieved.
    - If more rehabilitation is needed at a later stage, tailor the intensity to the person's needs at that time.
- Return-to-work issues should be identified as soon as possible after stroke, reviewed regularly and managed actively

[9] Cochrane (2012) Services for reducing duration of hospital care for acute stroke patients (Review)
[10] NICE (2010) Management of patients with stroke:REDS (Reach Early Discharge Scheme)
[11] Skrypak et al (2012) Why early discharge in stroke care can be vital for recovery in HSJ.

- Carers of patients with stroke are provided with a named point of contact for stroke information, written information about the patient's diagnosis and management plan, and sufficient practical training to enable them to provide care.
- Review the health and social care needs of people after stroke and the needs of their carers at 6 months and annually thereafter. These reviews should cover participation and community roles to ensure that people's goals are addressed.

These standards have been used to define each element of a stroke rehabilitation service and the quality standards they are required to meet. Commissioners have a responsibility to ensure:

- All three different types of stroke rehabilitation are available for their populations in and are meeting these standards
- Stroke reviews for all stroke survivors are being delivered at 6/12 and 12 monthly points to ensure their future needs are being met and outcomes are being achieved.

4.3 The current stroke patient pathway in BHR

The current service provision of stroke rehabilitation services in BHR is a 'postcode lottery' whereby access to stroke rehabilitation services depends on geography. Appendix A shows a diagram of the current patient pathway and depicts the complexity of current stroke rehabilitation service provision.

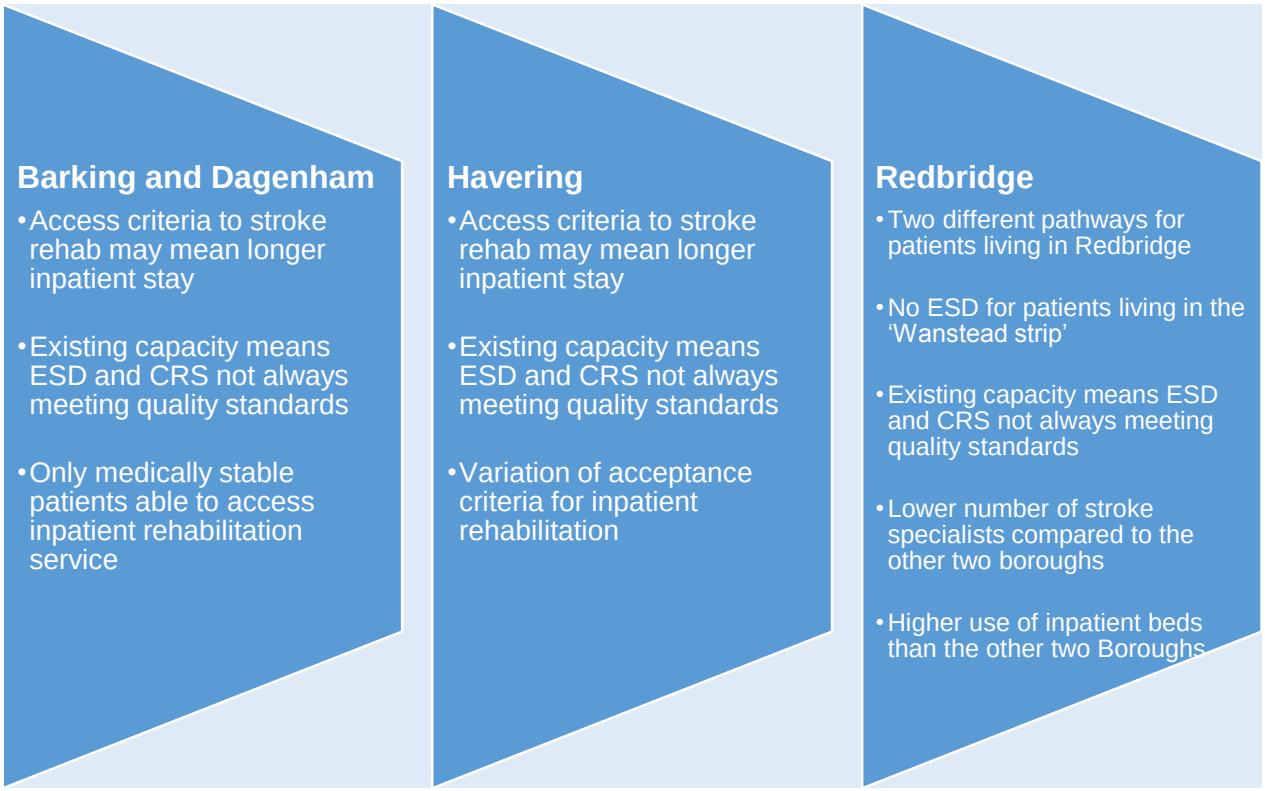
The key shortfalls this illustrates are:

- Whilst there is ESD available for most stroke survivors in BHR this is split between two different providers. The first two weeks of ESD is provided by Barking Havering and Redbridge University Hospitals Trust (BHRUT). For patients living in Barking & Dagenham and Havering, there is then a handover to the ESD service provided by North East London Foundation Trust (NELFT).
- The ESD service provided by BHRUT does not extend to the West of Redbridge so people in the "Wanstead Strip" have no access to ESD.
- For patients in the rest of Redbridge there is no ESD service after the first two weeks offered by BHRUT.
- The NELFT ESD service is not comprehensive; in particular Speech and Language Therapy (SALT) and Psychology are not provided by the ESD team and patients requiring these services either have to remain in an inpatient bed or wait for this therapy.
- There are two providers of inpatient rehabilitation; the service at King George Hospital (BHRUT) is predominately used by residents of Redbridge, the service provided at Grays Court (NELFT) is predominately used by residents of Barking & Dagenham and Havering. The range of services provided by the two providers varies.
- CRS is provided by three separate teams in each Borough with variations in the provision in each team.

Appendix B details the journey of four different patients, with same therapy needs, but living in different parts of BHR. Each receive a very different experience and as a consequence are likely to receive a different quality of life. The stroke rehabilitation pathway is dependent on each patient's home address. This variation does not provide equal access for all stroke survivors needing rehabilitation services.

Appendix C details the experience of patients with a slightly higher level of need who would be suitable for ESD but currently would not have access to it.

The following table describes some of the key variations of the provision of stroke services in the three boroughs.



Inpatient Bed Utilisation

An analysis of the bed utilisation for NELFT has shown that there is significant fluctuation at Grays Court in the use of inpatient stroke rehabilitation services from month to month. There are currently 17 stroke rehabilitation beds at Grays Court. Average occupancy of these beds for the year April 2014 to March 2015 was 56.6% although this varied from 24.5% to 83.3%. 97.4% of admissions to Grays Court are from Queens Hospital and almost of all are residents of Barking & Dagenham or Havering. Bed occupancy rates for Beech Ward (King George Hospital) is unknown. However centralising the inpatient unit will extend the catchment area to three boroughs and this should balance out some of the demand fluctuation.

4.4 Commissioning for quality

The table below provides a benchmark of the post-acute stroke services in BHR against the Royal College of Physicians guideline for Stroke.

Quality Standard/s	Is this standard being met?		
	H	R	B&D
Minimum of 45 mins. of active therapy for 5 days per week	No	No	No
Progress measured against goals set at regular intervals determined by their rate of change	No	No	No

Regular reassessment and management for people living with the effects of stroke	Yes	No	No
Patients who wish to return to work should be referred to a disability employment advisor or vocational rehabilitation team	No	No	No
Assessment by a clinical psychologist of social interaction is causing stress	No	No	No
6 and 12 monthly reviews of health and social care needs	Yes	No	No
Appropriate stroke specialist services and generic voluntary services and peer support are available	Yes	Yes	No
Assessment and treatment from stroke rehabilitation services are delivered in the same way as patients living in their own homes	Yes	No	Yes

There are quite clearly gaps in the quality of care being provided in relation to national quality standards for stroke rehabilitation.

It is understood that these gaps are likely to be a result of the variation in current configuration and provision across a multitude of providers, or a lack of service capacity in a particular area or team.

4.5 Commissioning for outcomes

Whilst acute stroke providers are systematically using the Sentinel Stroke Audit Programme (SSNAP) to record nationally recognised outcomes for stroke, there is currently very little information routinely recorded or reported across providers and organisations in respect to any outcomes from post-acute stroke care. This is largely due to the lack of consistency in commissioning services requiring the Trusts to use the nationally recognised SSNAP database for recording information on post-acute stroke care.

A review of the contracts and service specifications of those providers commissioned to provide both acute and post-acute stroke care was undertaken alongside discussions with clinicians to understand:

- Whether they used nationally recommended outcome measure such as the modified Rankin Scale (mRS);
- What they were currently recording to enable them to understand the outcomes they were helping people to achieve.

The table below illustrates the outputs of this analysis.

Pathway Phase	Type	Provider	Are Outcomes for Stroke Measured and Reported?
Hyper-acute / Acute		BHRUT Barts Health	✓ Morality Rates ✓ mRS
Stroke Rehabilitation	In-Patient	Grays Court (NELFT)	✓ mRS
		BHRUT	✓ mRS
	Early Supported Discharge	BHRUT	✓ mRS
		NELFT	✓ mRS
	Community Rehabilitation Service	NELFT	✓ mRS

Stroke Survivorship Support	6 / 12 monthly reviews	Stroke Association	✗
		Carers Trust	✓ mRS

Availability of data on stroke-specific key performance indicators (KPI's) both within services and across the stroke pathway is sparse. The focus is generally on measuring process measures (such as the numbers of patient's seen, access, amount of time spent on stroke rehabilitation and level of intensity), rather than the outcomes stroke survivors are currently achieving.

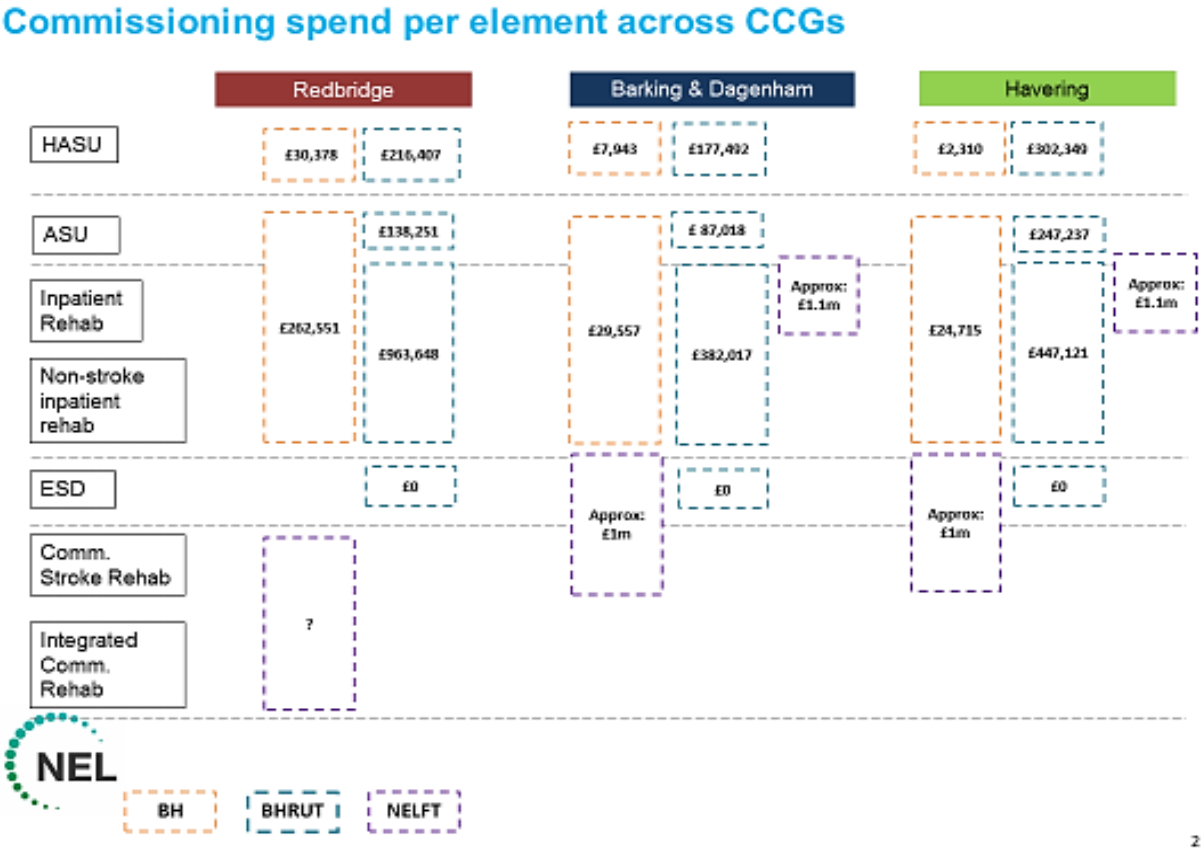
Whilst some individual stroke service providers, such as BHRUT and Barts Health meet monthly to discuss their stroke service improvement plans, there is currently no formal meeting or forum where outcomes being achieved can be presented across the entire pathway; something that local stroke physicians have expressed frustration about.

Given the lack of outcome data available specific to the stroke pathway through existing commissioning and contracting arrangements, there is clearly a case for service change in relation to developing and agreeing a number key patient outcomes the BHR CCGs may wish to measure in the future.

4.6 Commissioning for value

The different contracting and reporting arrangements across the number of different types of providers means that the BHR CCGs are currently unable to tell how much they are spending on stroke services. Consequently it is difficult to assess whether the existing resources going into stroke care represents the best way to achieve the best outcomes for patients.

The diagram below articulates the existing contracting information as understood by BHR CCGs:



Existing contracting information understood by the BHR CCGs in relation to spend

The amounts shown on the diagram above are taken from a combination of the contract values and the Trusts' service line reporting (SLR). This has highlighted a number of problems:

- Barts Health, which provides an inpatient service to some Redbridge patients from Whipps Cross Hospital, does not differentiate in its charges between ASU and inpatient rehabilitation;
- BHRUT does not differentiate between inpatient stroke rehabilitation and rehabilitation for other conditions. The basis of the charge is by an individual patient tariff. No specific charge is made for ESD, so the assumption is that this is also included in the price for inpatient rehabilitation.
- The community services provided by NELFT are on a single block contract with no differentiated prices. From the Trusts SLR a cost of stroke rehabilitation can be estimated. However the SLR does not show the cost to each commissioner, nor does it differentiate between the cost of ESD and the rest of the community stroke rehabilitation team.

Commissioners do not know whether the existing resources going into stroke care represents the best way to achieve the best outcomes for patients.

5 List of Potential Options

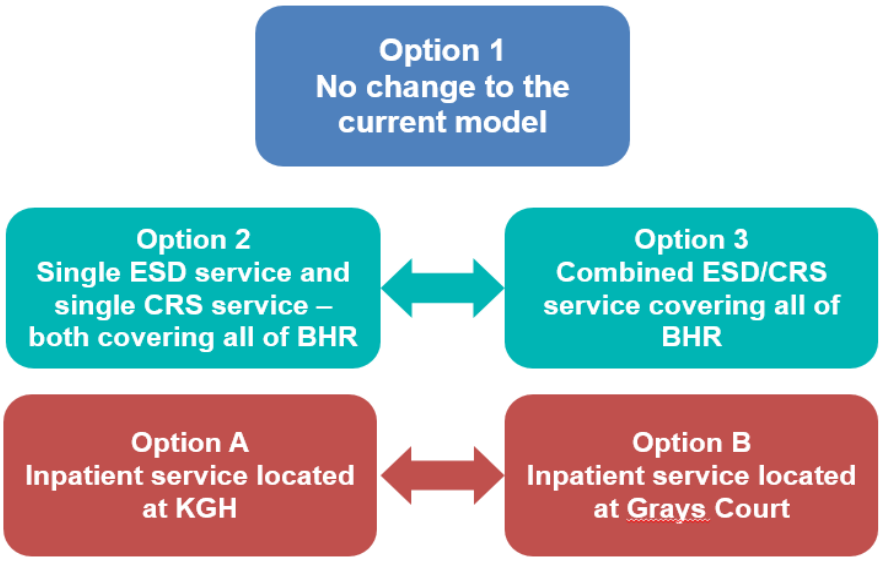
Following the approval of the Case for Service Change in June 2015, BHR CCGs worked in partnership with national, regional and local stroke experts to develop a list of options in response to the challenges raised through the case for service change.

There are common features for all of the change options that will provide a service that meets national standards and will deliver the best possible outcomes for all patients in BHR. These are:

- ✓ A streamlined ESD service delivered through one provider that will improve continuity of care;
- ✓ The ESD service will be extended to cover the whole of the borough of Redbridge;
- ✓ Provide a high quality stroke specialist multidisciplinary team, including equal access to speech and language therapy and psychology; enhancing what is already available in the community;
- ✓ All patients will receive up to six weeks ESD based on need;
- ✓ All patients will access the inpatient service through a single set of access criteria and the quality of inpatient care provided will be standardised;
- ✓ The models reflect the CCGs strategic direction in relation to providing increased rehabilitation at home;
- ✓ There will be common service providers working to a shared set of standards across all of BHR.
- ✓ A single provider of inpatient services from a single location

There are five potential options which are described below:

- Option 1 is the do-nothing option
- Option 2 and 3 relate to alternative ways of organising and commissioning community services
- Option A and B relate to alternative locations for the inpatient stroke rehabilitation service



The decisions over 2/3 and A/B are mutually exclusive.

There are four possible combinations for these options – 2A, 2B, 3A and 3B

Option one – Do nothing

This option maintains the current service model of post-acute stroke care across BHR CCGs. The challenges are described fully in section 5. In summary however, this option does not address the identified quality issues for patients requiring stroke services. This option also maintains the existing inequity of service provision, which will become more apparent over time as numbers of patients requiring stroke services increases.

Option two – Provision of single Early Supported Discharge (ESD) and single Community Rehabilitation Service (CRS) both covering all of BHR.

Key considerations:

- Best practice recommends that patients receive six weeks of intensive support. Using this model, if a patient needs more than this, it is possible that there may be a wait for this;
- There will still be a handover between providers of ESD and CRS.

Option three – Provision of combined ESD/CRS service covering all of BHR

Key considerations and benefits:

- The three working day wait for patients to be discharged from acute stroke services to being seen by the Community ESD provider is removed. The transfer between the different stages of care is seamless;
- The ESD and CRS services are delivered by the same team, so there is no handover between teams and there is better continuity of care;
- This option follows nationally recognised best practice models that combine ESD and CRS functions.

Inpatient care will be provided from a single location by one provider. This means that:

- ✓ All patients will access inpatients through a single set of access criteria, and quality of inpatient care provided will be standardised.
- ✓ There will be a focus in BHR for specialist stroke services;
- ✓ There will be improved relationships and communication between acute and community (post-acute) services;
- ✓ It will be easier for the ESD team to liaise with the hospital and assess patients' needs through in-reach;
- ✓ The pathway for stroke services is strengthened, as it becomes less complicated and there is a single set of criteria against which to assess patients across BHR.

The following two options were identified as the two locations that could meet the needs of this service configuration.

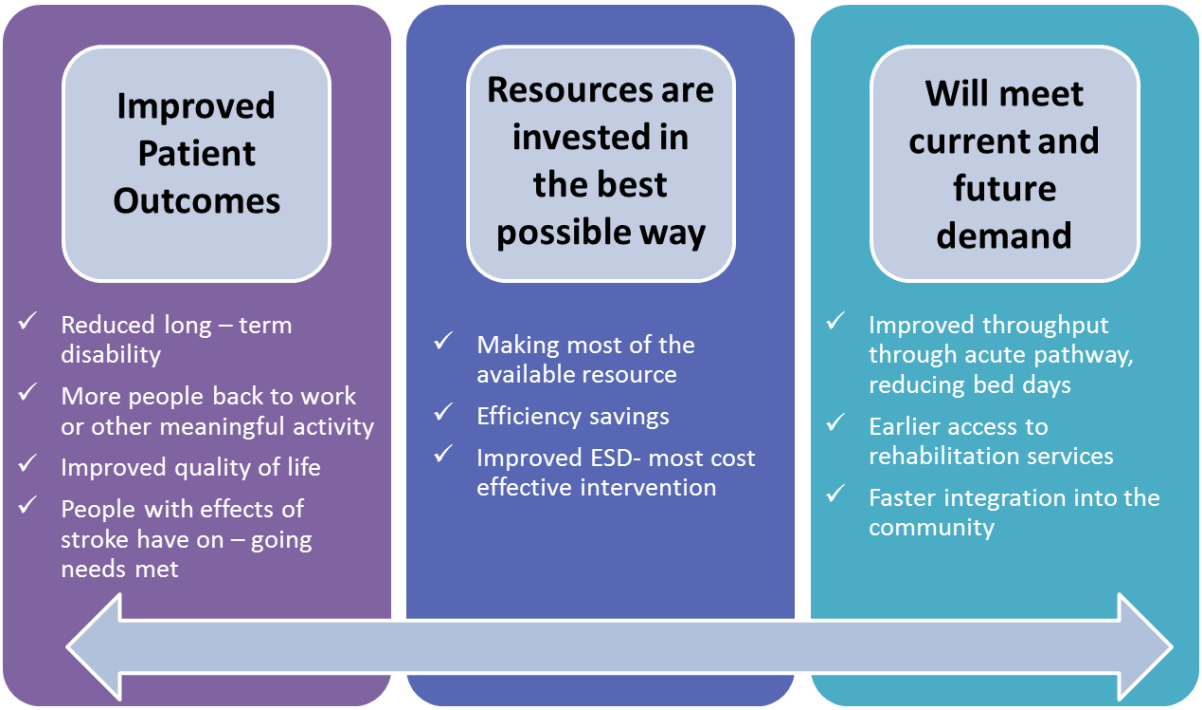
Option A – Consolidate the inpatient rehabilitation resource and locate inpatient services at King George Hospital.

Option B - Consolidate the inpatient rehabilitation resource and locate inpatient services at Grays Court.

6 Options assessment process

6.1 The benefits of changing the current stroke pathway

The table below represents the benefits that the project seeks to achieve through changing the model of care. This influenced the choice of criteria and weighting of the criteria used in the options assessment.



6.2 Criteria

The criteria and appraisal methodology was approved by the BHR CCGs Governing Body in September 2015 and reflected the identified benefits of changing the current stroke pathway.

The criteria were divided into two types; non-financial and financial, with a weighting ratio of 60:40 applied respectively. Each criterion was scored out of five points.

The financial and non-financial assessment of each of the options were undertaken separately.

The criteria used in the options appraisal process are described below.

Criteria	Description	Underlying factors	Weight
Non-Financial			**60%**
Clinical outcomes and safety	The option improves patient outcomes and patient safety	• Levels of expertise of available clinical resources • Types of estate, and equipment and expertise available at each site • Standards set by regulators and professional bodies • Improved patient outcomes	20%
Patient/ Carers' experience	The option will improve patient / carers' experience	• Better quality of estates and equipment • Co-ordination of health and social care • Patient's choice: therapist/staff/location/appointment time/ quality and suitability of the care provided within the stroke services.	20%

Access to service	There will be equitable access to services to all population groups	• Equality of access • Travel times	20%
Deliverability	• The option can be delivered without significant risk or disruption to business as usual • The option is likely to deliver the benefits identified	• Risk to service continuity • Workforce implications • Existing use of estate and ability to vary usage • Strategic fit with BHR economy • Availability of enabling technology • Provider sustainability	20%
Flexibility	Ability to respond to system resilience and future population growth	• Ability to increase beds / work force capacity to cope with changes in demand	20%
Financial			**40%**
Commissioner affordability	BHR CCGs can afford the option proposed within its projected financial envelope	• Indicative modeling of the options v. allocation projections • Identifying value of each option in relation to outcomes to be achieved	

6.3 Assessment of options against non-financial criteria

An options assessment workshop took place on 16th October 2015. The workshop was spilt into two parts.

Part 1: Pre-consultation engagement opportunity

The aim of this session was to:

- Present the emerging BHR stroke rehabilitation case for service change
- Present options to be appraised and scoring process
- Q&A.

The attendees included representation of the following:

- Stroke clinical reference and steering group members
- All stakeholders involved in first stroke pathway workshop
- Service users
- Voluntary organisations
- NHSE stroke leads
- Local authority representatives
- Carers Support leads
- Healthwatch

There were discussions regarding the pros and cons of each option and the impact they would make on services for stroke patients in BHR. At the end of this session, the representatives from provider organisations left the workshop, to prevent any conflict of interest in the scoring of the options.

Part 2: Options assessment against non-financial criteria

The following session, undertook the assessment process to appraise the options against the non – financial criteria and took into consideration the feedback from the first half of the workshop. Representation included:

- BHR clinical director lead GPs for stroke
- Nominated BHR CCG commissioning officers
- Nominated leads from BHR local authorities
- Public Health lead (Havering)
- BHR finance lead
- NHSE leads for stroke
- Patient Representatives
- Carer organisation representatives

Stakeholder discussion regarding the location of inpatient rehabilitation services

The stakeholders at the workshop were invited to discuss what they thought were the pros and cons of each location. These views were based on their experience either as a patient, carer, relative, member of staff or someone visiting from another organisation.

In considering a location for the inpatient rehabilitation services, several key factors were considered by the stakeholders:

- The location should be reasonably accessible to all the residents of Barking & Dagenham, Redbridge and Havering;
- There should be good transport links and disabled parking facilities;
- The location should be able to provide emergency medical cover (24/7)
- The location is able to deliver the service model to all BHR patients
- The location is able to respond flexibly to changes in demand over time

6.4 Assessment of options against financial criteria

The assessment of the options against the financial criteria took place on 22nd October 2015 and was undertaken by the BHR project lead and BHR Finance representatives.

The scores given to the “do nothing” option gave a baseline from which to measure how much better (or worse) each change option was considered.

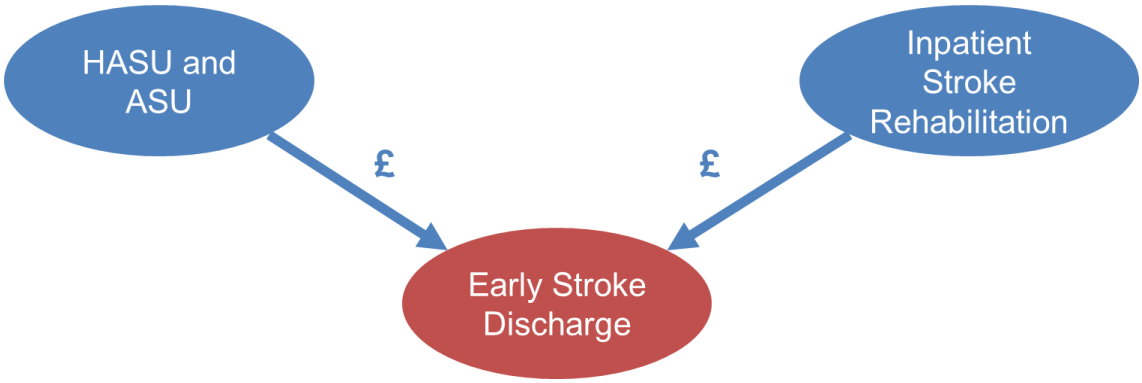
The scores given by individual participant at the workshop were analysed to identify any preferences by borough and an overall preference.

6.5 Results of the Non-Financial Scoring

The table in appendix C show that option 3 and option A scored the strongest. These were scored as the best options by every participant in the exercise, across every criteria.

6.6 Results of the Financial Scoring

All four of the change options involve the shift of resources from inpatient care to Early Supported Discharge.



The commissioners' position is that the revised service should cost no more than what is paid for the current service. The core assumption that underpins the financial scoring is that all changes to the prices paid to each of the providers resulting from this service change will balance out with no net change in the amount paid by commissioners.

The scoring of the options recognised that there are risks associated with this position; that it may not be possible to maintain neutrality once service changes are being implemented. However, in all but one aspect, these risks were common to options 2, 3, A and B. The exception was that option A (centralising inpatients at King George) was likely to be less risky than option B because maintaining inpatient services at Grays Court was likely to be more expensive the alternative.

After debate it was agreed that the affordability scores for the options should be 3 for options 1, 2, 3 and A, and 2 for option B.

6.7 Consolidated Scores

The consolidated scores for the options show options 3 and A to the clear preferred option; a combined ESD/CRS team and an inpatient service located at King George Hospital. The full scores (before and after weighting) are presented in Appendix D.

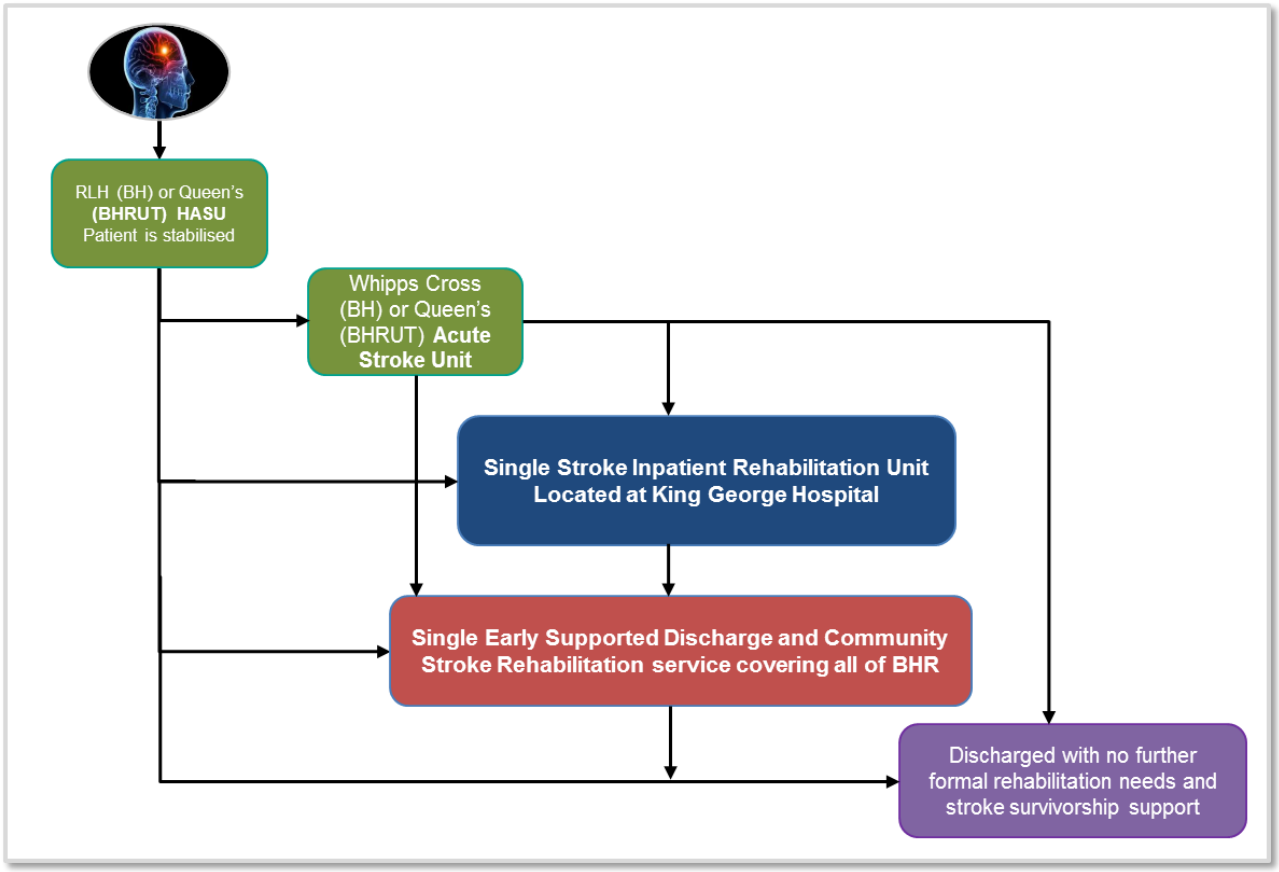
Option	Non-financial criteria Weighted score (60%)	Financial criteria Weighted score (40%)	Total Score
Do nothing	1.0	1.2	2.2
Option 2	1.9	1.2	3.1
Option 3	2.6	1.2	3.8
Option A	2.4	1.2	3.6
Option B	1.5	0.8	2.3

7 Identified Preferred Option

Option 3A was scored as the preferred option

7.1 Service description

Option 3 is the provision of a combined ESD and CRS service covering all of Barking and Dagenham, Havering and Redbridge. Option A locates the inpatient stroke rehabilitation service at King George Hospital in Ilford. The model below demonstrates the pathway for patients if the stroke services for BHR are reconfigured to the preferred option. This is in stark contrast to the complex pathway demonstrated in Appendix A.



7.2 Benefits of preferred option

The scoring group noted the following benefits for Option 3;

- ✓ A more streamlined pathway with a reduction in the number of transfers between providers.
- ✓ Access to the best care is improved. All people in BHR that are eligible for ESD will receive the rehabilitation and support they need in their homes
- ✓ More people will receive their care at home. Evidence shows that people who receive care at home are able to live more independently than those who have had all of their rehabilitation in hospital.
- ✓ The length of stay in hospital is reduced which means better outcomes for patients as well as reduced costs to the hospital which enables them to focus more on the most acutely ill patients;
- ✓ A more efficient use of workforce with the opportunity to 'flex' staff between service demands.

- ✓ A better quality of service provision for patients with equity of access across all three boroughs.
- ✓ Patients will receive the same quality of care regardless of where they live or which hospital they have been in. Each team will have the right number of staff with the right specialist skills to deliver rehabilitation at home. This includes equal access to speech and language therapy and psychology.
- ✓ Opportunity to redesign stroke rehabilitation services to meet the needs of growing demand.
- ✓ There are benefits for carers too, as there will be less travelling required and the carer will liaise with a single team throughout each phase of the rehabilitation; so less duplication.
- ✓ Better quality data collection of patient measures and outcomes to benchmark service provision.
- ✓ Service provision can be based on patient need rather than prescripted only by time
- ✓ Clarity of service delivery costs with sole provider opposed to multiple providers
- ✓ Reallocation of funding to improve rehabilitation services rather than increase in service budget.

The scoring group noted the following benefits for Option A;

- ✓ The pathway for stroke services is strengthened, as it becomes less complicated and there is a single set of criteria against which to assess patients across BHR. All patients will access inpatients through a single set of access criteria, and quality of inpatient care provided will be standardised.
- ✓ There will be improved relationships and communication between acute and community (post-acute) services. It will be easier for the ESD team to liaise with the hospital and assess patients' needs through in-reach.
- ✓ Patients will have immediate access to medical and support services at the KGH site opposed to Option B.
- ✓ Better provision of transport access to hospital site for family and carers to visit patients
- ✓ Equity of access to inpatient rehabilitation for all patients in BHR
- ✓ Create a more efficient and experienced single provider opposed to multiple provider sites.
- ✓ All patients will access inpatients through a single set of access criteria, and quality of inpatient care provided will be standardised.

7.3 Affordability of preferred option

Affordability for this option was scored as the same as Option 1 (Do nothing). This project aims to remain cost neutral but redesign service delivery to maximise outcomes for stroke rehabilitation patients.

7.4 Identified risks for preferred option

Following consultation a full risk register will be developed. Risks fall into three key areas. These can be summarised as the following;

1. **Risks associated with reaching a final decision about the redesign of the BHR stroke pathway**

At this time it is felt that there is low risk of the decision being delayed or derailed. Engagement to date has indicated that there is strong support for the project. However this will become clearer during the consultation period.

2. **Risks associated with implementing changes**
   The final business case that will be developed after the consultation will expand further upon the implementation programme that will be required. Implementation will involve some challenges including:

   - Workforce challenges; there are likely to be skills and resource gaps and some staff will need to be transferred between providers
   - Ensuring that the changes remain affordable
   - Organisational redesign
   - Maintaining safe and efficient services during the change programme

3. **Risks associated with delivering the anticipated benefits**
   The final business case will also consider where there are risks that the benefits that were articulated in section 7.2 are not realised.

A process for identifying and managing risks will be agreed by the Steering Group in the next phase of the project.

8 Pre – consultation engagement

Engagement with clinicians, professionals, patients and other stakeholders has been a key driver for the BHR STP and has underpinned the development of the CfSC and pre – consultation business case (PCBC).

Throughout the course of the project, BHR CCGs have undertaken a number of engagement activities with stakeholders to find out their thoughts regarding how stroke rehabilitation services need to improve, and their experience of using the services to date.

During the early stages of the project, a workshop was held with people who have had a stroke, stroke expert clinicians, commissioners and providers who provided services and support for stroke survivors. The workshop focussed on mapping the current stroke journey from when someone had a stroke, through to their acute hospital care and stroke rehabilitation care options, to home. As a result the project team had a good indication of how the current stroke rehabilitation service needed to change to ensure high quality stroke care for all residents living in BHR. Following this, BHR CCGs engaged in a period of wider stakeholder engagement to strengthen these findings and use to inform the development of the CfSC. This included on-going engagement with the Stroke Association and an on-site visit to NELFT community stroke team.

Following the approval of the CfSC by BHR Governing Bodies, it was presented to the three BHR Health and Wellbeing Boards, Health Scrutiny Committee in Barking and Dagenham, Joint Health Scrutiny Committee (covering Barking and Dagenham, Havering, Redbridge and Waltham Forest) and Barking and Dagenham Patient Engagement Forum. Since then it has been refreshed to incorporate feedback received.

In response to the challenges raised within the CfSC, BHR CCGs also worked in partnership with national, regional and local stroke experts to develop a draft list of options. A stakeholder workshop held to score the options for stroke rehabilitation services was attended by representatives from Healthwatch, carers groups, patient representatives, GP clinical leads, Age Concern, the Stroke Association and the London Boroughs of Barking and Dagenham, Havering and Redbridge and NHS England. While not present for the scoring part of the workshop, representatives from NELFT, BHRUT and Barts Health also attended the stakeholder engagement session of the workshop.

From these discussions, it was clear there was support for change to the services, but without a clear proposal to take forward (as a preferred option was yet to be identified and agreed) the specifics could not be discussed. Stakeholders were keen to understand the operational detail of how any new services might work, including eligibility, capacity and staffing and joint working together with other services and social care. They were also interested in how a potential consultation might be run, and the involvement of Healthwatch.

9 Stakeholder consultation process

9.1 Consultation process

The following is proposed:

- A 12 week, three-borough consultation, running from January – April 2016, to begin the week commencing 4January 2016.
- Hard copies of the consultation document (written in plain English) to be widely circulated throughout the three boroughs.
- Consultation to be promoted through media releases, posters, advertisements, and via newsletters, stakeholders and existing forums.
- People can respond to the consultation through an online survey or via freepost address.
- Present at the BHR Patient Engagement Forums (PEF), and at NELFT and BHRUT PEFs

- Actively engage with Healthwatch and other local stakeholders.
- Hold public events in each borough, at different times and locations, (one in each month of the consultation), and more if requested/a need is identified
- Key stakeholders identified with a special focus on hard to reach groups.
- Attend meetings with local stakeholders as requested.

9.2 Legislation/mandatory requirements

BHR CCGs are aware of their responsibilities as set out in section 14Z2 of the NHS Act 2006; NHS organisations should continually involve and engage patients and the public in service planning and operation, and in the development of proposals for change.

BHR CCGs believe that over and above their legal requirement there is significant benefit from engaging and involving service users and local stakeholders, including:

- Increased public confidence in local NHS services and decision-making.
- Better decisions when designing safe, high quality services.
- Improved patient experience and outcomes.
- Building stronger relationships with key stakeholders, including staff; and
- Mitigate risks and issues.

BHR CCGs will also take into account the NHS Constitution, which brings together a number of rights, pledges and responsibilities for staff and patients alike. This includes the 'right to be involved, directly or through representatives in the planning of healthcare services, the development and consideration of proposals for changes in the way those services are provided and in decisions to be made affecting the operating of those services'. This also includes the 'right to be provided with the information to influence and scrutinise the planning and delivery of NHS services'.

9.3 Health Scrutiny Committee engagement

The CCGs will work closely with Health Scrutiny Committee (HSC) members and officers to agree HSC oversight and engagement, making sure they are kept briefed on the proposals and planned communications and engagement.

Health Scrutiny Committees have the power to refer proposed changes and/or decisions to the Secretary of State for Health after a public consultation. These can be referred onto the Independent Review Panel (IRP) to consider whether the changes will enable the provision of safe, sustainable and accessible services for the local population. The CCGs will seek to mitigate this risk through running the consultation in line with best practice guidance.

9.4 NHSE assurance

BHR CCGs advised NHSE of their intention to consult on improving stroke rehabilitation services across Barking & Dagenham, Havering and Redbridge. NHSE were provided with a copy of the case for service change and the draft pre consultation business case. Regular updates will be provided to NHSE throughout the next stages of the stroke review and consultation period.

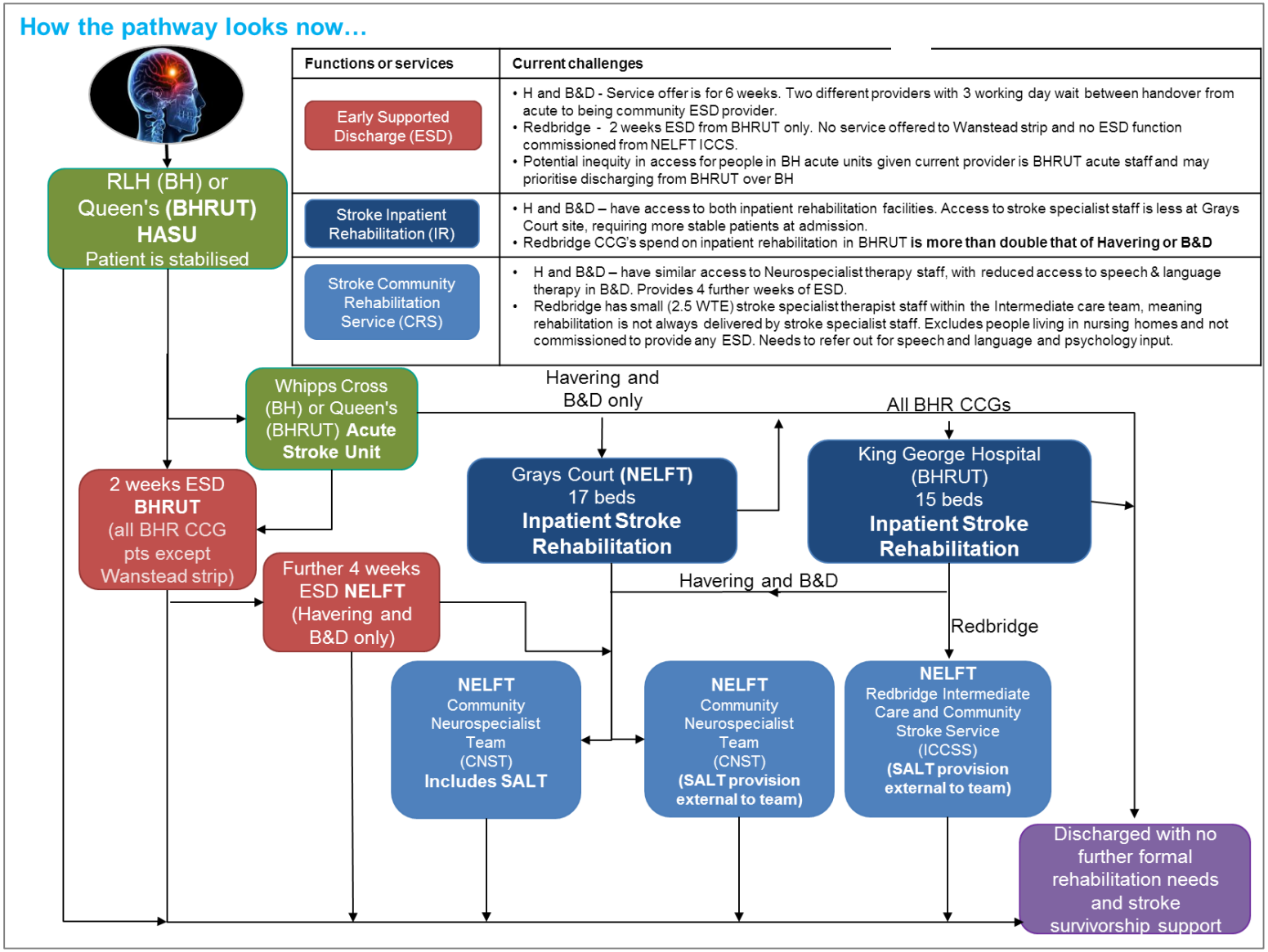
10 Recommendations & Next Steps

The Governing Body is asked to:

- Endorse the recommendation of the preferred option.
- To formally consult on proposals to change the delivery of stroke rehabilitation services.
- To note that subject to the agreement of point 1 and 2, the consultation will launch the week commencing 4 January 2016 for 12 weeks.
- To note the intention for the Governing Body to receive a Decision Making Business Case in June 2016.

Appendix A – Diagram of the current stroke pathway

Current stroke pathway for people living in Barking and Dagenham, Havering and Redbridge



Appendix B – Illustration of how where patients live dictates their care

Example pathways of four patients with same stroke diagnosis, who are suitable for Early Supported Discharge but living in different areas of Barking and Dagenham, Havering and Redbridge. So although the needs of these four people are the same the care that they receive will depend on where they live.

What these changes should mean to patients

Consider four BHR residents each with the same prescription rehabilitation as a result of their stroke, AND;

- Meet the clinical criteria and agree to Early Supported Discharge (ESD)
- Are keen for, and will benefit from a minimal hospital stay and can go home straight from hyper acute stroke unit (HASU)
- Will require ongoing speech and language support on discharge.

BUT:

Currently their access to the types of stroke rehabilitation is very different, as are their outcomes

In future the aim to ensure all BHR residents have equal access to evidence-based stroke rehabilitation.

Age profile and effects of their stroke		
All 4 people	**Age: 55**	**BHR**
	Condition	**Prognosis**
Upper limbs	Some weakness	Good
Lower limbs	Some weakness	Good
Speech/ swallow reflex	Some speech impairment	Good
Sensory loss	None	Good
Continence	No issues	Good
Complications	No issues	Good


Mrs Jenkins lives in North Redbridge

Mr Innes lives in Wanstead


Mr Khan lives in Barking and Dagenham


Mrs Williams lives in Havering

Current provision

Hyper-Acute Stroke Unit

Acute Stroke Unit

Early Supported Discharge (2 Weeks)

Further Early Supported Discharge (4 weeks)

Inpatient Stroke Rehabilitation

Community Stroke Rehabilitation

Discharged no further formal rehabilitation needs

Mrs Jenkins lives in North Redbridge

- Mrs Jenkins was supported back into her home and community as soon as it was possible.

HOWEVER……

- She had an ongoing speech therapy need that could have been met with a further 4 weeks ESD support IF she lived in Havering.
- This could not be met through a referral to CRS, therefore she was discharged from the formal stroke rehabilitation pathway.
- Mrs Jenkins may have to wait 6 months for routine speech therapy for referrals in the community. (Oct 2015)

Hyper-Acute Stroke Unit

Acute Stroke Unit

Early Supported Discharge (2 Weeks)

Further Early Supported Discharge (4 weeks)

Inpatient Stroke Rehabilitation

Community Stroke Rehabilitation

Discharged no further formal rehabilitation needs

Mr Innes lives in Wanstead, Redbridge

- Mr Innes was supported back into his home with community stroke rehabilitation (CRS)

HOWEVER……

- He had a longer stay in hospital to meet his early rehabilitation needs because he did not have access to ESD. Longer stays are linked with worse outcomes for people who have a stroke.
- The Redbridge CRS model has reduced access to stroke specialist therapy than the other two boroughs
- Like Mrs Jenkins, he may wait 6 months routine speech therapy in the community (Oct 2015)

Current provision

Hyper-Acute Stroke Unit

Acute Stroke Unit

Early Supported Discharge (2 Weeks)

Further Early Supported Discharge (4 weeks)

Inpatient Stroke Rehabilitation

Community Stroke Rehabilitation

Discharged no further formal rehabilitation needs

Mr Khan lives in Barking and Dagenham

- Mr Khan was supported back into his home and community as soon as possible
- Unlike Mrs Jenkins and Mr Innes, he has his speech and language therapy needs met by a further 4 weeks of ESD support

HOWEVER……

- He may have to wait longer for SALT than if he lived in Havering as the therapist works outside the ESD team in B&D.

Current provision

Hyper-Acute Stroke Unit

Acute Stroke Unit

Early Supported Discharge (2 Weeks)

Further Early Supported Discharge (4 weeks)

Inpatient Stroke Rehabilitation

Community Stroke Rehabilitation

Discharged no further formal rehabilitation needs

Mrs Williams lives in Havering

- Mrs Williams was supported back into her home and community as soon as possible
- Unlike Mrs Jenkins and Mr Innes, she has her speech and language therapy needs met during her further 4 weeks of ESD support
- Unlike Mr Khan, she has not had to wait for her Speech and Language therapy support because they are integrated within the CRS team.

This is currently the closest to the pathway that we would aim to achieve for patients with level of acuity and prognosis across all of BHR

Appendix C – Experience for patients with greater levels of need

The example shows how the experience of the patients that have a greater level of need but should still be suitable for ESD.

Consider Mr Ellis - following his treatment in the Acute Stroke Unit he:

- Meets the clinical criteria and agrees to Early Supported Discharge (ESD)
- Is keen for, and will benefit from a minimal hospital stay
- Is likely to require ongoing support from CRS once discharged from ESD.
- Will require speech and language therapy, nutritional support & psychology on discharge from acute care

Currently all BHR residents only have one stroke rehabilitation option

Future options all aim to ensure this BHR resident would have equal access to **all types** of evidence-based stroke rehabilitation

	Age: 63	Anywhere in BHR
	Condition	**Prognosis**
Upper limbs	L sided paralysis	Fair
Lower limbs	L sided paralysis – needs two to transfer now	Should be able to transfer & mobilise independently in the future
Speech/ swallow reflex	Mild dysphagia/impaired swallow	Swallow is likely to improve in the future
Sensory loss	Vision impairment	Fair
Continence	Incontinent	Fair
Complications	Moderate depression	Good with psychological support

Applies to all BHR residents

Current Provision

Hyper-Acute Stroke Unit

Acute Stroke Unit

Early Supported Discharge (2 Weeks)

Further Early Supported Discharge (4 weeks)

Inpatient Stroke Rehabilitation

Community Stroke Rehabilitation

Discharged no further formal rehabilitation needs

- Whilst ESD services exist they are not organised to meet this level of rehabilitation need in people's homes; e.g. there is inconsistent provision of speech and language therapy and no psychology provision available in the current 2 week ESD offer.
- This means **only option** for people with this level of need living in BHR CCGs is to spend longer in inpatient care which does not guarantee the best possible outcomes for people.

Future pathway for higher acuity patients suitable for ESD

Hyper-Acute Stroke Unit

Acute Stroke Unit

Early Supported Discharge (6 weeks)

Inpatient Stroke Rehabilitation

Community Stroke Rehabilitation

Discharged
no further formal rehabilitation needs

- Better outcomes achieved through equitable access to stroke specialists within ESD and CRS for all BHR residents
- Improves continuity of care by reducing possible handovers from 2 to 1 throughout out ED to CRS pathway
- Equitable access to ESD regardless of admitting hospital e.g. Queen's or Whipps Cross

Estimate is that up to 25% of all stroke patients could be eligible for ESD but currently do not or cannot access it

Appendix D – Options scoring

The following table provides a comprehensive breakdown of the scoring from the options scoring workshop and affordability assessment that were conducted in October 2015.

		Average	Weighting	Weighted Average	
Do Nothing	Clinical Outcomes and Safety	1.83	20%	0.37	1.71
	Patent Carers Experience	1.69	20%	0.34	
	Access to service	1.21	20%	0.24	
	Deliverability	2.25	20%	0.45	
	Flexibility	1.58	20%	0.32	
Option 2	Clinical Outcomes and Safety	3.38	20%	0.68	3.22
	Patent Carers Experience	3.15	20%	0.63	
	Access to service	3.25	20%	0.65	
	Deliverability	3.29	20%	0.66	
	Flexibility	3.04	20%	0.61	
Option 3	Clinical Outcomes and Safety	4.50	20%	0.90	4.29
	Patent Carers Experience	4.50	20%	0.90	
	Access to service	4.42	20%	0.88	
	Deliverability	3.88	20%	0.78	
	Flexibility	4.17	20%	0.83	
Option A	Clinical Outcomes and Safety	4.21	20%	0.84	4.07
	Patent Carers Experience	4.00	20%	0.80	
	Access to service	4.25	20%	0.85	
	Deliverability	3.75	20%	0.75	
	Flexibility	4.13	20%	0.83	
Option B	Clinical Outcomes and Safety	2.63	20%	0.53	2.58
	Patent Carers Experience	2.50	20%	0.50	
	Access to service	2.67	20%	0.53	
	Deliverability	2.71	20%	0.54	
	Flexibility	2.38	20%	0.48	