

**CONSULTATION AND
BUSINESS CASE ON
PROPOSALS FOR THE
FUTURE OF VASCULAR
SERVICES
ACROSS WEST
YORKSHIRE**

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EXECUTIVE SUMMARY

The range of vascular care extends from minor procedures associated with the veins such as surgery for varicose veins, to life saving artery repairs such as aneurysm surgery, that can be technically challenging and requires expert clinical precision.

The most complex vascular care requires an inpatient hospital stay in a specialist centre that can offer a wide range of supporting services, for example cardiology and renal dialysis and where a higher volume of patients with complex vascular conditions are being seen to ensure clinicians maintain their clinical skill and expertise.

Vascular interventions are provided by surgeons, interventional radiologists and nurse specialists supported by the wider multidisciplinary team.

The scope of specialised vascular activity commissioned (funded) by NHS England includes almost all vascular care except for varicose veins and inferior vena cava filter insertion which can be performed as day cases at local district hospitals and these services are commissioned by local Clinical Commissioning Groups (CCGs).

Currently there are seven specialised vascular centres providing a combination of both standard and complex vascular interventions and surgery across Yorkshire and the Humber, three of these are in West Yorkshire. The specialist vascular centres have a dual role acting as a district general hospital (DGH) to their local patients, providing all diagnostics, day surgery and follow up care and also have inpatient vascular beds for the wider population requiring urgent or emergency interventions to unblock arteries.

Most district general hospitals also provide some level of vascular care such as diagnostics, day surgery and follow up care to their immediate populations, this reduces the need for patients to travel into a specialist vascular centre for anything other than the most urgent or emergency vascular interventions.

NHS England has been reviewing these specialised commissioned vascular services across the Yorkshire and the Humber region since 2014 with the input of the Yorkshire and the Humber Clinical Senate. Reviews have focused on the ability of the centres, providing specialised vascular care to meet the NHS England service specification and standards as these lay out what is needed for services to be safe and effective.

Some of the current specialist vascular providers across Yorkshire and the Humber are unable to meet the minimum requirements of the NHSE service specification, which states:

- The minimum catchment population for a specialised vascular centre to serve is 800,000 to ensure patients can receive expert care and to ensure enough patients with a range of vascular disorders are being seen to ensure service expertise is maintained.

- To run a full 24-hour specialised vascular service that is safe and effective the minimum number service critical staff is:
 - six vascular surgeons
 - six interventional vascular radiologists.

Nationally there are low numbers of vascular specialists coming through the training programmes, this means specialised centres are struggling to recruit vascular surgeons and interventional radiologists. The result is that some centres are trying to manage with a major shortfall of vascular specialists and running onerous out of hours rotas. This causes stresses on the system as there are only a small pool of vascular clinicians per specialist centre covering the emergency on-call rotas.

In 2017 the Yorkshire and Humber Clinical Senate recommended the need to consolidate the number of specialised vascular centres across the Yorkshire and the Humber, some centres serve a smaller than required catchment population. For West Yorkshire the Senate recommended reducing the number of centres from three to two.

The West Yorkshire specialised vascular centres are currently located at:

- Leeds; provided by Leeds Teaching Hospitals NHS Trust (LTHT)
- Bradford; provided by Bradford Teaching Hospitals NHS Foundation Trust (BTHT)
- Huddersfield; provided by Calderdale and Huddersfield NHS Foundation Trust (CHFT)

Due to the low numbers of vascular specialists working at Bradford Royal Infirmary part of Bradford Teaching Hospitals NHS Foundation Trust (BTHT) and Huddersfield Royal Infirmary which is part of Calderdale and Huddersfield Foundation Trust (CHFT) the trusts have developed a shared approach to the on-call rota between the two hospitals. This rotates on a weekly basis and all urgent out of hours vascular patients are taken by ambulance to whichever of the two hospitals is on-call.

There is an urgent need to develop more sustainable vascular services, across West Yorkshire through reconfiguration. This is the only way to ensure sufficiently large catchment populations and tackle the fragility of the workforce. The development of a network is the first recommendation highlighted in the national Getting it Right First Time (GIRFT) report for vascular surgery in England published in 2018.

Leeds Teaching Hospital NHS Trust is the only major trauma centre across West Yorkshire and this requires the on-site presence of a specialist vascular centre, therefore Leeds Teaching Hospitals Trust must remain as one of the two specialised centres.

The challenge has been to identify the other (second) centre between Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield NHS Foundation Trust.

Quality of vascular care at both sites is in line with national standards, however, the service specification standards are not met and worsening staffing shortfalls and increasing complexity of vascular interventions mean that in the future the quality of the care being provided may be affected.

Therefore, in order to assist with identifying the second centre a set of criteria were agreed and considered as part of the analysis process, this criterion has been outlined within this document.

In 2017/18, at the request of NHS England the West Yorkshire Association of Acute Trusts (WYAAT) undertook a detailed analysis of the criteria and presented their findings and preferred option to NHS England in May 2018. The outcome from this analysis identified Bradford Teaching Hospitals NHS Foundation Trust as the preferred option given its interdependency with renal (kidney) dialysis.

This document is set out in four sections:

SECTION 1

The patient and public consultation document with information about how to provide feedback or find out more information about the proposal under consideration. This section also holds the glossary of terms.

SECTION 2

The business case, which includes a description of the analysis processes that have led to the options that were considered.

SECTION 3

The proposal under consideration.

SECTION 4

The consultation and engagement process.

SECTION 1

Patient and Public Consultation Document

Have your say on the future of West Yorkshire Vascular Services

The consultation process will run for three months from 28 August 2019 until 30 November 2019.

Our aim is to create vascular services in West Yorkshire that:

- Achieve best practice agreed by experts, to get the best outcomes for patients and the best chance of survival
- Ensure we have more doctors with the right specialist skills
- Meet national standards

Doctors and other specialists have worked together on plans for the future and now we want to explain our proposals for specialised vascular services in West Yorkshire, hear what you think and use your views and experiences to ensure the services work well for patients.

What are specialised vascular services?

These are complex vascular treatments provided to around 4,000 patients in the West Yorkshire area each year. Not all patients admitted to a specialised service will need a complex surgical or interventional radiology intervention, however due to the nature of their condition these patients need specialist assessment and care provided at a specialised vascular centre.

The chief aim of vascular services is to reconstruct, unblock or bypass arteries to restore blood flow to organs. These are often one-off procedures, in the main, to reduce the risk of sudden death, prevent stroke, reduce the risk of amputation and improve function. Vascular services also provide support to patients with other problems such as kidney disease.

Patients who receive vascular services may have:

- Had a stroke or mini stroke and are at risk of having further strokes.
- Blocked arteries in the legs causing pain which may deteriorate further and threaten the leg.
- A bulge in the wall of the body's main artery which needs repair to prevent it rupturing.
- Untreated or untreatable arterial blockages which means they need an amputation.

Note- vascular dementia falls outside the scope of this proposal.

Specialised services like these are not available in every local hospital because they should be delivered by specialist teams of doctors, nurses and other healthcare professionals who have the necessary skills and experience. Unlike most healthcare which is planned and arranged locally by Clinical Commissioning Groups (CCGs), specialised services are planned nationally and regionally by NHS England. Approximately 11,000 patients in West Yorkshire receive vascular treatment each year, (about 4000 specialised and 7000 non-specialised) delivered by six hospitals of which only three are specialised vascular centres providing the full range of complex vascular care.

Early diagnosis is key to successfully treating vascular disease. Patients will be admitted needing both emergency and urgent or planned vascular diagnosis and treatment. Emergency care is immediate treatment to save life or limb, whereas urgent care is planned treatment within a limited number of days.

Early diagnosis may reduce the need for complex surgical or interventional radiology procedures in the future.

Where are these services provided in West Yorkshire?



Bradford Royal Infirmary	Huddersfield Royal Infirmary	Leeds General Infirmary	Airedale General Hospital	Pinderfields General Hospital	Harrogate District Hospital
<p>Full range of services i.e. specialised vascular centres, which includes all local outpatients</p>	<p>Full range of services i.e. specialised vascular centres, which includes all local outpatients.</p>	<p>Full range of services i.e. specialised vascular centres, which includes all local outpatients</p>	<p>Patients seen in outpatient clinics, patients receive simpler procedures and minor surgery. Major and complex surgery delivered at Bradford Royal Infirmary</p>	<p>Patients seen in outpatient clinics, patients receive simpler procedures and minor surgery. Major and complex surgery delivered at Leeds Teaching Hospitals NHS Trust</p>	<p>Patients seen in outpatient clinics, patients receive simpler procedures and minor surgery. Major and complex surgery delivered at York District Hospital</p>

Please note Calderdale and Huddersfield NHS Foundation Trust also provides some vascular outpatient and minor surgeries such as varicose veins at Calderdale Royal Hospital in Halifax.

Harrogate District Hospital is included as part of the West Yorkshire and Harrogate Health and Care Partnership. However, for the delivery of vascular services it supports York Teaching Hospital NHS Foundation Trust with York District Hospital as the specialist vascular centre for the North Yorkshire population.

The populations of Pontefract and Dewsbury are served by both Leeds Teaching Hospitals NHS Trust as the specialised vascular centre and Mid Yorkshire Hospitals NHS Trust as the non-specialised vascular centre. Mid Yorkshire Trust provides assessment, diagnostics, some minor surgery and follow up care at Pinderfields Hospital. The trust works in a networked model with Leeds Teaching Hospitals NHS Trust. All complex urgent or emergency vascular care for these populations are taken to Leeds Teaching Hospitals who provide in and out of hours cover. This proposal will not have any impact on the vascular pathway for those people resident in the Pontefract, Dewsbury or Leeds locations.

Vascular cover at other neighbouring hospitals

Harrogate and District NHS Foundation Trust, provides assessment, diagnostics, and a small number of minor surgeries and follow up care. All complex and urgent/emergency vascular care is taken to York Teaching Hospital NHS Foundation Trust as the vascular centre. This proposal will not have any impact on the pathway for patients who live in Harrogate and the rural areas.

Surgeons and other clinical experts agree that services need to change

The way in which vascular services are provided is changing, with increased focus on screening and prevention as well as improvements in technology.

There is strong evidence that patients who need vascular interventions will receive better quality of care and have a better chance of survival when they are treated and cared for by specialists (including vascular surgeons, interventional radiologists, nurses and therapists) who see a large number of these patients. This helps specialists to develop and maintain expertise in their field of work. This view is supported by The Vascular Society for Great Britain and Ireland and our own local clinicians.

The national standards say there should be 24-hour access to specialist care, and this needs staffing that includes at least six vascular surgeons, six interventional radiologists and specialist nurses.

However, there is only a small pool of the specialist surgeons and interventional radiologists available. Both Bradford Royal Infirmary and Huddersfield Royal Infirmary have had difficulty in recruiting enough staff to meet this standard. They already operate a shared arrangement for an emergency out of hours on-call rota that alternates this service between the two hospitals on a weekly basis. However, this is not sustainable as a long-term option.

While both Bradford Royal Infirmary and Huddersfield Royal Infirmary vascular services have good patient outcomes (quality), we still need to ensure doctors see enough patients to maintain their expertise. This means vascular hospital staff need to work across multiple sites as one team, supporting both the specialised vascular centre and the non-vascular centre where outpatient treatment, diagnostic testing, and some day case surgery will still be taking place.

National standards say that a minimum catchment population of 800,000 will ensure doctors treat enough different types of vascular cases to remain expert. The vascular service provided by Leeds Teaching Hospital Trust serves a population of 1.2 million people. Bradford Teaching Hospital Trust catchment population is 630,000 and Calderdale and Huddersfield Foundation Trust catchment population is 498,000.

These figures are based on the catchment population for the hospital, and not a local authority population.

The options considered for vascular services in West Yorkshire

1. **Option 1** Do nothing and maintain three specialised vascular centres at: Leeds General Infirmary, Huddersfield Royal Infirmary (which will transfer to Calderdale Royal Hospital under the wider urgent and emergency care reconfiguration being undertaken locally) and Bradford Royal Infirmary.
2. **Option 2** Deliver all West Yorkshire specialised vascular services from a single vascular centre at Leeds General Infirmary.
3. **Option 3** Deliver all West Yorkshire specialised vascular services from two centres at Leeds General Infirmary and Bradford Royal Infirmary.
4. **Option 4** Deliver all West Yorkshire specialised vascular services from two centres at Leeds General Infirmary and Calderdale Royal Hospital.

Please note these options take account of the urgent and emergency care review by the Calderdale and Greater Huddersfield CCGs

The outcome from this review (2018) will see all acute medicine including A&E services transferred to Calderdale Royal Hospital in Halifax.

Specialised vascular care is often urgent in nature and would therefore need to be aligned with the acute services. This means as part of the options considered the specialised vascular centre would in the future be based at Calderdale Royal Hospital, with some minor vascular procedures such as day surgery and outpatients retained at Huddersfield Royal Infirmary.

Important and relevant factors considered when thinking about future services

NHS England has considered the four options for the delivery of specialised vascular services in West Yorkshire and has worked with Yorkshire and the Humber Clinical Senate, and the West Yorkshire Association of Acute Trusts to identify the criteria (factors for consideration) for assessing the options for the future of vascular services.

The views of vascular patients have also been sought. NHS England commissioned the School of Health and Related Research in 2016 to run initial patient discussion groups across Yorkshire and the Humber.

Most frequently mentioned as valued by patients regarding their experiences of vascular services were: professional and friendly staff; rapid and convenient access to treatment; personal nature of the service, the importance of integrated (joined-up) specialist teams; and involvement in shared decision making.

Taking account of this work, the criteria that have been agreed as most relevant when considering the future delivery of vascular services in West Yorkshire are:

- Ability for hospitals (also known as providers) to meet the standards of best practice as set out in NHS England's service specification for specialised vascular services and deliver good clinical outcomes
- Ensuring the service has a stable workforce (i.e. an appropriate level of specialised vascular surgeons and interventional radiologists).
- Ensuring the hospital covers a suitable size of population or catchment area (this is so the surgical team can see enough patients and carry out sufficient numbers of procedures to maintain their skills).
- Clinical interdependencies between specialised vascular services and regional major trauma services (i.e. the regional trauma centre must have 24/7 access to vascular surgeons for any emergency admissions that may involve a loss of limb).
- Clinical interdependencies between specialised vascular services and renal services (although not essential, this is desirable as patients with kidney disease can often develop vascular disease and vice versa) information is outlined below.
- Simplicity of process for Yorkshire Ambulance service when transporting out of hours emergency vascular patients to hospital.
- Impact for patients or visitors travelling to the vascular centre by private car or public transport.
- Ease of implementing planned changes both in terms of cost and how quickly any change can happen (due to the significance of the current vascular workforce pressures, there is a need to act swiftly).

Interdependency between renal and vascular care

The key link between renal and vascular care is when patients require urgent renal dialysis due to kidney failure. At this point a patient needs to undergo vascular surgery to prepare the body for renal dialysis treatment. This is one of the most important and challenging aspects of renal care. Vascular access is a patient's life line because good renal dialysis depends on it.

Considering the options against what we know to be most relevant

Table 1: Overview of how the criteria have been considered for each option

	Options considered	Would this help stabilise workforce pressures?	Would this help providers meet NHS standards for vascular services?	Does this cover a suitable population size?	Would this provide a clearer emergency pathway for Yorkshire Ambulance?	Would this support the co-location with current regional major trauma services?	Is there access to existing dedicated inpatient renal services	Would this impact on travel by car or public transport	Would this be easy to make happen?
1	Do nothing and maintain three specialised vascular centres in West Yorkshire at Leeds Teaching Hospitals Trust, Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield Foundation Trust	No	No	No	No	In part (Leeds is the regional major trauma centre for West Yorkshire)	In part (Leeds & Bradford provide renal services)	Yes (BRI & CHFT alternate on-call rotas weekly) relatives would travel to the centre that carried out the surgery	Yes, no change
2	Deliver all West Yorkshire specialised vascular services from one centre at Leeds General Infirmary.	Yes	There is a risk of capacity pressures	There is risk the catchment population would be too large	Yes	Yes	Yes	Yes, for relatives travelling into Leeds from the rest of West Yorkshire	No
3	Deliver all West Yorkshire specialised vascular services from two centres including Leeds General Infirmary and Bradford Royal Infirmary	Yes	Yes	Yes	Yes	Yes	Yes	In part for relatives travelling from the Calderdale & Huddersfield area	Yes
4	Deliver all West Yorkshire specialised vascular services from two centres including Leeds General Infirmary and Calderdale Royal Hospital	Yes	Yes	Yes	Yes	Yes	No	In part for relatives travelling from the Bradford/ Airedale areas	Yes

Given this situation and the requirement that one vascular centre should be at Leeds General Infirmary because it is the regional major trauma centre, the options available were limited to a choice between either Bradford Royal Infirmary (BRI) or Calderdale Royal Hospital (CRH) as the second specialised vascular centre. Therefore options 3 and option 4 were taken forward for further consideration in phase two.

Although there are some variations in the health profiles between Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield NHS Foundation Trust catchment areas, as set out by Public Health England, both populations have similar health care needs.

This means that there are no significant difference between the health of these populations that would mean one location should be chosen as the specialised vascular centre over the other.

At the request of NHS England further detailed analysis of both services at Bradford Royal Infirmary and Huddersfield Royal Infirmary (which would move to Calderdale Royal Hospital in the future) was undertaken in 2017, by the West Yorkshire Association of Acute Trusts (WYAAT). This included careful consideration of both clinical and non-clinical factors.

Table 2: Overview of differentiation between Bradford Royal Infirmary and Calderdale Royal Hospital in meeting criteria for consideration in identifying a preferred option for the second specialised vascular service in West Yorkshire

Relevant thresholds considered	Bradford Royal Infirmary (run by Bradford Teaching Hospitals NHS Foundation Trust)	Calderdale Royal Infirmary (run by Calderdale & Huddersfield NHS Foundation Trust).	What this means in terms of a preferred option...
Workforce considerations include a specialised vascular centre having a minimum of 6 vascular surgeons and 6 interventional radiologists to ensure comprehensive out of hours cover.	The hospital does not currently meet recommended workforce standards with 4.5 vascular surgeons in post and 2.5 interventional radiologists in post (it is funded for 3.5 interventional radiologists).	The hospital does not currently meet recommended workforce standards with four vascular surgeons in post and 1 interventional radiologist in post (it is funded for 4 interventional radiologists).	Due to both Trusts not meeting the expected workforce standards to ensure comprehensive out of hours cover, it is the view of NHS England that doing nothing is not an option. Workforce pressures are similar for both trusts i.e. based on workforce considerations alone the current position does not make a stronger case for either Bradford Teaching Hospital NHS Foundation Trust or Calderdale and Huddersfield NHS Foundation Trust to be identified as providing the second specialised vascular centre in West Yorkshire.
NHS service standard considerations suggest that a specialised vascular centre should carry out a minimum of 60 AAA repairs per year (ten per surgeon) and a minimum of 50 carotid artery intervention procedures per unit per year.	Hospital data from 2015 to 2017 shows that the trust is managing 37 AAA repairs per year and 48 carotid artery interventions.	Hospital data from 2015 to 2017 shows that the trust is managing 30 AAA repairs per year and 45 carotid artery interventions, currently undertaken at Huddersfield Royal Infirmary	Due to both Trusts not carrying out the minimum number of procedures, it is the view of NHS England that doing nothing is not an option. Activity levels are similar for both trusts i.e. based on activity considerations alone the current position does not make a stronger case for either Bradford Teaching Hospital NHS Trust or Calderdale and Huddersfield NHS Foundation Trust to be identified as providing the second specialised vascular centre in West Yorkshire.
A specialised vascular centre should cover a minimum population catchment area of 800,000.	The Trust currently covers a catchment population of 630,000	The Trust currently covers a catchment population of 498,000	Due to both Trusts not covering the minimum population size, it is the view of NHS England that doing nothing is not an option. While the population catchment area is higher for Bradford Teaching Hospitals NHS Foundation Trust, this is not considered a significant difference and therefore does not make a stronger case for Bradford Teaching Hospitals NHS Foundation Trust to be the preferred option for providing the second specialised vascular centre instead of Calderdale and Huddersfield NHS Foundation Trust. There is a need to combine the populations to meet the standards

Relevant thresholds considered	Bradford Royal Infirmary (run by Bradford Teaching Hospitals NHS Foundation Trust)	Calderdale Royal Infirmary (run by Calderdale & Huddersfield NHS Foundation Trust)	What this means in terms of a preferred option...
Clinical interdependencies indicate it is preferential but not essential for specialised vascular centres to be co-located with renal services.	Bradford Teaching Hospital NHS Foundation Trust has a renal dialysis unit on the Bradford Royal Infirmary site and a proposed service expansion would mean additional patients can be accommodated with no additional cost implications.	Neither of the Calderdale and Huddersfield NHS Foundation Trust hospitals currently have renal dialysis services on the same site. Bedside dialysis would need to be provided at Calderdale Royal Infirmary. The service would require a small team of renal nurses, bed spaces and dialysis equipment.	Due to the interdependencies and established renal services being in place at Bradford Royal Infirmary, this factor differentiates Bradford Royal Infirmary as the preferred option for the second specialised vascular centre in West Yorkshire.
Consideration must be given to any material impact on Yorkshire Ambulance Service performance or resources.	The trust operates a system of alternating weeks on-call with Calderdale and Huddersfield Foundation trust so there are only two specialised vascular centres in West Yorkshire on call for emergencies currently. Yorkshire Ambulance Service assessment is that if the Bradford Royal Infirmary service closes, there will be minimal impact on ambulance travel times or resource requirements.	The trust currently operates a system of alternating weeks on-call with Bradford Teaching Hospitals NHS Foundation Trust so there are only two specialised vascular centres in West Yorkshire on call for emergencies. Yorkshire Ambulance Service assessment is that if the Huddersfield Royal Infirmary service closes, there will be minimal impact on ambulance travel times or resource requirements.	The impact of any change for Yorkshire Ambulance service is similar for both Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield NHS Foundation Trust i.e. based on ambulance travel considerations alone the current position does not make a stronger case for either Bradford Teaching Hospital NHS Foundation Trust or Calderdale and Huddersfield NHS Foundation Trust to be identified as providing the second specialised vascular centre in West Yorkshire. Both options will provide a clearer emergency transport pathway on call for emergencies.
Consideration must be given to any material impact on the total population falling outside 45 mins travel to a specialised vascular centre.	If Bradford Teaching Hospitals NHS Foundation Trust provides the specialised vascular service at Bradford Royal Infirmary (BRI)- 26% of the population live within 1 hour Over half the West Yorkshire population live within 80 mins of BRI 95% of the population live within 2 hours	If Calderdale and Huddersfield NHS Foundation Trust provides the specialised vascular service at Calderdale Royal Hospital (CRH). 20% of the population live within 1 hour 41% of the West Yorkshire population lives within 80 mins of CRH. 95% of the population live within 2 hours	The results from the car transport analysis do not identify any significant difference between travel to either Bradford Royal Infirmary or Calderdale Royal Hospital. Considering public transport 95% of the population lives within 2 hours of each hospital. It is recognised that traveling by public transport from the boundaries of West Yorkshire will incur a lengthy journey regardless of which hospital site is chosen. The total population falling outside 45 mins travel to a specialised vascular centre is minimal and should not be considered as a factor in the analysis.
Ease of implementing planned changes based on timescales for implementation and any potential capital or revenue costs greater than 10% difference to total costs for the service	Bradford Teaching Hospitals NHS Foundation Trust has the infrastructure and capacity at Bradford Royal Infirmary required, however assessment shows potential impact in terms of ease of implementation will apply equally whichever site is chosen.	The current vascular service is located at Huddersfield Royal Infirmary, future specialised vascular care will be transferred to Calderdale Royal Hospital under the wider reconfiguration of emergency services. Renal inpatient beds will need to be included in future hospital developments if Calderdale and Huddersfield NHS Foundation Trust is identified as providing the second vascular centre which will incur a small additional cost. However, assessment shows potential impact in terms of ease of implementation will apply equally whichever site is chosen.	The impact of any change in terms of cost and timescales is similar for both Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield NHS Foundation Trust i.e. based on ease of implementation alone the current position does not make a stronger case for either Bradford Royal Infirmary or Calderdale Royal Hospital to be the second specialised vascular centre.

Outcome from the analysis

The outcome from the WYAAT analysis between Bradford Royal Infirmary and Calderdale Royal Hospital, and the subsequent proposal to NHS England identified Bradford Royal Infirmary as the preferred option as the second vascular centre for West Yorkshire, taking account of interdependencies with renal (kidney care).

What does this mean in terms of changes we want to make?

Under this proposal, emergency and most planned major treatments that require an overnight stay, would be provided at two specialised vascular centres instead of three, located at Leeds General Infirmary and Bradford Royal Infirmary. In an emergency patient will always be taken to their nearest specialised centre which will have:

- Dedicated vascular wards with extra beds for emergency patients 24 hours a day.
- Vascular nurse specialists – able to support the transfer of patients back to their local hospital/home.
- Out of hours which includes evenings and weekends, there will be on call vascular surgeons, who can be contacted by surgical teams at Calderdale and Huddersfield NHS Foundation Trust, Mid Yorkshire NHS Trust and Airedale NHS Foundation Trust.

Most of the vascular activity will still be provided at Calderdale and Huddersfield NHS Foundation Trust (CHFT).

This includes:

- Simpler procedures and minor surgery (such as the removal of unhealthy tissue or minor amputations).
- Diagnostic tests and treatments which don't require an overnight stay.
- Continuing inpatient care and any rehabilitation following major surgery at either Leeds General Infirmary or Bradford Royal Infirmary. Patients will usually be repatriated back to their local hospital as soon as they are medically fit. Some patients will be discharged directly home from the specialised centre if no further care is required.
- Out patients and follow up.
- Support services such as foot care for those who have had minor surgery.
- Treatment for varicose veins.

The aim is to provide two specialised vascular centres in West Yorkshire with more doctors working across a wider geography, who are able to work flexibly and collaboratively to meet patient needs.

There would be no change to the services currently provided at Leeds General Infirmary, Airedale General Hospital or Pinderfields General Hospital.

How many patients from the Huddersfield, Calderdale and Kirklees area does this affect?

At Calderdale and Huddersfield NHS Foundation Trust, there are approximately 2,100 in-patient episodes (a stay or attendance in hospital which is not a clinic appointment) under vascular surgery or interventional radiology in one year. This includes both planned lower risk day case surgery, such as varicose vein treatment, and the more complex emergency vascular treatments with a long stay in hospital. This proposal would be a change for only those patients requiring the more complex and higher risk planned and emergency vascular procedures. This will, therefore, affect approximately 800 patients per year (38%) out of the 2100. The remaining 1,300 (62%) surgical and interventional radiology treatments would remain locally at the hospital, alongside all the existing diagnostic tests, and out-patient/follow up care which will also continue at the local hospital.

This change represents 7% (11,000) of the total vascular activity across West Yorkshire, who currently receive that specific level of care at Calderdale and Huddersfield Foundation Trust.

Travel considerations

The results from the transport analysis do not identify any significant difference between travel to either Bradford Royal Infirmary or Calderdale Royal Hospital for each of those populations.

Patient transport services would be available to those who need help to get to the hospital. Once the patient is stable they can usually be either discharged home or return to their local hospital for any ongoing care or rehabilitation. Many patients will continue to receive treatment locally.

Information that can help visiting relatives with planning public transport options can be found here: <https://www.wymetro.com/plan-a-journey/>

Have your say: 2019

We are keen to hear from you, so that we can take account of any views that will help us reach a decision. We would like you to provide your feedback on these proposals and you can do this in a number of ways as set out below.

- To find out more about the consultation on the future of specialised vascular services in West Yorkshire and complete a survey on-line visit www.engage.england.nhs.uk (and search for 'West Yorkshire Vascular') or go to www.england.nhs.uk/north-east-yorkshire
- Or to request a copy of the consultation on the future of specialised vascular services in West Yorkshire is sent to you by email england.WYVfeedback@nhs.net or telephone 0113 8251536.
- To hear first-hand from clinical leaders about the consultation on the future of specialised vascular services in West Yorkshire and ask questions, you can attend one of the following six events in your local community:

Location	Date	Time	Venue
Kirklees/Huddersfield	3 October	2pm until 4pm	The John Smiths Stadium, Stadium Way, Huddersfield, HD1 6PG
	15 October	6pm until 8pm	The John Smiths Stadium, Stadium Way, Huddersfield, HD1 6PG
Calderdale/Halifax	8 October	6pm until 8pm	The Arches, East Mill, 328 Dean Clough, Halifax, HX3 5AX
	29 October	6pm until 8pm	The Crossley Gallery, East Mill, 328 Dean Clough, Halifax, HX3 5AX
Bradford	7 October	2pm until 4pm	Midland Hotel Forster Square, Cheapside, Bradford, BD1 4HU
	14 October	5pm until 7pm	Great Victoria Hotel, Bridge Street, Bradford, BD1 1JX

- If you have a copy of the consultation on the future of specialised vascular services and have completed the feedback section, this can be returned to the following address:

Freepost NHS BRADFORD DISTRICT & CRAVEN

You can handwrite or type your envelope, but the words NHS BRADFORD DISTRICT & CRAVEN must be in capital letters after the word Freepost.

Glossary of terms

Abbreviation	Meaning
AAA	Abdominal aortic aneurysm
AGH	Airedale General Hospital
ANHSFT	Airedale NHS Foundation Trust
BRI	Bradford Royal Infirmary
BTHFT	Bradford Teaching Hospital NHS Foundation Trust
BTHFT	Bradford Teaching Hospitals NHS Foundation Trust
CCGs	Clinical Commissioning Groups
CEA	Carotid Endarterectomy
CHFT	Calderdale and Huddersfield NHS Foundation Trust
CIC	Committee in Commons
CRH	Calderdale Royal Hospital
CT	Computed tomography
DCO	Directors of Commissioning operations
DGH	District General Hospital
DOF	Director of Finance
EVAR	Endovascular aneurysm repair
GIRFT	Getting it Right First Time
HDH	Harrogate District Hospital
HRI	Huddersfield Royal Infirmary
IG	Information Governance
IR	Interventional radiology
IT	Information technology
LGI	Leeds General Infirmary
LTHT	Leeds Teaching Hospitals NHS Trust
MOU	Memorandum of Understanding
MRI	Magnetic resonance imaging
MTC	Major Trauma Centre
MYHT	Mid Yorkshire Hospitals NHS Trust
PGH	Pinderfields General Hospital
ScHARR	School of Health and Related Research
STP	Sustainable Transformational Plan
WYAAT	West Yorkshire Association of Acute Trusts
Y&H	Yorkshire and the Humber

Questionnaire

It is important, before answering the questions in our consultation survey, for you to ensure that you have read all of the information provided about each of the individual vascular provider hospitals in West Yorkshire so that you understand the potential impact of our proposal on the hospital affected and the way in which the vascular service delivery might change, should our proposals be implemented.

1. Are you a...?

- a. Vascular patient
 - b. Carer of a vascular patient
 - c. Member of NHS staff
 - d. Member of the public
 - e. Organisation representing patients
Please state which organisation.....
-

2. From the following list which is your nearest hospital?

- a. Airedale
- b. Bradford
- c. Calderdale
- d. Huddersfield
- e. Harrogate
- f. Leeds
- g. Wakefield
- h. Not applicable/regional/national organisation, please specify

3. Now when thinking about specialised vascular services (those that require an overnight hospital stay because the intervention is more serious) please rank which is most important to you from 1 to 5 (with 1 being the highest and 5 being the lowest)

	Score
a) Being seen by a specialist team, available 24 hours a day, 7 days a week	<input type="checkbox"/>
b) Knowing the place you are being treated has good patient outcomes / success rates (in line with the NHS England standards)	<input type="checkbox"/>
c) The level of expertise of people treating you is of a high standard due to the large number of patients they see each year	<input type="checkbox"/>

d) Knowing that your vascular specialist is able to work closely with other relevant specialist doctors, such as (renal and major trauma professionals)

e) Being treated in a place that is close to where you live so people can visit

f) Ease of getting to and from your hospital appointment

g) Other/please provide your views here...

4. To what extent do you support or oppose this proposal?

- Strongly support
 - Tend to support
 - Neither support or oppose
 - Tend to oppose
 - Strongly oppose
-

5. Please explain your response to question 4.

6. Is there an alternative option that you want to put forward for consideration?

7. Is there any aspect of this proposal that would benefit from further information or explanation. If so please provide details

8. What age band do you fall under, please tick which applies to you

- Under 18
 - 18 - 30
 - 31 - 45
 - 46 - 55
 - 56 - 65
 - 66 – 75
 - 75 and over
-

9. Which ethnic group do you belong to (please select one answer only)?

- a. White British
 - b. White Irish or White Other
 - c. Black/African/Caribbean/Black British
 - d. Asian or Asian British
 - e. Multiple/Mixed Ethnic Groups
 - f. Prefer not to say
 - g. Other (please specify below)
-

10. Do you consider yourself to have a disability? The Equality Act 2010 states a person has a disability if they have a physical or mental impairment which has a long term (12-month period) or substantial adverse effects on their ability to carry out day to day activities.

Yes

No

Prefer not
to say

Thank you for completing this questionnaire. Your views will be taken into consideration and will help shape the final plans for vascular services in West Yorkshire.

The completed questionnaire can be returned to the following freepost address:

Freepost NHS BRADFORD DISTRICT & CRAVEN

You can handwrite or type your envelope, but the words NHS BRADFORD DISTRICT & CRAVEN must be in capital letters after the word Freepost

SECTION 2.

THE BUSINESS CASE

1. OVERVIEW

NHS England's strategic intention is to commission the best model of vascular service provision across Yorkshire and the Humber. This model must best meet the needs of patients and address any identified issues of variation in access and be within available resources from providers who are able to meet the NHS England service specification (2017 NHS Standard Contract for Specialised Vascular Services, Adults, NHS England)

This is based on the recommendations set by the Vascular Society of Great Britain and Ireland to provide safe, high quality care for patients requiring arterial (vascular) surgery.

The rising demand for vascular care and the falling numbers of vascular specialists is creating challenges for the hospital trusts delivering these services. Much of this care is urgent in nature and requires immediate interventions by either surgeons or interventional radiologists to prevent death or avoid severe disability. Therefore 24/7 access to specialists with the skill to deal with these emergencies is a key necessity. However, covering the out of hours vascular rotas at each of the seven specialised vascular centres in the Yorkshire and the Humber is becoming increasingly difficult. Training and subsequent recruitment of specialists is lower than those approaching retirement, which means the existing workforce is stretched and the on-call rotas particularly across West Yorkshire are unsustainable.

Therefore, changes to how the services are currently being delivered is essential to ensure everyone in need of vascular care receives it without unnecessary delay. Whilst supporting the workforce to maintain a realistic work life balance.

This is not about a short-term fix; we are focusing on the long-term resilience and sustainability of vascular services.

Finally, we would like to acknowledge that this work has taken a long time to reach this point and we recognise the uncertainty which has been hanging over vascular teams as a result. We hope this proposal goes some way to ending that uncertainty and provides reassurance that a solution is within reach.

2. BACKGROUND AND CONTEXT

Vascular services are for people with disorders of the arteries and veins. These include narrowing or widening of arteries, blocked vessels and veins.

Vascular disorders can reduce the amount of blood reaching the limbs, brain or other organs, causing for example severe pain on walking or strokes. Additionally, vascular abnormalities can cause sudden, life threatening, blood loss if abnormally enlarged arteries burst. Vascular specialists also support other specialties, such as major trauma, cardiology; diabetic medicine, stroke medicine, kidney dialysis and chemotherapy.

Complex Vascular surgery covers:

- Abdominal Aortic Aneurysms (AAA)
- Carotid Endarterectomy (CEA) following a stroke or transient ischaemic attacks (mini-strokes)
- Peripheral vascular disease, which causes poor or interrupted blood supply to the feet or legs
- Major trauma injuries

Patients requiring vascular surgery or interventional radiology suffer from different vascular disorders that can adversely affect quality of life. Late diagnosis can result in a more complex and urgent or emergency procedure e.g. lifesaving surgery to repair a ruptured abdominal aneurysm. This level of care requires a hospital stay in a specialised vascular (arterial) centre.

Risk factors for vascular disease include:

- over age 50
- smoking
- being overweight
- have abnormal cholesterol
- have a history of cerebrovascular disease or stroke
- have heart disease
- have diabetes
- have a family history of high cholesterol or high blood pressure
- have high blood pressure
- have kidney disease or on haemodialysis

Early diagnosis is key to successfully treating vascular related disease. Patients will be admitted with a variety of both emergency and planned vascular conditions and not all patients will go on to require a complex surgical or interventional radiology procedure. Emergency care is immediate treatment to save life or limb, urgent care is planned treatment within a limited number of days.

NHS England has been reviewing its plans for specialised vascular services across the Yorkshire and Humber region since 2014 with the input of the Yorkshire and the Humber Clinical Senate. Clinical Senates provide independent strategic clinical advice and leadership to NHS England and other health care organisations on how services should be designed to provide the best possible care and outcomes for patients.

2.1 Specialised vascular surgery is currently provided at the following centres across Yorkshire and the Humber

Sub region	Current specialised vascular centres	Location of specialised vascular sites
West Yorkshire	Three specialised vascular centres	<p>Bradford Teaching Hospital NHS Foundation Trust (Bradford Royal Infirmary)</p> <p>Calderdale and Huddersfield NHS Foundation Trust (Huddersfield Royal Infirmary) it has been assumed that future vascular care will be transferred to Calderdale Royal Hospital (CRH) in line with the wider reconfiguration of urgent and emergency care provision, undertaken by the Clinical Commissioning Group (CCG).</p> <p>Leeds Teaching Hospitals NHS Trust (Leeds General Infirmary)</p>
Humber Coast & Vale	Two specialised vascular centres	<p>Hull University Teaching Hospitals NHS Trust (Hull Royal Infirmary)</p> <p>York Hospitals NHS Foundation Trust (York District Hospital)</p>
South Yorkshire & Bassetlaw	Two specialised vascular centres	<p>Sheffield Teaching Hospitals NHS Trust, (Northern General Hospital)</p> <p>Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust (Doncaster Royal Infirmary)</p>

3. THE CASE FOR CHANGE

The case for change has shifted over time, the original incentive focused on meeting the NHS England service specification for the minimum catchment population for a specialised vascular centre which is 800,000. This is to ensure patients receive expert clinical care from specialists who see enough patients with a wide range of vascular disorders to maintain expertise. However, during the review period, workforce recruitment and retention has become an increasing concern, and this has now become an additional factor supporting the need for change.

Those trusts with low numbers of vascular specialists will find it a challenge to maintain safe and effective services in the future without changing the way vascular services are currently being delivered.

There are low numbers of specialised staff available to deliver the 24/7 (out of hours) care required. This is due in part to difficulties recruiting which has resulted from the national shortage of vascular surgeons and interventional radiologist consultants. This situation is likely to worsen as the numbers of newly qualified vascular specialists entering the workforce are low in comparison to those approaching retirement (Vascular Society 2018). This means that specialist vascular services are currently unable to meet the expected standards set out in the service specification for both the workforce and population as outlined below.

Quality Standards as set out in the NHS England Specialised Vascular service specification:

- Covers a minimum population of 800,000
- Minimum of six vascular surgeons to ensure comprehensive out of hours cover
- Minimum of six interventional radiologists to ensure comprehensive out of hours cover
- Minimum of 60 AAA repairs per year (ten per surgeon)
- A minimum of 50 carotid artery intervention procedures per unit per year

The clinical rationale for maintaining this level of service is to ensure:

- Improved health outcomes for patients; increasing evidence of link between surgical volumes and improved patient outcomes for complex arterial surgery, especially abdominal aortic aneurysms.
- Advances in technology and shift towards non-invasive treatment methods for vascular patients (for example, the use of balloons and stents) which means there is increasing collaborative working between specialist interventional radiology support.
- Advances in treatment have greatly improved patient outcomes. However, this requires the ready availability (24/7) of consultant interventional radiologists who have expert and highly specialised skills, working alongside vascular surgeons.
- A general increase in pressure on services and on the AAA screening programme.

In order to identify the best model to support the workforce, and ensure services meet the quality standards set in the NHS England service specification, a number of reviews were undertaken over an extended period between 2014-17.

4. HISTORY TO HOW THE PROPOSAL WAS DEVELOPED

PREVIOUS REVIEW WORK ACROSS YORKSHIRE & THE HUMBER

The Clinical Senate reviewed all specialised vascular services across the Yorkshire and the Humber and published their first report in April 2016. Noting that if Yorkshire and the Humber is to meet the population, workforce and quality standards within the specification, there will need to be significant changes to the current service model.

In a second report in January 2017, the Senate advised that none of the specialised vascular centres in Yorkshire and the Humber, meet all the standards in NHS England's national service specification (standard contract 2016/17). The Senate made several recommendations to improve services across the region, which included the need to reduce the number of specialist vascular centres across the three sub regions (Humber Coast & Vale, West Yorkshire and South Yorkshire) from seven to five.

A further recommendation identified that, in the future vascular care should be delivered via a network arrangement, with one vascular centre delivering specialised vascular interventions, supported by a local district general hospital (DGH), that would provide all non-specialised vascular care.

The non-specialised centre (DGH) would provide a high degree of care locally such as, assessments, diagnosis, day surgery and follow up. However, they would not have any specialised vascular inpatient beds. This networked arrangement will improve the long-term sustainability of vascular services.

The chief aim of this reconfiguration is to support service providers, to meet the NHS England national requirements for a compliant specialised vascular centre, with the appropriate number of consultant staff to cover rotas and to ensure enough patients with a range of complex vascular disorders are being seen to maintain clinical expertise.

This approach to safeguard services into the future is also recommended in a national report "Getting It Right First Time" on vascular surgery, published in March 2018.

The Senate report supports the views of the Vascular Society of Great Britain and Ireland, who published a report in 2015, outlining the provision of services for patients with vascular disease. The recommendations stated that:

"The Vascular Society of Great Britain and Ireland is actively engaged with driving down the mortality of patients undergoing vascular procedures in the UK and Ireland. Our primary objective is to provide all patients with vascular disease with the lowest possible elective and emergency morbidity and mortality rates in the developed world. To achieve this, we will need to modernise our service and deliver world class care from a smaller number of higher volume hospital sites...."

The Senate also advised that the following factors should be given special consideration when assessing the locations of the five Yorkshire and the Humber specialised vascular centres. These are:

- Co-location of a major trauma centre, to ensure major trauma patients have rapid access to vascular speciality.
- Clinical interdependency with inpatient renal care, to ensure vascular patients who develop renal failure, have access to urgent renal interventions, and renal patients who require vascular interventions, have easy access to specialist vascular care.

4.1 Outcomes from the Senate Review and Impact for West Yorkshire

The Senate review in 2017 concluded the need to consolidate vascular services onto fewer sites across Yorkshire and the Humber.

The view for West Yorkshire was that there are three specialised vascular centres, which all currently carry out specialised vascular surgery, however there is only enough specialised vascular activity and vascular surgeons and interventional radiologists to support two centres. The national service specification for vascular surgery (ref number 170004/S) clearly highlights the number of surgical staff required to sustain a service, and the number of specialist procedures, that should be carried out by vascular specialists per year, to support the maintenance of clinical skill.

4.2 The table below outlines the current staff levels:

	Bradford Teaching Hospitals NHS Foundation Trust	Calderdale and Huddersfield NHS Foundation Trust	Leeds Teaching Hospitals NHS Trust supported by Mid Yorkshire Hospitals NHS Trust
Population taken from the travel analysis	630,000	498,000	1.1 million
Surgeons - established (i.e. funded)	4.5	4	15
Surgeons - substantive (i.e. in post)	3.5	3	15
Interventional Radiologists - established	3.5	4	11
Interventional Radiologists - substantive	2.5	1	11

NB. Numbers reflect whole time equivalent posts, not individuals, CHFT currently has only one vascular interventional radiologist in post.

Given the complexity of some vascular conditions that present to A&E, requiring emergency attention by a vascular specialist, the out of hours workload is more onerous than in many other surgical specialties. The ability to provide an on-call rota at consultant level is a critical feature for a viable vascular unit. The GIRFT Vascular Report 2018, states that the majority of vascular work should be done within two weeks (semi-urgent) patients need to be seen and treated quickly. This impacts on the ability to plan treatments in the same way as other specialties can.

In addition to the strong clinical case for change, a proposed reconfiguration will also aid recruitment, while minimising any potential gaps in rotas and fragility within a service which is under increasing pressure.

4.3 The Yorkshire and the Humber Clinical Senate recommendations for the reconfiguration of specialist vascular centres across West Yorkshire

The Clinical Senate recommended a reduction from three to two specialist vascular centres.

4.4 Early West Yorkshire Reviews

It is worth reflecting on an earlier vascular review undertaken in 2014, by the Leeds Teaching Hospital NHS Trust (LTHT) and Mid Yorkshire Hospitals NHS Trust (MYHT). At that time both Leeds and Mid Yorkshire hospitals provided specialised vascular care. The reviewers concluded that services should be reconfigured to support one specialised vascular centre in a hub and spoke model. As Leeds Teaching Hospitals NHS Trust is the only designated Major Trauma Centre (MTC) across West Yorkshire, it must be co-located with specialised vascular surgery (Clinical Senate 2017) therefore following this review, Leeds Teaching Hospitals NHS Trust was appointed as the specialised vascular centre supported by:

- Mid Yorkshire Hospitals NHS Trust (at Pinderfields General Hospital)

Mid Yorkshire Hospital NHS Trust work in a networked arrangement with Leeds Teaching Hospitals NHS Trust to provide vascular outpatient clinics, day case surgery, lower risk interventional radiology procedures, and support to other specialties.

As a major trauma centre, Leeds Teaching Hospitals NHS Trust must continue to provide a full vascular service, which includes specialised vascular surgery (Clinical Senate 2017). The link between major trauma and vascular surgery includes crush injuries, caused by vehicle accidents and penetrating trauma, where the blood supply to a limb is compromised risking amputation or blood loss and could lead to loss of life without rapid access to a vascular surgeon.

5. CURRENT MODEL

Bradford Teaching Hospitals NHS Foundation Trust (BTHT) and Calderdale & Huddersfield NHS Foundation Trust (CHFT) currently operate as one service across two sites. The BTHT service is located at Bradford Royal Infirmary and the CHFT service is currently located at Huddersfield Royal Infirmary.

This model is not supported by the national service specification. The Clinical Senate supported the proposal that this arrangement changes to the model outlined, within the service specification of a specialised vascular centre, supported in a network arrangement with a non-specialised vascular centre. In a similar way to the model developed by Leeds Teaching Hospitals NHS Trust and Mid Yorkshire Hospital NHS Trust.

The Mid Yorkshire Hospital NHS Trust provides vascular support with out of hours cover and other vascular services such as outpatient and diagnostics on site, however they do not have any specialised vascular beds.

The 2017 Clinical Senate report highlighted the need to ensure that those services with a co-dependency on vascular specialism should wherever possible be co-located with the specialised vascular centre, these include:

- Major trauma centres, in as much as a major trauma centres should have access to vascular specialism.
- Dedicated in-patient renal dialysis facilities which although not essential, is desirable.

5.1 Facilities

The three specialised vascular centres have the following facilities dedicated to the vascular service:

Facility	BTHFT - BRI	CHFT – HRI Current site	LTHT - LGI
Ward beds	28	15	27
Theatre Sessions	11	12	19
Hybrid Theatre	No	No	No
VIR suites	1	1	4
Co-located with major trauma	No	No	Yes
In patient renal dialysis beds	Yes	No	Yes

All three specialised vascular centres, particularly Calderdale and Huddersfield NHS Foundation Trust and Leeds Teaching Hospitals NHS Trust, report that they regularly exceed this number of ward beds with patients outlying onto other surgical wards. In the initial GIRFT report, Leeds Teaching Hospitals NHS Trust reported 36 vascular beds and a bed audit at Calderdale and Huddersfield NHS Foundation Trust indicated average occupancy of 25 beds.

6. THE OPTIONS CONSIDERED

NHS England supported the Senate view that Leeds Teaching Hospitals NHS Trust (LTHT) would remain as one of the specialised vascular centres given its major trauma status and renal inpatient facility. Therefore, the options under consideration were:

1. **Do nothing and maintain three specialised vascular centres at:**

- A. Leeds General Infirmary,
- B. Huddersfield Royal Infirmary, which will transfer to Calderdale Royal Hospital under the wider urgent and emergency care reconfiguration being undertaken by the CCG
- C. Bradford Royal Infirmary,

In previous discussion, commissioners were reminded by the Clinical Senate to consider 800,000 as the minimum population required and were advised that the catchment population may need to be significantly bigger to ensure a sustainable service. Calderdale and Huddersfield NHS Foundation Trust and Bradford Teaching Hospital NHS Trust do not have the catchment population independently to sustain separate services. There are recruitment difficulties and pressure on staff.

2. **Deliver all West Yorkshire specialised vascular services from a single specialised vascular arterial centre at Leeds General Infirmary.**

Leeds Teaching Hospitals NHS Trust is unable to accommodate the additional capacity that a centralised vascular service will require. Centralisation of a specialised vascular service will cause significant pressure on the bed capacity, including intensive and high dependency care within the provider of this centralised arterial centre. (Clinical Senate 2016)

3. **Deliver all West Yorkshire specialised vascular services from two centres at Leeds General Infirmary and Bradford Royal Infirmary.**

Bradford Teaching Hospital NHS Trust has a well-established in-patient renal unit at Bradford Royal Infirmary.

4. **Deliver all West Yorkshire specialised vascular services from two centres at Leeds General Infirmary and Calderdale Royal Hospital.**

Calderdale and Huddersfield NHS Foundation Trust do not provide renal dialysis facilities, for all complex In-patient renal care, patients access the inpatient renal facility at Leeds which is provided by Leeds Teaching Hospitals NHS Trust. For daily renal dialysis this is also provided by Leeds Teaching Hospitals at satellite locations in Calderdale and Huddersfield. Developing a specialised vascular centre at Calderdale Royal Hospital will need the addition of renal inpatient facilities.

6.1 Criteria Used to Assess the Options

NHS England has considered the four options for the delivery of specialised vascular services in West Yorkshire and has worked with the Yorkshire and Humber Clinical Senate, and the West Yorkshire Association of Acute Trusts to identify the criteria for assessing the options for the future of specialised vascular services.

The views of vascular patients have also been sought, NHS England commissioned the School of Health and Related Research in 2016 to run initial patient discussion group across Yorkshire and the Humber. Most frequently mentioned, as valued by patients regarding their experiences of vascular services were: professional and friendly staff; rapid and convenient access to treatment; personal nature of the service, the importance of integrated (joined-up) specialist teams; and involvement in shared decision making.

Taking account of this work, the criteria that has been agreed as most relevant for the future delivery of specialised vascular services in West Yorkshire are:

- Ability for hospitals (also known as providers) to meet the standards of best practice, including ability to deliver clinical outcomes, as set out in NHS England's service specification for specialised vascular services.
- Ensuring the service has a stable workforce (i.e. an appropriate level of specialised vascular surgeons and interventional radiologists).
- Ensuring the hospital can cover a suitable size of population or catchment area (this is so the surgical team can see enough patients and carry out sufficient numbers of procedures to maintain their skills).
- Clinical interdependencies between specialised vascular services and regional major trauma services (i.e. the regional trauma centre must have 24/7 access to vascular surgeons for any emergency admissions that may involve a loss of limb).
- Clinical interdependencies between specialised vascular services and renal services (although not essential, this is desirable as patients with kidney disease can often develop vascular disease and vice versa).
- Simplicity of process for Yorkshire Ambulance service when transporting out of hours emergency vascular cases to hospital.
- Impact for patients or visitors travelling to the specialist vascular centre by private car or public transport.
- Ease of implementing planned changes both in terms of cost and how quickly any change can happen (due to the significance of the current vascular workforce pressures, there is a need to act swiftly).

6.2 The detail behind the consideration of the options

The review and assessment of the options presented for West Yorkshire has taken place over two distinct phases

Phase one: Yorkshire and Humber Clinical Senate reviews (2016 & 2017)

The Yorkshire and Humber Clinical Senate recommendation to reduce the number of West Yorkshire specialised vascular centres from three to two. These two centres would work together with the other hospitals providing non-specialised vascular care across West Yorkshire and they would continue to provide outpatient and diagnostic tests as well as some day surgery.

The information gathered by the Clinical Senate helped NHS England identify which of the four options would best meet the needs of the population and which should be discounted as follows:

Options 1, to do nothing (i.e. maintaining three specialised vascular centres at Leeds General Infirmary, either Huddersfield Royal Infirmary and/or Calderdale Royal Hospital and Bradford Royal Infirmary, was discounted as untenable due to catchment population numbers and the inability to meet the requirements of the on-call rota across two sites.

Option 2, To centralise vascular services from a single specialised vascular centre at Leeds General Infirmary. This was also discounted due to the increased capacity on one trust required to deliver a safe and sustainable service.

Given this situation and the requirement that one specialised vascular centre should be located at Leeds General Infirmary due to it being the regional major trauma centre, the options available were limited to a choice between either Bradford Royal Infirmary (BRI) or Calderdale Royal Hospital (CRH) as the second specialised vascular centre.

6.3 Options given further consideration

Therefore options 3 and option 4 were taken forward for further consideration in phase two.

Phase two: Focus of the current project work with West Yorkshire Association of Acute Trusts

Following the Yorkshire and Humber Clinical Senate report in 2017, the focus of the review shifted to identify which of these two hospitals (Bradford Royal Infirmary or Calderdale Royal Hospital) should become the second specialised vascular centre.

This proved difficult to determine as it is acknowledged that there is little to differentiate between them. There are currently staffing pressures at both centres. Despite these challenges, both services continue to deliver good patient outcomes within the acceptable range.

Currently the two hospitals already work together to cover an emergency out of hours vascular rota, with this service provision alternating each week. However, this is not supported by the Yorkshire and Humber Clinical Senate as a long-term sustainable solution.

At the request of NHS England further detailed analysis of both services was undertaken in 2017, by the West Yorkshire Association of Acute Trusts (WYAAT). This included careful consideration of both clinical and non-clinical factors.

The key differentiating factor was the interdependency between vascular and renal (kidney) services. There are close links between these services, especially for more complex inpatients, and the Yorkshire and Humber Clinical Senate had highlighted that they should ideally be kept together.

- Bradford Teaching Hospitals NHS Foundation Trust provides one of two inpatient renal units for West Yorkshire sited at Bradford Royal Infirmary (BRI) and this is co-located with the specialised vascular centre.
- The other in-patient renal unit is provided by Leeds Teaching Hospitals NHS Trust at Leeds General Infirmary (LGI).
- Calderdale and Huddersfield NHS Foundation Trust does not provide any dedicated inpatient renal beds, this service is provided to Calderdale and Huddersfield patients by Leeds Teaching Hospital NHS Trust at the LGI site.

Option 3 maintains co-location of specialised vascular and renal services at Bradford Teaching Hospitals NHS Foundation Trust at the BRI site.

Option 4 would separate renal services provided by Bradford Teaching Hospitals NHS Foundation Trust at BRI and vascular services provided by Calderdale and Huddersfield NHS Foundation Trust at CRH. Some renal beds could be provided at CRH with additional funding for renal equipment and running costs.

6.4 Outcome from the analysis between option 4 and 4

Bradford Royal Infirmary and Calderdale Royal Hospital have been considered against the criteria and there is one key area of differentiation.

- There is an existing and well developed renal inpatient service at Bradford Royal Infirmary. This service has the capacity to expand to accommodate the Calderdale and Huddersfield populations. This would remove the need to create capacity for renal inpatient beds at Calderdale Royal Hospital.

6.5 Considering the options against what we know to be most relevant

Table 1: Overview of how the criteria has been considered for each option

	Options considered	Would this help stabilise workforce pressures?	Would this help providers meet NHS standards for vascular services?	Does this cover a suitable population size?	Would this provide a clearer emergency pathway for Yorkshire Ambulance?	Would this support the co-location with current regional major trauma services?	Is there access to existing dedicated inpatient renal services	Would this impact on travel by car or public transport	Would this be easy to make happen?
1	Do nothing and maintain three specialised vascular centres in West Yorkshire at Leeds Teaching Hospitals Trust, Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield Foundation Trust	No	No	No	No	In part (Leeds is the regional major trauma centre for West Yorkshire)	In part (Leeds & Bradford provide renal services)	Yes (BRI & CHFT alternate on-call rotas weekly) relatives would travel to the centre that carried out the surgery	Yes, no change
2	Deliver all West Yorkshire specialised vascular services from one centre at Leeds General Infirmary.	Yes	There is a risk of capacity pressures	There is risk the catchment population would be too large	Yes	Yes	Yes	Yes, for relatives travelling into Leeds from the rest of West Yorkshire	No
3	Deliver all West Yorkshire specialised vascular services from two centres including Leeds General Infirmary and Bradford Royal Infirmary	Yes	Yes	Yes	Yes	Yes	Yes	In part for relatives travelling from the Calderdale & Huddersfield area	Yes
4	Deliver all West Yorkshire specialised vascular services from two centres including Leeds General Infirmary and Calderdale Royal Hospital	Yes	Yes	Yes	Yes	Yes	No	In part for relatives travelling from the Bradford/ Airedale areas	Yes

6.6 The table below provides an overview of how Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield NHS Foundation Trust have been considered against the criteria that NHS England and WYATT think are important for vascular services.

Relevant thresholds considered	Bradford Royal Infirmary (run by Bradford Teaching Hospitals NHS Foundation Trust)	Calderdale Royal Infirmary (run by Calderdale and Huddersfield NHS Foundation Trust)	What this means in terms of a preferred option...
Workforce considerations include a specialised vascular centre having a minimum of 6 vascular surgeons and 6 interventional radiologists to ensure comprehensive out of hours cover.	The hospital does not currently meet recommended workforce standards with 4.5 vascular surgeons in post and 2.5 interventional radiologists in post (it is funded for 3.5 interventional radiologists).	The hospital does not currently meet recommended workforce standards with four vascular surgeons in post and 1 interventional radiologist in post (it is funded for 4 interventional radiologists).	<p>Due to both Trusts not meeting the expected workforce standards to ensure comprehensive out of hours cover, it is the view of NHS England that doing nothing is not an option.</p> <p>Workforce pressures are similar for both trusts i.e. based on workforce considerations alone the current position does not make a stronger case for either Bradford Royal Infirmary or Calderdale Royal Hospital to be the second specialised vascular centre in West Yorkshire.</p>
NHS service standard considerations suggest that a vascular centre should carry out a minimum of 60 AAA repairs per year (ten per surgeon) and a minimum of 50 carotid artery intervention procedures per unit per year.	Hospital data from 2015 to 2017 shows that the trust is managing 37 AAA repairs per year and 48 carotid artery interventions.	Hospital data from 2015 to 2017 shows that the trust is managing 30 AAA repairs per year and 45 carotid artery interventions. At the Huddersfield Royal Infirmary site.	<p>Due to both Trusts not carrying out the minimum number of procedures, it is the view of NHS England that doing nothing is not an option.</p> <p>Activity levels are similar for both hospital trusts i.e. based on activity considerations alone the current position does not make a stronger case for either Bradford Royal Infirmary or Calderdale Royal Hospital to be the second specialised vascular centre.</p>
A specialised vascular centre should cover a minimum population catchment area of 800,000.	The Trust currently covers a catchment population of 630,000	The Trust currently covers a catchment population of 498,000	<p>Due to both Trusts not covering the minimum population size, it is the view of NHS England that doing nothing is not an option.</p> <p>While the population catchment area is higher for Bradford Teaching Hospital NHS Foundation Trust, this is not considered a significant difference and therefore does not make a stronger case for Bradford Royal Infirmary to be the preferred second specialised vascular centre instead of Calderdale Royal Hospital.</p> <p>There is a need to combine the populations to meet the standards</p>

Relevant thresholds considered	Bradford Royal Infirmary (run by Bradford Teaching Hospitals NHS Foundation Trust)	Calderdale Royal Infirmary (run by Calderdale and Huddersfield NHS Foundation Trust)	What this means in terms of a preferred option...
Clinical interdependencies indicate it is preferential but not essential for specialised vascular centres to be co-located with renal services.	Bradford Royal Infirmary has a renal dialysis unit on the same site as the specialised vascular centre and a proposed expansion of renal services would mean additional patients can be accommodated with no additional cost implications.	Neither of the Calderdale and Huddersfield NHS Foundation Trust Hospitals currently have renal dialysis services on the same site. Bedside dialysis would need to be provided at CRH. The service would require a small team of renal nurses, bed spaces and dialysis equipment.	Due to the interdependencies and established renal services being in place at Bradford Royal Infirmary, this factor differentiates Bradford as the preferred option for the second specialised vascular centre in West Yorkshire.
Consideration must be given to any material impact on Yorkshire Ambulance Service performance or resources.	Currently Bradford Teaching Hospitals NHS Foundation Trust operates a system of alternating weeks on-call with Calderdale and Huddersfield NHS Foundation Trust, so there are only two specialised vascular centres in West Yorkshire on call for emergencies. Yorkshire Ambulance Service assessment is that if the Bradford Royal Infirmary service closes, there will be minimal impact on ambulance travel times or resource requirements.	Currently Calderdale and Huddersfield NHS Foundation Trust operates a system of alternating weeks on-call with Bradford Teaching Hospital NHS Foundation Trust, so there are only two specialised vascular centres in West Yorkshire on call for emergencies. Yorkshire Ambulance Service assessment is that if the current Huddersfield Royal Infirmary service closes, there will be minimal impact on ambulance travel times or resource requirements.	No material difference between these hospitals in terms of emergency travel. NB- by reducing from two to one centre will eliminate the need for a shared alternating weekly on-call rota. Thus, removes the risk of transferring a patient to a centre not providing out of hours cover. Both options will provide a clearer emergency transport pathway for on call emergencies.
Consideration must be given to any material impact on the total population falling outside 45 mins travel to a specialised vascular centre.	If Bradford Teaching Hospital NHS Trust provides the specialised vascular service at Bradford Royal Infirmary, BRI- 26% of the population live within 1 hour Over half the West Yorkshire population live within 80 mins of BRI 95% of the population live within 2 hours	If Calderdale and Huddersfield NHS Foundation Trust provides the specialised vascular service at Calderdale Royal Hospital, CRH- 20% of the population live within 1 hour 41% of the West Yorkshire population lives within 80 mins of CRH. 95% of the population live within 2 hours	The results from the car transport analysis do not identify any material difference between travel to either BRI or CRH. Considering public transport 95% of the population lives within 2 hours of each hospital. The total population falling outside 45 mins travel to a specialised vascular centre is minimal and should not be considered as a factor in the analysis.

Relevant thresholds considered	Bradford Royal Infirmary (run by Bradford Teaching Hospitals NHS Foundation Trust)	Calderdale Royal Infirmary (run by Calderdale and Huddersfield NHS Foundation Trust)	What this means in terms of a preferred option...
<p>Ease of implementing planned changes based on timescales for implementation and any potential capital or revenue costs greater than 10% difference to total costs for the service</p>	<p>Bradford Teaching Hospital NHS Foundation Trust has the infrastructure and capacity required, however assessment shows potential impact in terms of ease of implementation will apply equally whichever site is chosen.</p>	<p>The current vascular service is located at Huddersfield Royal Infirmary, future specialised vascular care will be transferred to Calderdale Royal Hospital (CRH) under the wider reconfiguration of emergency services. Renal inpatient beds will need to be included in this work if CRH becomes the second vascular centre which will incur a small additional cost.</p> <p>However, assessment shows potential impact in terms of ease of implementation will apply equally whichever site is chosen.</p>	<p>The impact of any change in terms of cost and timescales is similar for both trusts i.e. based on ease of implementation alone the current position does not make a stronger case for either Bradford Royal Infirmary or Calderdale Royal Hospital to be the second specialised vascular centre.</p>

SECTION 3.

7. THE PROPOSAL

In May 2018, WYAAT submitted their preferred option to the Committee in Commons (CIC) who unanimously supported the proposal. This was then submitted to NHS England for consultation and consideration.

The proposal recommends Bradford Royal Infirmary (BRI) as the second specialised vascular centre supported by Calderdale and Huddersfield NHS Foundation Trust from both hospital sites (HRI & CRH).

This is based on the clinical interdependencies highlighted by the Yorkshire and Humber Clinical Senate in relation to the co-location of an in-patient renal service which would support the care of vascular patients who develop kidney disorders, and patients with kidney failure who develop vascular disease.

The proposal will result in all specialised planned and emergency vascular interventions currently performed at Huddersfield Royal Infirmary being moved to Bradford Royal Infirmary. Most of the vascular care is provided locally through screening, diagnosis, outpatients and day surgery, this will continue to be delivered by Calderdale and Huddersfield NHS Foundation Trust at both HRI and CRH.

Under this proposal there would be no change to the services currently provided at Leeds General Infirmary, Airedale General Hospital or Pinderfields General Hospital.

7.1 How many patients from the Huddersfield, Calderdale and Kirklees area does this affect?

This proposal would be a change for approximately 800 patients per year (7% of total vascular activity across West Yorkshire) who are currently treated as vascular inpatients at Huddersfield Royal Infirmary. These patients cover a wide variety of both planned and emergency treatment.

Huddersfield Royal Infirmary

Although under this proposal, Calderdale and Huddersfield NHS Foundation Trust would no longer provide complex or emergency vascular surgery, at Huddersfield Royal Infirmary it would continue to offer vascular services. There would be access to vascular specialists at the hospital in Huddersfield during weekdays in outpatients and on the wards. This would mean that patients with diabetes, cancer, or other related injuries will be able to be seen by a vascular surgeon.

Patients requiring emergency care would be taken by ambulance services to either Leeds General Infirmary or Bradford Royal Infirmary. Within the current network arrangements this already happens for vascular emergencies, with patients travelling between three different specialised vascular centres.

Given the pressures specific to West Yorkshire there is a willingness from clinicians and trust managers to move swiftly with progressing proposed changes to specialist vascular services.

8. THE PROPOSED MODEL FOR CHANGE

Leeds Teaching Hospitals NHS Trust as the major trauma centre for West Yorkshire is co-located with the specialised vascular centre. Leeds Teaching Hospitals NHS Trust provides renal care and is already in a networked arrangement with Mid Yorkshire Hospitals NHS Trust as the non-specialised centre. Given these factors both NHS England and the Yorkshire and Humber Clinical Senate recommended that Leeds should remain as one of the two vascular centres in West Yorkshire.

The outcome from the WYAAT analysis and the subsequent proposal to NHS England, identified Bradford Teaching Hospital NHS Foundation Trust from the Bradford Royal Infirmary site as the second specialised vascular centre for West Yorkshire, taking account of the following key factors:

- Bradford Teaching Hospitals NHS Foundation Trust have confirmed they have the required staff, interventional radiology capability, theatre and bed capacity, specialist wards, IT and cross-speciality working to provide safe and sustainable specialised vascular surgery at Bradford Royal Infirmary.
- Bradford Royal Infirmary has the physical infrastructure already in place for it to become the second specialised vascular centre, given clinical interdependencies with renal it already has an established renal inpatient unit with capacity to accommodate extra activity at no additional cost. Calderdale and Huddersfield NHS Foundation Trust currently refer its renal patients requiring an inpatient stay for care to Leeds Teaching Hospitals NHS Trust and to establish this facility would require both capital investment and running costs.
- As well as renal care, Bradford Royal Infirmary provides several related speciality services and has established cross-speciality working in cardiology, stroke, and care of the elderly. Services which can form part of the care needed by vascular patients.

Note, CHFT also has established cross specialty working in cardiology, stroke and care of the elderly.

The future model will mean all vascular emergencies and the planned major treatments that require an overnight stay, would be provided at two specialised vascular centres located at Leeds General Infirmary and Bradford Royal Infirmary. In an emergency patient will always be taken to their nearest specialised centre which will have:

- Dedicated vascular wards with extra beds for emergency patients 24 hours a day.
- Vascular nurse specialists – able to support the transfer of patients back to their local hospital / home.
- Out of hours and at weekends there will be on call vascular surgeons, who can be contacted by surgical teams at Huddersfield, Calderdale, Pinderfields and Airedale hospitals.

The reviewers recommended Calderdale and Huddersfield NHS Foundation Trust could continue to deliver vascular outpatient clinics, non-invasive diagnostics and day surgery working as part of a networked approach with Bradford Teaching Hospitals NHS Foundation Trust.

After extensive discussions between NHS England and all stakeholders including Bradford Teaching Hospital NHS Foundation Trust, Calderdale and Huddersfield NHS Foundation Trust and the Vascular Advisory Group (the regional network of vascular surgeons and interventional radiologists), and taking account of the previous Yorkshire and Humber Clinical Senate review mentioned above, a consensus of NHS stakeholders was reached in relation to the recommended preferred location of the second specialised vascular centre:

- NHS England has accepted the WYAAT proposal to consider Bradford Royal Infirmary as the second specialised vascular centre and is taking this option through the consultation and engagement process.
- Calderdale and Huddersfield NHS Foundation Trust accept with the reviewers' recommendation; that Bradford Teaching Hospitals NHS Foundation Trust should be developed as the second specialised vascular centre.
- The Vascular Advisory Group has also endorsed the reviewers' recommendation.

The proposal will result in specialised vascular in-patient surgery being transferred from Calderdale and Huddersfield NHS Foundation Trust, with the majority of these cases going to Bradford Teaching Hospitals NHS Foundation Trust and a minority to Leeds Teaching Hospitals NHS Trust. Leeds have the capacity to cope with the small number of additional patients that may result from the reconfiguration of these services.

8.1 Table of current services

Vascular services offered in West Yorkshire	Airedale General Hospital	Bradford Royal Infirmary	Huddersfield Royal Infirmary	Leeds General Hospital	Pinderfields General Hospital
Specialised vascular centre carries out Emergency surgery/ interventional radiology	No	Yes	Yes	Yes	No
Specialised vascular centre carries out Elective inpatient surgery	No	Yes	Yes	Yes	No
Non-specialised vascular centre carries out Elective day case surgery/ interventional radiology	Yes	Yes	Yes	Yes	Yes
Diagnostic procedures	Yes	Yes	Yes	Yes	Yes
Outpatients	Yes	Yes	Yes	Yes	Yes

8.2 Table of proposed future services

Vascular services offered in West Yorkshire	Airedale General Hospital	Bradford Royal Infirmary	Huddersfield Royal Infirmary	Leeds General Hospital	Pinderfields General Hospital
Specialised vascular centre carries out Emergency surgery/ interventional radiology	No	Yes	No	Yes	No
Specialised vascular centre carries out Elective inpatient surgery	No	Yes	No	Yes	No
Non-specialised vascular centre carries out Elective day case surgery/ interventional radiology	Yes	Yes	Yes	Yes	Yes
Diagnostic procedures	Yes	Yes	Yes	Yes	Yes
Outpatients	Yes	Yes	Yes	Yes	Yes

8.3 Catchment under new model

	LTHT	MYFT	BTHT	CHFT
Populations	1.2 Million	330,000	630,000	498,000
Populations combined	1.5 Million		1.1 Million	

9. LONGER TERM WEST YORKSHIRE NETWORK MODEL

Medics from across the county will work together in a more coordinated way. This will create a more flexible and supported vascular workforce through a single West Yorkshire Vascular Service. This will include all the five trusts that currently provide vascular care in West Yorkshire and aims to futureproof vascular services. This means services are better equipped and able to respond to the rising demands, whilst meeting the needs of a population with a full range of vascular conditions.

The network is based on the following principles:

- To develop a West Yorkshire vascular network working as a West Yorkshire team with sub specialist team(s).
- West Yorkshire needs two strong specialised vascular centres which are well utilised - this is not centralising service in Leeds.
- The case mix in the two centres will reflect the specialist tertiary service provision and MTC status of Leeds.
- Governance will be based on parity of esteem between partner organisations to develop a MOU covering governance, decision making, clinical model, workforce plan and operating principles.
- Start with joint appointments for the West Yorkshire service including the university.
- The network model will consider development of local services and potential spokes including partner Trusts in West Yorkshire.
- NHSE is supportive of a network approach and evolutionary development.
- There will be a shared financial model with risk gain share.

10. ALIGNMENT WITH FIVE YEAR FORWARD VIEW

The proposal aims to improve the quality of care for patients through better utilisation of available resources. The longer-term plan is to deliver vascular services via a single networked arrangement under a single governance structure.

- **Health and wellbeing;** improved health and wellbeing for patients and clinicians are expected outcomes from the redesign of vascular services that support a more integrated approach to service delivery. Access to timely clinical expert opinion and coordinated treatment pathways provided 24/7 through a partnership of specialism.
- **Care and quality;** the proposal aims to reduce variation in clinical practice and ensure equality of access, improved patient outcomes and a better patient experience. On call rotas will be coordinated across the network to maximise the benefits of a flexible consultant workforce. Care will remain closer to home for non-specialised interventions.
- **Funding and efficiency;** this will be achieved by ensuring the patient reaches the most appropriate service through clear pathways of care. Access to improved data through joined up IT systems will reduce delays in locating and sharing information. Integrated care systems that link network providers will be more efficient and provide better value for money.

11. EXPECTED IMPACT FOR PATIENTS & HOSPITAL TRUSTS

Based on current patient data, it is estimated that the recommended proposal in favour of Bradford will affect 800 patients per year (approximately 15 patients on average per week).

Patients that currently have their specialised vascular surgery at Huddersfield Royal Infirmary (HRI) under this proposal would have this surgery at Bradford Royal Infirmary (BRI). Some may choose to go to Leeds Teaching Hospital NHS Trust as an alternative.

Calderdale and Huddersfield NHS Foundation Trust would continue to deliver vascular outpatient clinics, non-invasive diagnostics and vascular day surgery.

The populations living on the boundaries of North Yorkshire will continue to access York Hospitals NHS Foundation Trust for all vascular care as York is the specialised vascular centre and remains unaffected by this proposal. Patients living in the Craven and Richmond areas will continue to access Airedale Hospital for all but the most complex vascular care, in which case they will access Bradford Royal Infirmary as per the current model.

Populations living on the boundaries of East Lancashire will access Calderdale and Huddersfield NHS Foundation Trust as usual unless they require specialised vascular care from Bradford Royal Infirmary. Patients receiving vascular care in these remote locations are very small in number and total approximately 5 patients per year.

Those populations living South of Huddersfield in the Barnsley area will access Sheffield as their closest specialised vascular centre as per usual care.

There are changes to the number of hyperacute stroke units being commissioned by the clinical commissioning groups across South Yorkshire, which means there will no longer be a unit in Barnsley Hospital. Barnsley stroke patients will receive emergency stroke treatment at Sheffield Teaching Hospitals NHS Foundation Trust or Mid Yorkshire NHS Trust (Pinderfields Hospital) depending on distance. Those patients who receive stroke treatment at Mid Yorkshire NHS Trust and then require a carotid endarterectomy (vascular intervention) which is usually performed a few days after a stroke, or Transient ischemic attack (TIA) will be transferred to Leeds Teaching Hospitals NHS Trust as the specialised vascular centre. This is only expected to affect a very small number of patient's resident in the north Barnsley area.

12. REPATRIATION PROCESSES

Repatriation process between Bradford Royal Infirmary and the Calderdale and Huddersfield NHS Foundation Trust are being worked through with clinicians and trust managers. There are several best practice models nationally that will help direct this process. Also, lessons can be learned from the previous vascular reconfiguration undertaken by Leeds Teaching Hospitals NHS Trust and Mid Yorkshire Hospitals NHS Trust.

The repatriation pathway has three routes for patients:

1. Discharged home directly from Bradford Royal Infirmary.
2. Discharged home with community care and rehabilitation.
3. Transferred to a ward at Calderdale and Huddersfield NHS Foundation Trust for ongoing in-patient care and rehabilitation, followed by discharge into the community.

A key aim is to ensure patients, who are not able to be discharged from the vascular specialist centre immediately home, are transferred back to their local hospital as soon as surgically fit, to continue their recovery and rehabilitation.

Clinicians and managers acknowledge the role of care coordinators, in supporting repatriation process and the plan will be to ensure coordinators are employed, to help navigate patients back to the best location after specialist surgery in the centre.

Patient receiving specialised vascular surgery at Bradford Royal Infirmary will continue to access existing rehabilitation services within their local area.

13. IMPACT ON THE WIDER HEALTH SYSTEM & SOCIAL CARE

Redesigning services across traditional health care boundaries is not easy. NHS England and WYAAT have utilised the experience of others from a variety of organisations in the hope of developing a proposal that is inclusive and considers how the changes will impact across these boundaries. We recognise that, despite our efforts, some risks will remain or emerge as the process unfolds. It has taken years to reach this point, during which time other vascular providers nationally have implemented this model, and we are confident that lessons can be learned from their experiences.

13.1 The table below identifies the risks, issues and actions we have taken to mitigate against these.

Risk	Issues	Mitigation
Variation in practice and access to specialist vascular care	Currently there is some variation in practice and waiting times can differ depending on the hospital.	The redesign of vascular services into two centres providing a full range of vascular interventions supported by local vascular services delivered in a collaboration, will ensure all patients have access to standardised and timely care. Patients can choose to travel further for some care if there are delays at their local hospitals.
Clinical support for the change proposed	Some clinicians will need to work across boundaries and travel more often.	Clinical leadership to harness enthusiasm for the changes and clearly set out opportunities for clinicians as a result of the changes.
Loss of clinical buy in due to time involved in delivering the changes.	Loss of interventional radiology capacity at CHFT as a result of the delays in redesigning these services.	Creating a collaborative network of vascular speciality will support smaller teams to manage vacancies, annual and sick leave. It will provide better opportunities for education, training and research.
Workforce well-being	Current shift patterns and on call rotas are unsustainable, with smaller teams struggling to maintain the levels of staff required to deliver safe effective services.	The model of collaboration will support skills sharing across the 5 trusts and avoid isolation and feelings of lone responsibility for delivering a service.
Delays in repatriation processes	Patients remaining on the ward at Bradford Royal Infirmary longer than required due to bed availability at their local DGH	Lessons can be learned from the LTHT and MYHT network arrangement to reduce the time it takes to transfer the patient back to their local DGH Every effort is being made to plan for patient repatriation. Patient numbers transferring back to local services will be no different under the new model than the existing. Local services are CCG commissioned and NHS England has little influence over CCG decisions. However, the role of the care coordinators will support these processes and help the patient access the best available care and rehabilitation.
Integrated IT systems	Limited access to joint diagnostic facilities to support patient care across the trusts	It is recognised that further work to support IT compatibility between trusts is required.
Access to community care and rehabilitation	Delays in discharge caused by uncoordinated or limited community care and rehabilitation.	Existing community-based support will be available for patient's returning home in the same way as it is currently being delivered. The demand for community support is ever increasing, which makes access to early vascular interventions essential in helping to reduce the burden of disability. Ensuring the patient reaches the most appropriate location after surgery will be supported by the care coordinators.
Unexpected Increase in funding	Costs associated with the transfer of patients between trusts, tariff related costs. Capital build costs for additional facilities	WYAAT are working with trusts to identify the costs involved with this proposal. Additional costs will result from the need to develop a hybrid theatre at one or both specialised vascular centres. This is a requirement regardless of which trust was identified as the preferred option to deliver specialist vascular care.

14. TRAVEL ANALYSIS

We appreciate that some patients or visitors might be concerned about having to travel an additional distance. The service being received by the patient is often life or limb saving. Patient transport services would be available to those who need help to get to the hospital. Once the patient is stable they can usually be either discharged home or return to their local hospital for any ongoing care or rehabilitation.

An independent travel impact assessment has been carried out, reviewing both emergency and non-emergency access, in the event of either the Calderdale Royal Hospital or Bradford Royal Infirmary becoming the second specialised vascular centre in Yorkshire.

It should be noted that the majority of modelling was undertaken on Calderdale Royal Hospital (CRH) rather than Huddersfield Royal Infirmary. Both form part of the Calderdale and Huddersfield NHS Foundation Trust (CHFT). However currently vascular inpatient beds are provided at HRI, these would transfer to CRH in the event that CHFT was identified as the second specialised vascular centre.

An independent public transport analysis was also undertaken to assess travel times between:

- Bradford Royal Infirmary and areas in Calderdale and Huddersfield.
- Calderdale Royal Hospital and the areas around Bradford City and rural area.

The outcome from all travel analysis identifies no material difference between the geographies in West Yorkshire and either Bradford Royal Infirmary or Calderdale Royal Hospital

The full travel analysis on ambulance, car and public transport is available at the following link

<http://www.yhscn.nhs.uk/cardiovascular/httpwwwyhscnnhsukcardiovascularpreventiovasculars.php>

15. PATIENT CHOICE

Regardless of where patients live, they will still be able to choose where they have their planned vascular surgery. A networked model will support greater choice. In an emergency situation, the patient would always be taken to the nearest vascular centre.

Rehabilitation of patients that have specialised vascular surgery at Bradford Royal Infirmary would continue to access rehabilitation services within their local area.

From the previous patient and public engagement work undertaken in 2016, patients are concerned that clinicians, will still have the opportunity to develop in their chosen speciality and not be disadvantaged by any changes in services.

Patients like the idea of centres of excellence, where access to highly specialist interventions are available in one location, and through this expert consolidation high quality outcomes are maintained. Further details regarding the previous stakeholder engagement process and outcomes can be found Section 4 of this document and the full report can be found at the following link.

<http://www.yhscn.nhs.uk/cardiovascular/httpwwwyhscnnhsukcardiovascularpreventiovasculars.php>

16. BENEFITS, RISKS AND ACTIONS TO BE TAKEN

The proposed changes are expected to provide the following benefits and NHS England has identified actions to ensure these benefits are delivered.

Benefits of proposal	Potential risks of proposal	What we will do to limit these risks
Easing of pressure on all vascular services including emergency and routine procedures	Requires clinical teams to change some of their currently established working routines, which may cause some initial disruption	Clinical leaders to involve teams with development of new working practices
Clarity on future service arrangements will ensure longer term sustainability	It requires a change in current service arrangements, which may not be supported by some individuals, groups or organisations	NHS England and clinical leaders to engage with patients and the public to inform them of the proposal and seek feedback as part of the consultation
It creates a clear pathway for emergency transfer into the vascular centre rather than rotating on a weekly basis between Bradford Royal Infirmary and Huddersfield Royal Infirmary or Calderdale Royal Hospital (under the future transformation change)	Some patients may be disappointed that the hospital closest to where they live is no longer used for management of emergency out of hours vascular cases	To seek feedback as part of the consultation
It supports excellence in practice enabling clinicians to develop their expertise working as part of a larger specialist vascular team covering a broader geographical area and seeing more patients	There will be increased travel time for some clinicians, patients and visiting friends and relatives	To seek feedback as part of the consultation
Proposed change only affects patients requiring a complex or specialist procedure requiring an overnight stay, all routine vascular services will continue to be available in local hospitals	Local hospitals will need to demonstrate readiness and commitment to support speedy repatriation back to the local hospital for ongoing care and rehabilitation	To be addressed as part of the transition plans
Shared out of hours workforce across West Yorkshire will reduce burden on clinicians and improve recruitment potential	Some clinicians with a preference for one hospital may not like the increased frequency of working at a different hospital site	Clinical leaders to involve teams with development of new working practices

Advantages of proposal	Potential risks of proposal	What we will do to limit these risks
In establishing Bradford Royal Infirmary as the second specialist vascular centre, access to renal inpatient care is maintained without the need for additional reorganisation of existing services	There may be a preference from some individuals, groups or organisations for Calderdale to be the second specialist vascular centre and for new renal inpatient services to be established as part of a wider reorganisation of existing services	To explain the interdependency with renal as part of the consultation process and ensure engagement events are held in the Calderdale and Kirklees community
Supports improved shared knowledge across West Yorkshire, including better access to education and training and increased research opportunities	Some staff may not wish to grasp these opportunities and clinical leadership will be required to support clinicians throughout the transition phase	Clinical leaders to involve teams with development of new working practices
It reduces hospitals working in isolation, and supports a shift to a more networked way of working across vascular services in West Yorkshire	As well as effective clinical engagement, proposals will require improvements to supporting infrastructure e.g. information management and technology systems	To be addressed as part of the transition plans with support from the trusts involved

17. IMPACT ASSESSMENTS

17.1 Workforce Impact Assessment

To deliver this service model, and as set out in the principles agreed in July 2017, the service will operate as a single vascular team. To make best use of the available workforce and to allow individual consultants to develop sub-specialty, research and teaching interests, the consultant workforce will be able to work flexibly across all sites in the network. This does not mean that consultants will be expected to work across more than two sites and in practice most consultants will probably spend the majority of their time between one specialised vascular centre and one local hospital. The opportunity for more flexible working will be available, both for regular job planned activity and to cover gaps in rotas, clinics, theatres due to illness or other unexpected circumstances.

The current activity is being delivered by the existing workforce, so it should still be deliverable if the Bradford Royal Infirmary and the current Huddersfield Royal Infirmary vascular activity is consolidated into one specialised vascular centre. This is, however, currently based on consultants working well above their official job plans.

There is a small additional requirement for travel time for consultants moving between the vascular network sites, however this should be accommodated if the gaps in the consultant workforce are filled as a result of improved recruitment. The biggest additional requirement for clinical time in the future service model is 15 PAs to provide cover on spoke sites to enable repatriation. This additional capacity would open up opportunities to manage patients more effectively, with shorter length of stay and using other clinical roles which would minimise the additional requirement and future proof the service. Further, detailed work is required with the clinical working group in the implementation phase to develop the full workforce requirement to deliver the future service model.

17.2 Impact on Clinical Commissioning Groups (CCGs)

The reconfiguration is not expected to have any financial impact on CCGs. There are 15 vascular inpatient beds being transferred to Bradford Royal Infirmary from Huddersfield Royal Infirmary. Calderdale and Huddersfield NHS Foundation Trust (CHFT) has confirmed that these beds will not be designated to an alternative service and will therefore not create an additional financial burden to the CCG. CHFT has confirmed that this will not have a destabilising effect on their income. The trusts have all advised that the number of inpatient beds does fluctuate in line with seasonal demand; therefore moving 15 beds from one trust to another is not expected to result in any material difference to the CHFT.

Feedback from clinical engagement suggests that a small number of dedicated beds may be required at Calderdale and Huddersfield NHS Foundation Trust to aid repatriation for patients who have ongoing vascular needs that cannot be served under a general surgery or medical ward. Work is still ongoing to explore this possibility including how these costs will be managed.

The proposed change is not expected to impact on local government services. This change does not represent a new service creating additional patients. Therefore, patients are expected to be managed within existing resources.

17.3 Equality assessment

An equality assessment has been completed for the options appraisal, located in Appendix 13 of the WYAAT Options Appraisal.

17.4 Four Key Tests & Bed Closure

NHS England has undertaken a gap analysis to ensure the proposal meets the government's four key tests and NHS England's test for proposed bed closure (where appropriate). This can be provided on request.

18. COSTS & AFFORDABILITY

This recommendation does not increase vascular activity in West Yorkshire; it only shifts where specialised vascular activity is delivered from Calderdale and Huddersfield NHS Foundation Trust to Bradford Teaching Hospitals NHS Foundation Trust. Therefore, there should be no financial impact on commissioners as a result of implementing this proposal.

18.1 Revenue

It has not been possible to complete a detailed, bottom up costing of the future service model. Whilst there might be a risk that the future model is more expensive than the current model, analysis undertaken so far indicates that this should not be the case even before opportunities for efficiency are considered. NB there would be an additional cost at Calderdale and Huddersfield NHS Foundation Trust (CHFT) to establish a bed side dialysis service should CHFT have been the WYAAT preferred option.

18.2 Local Services

Outpatient and Day Case Services

Outpatient and day case services are currently provided at Airedale NHS Foundation Trust, Bradford Teaching Hospitals NHS Foundation Trust, Calderdale and Huddersfield NHS Foundation Trust, Leeds Teaching Hospitals NHS Trust and Mid Yorkshire Hospitals NHS Trust. The baseline assumption is that these would continue unchanged in the future service model. The costs should be the same as now, regardless of WYAAT's preferred option for the location of the other specialised vascular centre. Opportunities for increased efficiency may also be available.

18.3 Inpatient Care

The baseline assumption (without considering potential efficiencies) is that the total number of bed-days required will not change either as a result of moving from three to two specialised vascular centres, or due to the choice of WYAAT's preferred option for the other specialised vascular centre. The location of the beds required will change and, if repatriation is implemented, the specialty staff mix would also change. In simple terms, an extra ward will be required at Bradford Royal Infirmary and a ward released at Huddersfield Royal Hospital if Calderdale and Huddersfield NHS Foundation Trust is no longer a specialised vascular centre.

- **Ward costs;** Bradford Teaching Hospitals NHS Foundation Trust has identified existing ward space which can be reallocated to the vascular service with some minor reconfiguration to provide the 28 beds. The anticipated cost for this work is £80K. Funding for this has already been secured within the Trust's resources.
- **Ward and theatre Staff;** The assumption is that vascular ward and theatre staff at the site, no longer providing specialised vascular care would either transfer to the other specialised vascular centre or would be subsumed into other services on their existing site to fill existing workforce gaps. Either option releases direct costs to fund the service transfer.

- **Critical care;** An additional two critical care beds are required to support the additional activity in the other specialised vascular centre. NHS England and the critical care network will determine whether the released beds in the non-specialised vascular centre are retained or decommissioned. If decommissioned, then staff released would reduce the requirement for bank and agency staff.
- **Therapies;** As with ward and theatre staff, therapists working with vascular services will have the opportunity to transfer to the other specialised vascular centre or remain at their existing site.
- **Repatriation;** The future service model includes an assumption that patients would be repatriated to non-specialised vascular centre if they still need acute care, but once their requirement for vascular support is complete. Repatriation would require consultant support at the local hospitals, but this would be minimised by operational efficiencies, different clinical roles and new models of care. In terms of length of stay, the baseline assumption is that there would be no change in the total bed-day requirement due to repatriation; fewer vascular beds would be required in the specialised centres, but the balance of the total bed requirement would still be needed in medical specialties. If anything, by ensuring patients are cared for in the right specialty and closer to home, there should be opportunities to reduce total length of stay.
- **Reduced length of stay;** Variation in length of stay between the trusts and the Vascular GIRFT report also indicate that there may be opportunities to reduce length of stay (although access to out of hospital care may constrain the reductions achievable).

18.4 Consultant travel time to/from the specialised vascular centre

Currently vascular consultants are employed by and based at Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield NHS Foundation Trust. In future, with only one of these acting as the specialised vascular centre, they will need to travel between locations for specialised vascular and local activities, which will incur a travel time allowance. The baseline assumption is that there is no difference in the travel time requirement based on Bradford Royal Infirmary as WYAAT's preferred option for the other specialised vascular centre. A unified approach, to travel across the West Yorkshire vascular network of clinicians, will need to be considered.

18.5 Renal dialysis support

A small number of patients undergoing major vascular procedures, also need renal dialysis support, so the other specialised vascular centre must be able to provide dialysis for these inpatients. At Bradford Teaching Hospitals NHS Foundation Trust, the existing inpatient renal unit has capacity to accommodate the additional patients from Calderdale and Huddersfield NHS Foundation Trust, without additional costs. At Calderdale and Huddersfield NHS Foundation Trust a bedside dialysis service would need to be established, requiring an initial capital investment of approximately £60k and an estimated annual running cost of £154k. Appendix 5 of the WYAAT Options Appraisal provides more details.

18.6 Capital

Modelling of the facilities required to combine the Calderdale and Huddersfield NHS Foundation Trust and Bradford Teaching Hospitals NHS Foundation Trust specialised vascular activity onto a single site, indicates that the following additional facilities would be required on either site (more details on the modelling are included in the WYAAT Options Appraisal):

- 1 ward of 28 beds
- 2 Level 3 (ICU) critical care beds
- 9 theatre sessions per week
- 2 vascular interventional radiology suite sessions per week

In addition, either trust would need to invest in a hybrid theatre to meet the NHS England service specification. The trusts have identified how they would provide this additional capacity and estimated the capital costs where investment is required. Details of this are shown in (appendices 10 and 11) of the WYAAT Options Appraisal.

18.7 Capital costs

- Bradford Teaching Hospitals NHS Foundation Trust requires £5.2 million
- Calderdale and Huddersfield NHS Foundation Trust requires £5.66 million

The difference in capital costs between the sites is approximately £460k, which is less than 10% and so within the margin of error for estimated costings at this stage.

A hybrid theatre is equipped to provide high end imaging within the sterile surgical environment, thus avoiding the need to move the patient from one area to another, in order to access diagnostic such as MRI scanners. Integrated imaging facilities not only support diagnostics, they also help the surgeon undertake complex operations where precision is key. The longer-term aim will be to develop hybrid theatre facilities at the specialised vascular centres. However, this will require substantial capital investment and careful planning. The trusts have agreed to work towards stabilising current vascular services through redesign before addressing the requirement for a hybrid theatre, which therefore falls outside the scope of this business case.

The future service will be a single service for the whole of West Yorkshire, including all 5 trusts.

18.8 Capital investment

This proposal does not require capital investment therefore none of the following will apply:

- Where all options require capital of less than £30m, this is a letter of support from the NHS Improvement Regional Finance Director.
- Between £30m and £100m, require a letter of support from the NHS Improvement Chief Finance Officer.

- Above £100m, the scheme will need to be considered by the NHS Improvement Resources Committee and a letter of support from the NHS Improvement Chief Finance Officer provided.
- All options requiring capital will need to be assured prior to consultation by NHS Improvement (as well as by NHS England).

19. SUPPORTING INFRASTRUCTURES

19.1 IT Systems

Calderdale and Huddersfield NHS Foundation Trust (CHFT) and Bradford Teaching Hospitals NHS Foundation Trust (BTHT) have both recently implemented the Cerner Millennium electronic patient record, to create a single standardised patient IT system, which will give staff instant access to patient's digital records in either trust. This means that clinical information on patients being transferred from CHFT to BTHT or vice versa will be immediately available to staff in the other hospital. The other trusts within the network, Leeds, Airedale and Mid Yorkshire will require a solution to aid IT compatibility and support the sharing of patient information.

19.2 Information Governance (IG)

NHS England will commission the specialised vascular service from either Bradford Teaching Hospital NHS Foundation Trust or Calderdale and Huddersfield NHS Foundation Trust, who will become the lead provider and second specialised vascular centre in West Yorkshire. Both trusts have recently implemented a joint IT system, for the purposes of delivering direct patient care across both trusts, and as such have undertaken the relevant information governance (IG) processes in line with the general data protection regulations.

The data received from the trusts will be sent to the North of England Commissioning Support Unit, in accordance with the data protection act 1998, and other laws such as the Health and Social Care Act 2012.

All data sent to NHS England Yorkshire and Humber hub for purposes of measuring service related indicators will be anonymised.

NHS England has sought assurances from the trusts that their IT processes for sharing patient information meets the regulations outlined above.

20. GOVERNANCE AND CONTRACTING ARRANGEMENTS

NHS England will initially contract with the two trusts providing specialised vascular care. Should the WYAAT proposal of Bradford Royal Infirmary becoming the second specialised vascular centre be agreed, then this will be Leeds Teaching Hospitals NHS Trust (LTHT) and Bradford Teaching Hospitals NHS Foundation Trust (BTHT). NHS England will remain the responsible commissioner for vascular services provided at these two sites.

Both LTHT and BTHT will contract directly with their network district general hospital (DGH) for all non-specialised vascular care, to ensure most vascular services are delivered locally. The specialised centres will hold governance arrangements for the non-specialised vascular centres (Mid Yorkshire Hospitals NHS Trust and Calderdale & Huddersfield NHS Foundation Hospitals Trust).

Longer term under the single network model NHS England will commission from one lead provider.

The WYAAT Dispute Resolution process sets out the following steps:

- In the first instance the WYAAT Programme Executive will seek to resolve the dispute to the mutual satisfaction of each of the Parties. If not, the Programme Executive will refer the dispute to the CIC for resolution.
- CIC shall deal proactively with any dispute on a “Best for Meeting the Key Principles” basis so as to reach a majority recommendation.
- If a Party does not agree, the CIC recommendation, or the CIC cannot resolve the dispute, the dispute can be referred to an Independent Facilitator. The facilitator’s role is to assist the CIC in working towards a consensus.
- If facilitation does not work, the whole process should be tried again.
- If that fails, then the CIC would either have to terminate the MOU, or agree the dispute does not need to be resolved.

In line with the WYAAT Governance Framework, the Programme Board’s recommendation to the Programme Executive was reviewed by the WYAAT clinical reference group and DOFs group on 13 April 2019, and by the Strategy & Operations group on 18 April 2019.

21. CONCLUSION

There is a wealth of evidence supporting the need for specialised vascular services to consolidate into fewer centres and develop a more flexible system to deal with the burden of vascular care. This system will be better able to respond to the rising demands on the skills of vascular surgeons and interventional radiologists to support longer term service sustainability. There is a national shortage of vascular specialists, which is unlikely to be resolved in the short term. Meeting the requirements for 24/7 cover is becoming an increasing challenge within current resources. Clinicians are struggling to maintain an appropriate work life balance, as these services become overly stretched, leading to low morale amongst the workforce.

NHS England has sought the best clinical advice available to provide direction on how best to resolve these concerns locally. The clinical recommendation for West Yorkshire is to reduce the number of specialised vascular centres from three to two and create a network arrangement of specialism.

Removing historical organisational boundaries to create a more flexible workforce will help clinicians to deliver services in the most appropriate setting. This flexibility will reduce the burden of the on-call rota by consolidating the small pool of consultants over two sites instead of three. The network arrangement will provide opportunity for education, research and skills sharing. Clinicians will have the choice to work across both specialist and non-specialist vascular units as they prefer, reducing the likelihood of burnout, which in turn will support staff retention and improve the chance of recruitment.

Leeds Teaching Hospitals NHS Trust as the major trauma centre will remain one of the two specialised vascular centres in line with the recommendations set out in the Yorkshire and Humber Clinical Senate report (2017). The challenge has been to identify the second site; WYAAT has undertaken a comprehensive analysis of the vascular services at Calderdale and Huddersfield NHS Foundation Trust and Bradford Teaching Hospitals NHS Foundation Trust.

This analysis included both current and future state to determine which presented the best option. The WYAAT proposed option based on the clinical interdependencies with renal services is that Bradford Royal Infirmary should become the second specialised vascular centre supported by Calderdale and Huddersfield NHS Foundation Trust from both Huddersfield Royal Infirmary and Calderdale Royal Hospital.

The overall aim is to create a network of vascular provision between the five vascular providers in West Yorkshire. This will support unified pathways of care and standardised treatment protocols to ensure everyone receives the same level and quality of care in the most appropriate location. By transferring patients back under the care of local consultants and DGHs at the earliest opportunity, will help keep the vascular beds located at the two specialised centres available for the most complex surgeries.

22. REFERENCES

1. NHS England Vascular Service specification <https://www.england.nhs.uk/wp-content/uploads/2017/06/specialised-vascular-services-service-specification-adults.pdf>
2. Clinical Senate vascular review reports 2016 & 2017 <http://www.yhsenate.nhs.uk/senate-advice/published-advice-recommendations.php?overall>
3. Society for Vascular Surgery, <https://vascular.org/news-advocacy/national-shortage-vascular-surgeons>
4. Getting It Right First Time (Vascular Surgery Report 2018) <http://gettingitrightfirsttime.co.uk/vascular-surgery-report/>
5. Kidney Care UK, <https://www.kidneycareuk.org/about-kidney-health/treatments/dialysis/vascular-access-dialysis/>
6. Population disease data <https://fingertips.phe.org.uk/>
7. Five Year Forward View (Oct 2014) <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf>
8. Tidy, C, Renovascular Disease, (Mar 2016) <https://patient.info/doctor/renovascular-disease> (accessed 15/07/2019)

LIST OF SUPPORTING INFORMATION/LINKS

- Consultation Strategy and patient/public questionnaire

The following documents and reports can be found via the link below

- Full Consultation Document
- Vascular service specification
- Patient and Public Engagement Events undertaken in 2016 by Sheffield Health and Related Research
- West Yorkshire Association of Acute Trusts, Options Appraisal
- GIRFT Report
- Travel analysis
- Renal interdependencies

<http://www.yhscn.nhs.uk/cardiovascular/httpwwwyhscnnhsukcardiovascularpreventionvasculars.php>

The Yorkshire and Humber Clinical Senate Reviews can be found via the following links-

Part 1 (April 2016)

<http://www.yhsenate.nhs.uk/modules/reports/protected/files/YH%20Senate%20Report%20-%20Vascular%20Services%20in%20YH%20-%20April%202016.pdf>

Part 2 (January 2017)

<http://www.yhsenate.nhs.uk/modules/reports/protected/files/YH%20Senate%20Report%20-%20Vascular%20Services%20in%20YH%20Part%202%20-%20January%202017.pdf>

SECTION 4

PLANS FOR COMMUNICATING AND ENGAGING

This section contains

- Previous engagement undertaken in 2016
- Planned communication and engagement approach
- Why are we consulting

1. PREVIOUS ENGAGEMENT UNDERTAKEN IN 2016

In order to inform the initial work on the vascular review, NHS England in 2016 commissioned School of Health and Related Research (SchARR) to organise patient discussion group meetings across Yorkshire and the Humber. This included two locations in West Yorkshire (Leeds and Huddersfield). Bradford Teaching Hospitals NHS Foundation Trust was approached; however, nursing staff were unable to identify patients to participate.

These events attracted participation from 41 vascular patients across Yorkshire and the Humber, with experience of varying procedures including aneurysm repair, carotid surgery and amputation. Independent facilitators enabled a focussed conversation on what is good about your current service? and 'what could be improved?' with comments captured.

The themes most frequently mentioned, as valued by patients in relation to their experiences of vascular services were: professional and friendly staff; rapid and convenient access to treatment; personal nature of the service, the importance of integrated (joined-up) specialist teams; and involvement in shared decision making.

As part of a discussion around any future changes to services (and a potential reduction in the number of vascular centres in the region) patient participants identified the benefits set out in the table below. Highlighting and expanding on these benefits will form a key part of communications and engagement activity going forward.

How patients see the benefits from changes...
<i>'More specialist staff and equipment'</i>
<i>'Better outcomes for patients'</i>
<i>'More joined up services'</i>
<i>'Meeting national standards'</i>
<i>'Development of centres of excellence for elective surgery'</i>
<i>'Enabling staff to develop skills while maintaining access'</i>

Perceived risks of any change to services were also discussed, and a series of proposed mitigating actions have been identified so that if recommendations are implemented, assurances can be provided and clearly communicated to patients.

How patients perceive risks with changes	Actions for communications activity to provide assurance...
<i>'Inability for staff to cope with increased workload'</i>	<ul style="list-style-type: none"> • Clinical leads from West Yorkshire Trusts to be key spokespersons for communications and engagement and events, providing reassurance. • Improved 'meet the team' information to be available.
<i>'Strain on beds, theatres in already busy hospitals'</i>	<ul style="list-style-type: none"> • Clinical leads from West Yorkshire Trusts to be key spokespersons for communications and engagement and events, providing reassurance. • Messaging to include reassurances around capacity. • Monitoring and transparency around service feedback during any transition / implementation.
<i>'Staff having to relocate if any centres may close'</i>	<ul style="list-style-type: none"> • Clinical leads from West Yorkshire Trusts to be key spokespersons for communications and engagement and events, providing reassurance. • Strong internal briefing systems to ensure staff act as ambassadors and don't pass any anxieties on to patients.
<i>'Time it takes to get to centre in an emergency'</i>	<ul style="list-style-type: none"> • Transparency on travel impact assessment work undertaken. • Clarity of pathways (e.g. ambulances automatically take emergency patient to centre).
<i>'Overcoming issues with travel, parking and congestion'</i>	<ul style="list-style-type: none"> • Clear information available on transport options, travel, parking and visiting arrangements.
<i>'Need to provide proof that it works'</i>	<ul style="list-style-type: none"> • Clinical leads to be key spokespersons providing reassurance. • Signposting to national vascular best practice publications. • Offers of site-visits to facilities where change has already happened.
<i>'Loss of access to specialists in an emergency'</i>	<ul style="list-style-type: none"> • Clarity of pathways (e.g. ambulances automatically take emergency patient to centre). • Information of how hub and spoke services work together as one team to provide networked specialised care. • Clinical leads to be key spokespersons providing reassurance.
<i>'Unnecessary travel for follow up appointments'</i>	<ul style="list-style-type: none"> • Clarity that changes are specific to specialist surgery and that outpatient appointments and day case surgery will continue to be available locally.
<i>'It not being clear what it actually means'</i>	<ul style="list-style-type: none"> • Testing of case for change and key messages with patient groups.
<i>'Will need effective information sharing between clinicians form one centre to another'</i>	<ul style="list-style-type: none"> • Operational implementation team / clinical spokespeople to provide assurances around how any transition / implementation is overseen.

2. PLANNED COMMUNICATION & ENGAGEMENT APPROACH

West Yorkshire specialised vascular services consultation August 2019

1.0 Communications objectives

The approach to the communications and consultation will meet the following objectives:

- Deliver targeted patient, NHS employee and stakeholder engagement deemed appropriate and sufficient by relevant health overview and scrutiny committees, and in line with the commissioning organisations engagement strategies, enabling the required service change to be implemented as soon as practicably possible, while ensuring the best outcomes for patients.
- Inform people that we are consulting on the preferred option that Bradford Royal Infirmary is the second specialised vascular centre in West Yorkshire (alongside Leeds General Infirmary), to explain the rationale and promote opportunities to provide feedback on the proposal, particularly amongst the individuals and families who will be affected.
- Make sure that communication to different groups of stakeholders and the public about the consultation is done consistently and that we are equipped to answer people's questions.
- Demonstrate that we have considered all the groups who will be affected by the consultation outcome.

2.0 Roles and responsibilities

The following NHS organisations are identified as having a role with associated responsibilities during the consultation process.

NHS England and Improvement

- NHS England will lead the overall consultation and engagement process, and decision making about the future of West Yorkshire specialised vascular services.
- Communication activities and key messages for external audiences will be provided to NHS stakeholders to support any internal communication activities associated with the consultation.
- The NHS England North East and Yorkshire communications team will be the point of contact for any media enquiries received by individual Trusts and CCGs.
- NHS England will make a clinical spokesperson available to support community events and media briefings regarding the consultation (to provide a focus on the commissioning perspective).

- In the event a media enquiry about the consultation requests an individual CCG or Trust response, the regional NHS England team will work with the relevant NHS organisation to coordinate a response.
- As part of this process, NHS England will not comment on the outcome of the previous urgent and emergency care review by the Calderdale and Greater Huddersfield CCGs which will see all acute medicine including A&E services transferred to Calderdale Royal Hospital in Halifax.

West Yorkshire Association of Acute Trusts

- WYAAT will support NHS England communications, with a focus on ensuring that external key messages are shared with and adapted for internal audiences.
- A clinical spokesperson and operational programme lead for vascular services will be available to support consultation engagement events and media briefings (to provide a focus on the provider perspective / collaborative working)
- Feedback or frontline enquiries that require further input from NHS England will be escalated by operational and communication routes for support.
- WYAAT will support the liaison with relevant operational leads and clinical service specialists to ensure that information about the consultation is targeted as a priority at patients with experience of vascular services (i.e. through patient mail out and information in clinics).
- WYAAT will support liaison with provider communication colleagues to ensure consultation information is published and signposted from provider websites.

West Yorkshire and Harrogate ICS leadership team

- West Yorkshire and Harrogate ICS colleagues will support NHS England communications, with a focus on ensuring that external key messages are shared with and adapted for internal audiences.
- Feedback or frontline enquiries that require further input from NHS England will be escalated by operational and communication routes for support.
- ICS colleagues will support liaison with CCG communication colleagues to ensure consultation information is published and signposted from CCG websites.

3.0 Key messages

The information that is shared with stakeholders, patients, the public and the media throughout the consultation process will seek to highlight and re-iterate the following key messages.

- This consultation is being run by NHS England specialised commissioning working with the acute trusts through West Yorkshire Association of Acute Trusts (WYAAT) and local Clinical Commissioning Groups (CCGs). We

are committed to engaging our patients and staff to shape the service of the future.

- Doctors and other non-clinical specialists have worked together on plans for the future and now we want to explain our proposals for specialised vascular services in West Yorkshire, hear what people think and use views and experiences to ensure the services work well for patients.
- Vascular services reconstruct, unblock or bypass arteries to restore blood flow to organs. These are often one-off procedures to reduce the risk of sudden death, prevent stroke and reduce the risk of amputation.
- Our intentions are to improve the overall sustainability of the vascular service in the region, continue to deliver excellent patient outcomes, develop services, aid recruitment, and minimise potential gaps in rotas at the same time as reducing pressure on services. We feel there are also opportunities to improve research by making these proposed changes.
- Under this proposal, the majority of patients will continue to access vascular day-case surgery, diagnostics, outpatient appointments and rehabilitation services in hospitals throughout West Yorkshire, including Huddersfield Royal Infirmary, Calderdale Royal Hospital, Pinderfields General Hospital and Airedale General Hospital. Under these proposals, only the most complex patients who require to stay in hospital overnight, after having vascular surgery or radiological intervention would be affected, receiving this treatment at either Leeds General Infirmary or Bradford Royal Infirmary.
- Specialised services like vascular are not available in every local hospital, because they have to be delivered by specialist teams of doctors, nurses and other healthcare professionals who have the necessary skills and experience. Unlike most healthcare which is planned and arranged locally by Clinical Commissioning Groups (CCGs), specialised services are planned nationally and regionally by NHS England.
- Leeds General Infirmary must remain as one of the specialised vascular centers, due to it being the regional major trauma center.
- Following considerations of both clinical and non-clinical factors, proposals recommend Bradford Royal Infirmary as the second specialised vascular centre. This is due to the importance of co-location with the in-patient renal care service also at Bradford Royal Infirmary, which supports the care of vascular patients, who develop kidney disorders, and patients with kidney failure who develop vascular disease. The importance of this link between clinical services was also highlighted by the Yorkshire and Humber Clinical Senate in their review of vascular services in the region.
- Calderdale and Huddersfield NHS Foundation Trust and Bradford Teaching Hospitals NHS Foundation Trust currently run a shared out of hours on-call rota for emergency vascular services between the two sites. However, this

is not supported as an acceptable or long-term solution by the Yorkshire and Humber Clinical Senate and NHS England.

- The outcome of the previous urgent and emergency care review by the Calderdale and Greater Huddersfield CCGs will see all acute medicine including A&E services transferred to Calderdale Royal Hospital in Halifax.

Key messages specific to feedback mechanisms and further information

- Patients and the public can find out more information and complete a questionnaire by visiting the NHS England consultation hub or looking out for vascular news and information on your local West Yorkshire hospital website. You can also attend an event in your local community where vascular specialists and NHS leaders will be available to explain the proposed changes and listen to your feedback.
- To find out more about the consultation on the future of specialised vascular services in West Yorkshire and complete a survey on-line visit www.engage.england.nhs.uk (and search for 'West Yorkshire Vascular') or go to www.england.nhs.uk/north-east-yorkshire
- Or to request a copy of the consultation on the future of specialised vascular services in West Yorkshire is sent to you by email england.WYVfeedback@nhs.net or telephone 0113 8251536.
- To hear first-hand from clinical leaders about the consultation on the future of specialised vascular services in West Yorkshire and ask questions, you can attend one of the following six events in your local community:

Location	Date	Time	Venue
Kirklees/Huddersfield	3 October	2pm until 4pm	The John Smiths Stadium, Stadium Way, Huddersfield, HD1 6PG
	15 October	6pm until 8pm	The John Smiths Stadium, Stadium Way, Huddersfield, HD1 6PG
Calderdale/Halifax	8 October	6pm until 8pm	The Arches, East Mill, 328 Dean Clough, Halifax, HX3 5AX
	29 October	6pm until 8pm	The Crossley Gallery, East Mill, 328 Dean Clough, Halifax, HX3 5AX
Bradford	7 October	2pm until 4pm	Midland Hotel Forster Square, Cheapside, Bradford, BD1 4HU
	14 October	5pm until 7pm	Great Victoria Hotel, Bridge Street,

			Bradford, BD1 1JX
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- If you have a copy of the consultation on the future of specialised vascular services and have completed the feedback section, this can be returned to the following address:

Freepost NHS BRADFORD DISTRICT & CRAVEN

You can handwrite or type your envelope, but the words NHS BRADFORD DISTRICT & CRAVEN must be in capital letters after the word Freepost.

4.0 Approach to consultation:

NHS England will be consulting widely across Airedale, Leeds, Bradford, Calderdale, Kirklees, Wakefield and Harrogate to understand the views of patients and the public who may be affected by the proposed changes. Staff consultation will be managed internally by the individual hospitals. This will be co-ordinated by WYAAT (communication and clinical teams), to ensure the message is delivered consistently across the trusts in terms of content and method. Also, response to any questions raised by one trust will be shared across the others.

The consultation process will be for a period of three months starting in August 2019 and this includes a series of community engagement events for the public. NHS England will work with its partner organisations across West Yorkshire including clinical commissioning groups (CCGs) and provider trusts to identify opportunities to attend face-to-face meetings with service users, their family members, carers and staff. Attendance and feedback from these events will be documented and fed in to the consultation process.

4.1 Public engagement events

There is a commitment to host six public engagement events that provide an opportunity for NHS leaders and vascular specialists to explain the proposals and respond to questions

To enable flexibility in attendance, it is proposed the meetings will be held at different times. Venues have been selected to ensure ease of accessibility and appropriate capacity.

The format for these events will be a presentation of the proposal by clinicians, followed by a question and answer session.

4.2 Patient and public consultation information with supporting questionnaire

Patient/public consultation information has been developed setting out the proposed changes with a supporting questionnaire and details of a series of six community events.

This has been developed based on the input of clinicians, with the opportunity for testing for feedback with stakeholders and patients to ensure it is easy to understand.

The intended audience is predominantly patients who have previously received vascular care in West Yorkshire, but it has been developed in a format that also enables members of the public to use for providing feedback.

Arrangements will be made for this information to be available on request in alternative formats.

4.3 Publication of information on the NHS England North East and Yorkshire website

The patient and public information on the proposals for vascular services in West Yorkshire will be published on the NHS England North East and Yorkshire website.

There is a three-month consultation period to enable sufficient opportunities for patients and the public to engage and have the opportunity to respond.

4.4 Direct vascular patient communications

NHS England will work with the West Yorkshire Association of Acute Trusts to coordinate a hospital-led proactive mailout to vascular patients that have used their inpatient services. This communication will include details of the consultation proposal, details of engagement events and where to find further information and provide feedback via the questionnaire.

Prominent patient displays will also be set up in vascular outpatient clinics to ensure that opportunities for raising awareness among this group are not missed.

4.5. Formal briefings and communications to wider stakeholders

Throughout the consultation process, NHS England will commit to providing regular updates to local stakeholders. This will include:

- An opportunity for key stakeholders to have input into planned consultation communications.
- Advanced notice of any confirmed consultation start date when known.
- Confirmation of consultation and information being published and circulation of links.
- Reminder information ahead of planned community events (these are taking place throughout October 2019).
- Details of level of response to survey and attendance at meetings.
- Arrangements for reporting of consultation feedback and outcome.

A stakeholder distribution list will be maintained and updated throughout the consultation period. This will include relevant leads from stakeholder organisations.

A focus will be placed on working with local Healthwatch groups and community and voluntary sector organisations in the Calderdale, Kirklees, Huddersfield and Bradford areas to ensure these stakeholder briefings are as far reaching as possible.

4.6 *Proactive media activity (i.e. working with local print, broadcast and on-line reports in West Yorkshire)*

NHS England will work closely with the West Yorkshire Association of Acute Trusts and West Yorkshire and Harrogate Health Care Partnership to adopt a proactive approach to raising awareness about the consultation in the local media.

The timing of this media activity will focus on promotion of the community engagement events, as well as signposting to on-line resources for further information and responding to the consultation.

Media activity will be clinically led but managed by NHS England North East and Yorkshire media team, in coordination with communication leads from the hospital trusts. Any briefings will be in line with key messages set out in the communications plan, with bids for interviews of a clinical spokesperson being considered on a case by case basis.

4.7 Use of hospital trusts, CCGs and ICS communication channels

NHS England will work with all West Yorkshire health system partners to support promotion of the consultation using existing and established communication channels. This will include websites, newsletters / e-bulletins, and social media platforms.

A schedule for communication updates will be established and reviewed by a communications working group with a particular focus on social media channels being used to promote reminders for events and signposting to consultation information.

4.8 Engagement event format

The format of these events will be delivered as follows:

- Introductions and overview of timescales.
- Background and history to the development of the proposal.
- Options considered and outcome from these including assessment criteria against which each option was assessed.
- Questions to the audience/gather feedback (the patient and public questionnaire)

- How to get involved and where to find the full proposal and consultation information.

An external organisation will attend to gather and collation feedback and present a report to NHS England at the end of the process.

Following the consultation, the results and recommendations for the future will be reported to the Joint Health Overview and Scrutiny Committee for West Yorkshire, published on NHS England's website and shared with stakeholders.

We have asked an independent company to collate all of the responses we receive to the consultation and to produce an analysis of what respondents have said. The analysis will be published in due course and will include information about the number, type and other characteristics of the responses, giving us a good picture of the views expressed.

In coming to a decision, NHS England will consider the responses to the consultation and will adjust its proposals if we consider it appropriate to do so. We will take into account and balance all the main factors, including affordability, impact on other services, access and patient choice. Our recommendations will then be considered by the relevant committees before a final decision is taken by the NHS England Board.

Stakeholders

The list is broken down by the following:

- Internal project stakeholders
- Internal NHS stakeholders
- External stakeholders
- Local and regional media

Stakeholder group	How we will communicate with them
<p>Internal project stakeholders</p> <ul style="list-style-type: none"> • NHS England Specialised Commissioning • NHS England Yorkshire and Humber DCO Team • West Yorkshire Association of Acute Trusts • Leeds Teaching Hospital NHS Trust, Bradford Teaching Hospitals NHS Foundation Trust and Calderdale and Huddersfield NHS Foundation Trust and their own internal audiences which includes: <ul style="list-style-type: none"> ○ Trust Board ○ Foundation Trust Governors (public and staff) ○ Staff Partnership Forum ○ Divisional and Clinical Directors ○ Senior Managers ○ Nursing and midwifery leads ○ Clinical specialist leads (by condition / departments) 	<p>Internal meetings / programme updates Face to face briefings Internal briefings Internal newsletters Intranet information</p>
<p>Other internal NHS stakeholders</p> <ul style="list-style-type: none"> • STP leadership teams for West Yorkshire area • STP leads for areas surrounding the West Yorkshire boundaries • Yorkshire Ambulance Service • Greater Huddersfield CCG • Calderdale CCG • North Kirklees CCG • Airedale, Wharfedale and Craven CCG • Bradford City CCG • Bradford Districts CCG • Referring GPs for West Yorkshire • Yorkshire and Humber Clinical Senate • CCGs and hospital trusts located on the boundaries of West Yorkshire • Vascular advisory group (regional network) 	<p>Face to face briefings Internal briefings and reports Internal newsletters Intranet information</p>

Stakeholder group	How we will communicate with them
<p>External stakeholders</p> <ul style="list-style-type: none"> • Patients and visitors (who currently access vascular inpatients and outpatient care) • Known patient groups with an interest in vascular or support for local hospital • Potential patients (catchment / border areas) • Population of Leeds, Bradford, Calderdale, Huddersfield and Kirklees • Local authorities both within West Yorkshire and boundary areas (Chief Executives and Council Leaders) • Overview and Scrutiny Committees (health) • Healthwatch groups • Health and Well Being Boards • MPs (of Huddersfield Town, Calderdale, Kirklees, Bradford City, Leeds City) • Charity, voluntary sector partners • Professional regulatory bodies (e.g. The Vascular Society) 	<p>Public / patient leaflet and questionnaire Targeted mailshots Stakeholder briefings Community meetings Website information On-line feedback Local media Social media Offer of face to face briefings and attendance at meetings</p>
<p>Local, regional and national media</p> <ul style="list-style-type: none"> • Yorkshire Post • Yorkshire Evening Post • Bradford Telegraph and Argus • Huddersfield Daily Examiner • Halifax Courier • Regional BBC 	<p>Media briefings</p>