SOUTH EAST WALES
VASCULAR NETWORK

GIG CYMRU NHS WALES

Reorganisation of localised Vascular Services into a 'Hub and Spoke' model Vascular Network for the South East Wales Region: A Report on Public Engagement 2021

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1. Executive summary

Collectively, Aneurin Bevan University Health Board, Cardiff and Vale University Health Board and Cwm Taf Morgannwg University Health Board provide vascular services in South East Wales. These services look after patients suffering from any condition that affects the network of blood vessels known as the vascular or circulatory system. The main aim of vascular services is to reconstruct, unblock or bypass arteries to restore blood flow to organs, often with the aim of reducing the risk of sudden death, prevent stroke, reduce the risk of amputation, and improve function. Vascular services are also provided to support patients with other problems such as kidney disease.

The populations affected are Blaenau Gwent, Caerphilly, Monmouthshire, Newport, and Torfaen; Cardiff and the Vale of Glamorgan; Rhondda Cynon Taff and Merthyr Tydfil (Bridgend is part of the South West Wales Network), and South Powys (other parts of Powys served by South West/North Wales Networks as well as networks in England).

There is an increasing demand on these services due an increasing and ageing population, as well as factors such as smoking and obesity. The current configuration of services across separate hospital sites in South East Wales are spread too thinly to meet the quality and safety standards set out by the Vascular Society and the Royal College of Surgeons, the total resident population of the Health Boards taking forward this proposal is approximately 1.5million.

Between Friday 19th March and Friday 16th April 2021, the four Health Boards, Aneurin Bevan University Health Board, Cwm Taf Morgannwg University Health Board, Cardiff and Vale University Health Board and Powys Teaching Health Board, ran a public engagement on a proposal for the reorganisation of localised vascular services into a 'hub and spoke' model Vascular Network for the South East Wales Region. Clinicians agree that this is a sustainable delivery model that will provide the best outcomes to all patients within the region and best use of skill and staff as advised by the Vascular Society.

This would mean that all major vascular operations and interventions are done in one hospital. It would not change citizens going to their local hospitals for non-complex, routine interventions, diagnostics, outpatient clinics, advice before an operation or for recovery and rehabilitation.

The purpose of this report is to inform the Joint Committee and affected Health Boards of the conduct and key findings of the public engagement on the proposal to locate a vascular surgery hub for South East Wales at University Hospital of Wales, Cardiff, with main spoke hospital services maintained at Royal Gwent Hospital, Grange University Hospital, Royal Glamorgan Hospital, University Hospital Llandough and University Hospital Wales, and care wherever possible maintained closer to home.

110 people responded to the engagement via an online survey.

There were 7 virtual public meetings, 1 Third Sector meeting and the proposals were discussed at a range of internal stakeholder meetings.

Of those who replied via the online survey, 72% agree with the national evidence and recommendation from the clinical option appraisal that a hub and spoke model would improve vascular services and patient outcomes in South East Wales.

A number of common themes emerged from the feedback received in response to the engagement questions and in other formats including comments made at the public and stakeholder events:

The Health Boards will need to give careful consideration to the feedback received and the views of the CHC's in determining their response to the engagement and agreeing a way forward.

2. Introduction

This engagement report provides:

- a summary of the rationale for a Vascular network for South East Wales
- an overview of the work that has been undertaken to develop recommendations for a vascular network for the region
- a summary of the resulting recommendations from an options appraisal from the 3 provider Health Boards
- a description of the process used to engage on the recommendations
- an analysis of the engagement responses
- conclusions drawn from the engagement

The engagement plan for the proposed development of vascular services in South East Wales was developed collaboratively by four Health Boards, namely Aneurin Bevan University Health Board, Cwm Taf Morgannwg University Health Board, Cardiff and Vale University Health Board and Powys Teaching Health Board.

The populations that are affected are:

- Blaenau Gwent, Caerphilly, Monmouthshire, Newport, and Torfaen
- Cardiff and the Vale of Glamorgan
- Rhondda Cynon Taff and Merthyr (Bridgend is part of the South West Wales Network)
- South Powys (other parts of Powys served by South West/North Wales Networks as well as networks in England).

The engagement period began on Friday 19th February and ended on the 16th of April 2021.

3. Background and Context

3.1 Rationale for a regional vascular network

Specialist vascular services aim to prevent death from aortic aneurysm, prevent stroke from carotid artery disease and prevent lower limb amputation from peripheral arterial disease and diabetes. In 2007 over 65,000[1] people in the UK

[1] https://www.vascularsociety.org.uk/_userfiles/pages/files/Document%20Library/National-Vascular-Database-2009-report.pdf

had surgery for a problem relating to vascular disease and, due to the increasing size of the aging population, demand for vascular services increase over time. The total number of patients likely to need a vascular procedure across South East Wales is approximately 1250 each year. In addition, there are currently an estimated 275,000 are living with diabetes in Wales.[2] and this prevalence is also increasing, 311,000 people in Wales could have diabetes by 2030[3] with diabetic patients having a worse outcome, as evidenced by the increasing rate of lower limb amputation in this group. Patient outcomes in South East Wales are good however they are not sustainable in the way they are currently provided.

Nationally outcomes from vascular surgery in the United Kingdom have not compared well with other countries. Until recently the UK had the highest mortality rates in Western Europe for abdominal aortic aneurysm repair[4].The Vascular Society of Great Britain and Ireland therefore published a series of recommendations[5] describing how vascular services should be organised to deliver the best outcomes for patients. They recommend that high quality urgent vascular care should be organized and delivered using integrated vascular networks. Ensuring that local assessment, diagnosis, and rehabilitation of patients in non-arterial centres (spokes) is optimised, whilst also delivering high volume interventions at arterial centres. The goal being a service which balances the needs of patient access with the provision of comprehensive safe vascular care and intervention that is sustainable.

In light of these recommendations NHS England published a national specification for the provision of vascular services in July 2013. This specification was used to assess services across England and implement networked models of care. This specification was subsequently reviewed and supported by GIRFT (Getting it Right First Time) programme report on Vascular Surgery in 2018 which advocated as its guiding recommendation[6], the development of Networked models of care for vascular services. Clinicians from across the three Heath Board Providers in South Wales have assessed this specification

[2]https://www.diabetes.org.uk/in_your_area/wales/diabetes-in-wales
[3] ibid
[4] Howell, S.J. (2017) Abdominal aortic aneurysm repair in the United Kingdom: an exemplar for the role of anaesthetists in perioperative medicine. British Journal of Anaesthesia.
[5]https://www.vascularsociety.org.uk/_userfiles/pages/files/Document%20Library/Provision-of-Services-for-Patients-with-Vascular-Disease.pdf
[6] https://gettingitrightfirsttime.co.uk/wp-content/uploads/2018/02/GIRFT_Vascular_Surgery_Report-March_2018.pdf

and agree that the key elements of which are that providers of vascular services should:

- Serve a minimum population of at least 800,000 people to ensure an appropriate volume of procedures
- Ensure that highly experienced staff are treating sufficient numbers of patients to maintain competency
- Have 24/7 on site vascular surgery and interventional radiology on-call rotas that are staffed by a minimum of 6 vascular surgeons and 6 interventional radiologists.
- Provide access to cutting edge technology including a hybrid operating theatre for endovascular (minimally invasive) aortic procedures.
- Provide a dedicated vascular ward and nursing staff.
- Have a specialist team to manage patients with vascular disease that includes vascular surgeons, interventional radiologists, specialist nurses, vascular scientists, diabetes specialists, stroke physicians, cardiac surgeons, orthopaedic surgeons, and emergency medicine amongst other specialities to provide a comprehensive multi-disciplinary service.

Discussions on the sustainability of vascular services in South East Wales have been taking place for a number of years. In fact, clinicians have worked together to develop the out of hours services for Vascular emergencies with a shared emergency on call rota in place, which has been running for 20 years.

However, despite developments in the rest of the UK and other parts of Wales, the South East Wales region remains the only region in the UK without a formal networked arrangement of care for all vascular services. This, along with the fragility of the wider service sustainability for the future has resulted in our clinical teams giving consideration to how this current position can be improved, as well as developing the service to be an exemplar in Wales.

3.2 Clinical Options appraisal

A lot of work has been undertaken by clinical teams exploring potential future options for the delivery of the service in the area. This has been articulated in a non-financial clinical options appraisal, undertaken in October 2014, and included options for the clinical model as well as an assessment of potential sites for an arterial centre (hub).

Options were assessed against the following:

1. Quality and safety
2. Acceptability
3. Strategic fit
4. Sustainability
5. Access
6. Achievability

With a strong rationale, clinicians arrived at a consensus on the option for a hub and spoke model of care, with the arterial centre or 'hub' being at University Hospital of Wales and 'spokes' remaining within Health Board footprints allowing services where possible to be delivered closer to home and a number of complex emergency and urgent vascular interventions to take place in one hospital.

This option reflects the model of care advocated in recommendations from the VSGBI but was also consistent in other specialised services including Major Trauma Networks which were developed and launched in England in 2012. A hub and spoke model allow a balance between local access for the population and ensuring sustainability of service, improved access to training for staff with higher volumes of surgery or intervention in one centre leading to improved patient outcomes.

The recommendation on the hub site was also based on the 6 key criteria and included consideration of collocated services, including; Neurosurgery, Nephrology, Cardiology.

Clinical engagement has taken place throughout the service development process and there remains good clinical consensus. A letter confirming that the work undertaken during the clinical option appraisal process in 2014 remains valid has recently been received by the Chair of the Joint Vascular Programme Board. Indeed, the clinical body indicated the preferred option including the site choice for the hub had now been strengthened since the Major Trauma Centre was launched in September 2020 at University Hospital Wales.

4. Scope of the public engagement

During October 2020, a report was shared with the Vascular Programme Board which outlined a potential approach to engagement and consultation on the proposals for the service. This was supported and a two-stage process of

engagement followed by consultation agreed, subject to appropriate engagement with Community Health Council colleagues.

Organisations that were identified as needing to be part of the consultation and engagement were Aneurin Bevan University Health Board, Cardiff and Vale University Health Board, Cwm Taf Morgannwg University Health Board and Powys Teaching Health Board, as commissioners of these services for their local population.

Further to the decision made by Programme Board, a workshop was held in November 2020 to agree the scope of the engagement and consultation and to have discussions that would inform the gaps in a skeletal draft engagement document.

As a result of these discussions, it was agreed that the scope of the engagement phase would be to:

- Inform people what vascular services are and how they are currently organised
- Explain the challenges facing the services
- Engage in discussions about potential/only viable option and aid understanding on this
- Hear what is important to people in this discussion prior to a period of formal consultation

It was however noted that given the extensive work that had been undertaken on a clinical option appraisal and formulation of ideas regarding a hub and spoke model of delivery, that this information should also be shared at the engagement phase, so as to offer as much information as possible, in order to explore with members of the public, and interested stakeholder views on the process that has been followed and whether there is any other information that should be considered.

The affected Community Health Councils considered the proposals for engagement together at their meeting held on 13th January 2021. There was explicit support expressed by both Cwm Taf Community Health Council and Aneurin Bevan Community Health Council, with further discussions taking place with both Powys and South Glamorgan CHCs. Following further assurances relating to process and remit, there was subsequent agreement by all CHCs to commence the engagement as proposed.

5. Approach to communication and engagement

To ensure a consistent approach was adopted across the region, an engagement group was established comprising engagement, communications, workforce, clinical and planning leads from each of the affected Health Boards.

Plans for local engagement activity, to be undertaken in line with the overall plan, were agreed between each Health Board and the respective CHC. It was agreed that it is the responsibility of these organisations to lead the programme of engagement and consultation in their respective areas, however overall co-ordination is being held within the programme structure.

Recognising the limitations of undertaking this work during the pandemic, which prevented the use of face-to-face mechanisms for engaging with the public, the Health Boards worked closely with Community Health Councils (CHCs) to develop a blended approach to engagement. This was designed to draw on the learning and mechanisms for reaching people virtually which have evolved over the last year including advice from intermediary Third Sector organisations who have been finding ways to reach different communities. It had the following key features:

Core elements	- Telephone number and answer phone set up - Postal address and inbox - Specific email address for programme established - Survey form created online as well as being available in the summary document
Web pages	- Web pages hosted on each Health Board website - Template supplied with content and useful documents (including main document, summary, FAQs and easy read version of summary) - Link to survey and all relevant contact details including; telephone number, postal address etc.
Staff/ public updates	- Inclusion in newsletters

	- All staff emails - Digital screen tiles and posters - Letter and assets to GPs
Stakeholder outreach	- Stakeholder letter - Communications Toolkit
Social media	- Promotion of public engagement events - Series of social media posts and subsequent visuals - Videos of key spokespeople for the network talking about proposed changes
Promotional assets	- Posters - Digital screen tiles - Leaflets/flyers - Teams Background - PowerPoint template
Engagement events	- Public engagement events arranged in each Health Board area

Note: All assets were created bilingually

A mid-point review meeting took place on Wednesday 24th March, to review the processes and responses received to date and determine whether any adjustments needed to be made to the engagement for the remaining period.

Emerging themes were also shared with the steering committee for the programme.

Please see appendix 2 for the detailed Engagement Plan.

5.1 Engagement during the Pre-election period

After commencement of the public engagement on the 19th February pre-election dates were confirmed by the Welsh Government and advice provided via a Welsh Health Circular[7] on the 11th March. The advice sets out the guidance on the permitted activity during a pre-election period and is set out below. In considering this guidance, further advice was sought from the Consultation

[7] https://gov.wales/sites/default/files/publications/2021-03/senedd-election-2021-guidance-for-nhs-wales.pdf

Institute and discussion took place with the Board of CHCs. It was concluded that the engagement did not meet the criteria for pausing the process, however in order to mitigate the risk of politicisation within the engagement process, it was agreed public events would not be held during the pre-election period. Therefore, the engagement process was continued through this period.

5.2 Engagement questions

In agreement with the CHCs, the engagement asked for individuals in the region and organisations to consider the following specific questions:

1. From reading this discussion document, do you have a good understanding of what vascular services are?
2. From reading this document, do you understand how services are currently organised?
3. From reading this document, do you have an understanding of the challenges that are currently facing vascular services?
4. Is there any other information you think we should consider in order to decide whether we should move towards a networked arrangement for vascular services in South East Wales?
5. Do you agree/disagree with the national evidence and recommendation from the clinical option appraisal that a hub and spoke model would improve vascular services and patient outcomes in South East Wales?
6. What are your thoughts on the hub being identified as the University Hospital of Wales Cardiff given the dependencies on other services that are located there?
7. Would you agree/disagree that spoke arrangements need to have a consultant led ED and an emergency surgery response on site?
8. Subject to your view on the above, would you agree/disagree with the suggested spoke arrangements.
9. Do you have any thoughts on the process that has been followed to date to consider the future configuration of vascular services in South East Wales?
10. Is there any other information you think we should consider in order to decide whether we should move towards a networked arrangement in South East Wales?
11. Do you have a view on the options that have been considered as part of this, are there others we should consider?

12. Do you have any comments on the process that is being undertaken to consider the best configuration of vascular services in South East Wales?
13. Do you have an alternate view on the proposals put forward within this document for the configuration of services?

5.3 Public sessions

Public session were arranged for each Health Board area. Powys citizens were offered to attend online public sessions held by both Aneurin Bevan and Cwm Taf Morgannwg University Health Boards.

Minutes of the public meetings are attached (appendix 3). Attendance at the sessions was not high, however as members will note from the minutes attached, the conversations were rich and far-reaching.

The organising and delivery teams for each Health Board Areas were agreed as:

Cwm Taf Morgannwg & Powys

Clinical Leads: Mr Kevin Conway, Consultant Vascular Surgeon and Mr Mike Rocker, Consultant Vascular Surgeon

Management Lead: Marie-Claire Griffiths, Assistant Director of Strategic Planning and Commissioning

Business Support: Michelle Lloyd, Business Support Manager

Powys Teaching Health Board Lead: Adrian Osborne, Assistant Director, Engagement and Communication

Aneurin Bevan & Powys

Clinical Leads: Mr Peter Lewis, Consultant Vascular Surgeon and Mr David Lewis, Consultant Vascular Surgeon

Management Lead: Chris Dawson-Morris, Assistant Director of Planning

Powys Lead, Adrian Osborne, Assistant Director, Engagement and Communication

Cardiff and Vale

Clinical Leads: Mr Richard Whiston, Consultant Vascular Surgeon and Mr Kevin Conway, Consultant Vascular Surgeon, Mrs Cath Twamley, Head of Nursing for Surgery

Management Lead: Mr Mike Bond, Director of Operations Surgery Clinical Board & Mr Alun Tomkinson Clinical Board Director Surgical Clinical Board

6. Summary of mid-point review report

A mid-point review of the engagement process was conducted by the engagement group on 24th March 2021 which aimed to scrutinise and evaluate progress in engaging with the public and staff. Following this initial review reviews took place between planning and engagement leads and CHCs.

At that time a total of 66 survey responses had been received and the public events had been completed. The survey responses at the time of the mid-point review had not been analysed by Health Board area.

Actions arising from the review:

- Following up with those who signed up to public events with a reminder to complete the survey.
- Agreement to continue through the pre-election period but not to hold any further public meetings.
- Agreement not to hold a planned Facebook Live Q&A session aimed at the public during the pre-election period.
- Check Facebook posts to identify any comments made which should be included in the consideration of feedback.
- Agreement on post engagement process and key dates to enable the CHC position to be considered as part of the presentation on the outcome of engagement at the May Health Board Boards.
- Additional FAQ to clarify spoke arrangements.
- Additional presentation slides to clarify potential impact on residents of each HB area.

Please see appendix 4 for the Mid-point Review report.

7. Responses to the engagement and reach

The below table outlines the feedback that was received during the engagement period including number of respondents and method of feedback:

Type of Feedback	Total number of respondents/reach	Comment
Survey respondents	110	

Email/correspondence received by email	3	
Public meetings	29	Minutes of meetings attached as Appendix 3
Third Sector Stakeholder meeting	4	4 third sector organisations represented Minutes of meeting attached as Attached as Appendix 3
Social media advertising reach	60,486	948 link clicks
Web page reach	Aneurin Bevan UHB English webpage: 1446 Welsh webpage: 30 Cardiff and Vale UHB English webpage: 631 Welsh webpage: Cwm Taf Morgannwg UHB English webpage: 1,132 Welsh webpage: 20 Powys THB English webpage: 270 Welsh webpage: 29	

Comments made at the public meetings were captured, verified by the CHCs and considered in the analysis. Key points made at the third sector stakeholder meeting, as detailed in the engagement plan, were also included in the analysis.

It should be noted that everyone was also encouraged to complete individual response forms so there may be an element of duplication in the points captured in meeting notes and those made in response forms. A full copy of all the feedback received via the survey and meeting notes has been shared with the CHC's.

7.1 Key Themes

The engagement survey contained a mix of closed and open-ended questions. A number of common themes emerged in the analysis of the feedback received via open questions in the survey, comments made at the public and stakeholder meetings, emails and social media posts. These key themes have been used as the basis of analysis of the qualitative feedback.

The key themes are set out below, with an indication of the number of comments relating to these themes were mentioned in survey responses:

All Questions	401	%
Organisation & Intergration of Network Services	86	21%
Location of Hub & Spoke	63	16%
Accessibility & Transport	52	13%
Care Provided	44	11%
Engagement Process	42	10%
Impact on other services	39	10%
Workforce	33	8%
Communication	15	4%
Financial Issues	13	3%
Request for information	8	2%
General Concerns	6	1%

7.2 High level summary of online feedback by engagement question

Question 1. From reading this discussion document, do you have a good understanding of what vascular services are?

ANSWER CHOICES	RESPONSES	
Yes	94.55%	104
No	1.82%	2
Not sure	3.64%	4
TOTAL		110

95% of respondents said they had a good understanding of what vascular services are, having read the discussion document.

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question1	5	%
Organisation & Intergration of Network Services	2	40%
Accessibility & Transport	1	20%
General Concerns	2	40%

Question 2. From reading this document, do you understand how services are currently organised?

ANSWER CHOICES	RESPONSES	
Yes	90.91%	100
No	4.55%	5
Not sure	4.55%	5
TOTAL		110

91% of respondents said they understand how services are currently organised, having read the document.

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 2	5	%
Location of Hub & Spoke	1	20%
Workforce	1	20%
Care Provided	1	20%
Impact on other services	1	20%
Engagement Process	1	20%

Question 3. From reading this document, do you have an understanding of the challenges that are currently facing vascular services?

ANSWER CHOICES	RESPONSES	
Yes	89.09%	98
No	4.55%	5
Not sure	6.36%	7
TOTAL		110

90% of respondents said they have an understanding of the challenges facing vascular services, having read the document.

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Questions 3	8	%
Location of Hub & Spoke	2	25%
Workforce	2	25%
Care Provided	1	13%
Financial Issues	2	25%
General Concerns	1	13%

Question 4. Is there any other information you think we should consider in order to decide whether we should move towards a networked arrangement for vascular services in South East Wales?

ANSWER CHOICES	RESPONSES	
Yes	30.84%	33
No	49.53%	53
Not sure	19.63%	21
TOTAL		107

31% of respondents felt there was other information we should consider.

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 5	38	%
Request for information	4	11%
Location of Hub & Spoke	5	13%
Organisation & Intergration of Network Services	6	16%
Accessibility & Transport	2	5%
Workforce	4	11%
Care Provided	3	8%
Impact on other services	3	8%
Financial Issues	2	5%
Communication	4	11%
General Concerns	1	3%
Engagement Process	4	11%

Question 5. Do you agree/disagree with the national evidence and recommendation from the clinical option appraisal that a hub and spoke model would improve vascular services and patient outcomes in South East Wales?

ANSWER CHOICES	RESPONSES	
Agree	72.48%	79
Disagree	11.93%	13
Not sure	15.60%	17
TOTAL		109

72% of respondents agree that a hub and spoke model of care would improve vascular services and patient outcomes in South East Wales.

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 5	38	%
Request for information	4	11%
Location of Hub & Spoke	5	11%
Organisation & Intergration of Network Services	6	11%
Accessibility & Transport	2	11%
Workforce	4	11%
Care Provided	3	11%
Impact on other services	3	11%
Financial Issues	2	11%
Communication	4	11%
General Concerns	1	11%
Engagement Process	4	11%

Question 6. What are your thoughts on the hub being identified as the University Hospital of Wales Cardiff given the dependencies on other services that are located there?

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 6	86	%
Location of Hub & Spoke	17	20%
Organisation & Intergration of Network Services	25	29%
Accessibility & Transport	21	24%
Workforce	3	3%
Care Provided	7	8%
Impact on other services	10	12%
Financial Issues	1	1%
Engagement Process	2	2%

Question 7. Would you agree/disagree that spoke arrangements need to have a consultant led ED and an emergency surgery response on site?

ANSWER CHOICES	RESPONSES	
Agree	88.99%	97
Disagree	1.83%	2
Not sure	9.17%	10
TOTAL		109

89% of respondents agreed that spoke arrangements need an Emergency Department and emergency surgery response on site.

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 7	22	%
Location of Hub & Spoke	4	18%
Organisation & Intergration of Network Services	9	41%
Workforce	3	14%
Care Provided	4	18%
Impact on other services	1	5%
Communication	1	5%

Question 8. Subject to your view on the above, would you agree/disagree with the suggested spoke arrangements.

ANSWER CHOICES	RESPONSES	
Agree	67.59%	73
Disagree	11.11%	12
Not sure	21.30%	23
TOTAL		108

68% of respondents agreed with the suggested spoke arrangements.

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 8	25	%
Request for information	1	4%
Location of Hub & Spoke	4	16%
Organisation & Intergration of Network Services	6	24%
Accessibility & Transport	2	8%
Care Provided	5	20%
Impact on other services	1	4%
Financial Issues	1	4%
Communication	1	4%
Engagement Process	4	16%

Question 9. Do you have any thoughts on the process that has been followed to date to consider the future configuration of vascular services in South East Wales?

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 9	39	%
Request for information	1	3%
Location of Hub & Spoke	3	8%
Organisation & Intergration of Network Services	5	13%
Workforce	1	3%
Care Provided	5	13%
Impact on other services	8	21%
General Concerns	1	3%
Engagement Process	15	38%

Question 10. Is there any other information you think we should consider in order to decide whether we should move towards a networked arrangement in South East Wales?

ANSWER CHOICES	RESPONSES	
Agree	36.96%	34
Disagree	16.30%	15
Not sure	46.74%	43
TOTAL		92

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 10	60	%
Location of Hub & Spoke	4	7%
Organisation & Intergration of Network Services	13	22%
Accessibility & Transport	13	22%
Workforce	4	7%
Care Provided	3	5%
Impact on other services	8	13%
Financial Issues	3	5%
Communication	5	8%
Engagement Process	7	12%

Question 11. Do you have a view on the options that have been considered as part of this, are there others we should consider?

ANSWER CHOICES	RESPONSES	
Yes	16.98%	18
No	50.94%	54
Not sure	32.08%	34
TOTAL		106

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 11	15	%
Location of Hub & Spoke	5	33%
Organisation & Intergration of Network Services	3	20%
Accessibility & Transport	1	7%
Workforce	3	20%
Impact on other services	1	7%
Financial Issues	1	7%
Engagement Process	1	7%

Question 12. Do you have any comments on the process that is being undertaken to consider the best configuration of vascular services in South East Wales?

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 12	18	%
Organisation & Intergration of Network Services	2	11%
Accessibility & Transport	1	6%
Workforce	1	6%
Care Provided	4	22%
Impact on other services	2	11%
Financial Issues	1	6%
Communication	1	6%
Engagement Process	6	33%

Question 13. Do you have an alternate view on the proposals put forward within this document for the configuration of services?

ANSWER CHOICES	RESPONSES	
Yes	18.10%	19
No	71.43%	75
Not sure	10.48%	11
TOTAL		105

The information from the respondents who submitted data for this question was categorised against the key themes. The themes are shown below:

Question 13	31	%
Location of Hub & Spoke	13	42%
Organisation & Intergration of Network Services	3	10%
Accessibility & Transport	1	3%
Workforce	4	13%
Care Provided	4	13%
Impact on other services	2	6%
Financial Issues	1	3%
Communication	2	6%
Engagement Process	1	3%

7.3 Analysis of survey respondent type

In order to assess the public reach of the engagement, survey respondents were asked if they were a member of Health Board staff, the general public, a current or past patient, a carer of a current or past patient or a stakeholder.

Carer of a current/previous patient	7
Current / previous patient	24
General public	47
Not Stated	4
Staff	24
Stakeholder	4
Grand Total	**110**

The Geographical Profile of Respondents to the Survey

Health Board	Number	%

Aneurin Bevan University Health Board	42	38%
No Postcode	9	8%
Unidentifiable	6	5%
Powys	10	9%
Cardiff and Vale University Health Board	29	26%
Cwm Taf Morgannwg University Health Board	14	13%
Total	110	

Demographic Profile of Respondents to the Survey

The survey included a series of questions designed to help us understand the reach of the engagement.

Respondent Age profile

ANSWER CHOICES	RESPONSES	
18-24	0.00%	0
25-34	10.38%	11
35-44	11.32%	12
45-54	17.92%	19
55-64	29.25%	31
65 and over	31.13%	33
TOTAL		106

Respondent gender profile

ANSWER CHOICES	RESPONSES	
Male	39.62%	42
Female	56.60%	60
Prefer not to say	3.77%	4
TOTAL		106

Respondent Ethnicity

ANSWER CHOICES	RESPONSES	
White	97.12%	101
Mixed/multiple ethnic groups	0.96%	1
Asian/Asian British	0.00%	0
Black/Black British	0.00%	0
Arab	0.00%	0
Prefer not to say	1.92%	2
TOTAL		104

Welsh speaking respondents

ANSWER CHOICES	RESPONSES	
Yes	4.76%	5
No	95.24%	100
TOTAL		105

7.4 Issues raised at public meetings

In agreement with CHCs each Health Board held a minimum of 2 public meetings via Zoom, with Welsh translation available. A total of 29 people attended the meetings which are broken down as follows:

Health Board	Date	Time	Number of Attendees
Aneurin Bevan & Powys	Wednesday 10th March, 2021	14:00hrs	7 members of the public
	Tuesday 16th March, 2021	18:00hrs	5 members of the public
	Wednesday 17th March, 2021	18:00hrs	2 members of the public
Cardiff and Vale	Tuesday 16th March 2021	19:00 hrs	1 member of the public
	Thursday 18th March 2021	19:00 hrs	6 members of the public

Cwm Taf Morgannwg & Powys	Thursday 11th March 2021	14:00hrs	3 members of the public
	Tuesday 23rd March 2021	18:00 hrs	5 members of the public

The notes of the public meetings are available as appendix 3.

The issues and themes raised in the public meetings are very similar to those represented in the analysis of the survey feedback.

The comments raised suggest support for the proposed model. Attendees were interested in the proposed location of and services delivered within the Hub and Spokes, and furthermore appeared interested in the issue of access and transport.

Themes from each of the public sessions are set out below:

Aneurin Bevan University Heath Board & Powys teaching Health Board public engagement session themes identified were:

- Support of proposed change to services
- Travel and parking
- How will care pathways work in future
- How to make sure we are getting the services where possible closer to home and that we are not making people travel lots of miles
- Really clear on how people will flow through from local spokes to the hub
- Ensuring links with other services and development of benefits with centralisation of services and make sure that we get links with other services such as Rheumatology

Cwm Taf Morgannwg University Health Board, & Powys teaching Health Board themes identified were:

- Transport and transport related costs
- Health Board using face to face events for engagement going forward
- Links for Bridgend questions
- Llandough Hospital being the spoke for the University Hospital of Wales

- Liaising with diabetic patients, national support groups and stakeholders
- Site of follow up outpatient appointments.
- Having two spokes in Aneurin Bevan and whether or not this was still valid after changes in the Royal Gwent as a result of the Grange Hospital opening.
- The impact of covid recovery on the proposals.
- Obtaining views of patients who do not use IT or social media.
- Implications on WAST
- Parts of Powys affected by changes

Cardiff and Vale University Health Board themes identified were:

- The rationale for the creation of a Vascular Network is sensible and logical.
- Transport, parking, and accessibility needs to be considered throughout the design of this service.
- Suitability of University Hospital Wales in regard to impact on other services, geographic location and infrastructure requirements.

Attendees at all meetings were all asked to submit individual responses to the survey.

7.5 Issues raised at Third Sector meeting

Four Third sector organisations attended a dedicated engagement session.

Points were raised around:

- Support for the proposed model, in line with other similar services with high volume centres to improve patient outcome.
- Taking learnings from other networks
- Highlighting the importance of timely treatment and audit of outcomes

7.6 Issues raised through social media

The comprehensive social media programme supporting the engagement included regular posts about different aspects of the proposals, mainly through Twitter and Facebook. A number of comments were posted and reviewed, largely echoing the themes already identified. Feedback included concerns about the impact of the provision for Bridgend citizens and the centralisation of

services in Cardiff creating health inequalities. Other comments demonstrated praise for the proposed model.

It is important to note that 'reactions' to social media posts were positive with support shown through the use of 'like' or 'love' reactions. It is widely accepted that only the most vocal proportion of social media users comment on social media posts, similar to contributions seen at public events.

7.7 Issues raised via email

The South East Wales Vascular programme team received email correspondence that expressed a variety of views and issues. From the emails the following themes were identified:

- Support for digitalisation of services but with concern for health inequalities
- The logic of the Vascular Network is sensible and uncontroversial
- Patients hold the vascular surgery staff and services overall in extremely high regard
- The timing of the engagement may be unfortunate

8. Consideration of Engagement Responses and Vascular Programme response, action and mitigation

This section provides an analysis of the key themes that have emerged through the engagement, with a commentary regarding our response to the comments received and further action that will be taken.

The document is intended to demonstrate that all the issues and concerns have been considered in a balanced, rational, proportionate, and transparent way. In addition, we describe those areas where the engagement has identified issues that would require further action or mitigation to ensure the safe, effective, and sustainable delivery of a new model of care for vascular services.

Note that a number of sub themes have been grouped together for the purposes of response and to reduce duplication in response.

8.1 Organisation and integration of Networked services

Responses which highlighted issues relating to the implementation and organisation of a networked model of care formed one of the largest key

themes with 113 comments. There were a number of comments that were supportive of the model proposed and several areas that highlighted specific ideas or issues related to service provision and integration within the proposed network and in both hub and spokes.

The table below quantifies the sub-themes identified in the responses and elaborates on what was considered important within this theme.

Organisation & Intergration of Network Services - Sub themes	Total = 113	%
Hub and Spoke issues	30	35%
Model of Care for the network	26	30%
Facilities at each hospital & are they sufficient for now/future	13	15%
Facilities in the spokes and how they will work	12	14%
How will you ensure better working collaboration with cross over services and Health boards	11	13%
Hub facilities requiring investment/expansion	9	10%
Facilities are in the hubs and how do they work	4	5%
Issues relatiing to confidence of health boards to deliver as promised	2	2%
Have other areas tried this model and what was the outcome?	2	2%
Preventative screening, assessments & follow up should be close to patients home	1	1%
There are too many services being located at the heath	1	1%
What happens to the vacant space at the Grange?	1	1%
Centralising all tertiary services does not work	1	1%

Sub themes – The proposed model of care, proposed services delivered at the hub and spoke facilities at each Hospital and adequacy for the future

The most common categories of responses related to the proposed model of care and clarity over current vascular services within the proposed hub and spokes and whether they were sufficient at present and in the future.

It is important to note that in response to the mid-point review additional steps were taken to ensure greater clarity around the proposed model for the spoke sites were clear.

Currently vascular surgery and intervention for local residents takes place at 3 main hospital sites:

- University Hospital Wales, Cardiff
- Grange University Hospital, Cwmbran
- Until September 2020 the Royal Glamorgan Hospital, Llantrisant[8]

[8] At the time of writing there is an urgent temporary arrangement in place for Cwm Taf Morgannwg residents. Patients are currently being seen in Cardiff and Vale University Health Board as the service became undeliverable due to the lack of specialist staff.

Vascular surgical services for the Aneurin Bevan UHB population were previously provided at the Royal Gwent Hospital before the changes that took place in November 2020, resulting in a move of these services to the Grange Hospital.

"Run on weekends and open up the NHS system to a full 7 day a week service including doctors' surgery"

Whilst vascular surgery units within South East Wales currently perform well, it is important to remember the context in which this engagement has been undertaken. The need for change arose out of a number of national reviews of vascular services in the UK requiring a minimum population for safe, and effective and sustainable vascular surgery. The Royal Surgical Colleges and The Vascular Society of Great Britain & Ireland support the view that it is no longer desirable to provide urgent or emergency vascular surgery outside a fully centralised service or a formalised clinical network with a designated single arterial surgery centre providing a 24/7 on-site service. The evidence shows that patients have better outcomes if they receive their treatment at larger, high-volume specialist centres that are also fully equipped with the full range of necessary specialist support services e.g. 24/7 interventional vascular radiology.

Due to being one of the last areas in the UK not working as a part of a formalised vascular network, there is concern about key risks to the existing vascular surgical services in South East Wales, namely sustainability of services in the region. Other concerns include: vascular surgery being delivered across 3 (currently 2) hospital sites, several consultant staff approaching retirement age, and vascular surgery continuing to become specialised and distinct from the general surgery profession. Vascular arterial interventions and surgery require both a highly skilled and specialised surgical and radiological workforce and equipment. As the technology and equipment has developed over recent years, interventions and outcomes for patients have improved. Training and co-dependant services have also become more specialised – meaning that in order to deliver this level of specialist and complex care, we need to concentrate our specialist staff and services in fewer places so that:

- they can be provided on a 24/7 basis,
- they have immediate access to supporting specialist services and;
- they provide sufficient volumes of patients to enable clinical staff to be trained in and maintain their specialist skills.

It will not be possible to attract or train the medical workforce required to maintain this level of specialist care on more than one acute site for the population of South East Wales.

This proposed direction of travel has already been partially implemented as Emergency Vascular surgery 'out of hours' for the region is already centralised at the proposed hub site and in October 2014, senior clinicians from across the region recommended the move towards a fully networked model of care for all complex vascular interventions, and more specifically, articulated their agreement on the hub and spoke model set out. This has been supported at the South East Wales Vascular programme board who have unanimously supported this proposed model of care to ensure that the services can deliver sustainable care for the future. This means that South East Wales will not only be able to deliver a service that has the capacity to meet the growing needs of patients, but also a service which would become a centre of excellence in the UK.

A single arterial centre (Hub) will offer enhanced opportunities for its surgeons to sub-specialise and promote innovation and research. Bringing the most complex vascular surgery and interventions into one unit as a part of a network of care gives us the opportunity to change the way the services work and build on best practice from all existing vascular units within South East Wales. Most importantly it will help us improve outcomes for patients whilst ensuring that care wherever possible, including investigations, appointments, and rehabilitation, will remain closer to home.

Sub themes - Collaboration

The variety of responses we received demonstrates that ensuring a high-quality service will mean ensuring that many different elements work well and will require effective partnership working and collaboration.

Importantly, the establishment of the network itself promotes and develops collaboration across health care providers to ensure better outcomes for patients.

"Increase expertise at other hospitals as well"

As a part of the existing programme a variety of specialties and professions across Health Boards are engaged and involved. If the proposed model is supported any implementation plan will ensure that each specialty, profession, and team involved in or impacted by the delivery of vascular services are included within

the implementation planning. More specifically a more detailed staff engagement process will be undertaken across all provider Health Boards.

We are also asking other vascular networks within Wales and the wider UK to advise us on delivering the best service for patients based on their experiences and learning as well as making links with other similar clinical networks within Wales.

Sub themes – Issues around centralising services and ensuring services closer to home

Several respondents emphasised the issue of centralising services and ensuring that services were delivered closer to where patients lived.

The nature of the proposed clinical model ensures that patients will only be treated at the proposed hub for a small but highly specialised part of their care. This means that wherever possible we will deliver care and treatment closer to a patient's home, this includes outpatient appointments, tests and rehabilitation.

There are both medium and long-term opportunities to strengthen and develop services closer to home that could reduce the need to travel to spoke hospital sites. Health Boards are committed to working with partners including other Health Board Partners in Powys but also local community services and third sector partners to develop plan that support care closer to home.

Sub themes - Resourcing, capacity and adequacy of facilities at the proposed Hub site, UHW

A number of respondents emphasised the issue of adequate resourcing at the proposed Hub and the need to ensure funding for any building work or new equipment. Because we are bringing three existing vascular units together, we know that resources are already available to support the delivery of these services. If the model of care is supported and if existing resources and capacity is found to be inadequate for the increase in vascular activity within the Hub, we will deal with this through the programme process. Any investment for workforce, building work or new equipment will require a business case to be presented to the health board boards.

Specific issue - Capacity released at the Grange Hospital

There was one specific concern raised about the use of capacity that would be released as a result of the transfer of some vascular services to UHW.

Vascular patients utilised beds within the wider general surgery pool, rather than a physically separate area. The centralisation would give general surgery some additional flexibility for their activity planning, which will be particularly valuable when finalising and operationalising recovery plans over the coming months.

8.2 Accessibility & Transport (including parking)

Accessibility was the second most cited issue with 71 individual respondents. In order to further understand what was considered important within this category the table below quantifies the key sub-themes in the response.

Accessibility & Transport	Total = 71	%
Need to take into consideration the distance patients need to travel	18	35%
Car parking in the heath is an issue	17	33%
What public transport & cost have been taken into considerations for patients?	11	21%
Ease of access to the heath building need to be taken into consideration for elderly/ disabled	11	21%
Need to take into consideration patients ability to travel	5	10%
How will patient transport work between sites	5	10%
Has the carbon footprint of patient travel been taken into consideration?	2	4%
Ambulance times travelling to Cardiff are already high - rush hour traffic	1	2%
Has visitor access been taken into consideration for people being treated in the hub long term	1	2%

Sub theme – Car parking

There were several concerns raised about the congestion and lack of car parking at the UHW site.

"I don't mind this, however the parking at UHW is a lot worse than Royal Glamorgan and the Grange. But perhaps more accessible via public transport. Is there already too many big services operating from UHW is there capacity for this hub too?"

The likely increase in the number of patients to UHW is moderate. Cardiff and Vale UHB recognises that it will be imperative to ensure that family and friends are able to access the hospital on a timely basis, particularly when the patient might have been transferred to the hospital for an emergency treatment. The UHB has been developing a new traffic management system for the University Hospital of Wales site as part of a wider Sustainable Travel Plan. Strict criteria for staff parking have been introduced and the UHB encourages staff and visitors to use

alternative means of travel such as the park and ride scheme and public transport. This has resulted in reduced congestion on the site and has freed up parking spaces for visitors.

More recently, with a number of outpatient appointments taking place virtually an initiative to ensure the amount of time patients are waiting in the emergency department at UHW has resulted in fewer trips to hospital for many patients and reduced congestion on the Heath Park site.

It is also worth noting that there are no parking charges at hospitals in Wales.

Sub theme - Travel distance and costs

Those patients who are likely to be affected by increased travel are those living in the area of South Powys, with their nearest emergency hospital being the Prince Charles Hospital in Merthyr Tydfil or the Grange University Hospital in Cwmbran, the answer is potentially, but only if they are undergoing specialist or complex surgery or intervention and only for this specific part of their treatment.

"Patients have to travel further for treatment "

There is a need to balance the potential benefits of a single larger centre with any extra time and distance to travel. Our intention when developing the proposed model of care is that we can improve the ways our multi-disciplinary teams work across the whole South East Wales Network. A Multi-Disciplinary Team includes surgeons, interventional radiologists, physicians, nurses, therapists. This means that we ensure care, such as out-patient appointments with the surgeon can take place locally. Improving the way our teams work will also allow us to reduce the amount of time patients can expect to spend in hospital having their operations by using new techniques such as Enhanced Recovery After Surgery (ERAS), making use of minimally invasive (endovascular) technologies, as well as maximising the use of high-quality imaging and telemedicine.

The clinicians involved in the initial 2014 clinical options appraisal agreed that the University Hospital of Wales should act as the hub for the network based on a number of criteria including quality, safety, sustainability and strategic fit. This proposal decision was also made with the recognition that the proposed model of care will affect the highly specialist one component of the patient's health-

care pathway and that wherever possible tests, outpatient appointments, and other routine treatments will be provided closer to home by their local hospital.

We recognise that regional centres do create challenges for patients, relatives and visitors, and should the proposed model be supported, we will work closely with teams at the University Hospital of Wales to build on their experience of delivering specialised care for Wales to deliver innovative solutions for visitor access.

Sub themes - Patient transport issues and impact on the Ambulance service

We recognise that travel to UHW may create challenges to some of our patients. For those unable to travel by private car, access to NHS transport, known as Non-Emergency Patient Transport ("NEPT") is an important service that will enable them to access health care services at the Hub. We are already working closely with the Welsh Ambulance Service Trust ("WAST") who provide the NEPT service. If the proposed model is supported, we will carry out thorough and robust planning measures alongside them to ensure that we can meet the increased needs that this service change will cause. As with travel by car, this proposed service change only affects one part of patients' care. Tests, out-patient visits and other treatment will continue to take place at the patient's local hospital. To reduce further the need for travel, we intend to improve the way our multi-disciplinary teams work. This means that we can re-organise the service so that even more of the care, such as out-patient appointments, can take place locally.

"It should be easy for patients to get to"

Sub theme - Access to the Heath site for elderly/disabled patients

Accessibility at the University Hospital Wales site is important for certain groups, such as persons with disabilities and the elderly. The UHW site is compliant with the Equalities Act (2010) that sets out a minimum threshold for disability-compliant access infrastructure. The UHW site benefits from:

- Park and ride access into the site
- Two disability lifts, one located at the rear near the Y Gegin restaurant and an access lift from the ground floor to the first floor located at the front of the building in the concourse
- Push-pads for doors are put at a disability-friendly height
- Wheelchairs that are available from the ambulance service desk in the

concourse
- Additional lifts are located in the multi-story car park

In addition, the Patient Experience team organises the efforts of volunteers who are able to guide and direct patients and visitors to where they need to be, and assist them where necessary. We also work hand-in-hand with St Johns ambulance charity who provide transportation to members of the community.

However, we recognise that the size and age of the building does create challenges for those who do have mobility issues. The new Lakeside Wing has meant that although the overall amount of disability car parking spaces has increased, some of these spaces have been relocated in order to accommodate the new facility. Despite these changes, the drop off zones remain the same.

Recent changes to the way we work at UHW means that virtual appointments are being offered and provide an alternative to face-to-face consultations. We are also looking at innovations to our health care pathways to offer 'See-on-Symptoms' consultations.

Specific issue - Carbon footprint for increased travel times

The predicted volume and distance for additional travel is very small as CTM patients are already treated at UHW and distance between Newport and Cardiff for the AB patients is approximately 17 miles. For a significant proportion of the AB catchment population, UHW is only marginally farther than The Grange.

Specific issue – Ambulance travel times during rush hour

The access arrangements for blue light emergency transfers to UHW are well developed and will be improved following the lane enhancement work on Manor Way to enable timely access for time critical patients.

Specific issues – Visitor access for patients staying 'long term' at the hub

The proposed model of care aims to transfer patients to a hub for a small but specialised element of their care with the aim of ensuring that patients receive their as close to home as possible. If the proposed model is supported then Visitors' access will be addressed through the implementation planning which will take place through the Vascular Network Programme and by C&V UHB in respect of the development of the Hub.

As part of the development, we have been undertaking a number of interviews with patients looking at the experiences of patients, families and carers of

existing vascular services and what could be improved. Work will be undertaken within the hub project to further develop outline plans to provide specialist support for families and carers. There will also be practical advice, signposting and support provided to families and carers to make appropriate accommodation and transport arrangements working alongside third sector and other public sector services should this be required.

8.3 Hub and spoke location

Issues and comments raised in relation to the hub and spoke locations and services delivered was the third largest theme.

The table below quantifies the sub-themes identified in the responses and elaborates on what was considered important within this theme.

Location of Hub & Spoke	Total = 68	%
Services should be provided at a local level (in the community)	25	40%
Residents of Powys are having services taken away from them.	9	14%
The Hub should be located in The Grange	8	13%
The Heath is already over crowded/ under performing	6	10%
What services will be delivered in the spoke?	6	10%
All sites should remain and their facilities expanded	4	6%
Spokes should provide emergency services and their facilities expanded	4	6%
The Hub should be located in Neville Hall	3	5%
The Hub should be located in the Royal Glamorgan Hospital	2	3%
Will there be room to expand the service in the Heath?	1	2%

Sub themes – Services should be provided locally

It is important to highlight that the benefits of a Hub and Spoke networked model of care allow the balance between sustainability of service, improved patient outcomes and services closer to home wherever possible.

The nature of the clinical model ensures that patients will only be treated at the proposed Hub for a small and highly specialised part of their care. This means that wherever possible we will deliver care and treatment closer to a patient's home, this includes outpatient appointments, tests and rehabilitation.

There are both medium and long-term opportunities to strengthen and develop services closer to home that could reduce the need to travel to spoke hospital sites. Health Boards are committed to working with partners including other Health Board Partners in Powys but also local community services and third sector partners to develop plans that continue to deliver on plans and support care closer to home wherever possible; the use of virtual outpatient clinics being an important example.

The proposed model of care for the network ensures that patients across South East Wales will still have access to a 24/7 emergency department and a general surgery emergency service in spoke hospitals, the main spoke sites for each of the areas are proposed as:

Aneurin Bevan University Health Board spoke arrangements– Grange University Hospital

The principal spoke hospital within the Health Board will be the Grange University Hospital, where our main emergency department is located. This site will provide initial assessment and stabilisation of any acute vascular patients who may present, prior to transfer to the hub at the University Hospital of Wales. In addition, as part of our 'Clinical Futures' model of care, other hospitals will be used for vascular surgical patients where care can be provided safely and effectively as close to their homes as possible e.g. for outpatient clinics and post-treatment rehabilitation.

A summary of services that would be provided on different sites is shown below:-

Health Board Site	Proposed Vascular Services
Grange University Hospital (principal spoke site)	• Initial assessment and stabilisation of any patients presenting to emergency department with acute vascular conditions • Interventional radiology e.g. angioplasty • Non-invasive vascular imaging ('vascular lab' work) • CT angiography • On-demand inpatient assessment (nurse led)
Royal Gwent Hospital	• Day case procedures e.g. varicose veins • Outpatient clinics (vascular surgeon and vascular nurse delivered), including 'hot' clinics for rapid access • Ward assessment of patients on request e.g. diabetes and Care of the Elderly patients • Post-treatment rehabilitation / step down for general medical care • Non-invasive vascular imaging ('vascular lab' work) • CT angiography • Pre-operative anaesthetic assessment (face to face where required)

	• On-demand in/outpatient assessment (nurse led)
Nevill Hall Hospital	• Outpatient clinics, including 'hot' clinics for rapid access • Ward assessment of patients on request e.g. diabetes and Care of the Elderly patients • Post-treatment rehabilitation/ step down for general medical care • Non-invasive vascular imaging ('vascular lab' work) • CT angiography • On-demand patient assessment (nurse led)
Ysbyty Ystrad Fawr	• Possible future outpatient clinics • Ward assessment of patients on request e.g. diabetes and Care of the Elderly patients (vascular surgeon and vascular nurse delivered) • Post-treatment rehabilitation / step down for general medical care • CT angiography • On-demand patient assessment (nurse led)
Ysbyty Aneurin Bevan	• Post-treatment rehabilitation/ step down for general medical care • On-demand patient assessment (nurse led)
Chepstow Community Hospital	• Post-treatment rehabilitation/ step down for general medical care • On-demand patient assessment (nurse led)
County Hospital, Pontypool	• Post-treatment rehabilitation / step down for general medical care • On-demand patient assessment (nurse led)
Virtual / Telemedicine (where clinically appropriate)	• Outpatient appointments (consultant and nurse-led) • Pre-operative anaesthetic assessment

Cwm Taf Morgannwg University Health Board – Royal Glamorgan Hospital, Llantrisant serves the more densely populated area of the Health Board namely the Rhondda valley. The vascular surgical and Interventional Radiology service for the Health Board were based in this hospital until September 2020, until an urgent temporary change of service (service moved to University Hospital of

Wales) due to a loss of specialist clinical staff. The Royal Glamorgan Hospital has retained the necessary therapy inputs to manage these patients with complex needs. Vascular outpatients clinics and ward-rounds take place twice weekly on the Prince Charles Hospital site. It is important to note Bridgend is served through the South West Wales Vascular Network which is already established and was in place prior to the Bridgend Boundary Change. The Bridgend Boundary Change was an administrative change that did not change the patient pathways to ensure continuity of care.

Cardiff and Vale University Health Board

It is important to note that there is no change to where services will be delivered for Cardiff and the Vale residents. Those requiring access to 24/7 emergency department and general surgery emergency service will continue to access this at the University Hospital if Wales.

Rehabilitation will be provided at Llandough Hospital Vale of Glamorgan.

As a part of the delivery of the Health Board strategy, Cardiff and Vale is developing a programme to develop and deliver a clinical services plan over the next 10 years that will continue to focus on care closer to home wherever possible which will include: delivery of some services where possible digitally (virtual appointments for example).

Sub themes - Sites should remain and facilities expanded

The Royal Surgical Colleges and The Vascular Society of Great Britain & Ireland support the view that it is no longer desirable from a service quality, safety and sustainability perspective to provide urgent or emergency vascular surgery outside a fully centralised service or a formalised clinical network with a designated single arterial centre providing a 24/7 on-site service. The evidence shows that patients have better outcomes if they receive their treatment at larger specialist centres serving a minimum population of 800,000 people. This number is required to provide a sufficient critical mass of patients, thereby providing the sufficient demand for specialised services and volume of demand to train for and maintain clinical specialist skills. No Health Board in the South East Wales region can meet this minimum population criteria alone.

A single arterial centre (hub) will offer enhanced opportunities for its surgeons to train, sub-specialise and promote innovation and research. Bringing the most complex vascular surgery and interventions into one unit as a part of a network

of care gives us the opportunity to change the way the services work and build on best practice from all existing vascular units within South East Wales. Most importantly it will help us improve outcomes for patients whilst ensuring that care wherever possible including investigations, appointments and rehabilitation will remain closer to home.

Sub themes - Location of the hub

The most important driver for the development of vascular networks and establishing specialist centres are to improve patient outcomes.

During the 2014 clinical options appraisal and subsequent review earlier this year. Options on the hub site were reviewed against key criteria including: Quality and Safety, Acceptability, Strategic Fit, Sustainability (ability for the services to be fit for now and the future), Access and Achievability.

Quality and Safety was given the highest priority and alongside acceptability, strategic fit and sustainability, given the range of services established at the University Hospital Wales site, its position as a specialist provider of major trauma, interventional cardiology and cardio-thoracic surgery and the co-dependencies between them and the vascular service, the preferred option for the hub was identified by senior doctors from all three Health Board providers as the University Hospital of Wales, Cardiff.

There were concerns raised about performance and capacity at UHW. Questions of performance were due to a low submission of data to the National Vascular Registry in 2019. Cross checking with other data sources show the Cardiff and Vale Unit to have acceptable outcomes for vascular surgery and interventional radiology. Capacity on the vascular ward in University Hospital of Wales was reduced due to demands placed on the hospital by the Covid-19 pandemic. By August 2021 the unit will be returned to its former capacity of 36 acute vascular beds.

Cardiff and Vale UHB is working closely with other health boards on the following:

A review of services provided at a regional level to identify those that might safely and appropriately be delivered at other hospitals. This would free up theatre time and beds to support patients who require more complex care and treatment. Proposals for service change arising from this work would be subject to further engagement with stakeholders and the public.

Arrangements to ensure that patients are returned to their nearest hospital as soon as the specialist part of their treatment is complete, as the support of family and friends is important to a patient's recovery. Repatriation protocols are being developed to support this work. Existing protocols such as in neurosurgery and Major Trauma are already delivering benefits, enabling patients to return to a local hospital as soon as clinically appropriate, releasing capacity in the UHW specialist service.

Cardiff and Vale UHB is also developing a Clinical Services Plan as a part of the Shaping our Future Clinical Service Programme which will include consideration of what services could move off the UHW site to University Hospital Llandough which would similarly be subject to further engagement and consultation.

Cardiff and Vale UHB has identified a number of critical enablers that would support the delivery of a vascular hub service:

- Increased theatre capacity in line with modelling for additional vascular activity
- Increased ward capacity in line with modelling for additional vascular activity
- Additional theatre equipment – a detailed inventory of equipment and future anticipated needs is being compiled for planning purposes
- Hybrid theatre with timetabled sessions for vascular surgeons to deliver minimally invasive and "hybrid procedures".
- High quality imaging in standard operating theatres as part of recommended quality assurance along with access to the highest quality surgical instruments.

There are plans being developed to address each of these, dependent on the outcome of engagement.

Sub theme – Powys residents will be disadvantaged as access to services will be reduced AB & CTM to review

A key principle of the proposed network model is that each element of the service is undertaken in the hub only if that is necessary on clinical grounds e.g. specialist inpatient care and vascular operations in theatre. All elements that can be delivered safely and effectively

"The travelling issues some patients may experience getting to a hospital possibly much further away"

more locally e.g. rehabilitation and outpatient care will continue to be undertaken within the spokes. Access to all of the latter services will therefore remain unchanged for Powys residents.

8.4 Care provided

Care Provided	Total = 45	%
Specific suggestions for improvements to care	28	64%
Concern over patients not being treated promptly in vascular and other services	17	39%

There were a range of comments suggesting improvement in current vascular services, these comments will be reviewed by vascular teams within provider Heath Boards and also the programme team so that these can be taken in account in both the delivery of services now and development of services for the future.

"I do agree, the wait times are huge at the moment"

There is understandable concern about the impact of the COVID-19 pandemic on the delivery of services. All provider Health Boards have developed plans to support both the response to COVID and recovery. The primary driver for this service development is to improve the quality and standard of care in line with national service recommendations and will be constantly monitoring progress and outcomes through the vascular clinical audit programme.

"Further delays on treatment delayed by COVID-19 need to be avoided at all costs"

Provider Health Board have protected essential services throughout the pandemic but recognise that the pandemic has resulted in fewer consultations, diagnostic procedures and surgeries and a full recovery, therefore, will take careful planning over multiple years. Further details of the Health Board's Annual Plan's for 2021-22 will be published on websites in due course.

8.5 Engagement Process

A total of 44 comments related to the process undertaken.

The table below quantifies the sub-themes and specific comments identified in the responses and elaborates on what was considered important within this

theme.

Engagement Process	Total = 44	%
Need more information before forming a view on the proposal	21	47%
Analysis - Has an options appraisal been done? What data has been analysed?	5	11%
Would like more clarity on some areas of proposal	4	9%
Time taken to undertake engagement	3	7%
Sceptisicsm over process	3	7%
The consultation could have been betted advertised	3	7%
General engagement comments	3	7%
Issues with digital engagement	1	2%
Engaging with hard to reach groups	1	2%

Sub themes – More information/clarity on the proposal before forming a view

Considerable emphasis was placed at the engagement sessions on ensuring that participants had full information and understood the nature of the service and of the proposals for change. A list of FAQs was maintained and updated in response to queries to further enhance information and understanding during the process.

Sub theme – Options appraisal and data in the engagement documentation to support the proposal

The options appraisal was again considered and supported by the programme clinical advisory group and steering committee in early 2021. This group includes senior clinicians from all three provider Health Boards from a range of professions.

The national vascular registry (NVR)provides an invaluable opportunity to benchmark the unit's performance in a UK wide context. The NVR provides comprehensive annual reports on process, performance and outcomes in vascular and endovascular surgery. These reports are in the public domain.

Sub theme - Time taken to undertake engagement

Although discussion started in 2014 this work was undertaken by the vascular surgeons to identify the options and test the need and appetite for service change. Following this process there was a view formed and supported across the 4 SE Wales Health Boards that this was a desirable proposed way forward. There have been a range of regional and local service changes that have taken corporate clinical and planning resources – both expected and unexpected - that have impacted on the timescale for this proposed service reconfiguration.

Since this time the body of evidence to support the options appraisal undertaken has grown and examples of improved care where networks have already been formed demonstrated.

More recently the COVID pandemic halted planning for a period of 12 months.

Sub themes - Reach of the engagement including digitally excluded

Running the public engagement during the pandemic is something that the Health Boards in partnership with the CHC discussed at length before the programme was launched. While COVID-19 has presented us with many challenges we have also recognised that we have a number of opportunities to reach communities digitally and support and seek feedback from specific stakeholders. It was agreed that seeking public feedback sooner rather than later would be beneficial given the current emergency temporary transfer of vascular surgery services away from Cwm Taf Morgannwg Health Board and the uncertainty around the relaxation of COVID restrictions.

We therefore developed a communication and engagement strategy that capitalised on digital adoption during the pandemic but also leveraged opportunities to reach third sector stakeholders and the digitally excluded through other channels as well as wider stakeholders.

Sub themes – Scepticism over process

There are 3 comments that relate to the process itself and the ability to influence a decision on the proposed model at this stage.

Although a number of discussions have taken place and a considerable body of evidence has been developed over the last few years that supports the principle of a regional network, the purpose of this engagement is to see if there is any other feedback, evidence or issues to take into account when considering the proposed model of care for the network in South East Wales. It is also important for us to understand the impact of the proposals so that we can mitigate possible adverse impacts of any change for patients, their carers or family.

8.6 Workforce

Workforce	Total = 38	%
Limited workforce presents a challenge to patient care/ treatment	12	36%
Staff could be shared between sites (if consultants would travel)	8	24%
How will staff skills be kept up to date?	10	30%
Services would benefit from an MDT approach	3	9%
Patients wanting to see their regular consultant	1	3%
Complaints of poor patient care	2	6%
Suggested collaboration with Bristol	1	3%
We need to make sure there is no compromise to working in unfamiliar environments with un	1	3%

Sub theme – challenges with limited workforce

One of the drivers for a move towards networked models of care has included the sustainability of workforce. With vascular surgery becoming increasingly specialised this challenge is likely to increase. Clinicians feel that the proposed model will attract skilled staff to Wales and to the region to ensure that these services can continue to develop by both attracting and retaining skilled staff by offering opportunities to work within a centralised vascular hub. This has been evidenced in similar networks such as the Major Trauma Network for South Wales launched in 2020, which attracted many staff from across the UK and from overseas.

It is also important that the network provides training and experience for all staff groups. A multi professional training and education plan for the region has been developed by the programme clinical advisory group.

Sub theme – Sharing of workforce across sites

The premise of a networked model of care is to allow the sharing of expertise across a number of organisations. Whilst we appreciate there may be a number of staff who will remain within their local Health Board, a network provides additional opportunities for professional development, joint working, communication and best practice sharing.

Sub theme – High Quality and well-trained staff including staff skills

One of the benefits and drivers of the development of a network for those services which are specialised or who have specialised elements are to ensure that high quality staff can be attracted and retained by

"I am not sure of all the services which this hospital provides but I would assume it to be a busy hospital. As long as they have enough qualified staff for the operations is the main priority"

offering increased opportunity to develop skills and knowledge within a specialised centre (hub). Through the development and regular review and assessment of whole network training and educational plans we can ensure equity of access for staff across the whole region, in turn ensuring improved outcomes for patients.

Specific issue - Collaboration with specialists in Bristol

The clinical teams collaborate regularly with colleagues in Bristol, sharing learning opportunities and when necessary, transferring patients for complex procedures that cannot be delivered at UHW. This collaboration will continue in a future network service.

Specific issue - Unfamiliar environments, travelling teams

We know we currently have expert teams working in three sites; by connecting them as a part of a network we will build on their strengths. It is important to emphasise that the surgical and Interventional radiology consultant teams already take part in a regional rota and therefore work together as one team and take part in a regular multi-disciplinary team meeting. If a fully networked model is implemented, then this will in practice be a natural evolution of existing collaborative practices and should drive up standards beyond the current performance.

If the model of care proposed is supported, the vascular hub will be double the size of the existing unit at UHW and will be developed by an implementation team drawing upon expertise from all three provider Health Boards.

We believe that a Hub of this size as a part of a wider network, properly implemented, will be highly attractive to medical staff. We accept that this may be different for certain other staff groups, and that these may be less inclined to transfer from their current posts. A strong training and development programme starting very early in the process will therefore be an essential requirement. We will ensure that the programme team work closely with Health Improvement and Education Wales to facilitate this.

If the proposed model is supported, a skilled and dedicated workforce working as one team familiar with the network would be essential to its success and this would be a core element in implementing the network model.

8.7 Impact on other services

Impact on other services	Total = 52	
Services are interdependent on each other/ requires closer MDT working	11	28%
The Heath Hub would need sufficient services	2	5%
Other services should be engaged to assess the impact this will have	11	28%
Have future needs been taken into consideration	6	15%
Can the heath accommodate a Hub without negatively impacting on other services	7	18%
What is the impact on other departments (emergency transport/radiology/ all vascular/ Auto	15	38%

Sub themes – Service interdependencies, engagement and MDT working

We wholeheartedly agree with the requirement for closer working across multi-disciplinary teams and organisations. The aim of a network is to enable not only sustainable care for the future but to apply consistent high standards across the region and to ensure better, more joined up care for patients and their carers.

The selection of UHW as a proposed hub takes account of the importance of having key interdependent and complementary services co-located on that site (e.g. Neurosurgery, Cardiac Surgery, Major Trauma).

Sub theme – sufficient capacity within supporting services at the Hub to mitigate negative impact

Careful consideration of demand and capacity has been undertaken as part of the planning process. This has been informed by activity data from across the region and full reassurance has been achieved that the capacity plans for the new service are robust. If the proposals are supported, then more detailed planning will be undertaken across all supporting services within UHW.

8.8 Communication

Communication	Total = 21	%
Better communication between teams	7	47%
How will families and patients have the changed communicated to them	4	27%
Hub and Spokes need excellent communication	4	27%
How will patients and family remain in contact if they live far away?	6	40%

Sub theme – Communication between teams and between hub and spokes

The development of a formal networked model of care will provide a structure that allows not only the hub and spoke organisations but also teams and different professions to communicate more effectively with one another.

There has already been increased communication and collaborative working across the four Health Boards and different teams working within them, to

develop the proposed model of care and to progress a number of work streams within the programme.

Improved communication has also been observed in the development of Networks across the UK and within other clinical networks within Wales.

Sub theme – Communication between clinicians and patients and their families/carers

The respective clinical teams place a high value on effective and compassionate communication with patients, and all see this as a priority to maintain and enhance within a future network model. Multi-disciplinary discussion and sharing of best practice will form the basis of achieving this

"How will patients get feedback /future appointments with consultants who carried out their operation?"

Sub theme – Contact and communication between patients and their families

In addition to the above, the teams will ensure that all facilities and opportunities (including use of technology) will be made available to allow for good communication between patients and their families e.g. during inpatient stays.

8.7 Financial issues

Financial Issues	Total = 13	%
The health board is under funded	3	23%
Request more money from Welsh Government	2	15%
What are the financial implications of this decision	2	15%
Investing in moving the department there is a waste of money	1	8%
Ensure adequate medicine cover factored in as part of costs	5	38%

Sub themes - Value for money and financial implications

"Involve the patient first not what just good for the NHS and it financial needs"

The clinical benefits for patients having access to a vascular network and centralised hub for complex vascular surgery have been clearly demonstrated. In launching this engagement, health boards are already committed to ensuring the patients of South East Wales have access to equitable, appropriate care to meet their specialist needs. The matters being engaged upon relate to how this should be achieved. Ensuring value for money

and optimising the quantum spent on vascular will be subject to further scrutiny through the commissioning process.

8.9 Requests for information & general concerns raised

Request for information	Total = 8	%
What affect will this have on patient outcomes/ waiting lists/ patient prioritisation	5	63%
Would like more information in the local community (GP's, community nurses etc.)	3	38%

General Concerns	Total = 6	%
Have other parts of the country tried this- how did it work?	1	17%
Are patient outcomes worse the further out a patient lives?	1	17%
Further delays on treatment delayed by COVID-19 need to be avoided at all costs.	1	17%
What services come under vascular?	2	33%
Does the need to treat patients need to rethinking?	1	17%

The continuous improvement in patient outcomes and waiting times is one of the major drivers of the network proposal, with all national evidence indicating that regionalisation will have a positive effect on these. This has been the documented experience of virtually all other networks in the UK.

"Are sacrifices to be made in outlying areas to demonstrate an overall average improvement?"

There is no known evidence of patient outcomes being adversely affected by the distance between their homes and the hub. The key factor is the ability of a network to ensure that all patients requiring acute vascular care are brought to a hub with full expertise and critical mass to respond to all their needs in the most effective manner.

Vascular disease is any condition that affects the network of your blood vessels. This network is known as your vascular or circulatory system. The main 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. Note that cardiovascular services are delivered by a separate specialty and are not covered by the vascular surgery team.

9. Equality Impact

We are particularly interested in identifying issues emerging from the engagement which relate to potential impacts, positive or negative, of our

proposals on different members of our communities. This section highlights some of the key learning we have gained from this engagement in relation to equality impacts. This will help to inform and shape our approach going forward; the information has been used to update the Equality and Health Impact Assessment (attached as Appendix 5). This is to ensure that due regard is given to these issues in our planning and that appropriate action is built into implementation plans to mitigate any negative impacts and promote positive impacts.

Comments relating to equality impacts featured in the responses to the engagement survey questions.

Physical access and building design of healthcare facilities were major themes in the feedback we received. Ensuring good access to our sites, on our sites and within our buildings, is of particular significance to some members of our community. Poor access impacts negatively but ensuring that access is improved in the future could impact positively on people's ability to receive the care they need e.g. older people or people with a disability.

Another theme which is likely to have a negative impact on patients, relatives and carers from socio-economic disadvantaged areas is transport. It is anticipated that some may experience increased difficulty in travelling due to low income, disability, age, poor transport provision, lower number of households with access to their own car. Being required to travel to an unfamiliar hospital and experience longer journey times could be particularly difficult and disorientating for people. Early transfer of the patient back to the 'local' hospital would help to mitigate long period in unfamiliar surroundings. In addition, in order to mitigate against the negative impact of transport it is considered that the service should promote transport links and provide easy to read information to patients, families and carers in order to make their journey as easy as possible.

Another theme which has the potential to impact on particular groups in our community is communication. Feedback through this engagement focused on the importance of clear information about service changes and how to access services written in a way that is easy for people to understand. How that type of

information is communicated could impact differentially on different members of the community.

10. Conclusion

We are grateful to all members of the public, staff and the Community Health Councils who have supported this engagement process. The contributions have helped to strengthen the service development process providing insight from many perspectives.

In this report we have described the themes from the engagement process and set out from the Programme Team our response, action and mitigations. We believe this report provides a good reflection of the engagement process.

We look forward to discussing this report with Community Health Councils as we consider the next stages of the process.

11. Appendices

A. The Future Provision of Vascular Services for the Population of South East Wales: A Discussion Document

THE FUTURE PROVISION OF VASCULAR SERVICES FOR THE POPULATION OF SOUTH EAST WALES : A DISCUSSION DOCUMENT

Aneurin Bevan University Health Board

Cardiff & Vale University Health Board

Cwm Taf Morgannwg University Health Board

Powys Teaching Health Board

CONTENT

1. INTRODUCTION

This document is being shared with people across South East Wales, to start a conversation about how Vascular services are organised in the future. It aims to share information and gain your views about :

- What vascular services are
- Which people may be in need of vascular care
- How vascular services are currently provided
- The challenges facing vascular services
- The options we have started to consider about how we could respond to these challenges
- A preferred way for organising services
- What may be the advantages and disadvantages of any future changes

After considering the issues contained within the paper, we hope you will share your views, thoughts and ideas with us. We have offered a questionnaire at the end of this document, but should you wish to tell us about issues that are broader than this, please do not hesitate to do so.

Your responses should be with the team co-ordinating this by xxx/xxx/xxx.

Following this period of engagement, we may need to enter a more formal period of consultation about the services. If you would be interested in continuing the conversation with us, please let us have the best contact details to keep you engaged with the conversation.

We recognise that this document will have some medical terms associated with Vascular surgery within it. We have added a 'Glossary of Terms' to the end of the document to help with this.

We have also completed an equality impact assessment which you can view at appendix C. We will use the information gained through the engagement process to increase our understanding here.

2. WHAT ARE VASCULAR SERVICES?

Vascular disease is any condition that affects the network of your blood vessels. This network is known as your **vascular** or circulatory system. The main aim of

vascular services is to 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, reduce the risk of amputation and improve function. Vascular services are also provided to support patients with other problems such as kidney disease

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.

The core activities of vascular specialists are:

- Preventing death from abdominal aortic aneurysm (AAA);
- Preventing stroke due to carotid artery disease;
- Preventing leg amputation due to peripheral arterial disease;
- Symptom relief from peripheral arterial and venous disease;
- Healing venous leg ulceration;
- Promoting cardiovascular health;
- Improving quality of life in patients with vascular disease;
- Assisting colleagues from other specialties with the control of vascular bleeding;
- Providing a renal access service for patients requiring haemodialysis.

Aneurin Bevan University Health Board; Cardiff and the Vale University Health Board; Cwm Taf Morgannwg University Health Board and Powys Teaching Health Board have worked together for a number of years to discuss the best way of delivering vascular services, and already have a number of shared arrangements already in place (eg out of hours rota) We are therefore collectively talking to you about the future of vascular services, following which we may enter a period of more formal consultation on the services.

3. **WHO NEEDS THESE SERVICES?**

The prevalence of vascular disease increases with age. Average life expectancy continues to rise especially in males. This suggests that demand for vascular services is likely to increase over time. There are currently an estimated 200,000 people with diabetes mellitus in Wales, and prevalence is increasing. Vascular disease is the major cause of morbidity in diabetes and the risks of disease progression are higher, with an epidemic of diabetic foot disease expected in the next decade.

Risk factors for vascular disease include:

- Being over the age of 50
- Smoking
- Being overweight
- Having abnormal cholesterol
- Having a history of cerebrovascular disease or stroke
- Having heart disease
- Having diabetes
- Having a family history of high cholesterol or high blood pressure
- Having high blood pressure
- Having kidney disease or 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 a life or limb, urgent care is planned treatment within a limited number of days.

Patients who receive vascular services may have:

- Had a 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 mean they need a limb amputation

Not all patients admitted to a specialist 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 in a specialised vascular unit.

Vascular services are provided to the populations of South East Wales with the exception of Bridgend who receive care from the South West Wales vascular network. This is a population of approximately 1.6 million people.

To give a sense of demand for services, the following shows activity across the Health Boards for the 2019 year:

Matric	Period	Aneurin Bevan University Health Board	Cardiff & Vale University Health Board	Cwm Taf Morgannwg University Health Board	Powys Teaching Health Board	South East Wales Total
Population		600,000	472,000	450,000	132,500	1,654,500
Total Outpatient Appointments	**2019**		**2391**	**2340**	**N/A**	**4731**
New Patients	2019		867		N/A	**867**
Follow ups	2019		1524		N/A	**1524**
Total number of Cases/ Procedures	2019	456	437	355	N/A	**1248**

4. HOW ARE SERVICES CURRENTLY PROVIDED?

National Context

The last few years have seen great changes in vascular services in the UK, partly stimulated by challenges such as poor surgical outcomes and the introduction of national screening for AAA, but also endorsed by a specialist group trying to improve its quality and performance. This has meant a contraction of the service into a smaller number of higher volume centres to improve outcomes. Whilst complex in-patient work is concentrated in a single network centre, outpatient and outreach services for the entire network are provided locally so that patients attending smaller network hospitals are not disadvantaged.

Since 2001, the Vascular Society of Great Britain and Ireland (VSGBI) has funded and maintained a registry of index arterial procedures (National Vascular Registry – NVR). In 2008, data from the previous five years in the UK were included in a European report (Vascunet), that suggested the UK had the worst elective abdominal aortic aneurysm (AAA) mortality rates in Europe (7.5% versus 3.5% European average). These data were supported by similar results from the Vascular Anaesthesia Society audit and the Intensive Care Database. The main conclusion was that many patients were being treated in small UK centres undertaking a limited number of AAA repairs, with poorer outcomes. Studies have consistently shown that higher volume centres produce better outcomes for many surgical procedures, and this is well recognised for aortic aneurysm surgery. The conclusion was that concentrating aortic surgery in higher volume centres should improve surgical outcomes. Subsequently similar conclusions regarding improved outcome for patients have been drawn with regard carotid surgery and lower limb revascularisation.

With the exception of the populations in South East Wales, all other parts of the country have networked arrangements in place for the provision of vascular services and have centralised vascular surgery.

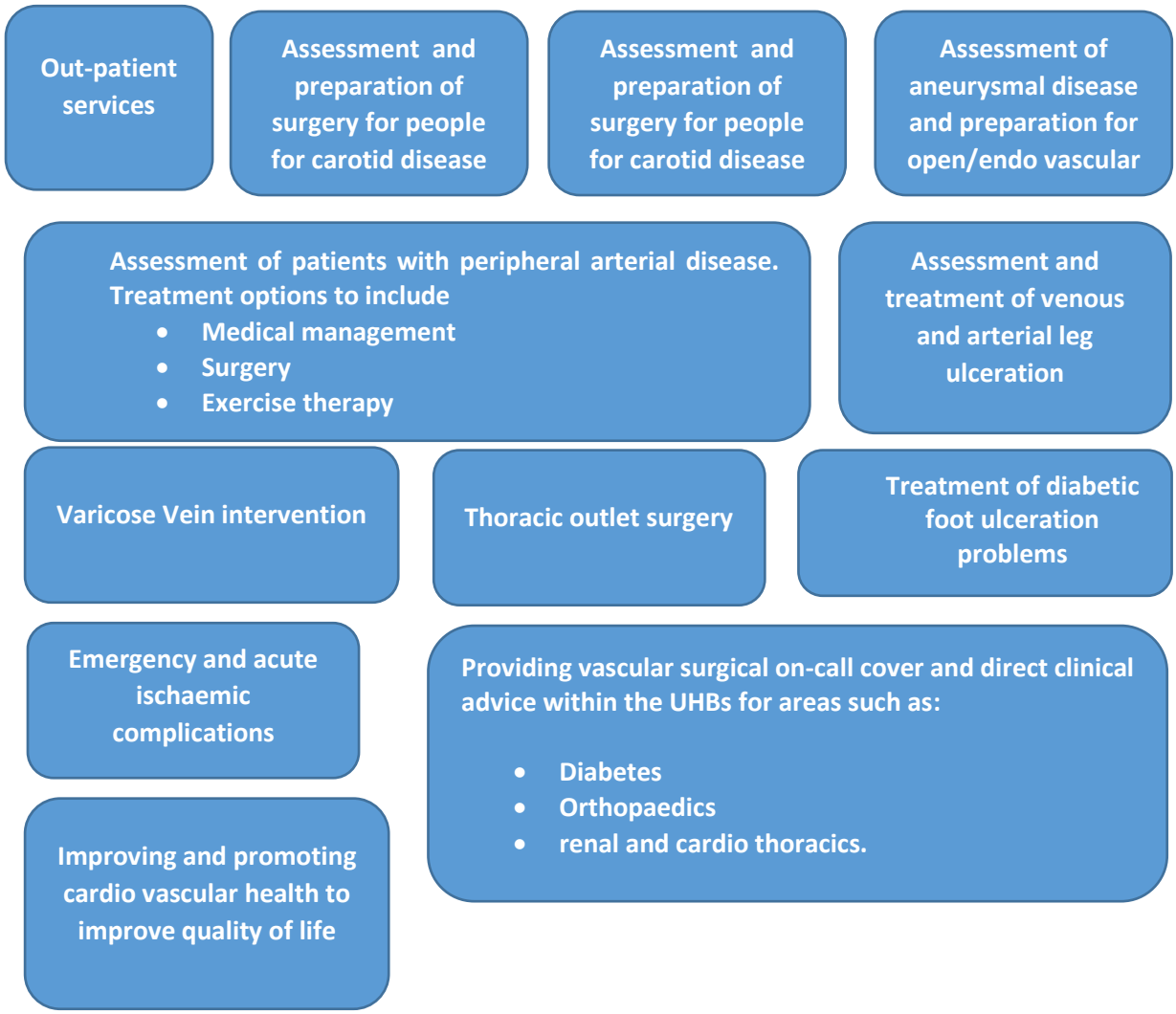
Local Context

Collectively, Aneurin Bevan University Health Board, Cardiff and the Vale University Health Board and Cwm Taf Morgannwg University Health Board provide Vascular services to the following populations:

GWENT	CWM TAF MORGANNWG	CARDIFF & THE VALE OF GLAMORGAN	POWYS
Blaenau Gwent	Rhondda	Cardiff	South Powys
Caerphilly	Cynon	Vale of Glamorgan	
Monmouthshire	Taff Ely		
Newport	Merthyr Tydfil		
Torfaen			

- *Note that the population of Bridgend is served by the South West Vascular network*

A summary of the services that are provided is offered here (you can find a simplified description of all in the glossary of terms:



To deliver these, each Health Board has full access to:

- A vascular team that comprises vascular surgeons, vascular anaesthetists, vascular interventional radiologists, clinical nurse specialists, podiatrists, tissue viability nurses, physiotherapists, occupational therapists, social workers, pharmacists and members of the prosthetics team. The teams are used to working across Health Board boundaries.
- A dedicated vascular ward. There is a provision for inpatient facilities along with day case access for various veins and minor day case surgery. Outpatient clinics are held in each Health Board area.
- Access to Doppler ultrasound, Computer Tomography (CT) and Magnetic Resonance (MR) Angiography..
- Vascular clinics within their area and has weekly interventional radiology clinics in which patients are consented for interventional radiology procedures.
- An interventional radiology suite with high quality rotational fluoroscopic imaging, in a room which is equipped for a full range of anaesthetics. The rooms can be used for endovascular aneurysm repair, combined vascular surgery and interventional radiography techniques.
- Day Case and Short Stay Facilities for minimally invasive varicose veins procedures are performed under local anaesthetic.
- Operating Theatres
- Vascular team access to a critical care unit
- Pathways in place for those patients presenting with critical limb ischaemia (CLI)
- Out of hours arrangements (which are already managed across Health Board sites). Normally, vascular patients are referred to the admitting general surgical on call team and depending on the urgency, the patient is either assessed by the emergency surgeon or referred directly to the vascular surgeon.
- In hours interventional radiology
- Out of hours interventional radiology which is managed via an on call rota, meaning that outside of normal working hours, the patients are admitted by the on call surgical team at UHW and assessed. If emergency interventional radiology input is required, the case is discussed with the vascular surgeon on for the region, who will in turn contact the on call interventional radiologist.

It should be noted however that at the time of writing, temporary arrangements have had to be put in place to support Cwm Taf Morgannwg whose vascular

service has recently become unsustainable. There are therefore temporary arrangements in place with services being provided to patients from Rhondda, Cynon, Taff Ely and Merthyr Tydfil by vascular services in Gwent and Cardiff and the Vale of Glamorgan

5. HOW DO WE PERFORM?

The following information provides information about how well each of the Health Boards in South East Wales does in respect of the key areas of vascular service provision:

- **Abdominal Aortic Aneurysm**

An **abdominal aortic aneurysm** (AAA) is a bulge or swelling in the **aorta**, the main blood vessel that runs from the heart down through the chest and tummy. An AAA can be dangerous if it is not spotted early on. It can get bigger over time and could burst (rupture), causing life-threatening bleeding

In the UK in 2019, 3445 people underwent surgery for abdominal aortic aneurysm. Of these, 80 people were from the South East Wales region. 44 were from the Aneurin Bevan University Health Board area, 21 from the Cardiff and Vale University Health Board area and 15 from within Cwm Taf Morgannwg Teaching Health Board.

The National AAA screening programme recommends that patients have treatment within 8 weeks of referral (56 days). The actual wait nationally is on average 69 days. Performance in the South East Wales region is set out below:

Metric	Period	Aneurin Bevan UHB Figures	Cardiff & Vale UHB Figures	Cwm Taf Morgannwg UHB	National
Elective Infra-renal Cases	**2019**	**44**	**21**	**15**	
Type of elective infra-renal AAA repairs	2019	64% EVAR	62% EVAR	60% EVAR	61% EVAR
Average time from assessment to procedure	2019	67	68	111	69
Average length of stay for open repair	2019	9	9	9	7
Average length of stay for EVAR	2019	1	3	2	2
Risk adjusted survival	2017-2019	98.40%	94.40%	98.20%	98.60%

The average length of stay for patients in the South East Wales region is in line with the national range.

The Vascular Services Quality Improvement rated all three health boards in South East Wales 'Green' on a green, amber, red scale for elective abdominal aortic aneurysm outcomes.

- **Lower Limb bypass for peripheral arterial disease**

Peripheral artery bypass is surgery to reroute the blood supply around a blocked artery in one of your legs. Fatty deposits can build up inside the arteries and block them. A graft is used to replace or bypass the blocked part of the artery. In the UK between 2017 and 2019, 18'090 people had a bypass of this kind. 6'807 of these were undertaken as an emergency and 11'283 as a planned procedure. Of these, 497 were in the South East Wales region.

Nationally, the average length of stay for a patient who has had a planned surgery is 5 days and average length of stay for a patient admitted as an emergency is 14. How Health Boards in the South East Wales region compare is outlined below

Metric	Period	Aneurin Bevan UHB Figures	Cardiff & Vale UHB Figures	Cwm Taf Morgannwg UHB	National
No. of Cases	**2017-2019**	**206**	**209**	**82**	
Average Length of stay	2017-2019	7	9	9	7
Risk adjusted survival	2017-2019	97.8%	96.8%	99.0%	97.6%

The Vascular Services Quality Improvement rated one of the Health Boards in the South East Wales area as green, and two of the health boards as 'Amber' due to a slightly higher than expected length of stay in hospital.

- **Lower limb bypass angioplasty and stenting**

Angioplasty is a procedure to open narrowed or blocked blood vessels that supply blood to your legs. Fatty deposits can build up inside the arteries and block blood flow. A stent is a small, metal mesh tube that keeps the artery open. Angioplasty and stent placement are two ways to open blocked peripheral arteries. Between 2017 and 2019, 23'881 procedures of this kind were carried out across the UK. Of these 6'605 patients were admitted as an emergency, and 17'276 as planned procedures.

The number of patients across the South East Wales region during this period is recorded as 265, however there are some challenges with validation of the data in both Aneurin Bevan and Cardiff and Vale University Health Boards, .so the actual figure is likely to be much higher.

Metric	Period	Aneurin Bevan UHB Figures	Cardiff & Vale UHB Figures	Cwm Taf Morgannwg UHB	National
No. of Cases	**2017-2019**	**25**	**90**	**150**	
Average Length of stay	2017-2019	0	2	0	100%
Risk adjusted survival	2017-2019	92.50%	97%	99.30%	98.40%

The Vascular Services Quality Improvement rated One Health Board in the region as 'Green' on a green, amber, red scale for lower limb angioplasty and stenting, and two red based on incomplete data sets.

- **Major lower limb amputation**

There are occasions when the blood flow in the legs cannot be increased and an operation is not possible. In these cases, and amputation of the leg may be required. During 2017 – 2019, there were 10'022 procedures of this kind undertaken across the UK. The average length of stay for patients nationally is 23 days. All 3 Health Boards in the South East Wales region have higher lengths of stay than the national average.

Metric	Period	Aneurin Bevan UHB Figures	Cardiff & Vale UHB Figures	Cwm Taf Morgannwg UHB	National
No. of Cases	**2017-2019**	**132**	**113**	**86**	
Average time from assessment to procedure	2017-2019	8	10	37	7
Average length of stay	2017-2019	29	40	27	23
Risk adjusted survival	2017-2019	98.4%	96.2%	96.0%	95.4%

The Vascular Services Quality Improvement rated all three health boards in South East Wales 'Green' on a green, amber, red scale for lower limb amputation outcomes.

- **Carotid endarterectomy**

A **carotid endarterectomy** is a surgical procedure to unblock a carotid artery. The carotid arteries are the main blood vessels that supply the head and neck. During 2017 and 2019, there were 4'141 of these procedures carried out in the UK. The recommended time from symptom to treatment is 14 days.

75 of these patients were from the South East Wales region and were all treated underneath the minimum timescale of 14 days. The average national length of stay for patients who undergo this procedure is 2 days. 2 of the 3

Health Boards are within this range, with one reporting a higher length of stay than the national average.

Metric	Period	Aneurin Bevan UHB Figures	Cardiff & Vale UHB Figures	Cwm Taf Morgannwg UHB	National
No. of Cases	**2019**	**49**	**4**	**22**	
Median time from symptom to procedure	2019	12	8	8	12
Median Length of stay	2019	1	7	2	2
Risk adjusted stroke free survival	2017-2019	96.60%	100%	98.60%	98.10%

The Vascular Services Quality Improvement rated two of three health boards in South East Wales 'Green' on a green, amber, red scale for carotid endarterectomy outcomes. Cardiff and Vale University Health Board were rated 'Red' due to a low ascertainment rate i.e. an incomplete data set.

6. WHAT ARE THE CHALLENGES FACING THESE SERVICES?

Vascular services need to be provided in a safe and sustainable way that is consistent with National guidelines and best practice. The key challenges facing the service at this time are summarised below:

- **A growing need for the service –** There is an increasing demand on vascular services across the South East Wales region due an increasing population and worsening rates of diabetes. There are a number of issues that contribute to this:
  - **Age** - Vascular disease and its consequences increase with age. Our 65 to 84 and 85+ age groups are projected to have the largest increase by 2036, when an estimated one in four people in Wales will be aged 65 and over. These projections will have significant implications for the way in which we design and provide health (and increasingly integrated health and social care) services. With an increasing population and especially an increasing older population it is even more important that we support the people living in our communities to live long and healthy lives, free from the limiting effects of multiple chronic conditions.
  - **Diabetes –** There is a diabetes epidemic in Wales. There are more than 194,000 people over the age of 17 diagnosed with diabetes and, we estimate, a further 61,000 people living with undiagnosed Type 2. This takes the total number of people living with diabetes in Wales now to over 250,000. It is not just the raw figures that are concerning. Wales' prevalence as a proportion of its population is 7.4% - the highest in the UK and Western Europe. The number of people with diabetes has been steadily increasing and has doubled in the last 20 years. NHS Wales estimates 11% of our adult population will have the condition by 2032. This is mainly a result of the drastic increase in Type 2 diabetes. This is unsustainable, both for our health service and wider society. Vascular disease is the major cause of morbidity in diabetes and the risks of disease progression are higher. Prevalence of peripheral arterial disease was 4.5% in the general population but increased to 9.5% in people with diabetes. It is likely that the great increase in the number of patients with diabetes over the next decade will have the biggest impact on vascular services. Many of these patients present as an emergency and are at high risk of amputation. Prompt treatment of the infected diabetic foot can minimise the risk of subsequent amputation. Lower limb

amputation is carried out more than 20 times as often in people with diabetes than it is in people without diabetes. Only around half of people who have lost a leg because of diabetes survive for two years.

- **Smoking -** Smoking is a major cause of vascular disease and over 80% of vascular patients are current or ex-smokers. Smokers are at greater risk of complications from vascular interventions because of cardiac and respiratory co-morbidity and the longer-term success of vascular intervention is reduced in patients who continue to smoke. (HSE 2007)

- **Obesity –** Obesity and being overweight are linked to several factors that increase risk for cardiovascular disease. Almost 60% of adults in Wales are currently overweight or obese, of which 24% are obese. There is evidence of an upward trend in recent years. It is estimated that the percentage of adults who are overweight or obese will increase to around 64% by 2030 if the current pattern continues.

- **Minimum population requirements -** A minimum population of 800,000 is considered necessary for an Abdominal Aortic Aneurysm screening programme and is often considered the minimum population required for a centralised vascular service. This is based on the number of patients needed to provide a comprehensive emergency service; maintain competence among vascular specialists and nursing staff; ensure the most efficient use of specialist equipment, staff and facilities; and the improvement in patient outcome that is associated with increasing caseload. A minimum population of 800,000 would be appropriate but for a world class service a larger catchment area will be required. The population of SE Wales (the resident population of the Health Boards taking forward this proposal is approximately 1.6 million (StatsWales 2016). The current configuration of services across separate hospital sites across South East Wales are too small to meet the quality and safety standards set out by the Vascular Society and the Royal College of Surgeons. None of the current individual units meet this requirement.

- **Meeting quality standards -** Not all units are able to currently achieve the quality indicators individually as units. These are:
  - The Vascular society recommends a vascular unit should be performing 60 elective aneurysm repairs per year. Collectively in SE Wales 99 aneurysm repairs were performed in 2019. No units individually reached the required number.

- The Vascular society recommends a vascular unit should be performing 40 carotid endarterectomies per year. Collectively in SE Wales 75 were performed in 2019.
- Between 2017-19 497 bypass procedures and 331 major limb amputations were performed in SE Wales.

- **Workforce –** A workforce survey undertaken by the Vascular Society for Great Britain and Ireland in 2019 concluded that both the number and complexity of vascular surgery procedures per capita population is increasing year-on-year. Worldwide there is a shortage of vascular surgeons to meet increasing demand and this shortfall is significant in the UK. There are a few workforce challenges to note:
  - Vascular services need to be organised to allow reasonable volumes of elective activity to exist alongside an acceptable consultant emergency on call rota thus ensuring appropriate critical mass of infrastructure and patient volumes.
  - The vascular society recommend 1 surgeon per 100,000 of population. (it was previously 1 per 130,000 population). This would mean that South East wales should have 14 consultants supporting vascular services in the area. It actually has 9 surgeons across the 3 provider Health Boards. Seven of these cover on-call arrangements too which means there is very little opportunity to foster learning and growth in the workforce.
  - There is challenge in recruiting to vascular posts in Wales and even where appointments happen, retention proves very difficult.
  - The age profile of current consultants and vascular nurse specialists makes it very difficult to succession plan.
  - Disparate teams mean that there is little opportunity for people to specialise however this is something that we know would attract more consultants and specialist therapists.

- **Services spread across South East Wales –** The National Vascular Registry has shown a constant improvement in vascular surgical outcomes over the last 10 years. However, as shown above this could be improved further by concentration of services into a single arterial hub. The Getting It Right First Time (GIRFT) report showed co-location of vascular services with other specialist services such as nephrology, major trauma and interventional radiology improve outcomes. This is not currently the case within the South East Wales region.

- **Patient outcomes -** There is strong evidence that case volume influences outcomes. The 31 highest volume hospitals (which perform 57% of all elective Abdominal Aortic Aneurysm procedures in the UK) have mortality rates that are under half those seen in the 32 hospitals with the lowest volume of procedures. These data lend support to the current move towards performing major arterial surgery in larger volume units in order to further optimise outcomes. The Royal College/national professional view, is that it is no longer acceptable to provide elective or emergency vascular cover outside a fully centralised service or a formalised modern clinical network with a designated single site for all arterial interventions providing a 24/7 on-site service.

All of the issues outlined above mean that services are becoming increasingly unsustainable and could become unsafe unless changes to the way services are organised and delivered are made.

The service models emerging nationally across the UK all enable sustainable delivery of the required infrastructure, patient volumes, and improved clinical outcomes and are based on the concept of a network of providers working together to deliver comprehensive patient care pathways, centralising where necessary and continuing to provide some services in local settings. There are a number of reviews and reports that support this which include:

1. Vascular Society of Great Britain and Ireland Provision of service for patients with vascular disease (2012) (http://www.vascularsociety.org.uk/library/quality-improvement.html)
2. Getting it right first time (2018) (https://gettingitrightfirsttime.co.uk/wp-content/uploads/2018/02/GIRFT_Vascular_Surgery_Report-March_2018.pdf)

7. WHAT OPTIONS HAVE WE CONSIDERED TO RESPOND TO THE CHALLENGES?

Our focus must be on long term resilience and sustainability of vascular services, therefore, changes to how the services are currently being delivered will be required to ensure that everyone in need of vascular care receives it without unnecessary delay.

Our aim is to create vascular services 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

The issues outlined in the previous chapter that are facing the service have been emerging over recent years. Unsurprisingly therefore, our clinicians and senior leaders have already been giving some thought to how they may respond to the challenges.

During 2014, senior clinicians across the Health Boards undertook a clinical option appraisal about the best way that services may be organised in the future. They tested the following options for future delivery which would help reduce the risks of future delivery:

Option 1	**Do nothing** – Continue to deliver all services as they are with a thin layer of regional co-ordination to share best practice
Option 2	**Centralise delivery** - All services are delivered to the three Local Health Boards by a central team, located in one of the provider Health Boards. A single site for all vascular surgery services in South East Wales.
Option 3	**Single hub and spoke model**-Some functions, services and procedures (or elements of such) are delivered at scale by a central team, within one provider Health Board – the hub. These would only be provided at this central site location for SE Wales. Other functions and services are delivered on a more local basis, through spokes.

Option 4	**Multiple hubs** - Each LHB leads on a specific function or functions within the overall service, on behalf of all LHBs across SE Wales, e.g. arterial surgery.
Option 5	**Outsourcing -** All services are provided for Health Boards in South East Wales by another provider, which is not one of the constituent Health Boards of the network, but for which the network acts as the commissioner of the service.
Option 6	**A whole of South Wales option.** Widening the scope to include that which is currently provided by the South West Wales Vascular Network, to establish a joined up network across all of South Wales. If this was a viable option at this stage of the development of both networks, this would again then open up a range of future options to be considered, including many of the above, but on a wider South Wales basis. The initial option of considering this approach in this way at this stage was worth considering however, if only to discount it at this stage.

A range of clinical and managerial staff appraised the options against the following criteria:

- Quality & Safety (highest priority)
- Acceptability
- Strategic Fit
- Sustainability (ability for the services to be fit for now and the future)
- Access
- Achievability

They also considered the growing evidence base and used this to inform the proposed future service model for vascular surgery services in SE Wales. This includes a number of recommendations and published evidence of the Department of Health (DH) in England, the Vascular Society of Great Britain and Ireland (VSGBI), the Royal College of Radiologists (RCR), the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) and all relevant NICE Guidance.

Based on considering the evidence, and a full range of issues, the outcome from the clinical option appraisal was that the most feasible option for the future

delivery of vascular services in South East Wales is considered to be a hub and spoke model, managed through a clinical network as outlined in option 3.

There are a number of areas across the UK that are already configured in this way, and a number of reports and recommendations that support a networked arrangement for the organisation and delivery of vascular services with strong evidence that improvement to outcomes for patients undergoing vascular surgical procedures are seen as a result of centralising vascular surgery to a Major Arterial Centre. A more detailed description on the way we may organise delivery against a hub and spoke model is outlined in the following chapter.

8. PROPOSED SERVICE MODEL

There is strong National and International evidence that patients who need vascular interventions will receive a 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, which helps specialists to develop and maintain expertise in their field of work.

Based on considerations over recent years, there is good clinical consensus to proposed that if supported, the new vascular service will be based on a hub and spoke model and will have:

- Diagnosis and assessment of vascular disease (including the input of the vascular laboratory and diagnostic imaging);
- Outpatient management of patients with peripheral arterial disease;
- Inpatient spells, emergency and elective activity;
- Day case activity;
- Multidisciplinary outpatient follow up of patients receiving vascular surgery/endovascular interventions;
- Seamless repatriation of patients following rehabilitation care pathways particularly for post amputation care;
- Limb Fitting Service – the vascular service must ensure its patients have access to a local limb fitting service, which meets the standards set by The British Society of Rehabilitation Medicine.
- A dedicated vascular day case facility in both hub & spoke to allow day case surgical & interventional radiology procedure.

It is proposed that the hub and spokes have the following components:

HUB	**SPOKE**
➢ Emergency Vascular Service: • Amputations and "*nibbling"* • Aneurysm surgery;	➢ Emergency Vascular Service:- • Angiogram; • Angioplasty

• Patients requiring CEA within 48 hrs of index event; • Peripheral arterial reconstructions.	• As noted above, the "front door" will remain the patient's local hospital, defined as a Local Hospital with an Emergency Department and an Emergency General Surgery Service; • Rehabilitation.
➢ **Elective Vascular Service:** • Abdominal Aortic Aneurysm • Endovascular aneurysm repair • Carotid endarterectomy	➢ **Elective Vascular Service:-** • Venous surgery angiography and angioplasty; • Outpatient clinics

Based on this, the main procedures that are expected to transfer from each of the current sites to any future hub are the following:

- Iliac and femoral artery procedures
- Carotid
- Open Abdominal Aortic Aneurysm
- Endovascular Abdominal Aortic Aneurysm
- Open Thoracic Aortic Aneurysm
- Thoracic endovascular aortic repair (TEVAR)
- Operations on vena cava
- Other artery.

To achieve delivery, there will be a number of infrastructure requirements for both the hub and the spoke:

HUB	SPOKE
➢ Dedicated vascular surgery ward(s). Beds will need to be staffed by an appropriate skill mix of nurses who have been trained in the care of vascular patients. Doppler investigation will need to be available on the ward; ➢ Hybrid theatre, with experienced vascular theatre staff; ➢ Scheduled elective lists (IP / DC); ➢ Anaesthesia – elective vascular services will have dedicated vascular anaesthetic input, from anaesthetists experienced in dealing with vascular patients and with a special interest in this area. This may include anaesthetists from Spoke sites given the opportunity to support elective lists in the hub; ➢ Intensive Treatment Unit (ITU) and High Dependency Unit (HDU) – Facilities with full renal support must be available on-site to support the vascular service. Bookable HDU/ITU with sufficient beds will need to be available for elective patients ➢ Interventional radiology suite with access to nursing staff trained in vascular procedures. ➢ Out-patients clinics	➢ Mixed surgical wards but with ring fenced vascular beds; ➢ CEPOD theatre model; ➢ Interventional radiology; ➢ Scheduled elective DC lists; ➢ Outpatient Clinics – including access to nurses/therapists experienced in ulcer and wound dressing. Doppler ultrasound machines should be available. To support this, it is also assumed that each of the spoke sites will have the following: ➢ A consultant led Emergency Department (A&E); ➢ An Emergency General Surgery service.

Given the range of services already in situ on the University Hospital Wales site, its position as a specialist and tertiary provider, and the co-dependencies between them and the vascular service, particularly major trauma, interventional cardiology and cardio-thoracic surgery, the preferred option for the hub is identified as the University Hospital Wales, Cardiff. Given the need for consultant led A&E and a general surgery emergency service, the spokes for each of the areas are proposed as:

- **Aneurin Bevan University Health Board** – Grange University Hospital and Royal Gwent Hospital
- **Cwm Taf Morgannwg Teaching Health Board** – Royal Glamorgan Hospital, Llantrisant
- **Cardiff and Vale University Health Board** – Llandough Hospital Vale of Glamorgan

It is important to note that as patients begin their recovery and rehabilitation journey, that this too will be provided from a hospital/community setting which is much more local to them

Patient 1 : Mrs Edmunds

Mrs Edmunds is an 81 year old lady who has lived in Crickhowell all her life. Ten days ago, while getting ready for bed, her husband noticed that she was slurring her words and her right arm seemed clumsy and weak. Worried that his wife was having a stroke Mr Edmunds dialled 999 and Mrs Edmunds was taken to Grange University Hospital by ambulance.

On admission to hospital she was assessed by the Acute Stroke Team and underwent a CT scan of her brain and the next day underwent an ultrasound scan (duplex scan) of her carotid arteries (these are the arteries in the neck that supply the brain). The duplex ultrasound scan showed that Mrs Edmunds had a 90% narrowing in her left carotid artery. The Acute Stroke Team told Mr Edmund's that he had done exactly the right thing.

The Stroke Physican telephoned the Vascular Surgical Regional Coordinator on the same day that the duplex scan was performed. After discussion with the duty Vascular Surgeon Mrs Edmunds was offered the choice between an operation at University Hospital of Wales (UHW) to "clear out" the blockage in her carotid artery (carotid endarterectomy) or continuing with medication. The Vascular Surgeon at UHW felt that, on balance, the operation would reduce her risk of stroke more than medication alone.

After discussion with her husband Mrs Edmunds decided that she would like to go ahead with surgery. She was transferred to Cardiff as a “day of surgery admission” and underwent left carotid endarterectomy under local anaesthetic. As is usually the case, she made an uncomplicated post-operative recovery and was allowed to go home to Crickhowell the next day. She was offered the choice of a telephone follow up consultation or a clinic appointment with a vascular surgeon at Nevill Hall Hospital in Abergavenny 6 weeks after the operation. At follow up she had fully recovered from her stroke and had made a good recovery from her operation.

9. ADVANTAGES/DISADVANTAGES & IMPACT

WHAT ARE THE ADVANTAGES OF THE PROPOSED CHANGES?

There are significant benefits to the model proposed:

- A sustainable delivery model that will provide the best outcomes to all patients within the region as advised by the Vascular Society. The vascular surgeons will work as a team to provide a resilient vascular surgical workforce model for the region's patients.

- Patients admitted to the 'Hub' will be nursed on a specialist vascular ward and receive daily review, including weekends, by a consultant vascular surgeon ('Consultant of the Week') working within a specialist multi-disciplinary team.

- Patients admitted to the 'Hub' will have on site access 24/7 to both vascular surgery and vascular interventional radiology.

- Aside of surgery, all other parts of a patient's treatment and rehabilitation will happen in their own area (with the exception of Powys residents who may access services in Cwm Taf Morgannwg or Gwent).

- Rapid access to diagnostics and interventions forms part of a high quality service. The need for this has been an important driver for centralisation, as it requires around the clock working, which larger units are better placed to provide. The units would be staffed by vascular specialists and would operate 24 hours a day, seven days a week.

- Performing all complex procedures at central units would ensure all patients have their surgery at a high volume hospital by an experienced vascular specialist, using the latest technology and techniques

- Centralisation should ensure improved facilities for patient care (dedicated vascular wards), investigation (larger radiology units with 24/7 interventional radiology) and treatment (vascular operating theatres and staff, vascular anaesthetists, improved facilities for endovascular management, better critical care).

WHAT WOULD THE IMPACT BE?

The proposals could mean:

- Patients would potentially need to travel further for their operation, as would their visitors
- Patients would be treated at a centre carrying out higher volumes of complex work, which is linked to improved outcomes
- Patients would be treated by a surgeon or interventional radiologist carrying out large volumes of complex work
- Patients would be able to access the full range of procedures 24/7

ARE THERE ANY DISADVANTAGES TO THE PROPOSALS ?

Some patients from the Aneurin Bevan and Cwm Taf Morgannwg areas will need to travel to University Hospital of Wales - rather than the Royal Gwent or Royal Glamorgan Hospitals - to receive surgery, as they do now out of hours. Powys residents will need to go to University Hospital of Wales for their surgery rather than to the Grange University Hospital in Cwmbran.

10. HOW YOU CAN CONTRIBUTE : ENGAGEMENT AND CONSULTATION.

This is the beginning of our conversation with you about Vascular services in South East Wales. We would like to hear your thoughts about what you have read. Specifically:

- Whether you have an understanding of what vascular services are
- How services are currently provided
- The challenges facing the services and some of the options that have been considered for the future organisation and delivery of the services.

A questionnaire is attached at to aid your response. It should be returned to:

South East Wales Vascular Programme
Woodland House
Maes Y Coed Road
Cardiff
CF14 4HH

WHAT NEXT?

When this engagement exercise has ended, the 4 Health Boards will consider all the feedback and share this with the individual Health Boards and the relevant Community Health Councils. We will also publicly make available a report that outlines a summary of what has been received. We will consider all the issues and whether there are any mitigating actions that need to be taken. We will also use the information received to update the Equalities Impact Assessment.

Subject to further discussions with the Community Health Councils, we may wish to enter a period of formal consultation and should we do that we will once again invite your views.

B. Engagement Plan

STAKEHOLDER GROUP	SPECIFICALLY	PRODUCT	RESPONSIBLE	HANDLING PLAN/RELEASE DATE
Comms leads	All affected HBs	All core documentation for posting on HB websites	Programme Manager	Ensure ready to run and cascade with: Launch of documents Cascade through established networks and mechanisms
General Public	Population of Aneurin Bevan University Health Board • Blaenau Gwent • Caerphilly • Monmouthshire • Newport • Torfaen	Core document Summary document EQIA Invite to online events/presentations Access to websites and on-line resources ie videos	ABUHB Planning/engagement lead	Day of launch through existing public cascade mechanisms
	Population of Cardiff & Vale University Health Board • Cardiff • Vale of Glamorgan	Core document Summary document EQIA Invite to online events/presentations Access to websites and on-line resources ie videos	C&V Planning/engagement lead	Day of launch through existing public cascade mechanisms
	Affected population of Cwm Taf Morgannwg University Health Board • Rhondda • Cynon • Taff Ely • Merthyr Tydfil	Core document Summary document EQIA Invite to online events/presentations Access to websites and on-line	CTM Planning/engagement lead	Day of launch through existing public cascade mechanisms

		resources ie videos		
	Affected population of Powys Teaching Health Board • South Powys	Core document Summary document EQIA Invite to online events/presentations Access to websites and on-line resources ie videos	PTHB Planning/engagement lead	Day of launch through existing public cascade mechanisms
Welsh Government	Director General Health and Social Care	Letter from chair of Vascular Joint Programme Board (Ann Lloyd) signposting towards resources website etc	Chair of Vascular Board – engagement lead (CH) to draft	Following approval at Boards and just before launch
Patients, their families and carers	Patients who have received services since 2019 (linked to timescales outcomes reported in NVR report) with reference to inviting views from families and carers too	Letter from relevant consultant/MDT Core document Summary document Invite to online events/presentations Access to websites and on-line resources ie videos Access to a telephone line for discussion	Planning leads with MDT teams	Week of launch
NHS Wales	All CEOs of HBs and Trusts in Wales: Aneurin Bevan University Health Board Betsi Cadwaladr University Health Board Cardiff and Vale	Letter from Chair of Joint Vascular Board Ann Lloyd identifying launch and signposting towards all products	Chair of Vascular Board – engagement lead (CH) to draft	Following approval at Boards and just before launch

	University Health Board Cwm Taf Morgannwg University Health Board Hywel Dda Health Board Powys Teaching Health Board Swansea Bay Health Board Velindre NHS Trust Welsh Ambulance Services Trust			

Community Health Councils	AB CHC C&V CHC CTMCHC PCHC	Report to joint Board CHCs 13 Jan 21 Receipt of all documentation	Programme Manager	Launch day
Third Sector Organisations	GAVO TVA PAVO CAVOC	Core document, summary document and signpost to online resources and opportunities	Health Board leads	Launch day
National bodies/organisations including Professional Societies and Royal Colleges concerned with the delivery of Vascular Surgery	Plotted by programme	Core document, summary document and signpost to online resources and opportunities	Programme Manager	Launch day
National Voluntary Organisations	Plotted by programme	Core document, summary document and signpost to online resources and opportunities	Programme Manager	Launch day

Local authorities and elected representatives	CEOs & Leaders of the councils	Core document, summary document and signpost to online resources and opportunities	Health Board leads	Via local cascade mechanisms requesting sharing with staff and members

National Politicians	Members of the Senedd and Members of Parliament	Core document, summary document and signpost to online resources and opportunities	Programme Manager	via a letter from Chair of vascular group
Stakeholder Reference Groups	ABUHB SRG C&V SRG CTM SRG PTHB SRG	Core document, summary document and signpost to online resources and opportunities	ABUHB lead C&V lead CTM lead Powys lead	Via local cascade mechanisms on day of launch
Trade Union Partnership Fora	ABUHB TUPF C&V TUPF CTM TUPF PTHB TUPF	Core document, summary document and signpost to online resources and opportunities	ABUHB lead C&V lead CTM lead Powys lead	Via local cascade mechanisms on day of launch
EQIA Targeted groups	Local Diabetic groups National Stroke Association and any local stroke groups	Core document, summary document and signpost to online resources and opportunities	Programme Manager as links to programme EQIA	Group contacts to be sourced by programme manager
Town and Community Councils	All town and community councils in Gwent, Cardiff, Vale of Glamorgan, Rhondda, Cynon, Taf Early and Merthyr and South Powys	Core document, summary document and signpost to online resources and opportunities	ABUHB lead C&V lead CTM lead Powys lead	Via local cascade mechanisms on day of launch
Local Medical Committees	Aneurin Bevan LMC	Core document, summary	ABUHB lead C&V lead	Via local cascade mechanisms on

	Cardiff and Vale LMC Cwm Taff Morgannwg LMC Dyfed-Powys LMC	document and signpost to online resources and opportunities	CTM lead Powys lead	day of launch
Public Service Board and Regional Partnership Boards	Powys Regional Partnership Board Powys Public Service Board	Core document, summary document and signpost to online resources and opportunities	ABUHB lead C&V lead CTM lead Powys lead	Via local cascade mechanisms on day of launch

C. Public Engagement notes

C1. Cardiff and Vale Public Engagement Notes - 16.03.021

Audience: Public Meeting

Meeting Details: Tuesday 16 March at 7.00 pm on Zoom

Number of attendees: 1

UHB Presenters: Alun Tomkinson; Kevin Conway; Gininna Conway; Abigail Harris

Also in attendance:

CHC - Malcolm Latham, Chair; Stephen Allen; Caroline Harris; Amy English

UHB - Victoria Legrys; Alaa Khundakji; Daniel Marsh; Andrea Bird; David Williams; Anne Wei

Interpreter – Gwnfor Owen

Following a welcome and introduction by the CHC and UHB, the UHB gave a presentation. The meeting was opened up for Q&A and discussion:

- A concern about repatriation. Currently there exists a problem in the system, won't this become more difficult with patients from additional Health Boards involved?

UHB response:

- *Cardiff and Vale UHB has been working with Cwm Taf for the last 6 months and repatriating to Cwm Taf hospitals. A good working relationship exists between the vascular teams and we are successful in discharging rapidly. We are planning a similar relationship with Aneurin Bevan UHB and they have multiple sites. Work is on-going at University Hospital Llandough to prepare for becoming a spoke site.*

- Recruitment. There is a national shortage of Interventional Radiologists and for this proposal a critical mass of support staff will be required. Are you preparing for this risk?

However, I believe the idea is very sound.

UHB response:

- *Currently, we have 24/7 on-call cover by interventional radiologists with 7 full-time consultants. For our population we should have 8. However, we have a trainee who has indicated a wish to work in SE Wales. There are shortages in the rest of Wales but we are in a fortunate position in SE Wales.*

- A related, supplementary concern about the availability of a critical mass of staff and being able to cope following the Covid pandemic. Would it be necessary to outsource work to address the backlog?

UHB response:

- *No vascular services are outsourced. Because of the immediate needs of those requiring vascular surgery we don't have waiting lists. While it may be necessary to wait in hospital for this, there is no list of people waiting at home.*

- I think the logic of the network for vascular services is sound but there may be some travel issues to deal with for those in other areas who must travel further.

- What will be the protocol for patients who experience problems following vascular surgery after they have left the hub?

UHB response:

- *Repatriation to the spoke hospital will enable physiotherapists, occupational therapists and others to offer rehabilitation but, if there is a problem, it will be picked up quickly by the vascular team. There will be cover at the spokes for wound care but if in-patient care at the hub is needed, the patient will transfer back.*

- Yn Gymraeg / In Welsh: A question about transport and the accessibility of University Hospital Llandough and a supplementary question about the possibility of patients being seen as close as possible to friends and family.

UHB response:

- *Consultant, Kevin Conway expressed an awareness of the difficulties having recently seen patients who'd needed to take 3 buses to see him at Prince Charles Hospital. He had been pleasantly surprised how well virtual clinics and phone clinics had worked during the pandemic and how they had saved the effort of travelling. He hoped to expand the use of virtual clinics having found that many elderly people could use the technology and responded well. However, there would always be hospital transport for those needing to be seen in person.*
- *In addition, the Health Board is working with the local authorities to improve transport links to both hospitals and there are Park and Ride services.*
- *The Health Boards will be seeking to see more patients closer to home and are mindful of access issues.*
- *In this model, the separation for rehabilitation allowed a model suitable for this service.*

- Yn Gymraeg / In Welsh: What are the day to day connections with cardiology services and will the change affect this?

UHB response:

- *Assurance was given that the vascular surgeons work closely with cardiologists and are in constant communication with them. These changes will further improve the close working.*

- From the point of view of the residents of Cardiff and the Vale of Glamorgan, do these changes mean any real change or improvement in service?

UHB response:

- *It would be an improved service, firstly because Cardiff and Vale UHB currently has 3 vascular surgeons and when the network is complete*

would have 11. It also gives people the opportunity to develop speciality intensivist and sub-speciality skills. This development gives the opportunity to develop our services significantly.

- *The emphasis on rehabilitation and prehabilitation is very important for outcomes and has probably been neglected in the past. This is good for the vascular surgeons but above all for the patients.*

- Will the fact that patients from neighbouring Health Boards are referred to UHW cause a delay in treatment for Cardiff and Vale residents?

UHB response:

- *The intention is to develop a consultant of the week and also a surgeon of the week timetable. Also, to develop 'hot clinics' where patients will be seen on the same day or the next day. The network will allow us to justify the case for a hybrid theatre and state of the art technology which without vascular redesign we couldn't have. In summary, this is a win-win improvement in service for all patients and staff alike.*

- Assurance was sought that Cardiff and Vale residents would not have to wait in a longer queue because of being treated alongside residents from elsewhere.

UHB response:

- *Assurance was given, supported by details: previously the service had access to 19 beds but it would have 38 beds; previously operations took place on 3 days but in future there would be 8 days of theatre per week. There would be an increase in radiology capacity and an increase in the capacity for out-patients. All the component parts would improve the robustness and resilience of the service for Cardiff and Vale residents.*
- *Additionally, the presence of vascular surgeons in a hospital provides a good resource for other surgeons, e.g. for those doing bowel or kidney operations. Having vascular surgeons nearby can make a real difference and is one of the key reasons why it has to be co-located with the Major Trauma Centre in Cardiff. The residents of Cardiff could be assured of being in a safer place.*

- Hospital acquired infection rates. Knowing that there were some problems in cardiac services last year, the public might like assurance that Cardiff and Vale UHB have this under control.

UHB Response:

- *Acknowledged that we had learnt a huge amount from Covid in the last 12 months and described how we had divided the hospital into zones and kept time critical surgery separate. In the green zones, 5000 patients had been treated and there had been no cases of Covid or MRSA or other hospital acquired infections. Noted that the Health Board was keen to maintain those protected elective zones. In the emergency zone it was more difficult to protect patients from post-operative infections. Overall there had been a significant learning and change in practice.*

At 7:52 pm, the CHC Chair called for final questions. There were none. The CHC Chair then thanked the speakers for their answers and those attending for their questions and observations. He noted that the CHC would formally respond to the Health Board and asked people attending to encourage others to fill in the questionnaire. Alun Tomkinson thanked people for spending their time on the engagement and hoped they were reassured.

18.03.2021

Audience: Public Meeting

Meeting Details: Thursday 18 March from 7:00 – 8:00 pm via Zoom

Number of attendees: 6

UHB Presenters: Richard Whiston; Mike Bond; Catherine Twamley

Also in attendance: CHC - Malcolm Latham, Chair; Stephen Allen; Amy English

UHB - Abigail Harris; Vicky Le Grys; Daniel Marsh; Andrea Bird; David Williams

Interpreter - Gwnfor Owen

Following a welcome and introductions to the presenters and his colleagues by CHC Chair, Malcolm Latham, the UHB gave a presentation. The meeting was then opened up for Q&A and discussion:

- Suitability of University Hospital of Wales (UHW) to be the hub. In acknowledging that surgery was the most complex part of the vascular service, asked whether the building had the capacity and was in good enough condition to take on the extra workload safely.
- Diagnostics. Wanted to check understanding that diagnostic procedures and other parts of the vascular service would be undertaken at spoke hospitals.
- Governance. Who would have oversight of the service if three Health Boards were involved? Would there be clear leadership and an integrated service, which would be what was required to produce the best outcomes?

UHB response:

- *Confirming the intention to bring expertise to the network hub at UHW, described the plans for a hybrid theatre which would have both surgical and x-ray capacity. There would be changes to accommodate patients from the other Health Boards, for example, the new rehabilitation facility at University Hospital Llandough (UHL) would release beds at UHW as South Glamorgan patients moved to their spoke.*
- *Regarding diagnostics, the plan was that these appointments should take place as close to home as possible to avoid travel to Cardiff. Recent*

positive experience of telephone and virtual appointments replacing outpatients' clinics was highlighted.

- *Advised that the Chief Executives of the three Health Boards had meet last week at Vascular Programme Board and approved key papers and that the Board met every 2 months to oversee the governance of the Vascular Programme.*
- *Noted that part of the work of the Vascular Programme, similar to that of the Major Trauma Centre Programme, was to put in place a robust structure. There were formal leads for the network e.g. the clinical lead was Peter Lewis, Vascular Surgeon, Aneurin Bevan UHB. This was intended to ensure transparency across the network. There were mutually agreed policies in place but the Health Boards had yet to define and agree a host organisation for vascular services. This role would usually be with the hub, i.e. with Cardiff and Vale UHB.*
- *Emphasised the experience of the Major Trauma Centre in showing successful practice where clear protocols and pathways facilitated working together and implementation across a network. Agreed that this was an important question and it was fortunate for the UHB that it had been raised to allow the opportunity to set out their position.*

- Protocols. In the case of someone suffering an embolism or aneurysm while out in Cwmbran, would s/he be taken to The Grange or UHW?

UHB response:

- *Speed of treatment is important but also expertise. Most such cases already come to UHW as emergencies. It is clear from data across the UK that it is important to get a patient to the right centre. For planned surgery, patients will be brought from the spoke to the hub as that is where the surgeons will be. There will be occasional instances where the consultants will need to go to spoke hospitals to treat and they are prepared to do that.*

- Transfer of patients. Would these transfers be by ambulance? Question whether the programme had worked with the Welsh Ambulance Service Trust (WAST) and whether they were fully aware of proposals.

UHB response:

- *Confirmation that discussions had taken place and arrangements were in place.*

At 19.57 hrs, Malcolm Latham, Chair asked for any final questions. He thanked the meeting for feeding in questions, comments and observations and noted that the CHC would formally respond to Cardiff and Vale UHB. The Health Board thanked the CHC for hosting and the audience for contributing to the event.

C2. Cwm Taf Morgannwg & Powys Teaching Health Board Public Engagement Notes - 11.03.2021

FIRST SOUTH EAST WALES VASCULAR ENGAGEMENT EVENT

11TH MARCH 2021

2:00PM – 3:30PM

(LIVE EVENT VIA TEAMS)

Panel Members

Mr Kevin Conway	Vascular Surgeon
Dr Stuart Hackwell	Locality Group Director, Rhondda & Taff Ely Locality
Marie-Claire Griffiths	Assistant Director of Strategy & Commissioning
Hannah Davies	Physiotherapy
Lee Leyshon	Assistant Director, Engagement & Communication

In Attendance:

Adrian Osborne, Assistant Director, Engagement & Communications, Powys Teaching Health Board

Michelle Lloyd, Business Support Manager, Cwm Taf Morgannwg University Health Board

Ben Screen, Senior Welsh Language Translator, Cwm Taf Morgannwg University Health Board

1. Marie-Claire Griffiths opened the public engagement event, welcome all and ran through the agenda for the day. Attendees were asked if they required Welsh language translation and it was noted that no Welsh language translation was required for this event.
2. Marie-Claire Griffiths commenced with a presentation around the South East Wales Vascular Network.
3. Panel members introduced themselves and gave a brief overview of their roles at slide 3 of the presentation.
4. Dr Stuart Hackwell presented slide 5 to the group which outlined what the aims are of the engagement i.e. to start a discussion with citizens about how vascular services are organised in the future.
5. Mr Kevin Conway presented slides 6 – 16 to the group which outlined:-

- What are vascular services?
- Who needs vascular services?
- How are services provided now?
- Why are we talking about them?
- Measures of how well organisation do?
- History of discussion to date
- Have we given thought to where the hub might be?
- What about the spokes?

6. Marie-Claire Griffiths presented slides 17 to 20 which outlined:-

- What would this mean for patients?
- How can you get involved?
- We want to hear your views?
- How can you contact us?
- Questions?

Marie-Claire Griffiths outlined the areas where we would like people to get involved as part of the engagement, these included views on:-

- The recommendation that a hub and spoke model will improve patient outcomes
- The proposal for UHW in Cardiff to be the Hub
- The suggested Spoke arrangements
- Any other information we should consider in deciding the future of vascular services
- The process undertaken to reconfigure services
- Any alternative view on the proposals put forward

Attendees were encouraged that if they should have any further questions, thoughts, comments or views in addition to any that they may have today to visit the website at : https://cwmtafmorgannwg.wales/sewalesvascular

In addition, questions can also be received via email to: sewales.vascular@wales.nhs.uk, a phone line with voicemail is also available the number for which is: 02921 836068, or the public can search #sewalesvascular on social media.

7. Questions:

The following questions were asked:-

Question 1 - Whether there should be two spokes in Aneurin Bevan and whether or not this was still valid after changes in the Royal Gwent as a result of the Grange Hospital opening.

Mr Kevin Conway responded to say that he had spoken to his colleague David Lewis about this and although the original Options Appraisal said that there should be a single spoke in each Health Board, it is slightly more complicated because of the way that the Grange University Hospital is set up. It is actually a specialist care centre so that means it has all the emergency services so it has got an emergency unit, it has the operating theatres and critical care unit but it does not have all of the rehabilitation services and outpatient facilities that the Royal Gwent Hospital had before. So, it is not a straight answer but Mr Conway's understanding was that at least initially it will be spread across the Grange University Hospital and the Royal Gwent Hospital.

Question 2 – Marie-Claire Griffith took this question from the pre-prepared 'Frequently Asked Questions'. What is a vascular network?

The aim of a Vascular Network is to improve patient outcomes and ensure that services are sustainable and equitable for the population they serve. A vascular network provides coordinated vascular services for a population across a wide geographical area and involving a number of different hospitals. Vascular services across NHS England and North Wales and West Wales have already been reconfigured into network models of care for a number of years. Most networks operate a 'hub and spoke' model of care which focuses major urgent and emergency vascular surgical procedures to be performed in one specialist hospital, the 'Hub'. Whilst minor procedures, investigations assessments, recovery following surgery and outpatient appointments still take place in local hospitals, the 'Spokes'.

Question 3 - Marie-Claire Griffiths took this question from the pre-prepared 'Frequently Asked Questions. What is the difference between a hub and a spoke?

The crucial differences between a hub and a spoke are the seriousness of the conditions treated and the complexity of the procedures undertaken. The Hub

receives all vascular emergencies requiring vascular or endovascular intervention, along with all vascular inpatient urgent care. It has dedicated vascular inpatient beds in a ward staffed by nurses with an interest in vascular surgery. A spoke hospital provides everything other than complex and emergency vascular care and has no dedicated vascular hospital bed.

Question 4 - For those patients who do not have IT or social media how are their views obtained?

Marie-Claire Griffiths responded stated that posters have been developed and shared across GP surgeries, mass vaccination centres, posted on hospital TV screens which outlines that there are a number of options for the public to share their views with us. These include:-

- Via our website https://cwmtafmorgannwg.wales/sewalesvascular
- By email to the address: sewales.vascular@wales.nhs.uk
- By phone to 02921 836068 (there is also a voicemail service)
- Or via social media by searching #sewalesvascular

Lee Leyshon also advised that the public can also write to the Cwm Taf Morgannwg University Health Board with their questions, views or comments and also stated that the Health Board are open to any addition suggestions for engagement.

Question 5 – Which part of Powys does this affect?

Marie-Claire Griffith responded stating that this change primarily affects the South Powys area as that is the area at the moment that receives it vascular services through Aneurin Bevan University Health Board, other parts of Powys are either served through the South West or the North of Wales and also England.

Kevin Conway – added that as the Network Representative he had met with Powys Teaching Health Board Commissioners recently and that we are currently just looking at South Powys but we are looking at the potential to cover as far West as Ystradgynlais and as far North as Llandrindod Wells but that is only discussion but going back to the answer primarily it is only South Powys that will be affected.

NOTE **further confirmation was received from Powys following this response to say that pathways for Ystradgynlais and Llandridod Wells patients are not affected by these proposals and their pathways remain unchanged.

Question 6 - Marie-Claire Griffiths took this question from the pre-prepared 'Frequently Asked Questions. How many patients do the changes affect?

The total number of patients likely to need a vascular procedure across South East Wales is approximately 1250 each year. This estimate is based on the numbers from the year 2019, which saw 456 patients treated at the Royal Gwent Hospital, Newport, 355 patients treated at the Royal Glamorgan Hospital, Llantrisant and 437 treated at University Hospital of Wales in Cardiff.

Question 7 - What are the implications on Welsh Ambulance Services NHS Trust? (WAST)

Marie-Claire responded to say that conversations are ongoing with the Welsh Ambulance Services NHS Trust ensuring that they are involved and engaged with all the plans. There may be some implications on patient transport but these will be able to be predicted and managed. Robust demand and capacity planning will be undertaken with WAST so that any implications are understood. We will be looking to support patients to their return to their own home for recovery in the first instance but if they can't they will go to their local hospital so there will be some impact for WAST in terms of patient transport but we are engaged with WAST so that they will be prepared for any changes that could happen.

Question 8 - Marie-Claire Griffiths took this question from the pre-prepared 'Frequently Asked Questions. Why do vascular surgical services need to be changed**?**

We want to make sure that we provide the best care possible for people needing vascular surgery in South East Wales. We know that:-

· Vascular surgery is becoming increasingly specialised and the evidence shows that patients have better outcomes if they receive their treatment at larger specialist centres

· The Royal Surgical Colleges and The Vascular Society of Great Britain & Ireland support the view that it is no longer desirable to provide urgent or

emergency vascular surgery outside a fully centralised service or a formalised clinical network with a designated single arterial centre providing a 24/7 on-site service.

· A lack of specialist staff to cover the existing vascular units means that we cannot deliver the service safely, the way we have done in the past, and provide the opportunities for staff development and training that other centralised vascular services can. 9. Why the University Hospital of Wales as the hub

Question 9 - Marie-Claire Griffiths took this question from the pre-prepared 'Frequently Asked Questions. How do vascular services work elsewhere in Wales?

The population of North Wales are served by a network with Ysbyty Glan Clwyd, in Rhyl, as the Hub. Vascular clinics, investigations, diagnostics, vascular access and varicose vein procedures are provided by three spoke district hospitals, in Betsi Cadwaladar University Health Board. In South West Wales the population are served by a network with Morriston Hospital as the hub site and spoke services provided in several hospitals in Hywel Dda and Swansea Bay University Health Boards areas.

Question 10 - Is there any impact of covid on recovery proposals we are all aware of long waiting lists after the pressures of the last year?

Mr Kevin Conway responded to say that we do not expect an impact as vascular care tends to be an urgent and emergency service, so if someone needs to have an operation or procedure we can do this within a few days or weeks. We do not tend to have waiting lists so do not expect it to be impacted by covid.

Question 11 - Marie-Claire Griffiths took this question from the pre-prepared 'Frequently Asked Questions. What happens next?

When this engagement exercise has ended, we will consider all of the feedback and share this with the individual Health Boards and the relevant Community Health Councils. We will also publicly make available a report that outlines a summary of comments, questions and suggestions that have been received. We will consider all of the issues and whether there are any mitigating actions that need to be taken. We will also use the information received to update the Equalities Impact Assessment. Subject to further discussions with the

Community Health Councils, we may wish to enter a period of formal consultation and should we do that we will once again invite your views.

Question 12 - Can you clarify who will undertake the follow up outpatient appointments and where these will be undertaken?

Mr Kevin Conway responded to say that we will endeavour to do these in your local spoke hospitals, but some patients will need to go to hub hospitals where there are complex wounds but the majority will be in local spoke hospitals.

Marie-Claire Griffiths reiterated how people can contact us to ask questions, share comments and views. Comments to be received by the 16th April 2021. Attendees were informed that today's event was recorded and can be shared. Details of the second event were shared which is being held on the 23rd of March 2021 from 6pm – 7.30pm. Attendees and panel members were thanked and the event was closed.

Summary of Themes

- **Site of follow up outpatients appointments.**
- **Having two spokes in Aneurin Bevan and whether or not this was still valid after changes in the Royal Gwent as a result of the Grange Hospital opening.**
- **The impact of covid recovery on the proposals.**
- **Obtaining views of patients who do not use IT or social media.**
- **Implications on WAST?**
- **Parts of Powys affected by changes.**

23.03.2021

FIRST SOUTH EAST WALES VASCULAR ENGAGEMENT EVENT

23re MARCH 2021

6:00PM

(LIVE EVENT VIA TEAMS)

Panel Members

Mr Kevin Conway	Vascular Surgeon
Dr Stuart Hackwell	Locality Group Director, Rhondda & Taff Ely Locality
Marie-Claire Griffiths	Assistant Director of Strategy & Commissioning
Jo Mclaughlin	Physiotherapy
Kate Rowlands	Vascular Nurse Specialist
Lee Leyshon	Assistant Director, Engagement & Communication

In Attendance:

Michelle Lloyd, Business Support Manager, Cwm Taf Morgannwg University Health Board

Ben Screen, Senior Welsh Language Translator, Cwm Taf Morgannwg University Health Board

A minutes silence was held for all those lost during the Covid-19 pandemic.

1. Marie-Claire Griffiths opened the public engagement event and welcome all. It was noted that the event was being recorded so that it can be uploaded to the Cwm Taf Morgannwg Webpage so that those who were unable to join can watch the session and listen to the question raised. Attendees were asked if Welsh language translation service was require and it was noted that no Welsh language translation was required for this event.

2. Marie-Claire Griffiths commenced with a presentation around the South East Wales Vascular Network and rang through the agenda for the event.

3. Panel members introduced themselves and gave a brief overview of their roles at slide 3 of the presentation.

4. Dr Stuart Hackwell presented slide 5 to the group which outlined what the aims are of the engagement i.e. to start a discussion with citizens about how vascular services are organised in the future.

5. Mr Kevin Conway presented slides 6 – 16 to the group which outlined:-

- What are vascular services?
- Who needs vascular services?
- How are services provided now?
- Why are we talking about them?
- Measures of how well organisation do?
- History of discussion to date
- Have we given thought to where the hub might be?
- What about the spokes?

6. Marie-Claire Griffiths presented slides 17 to 20 which outlined:-

- What would this mean for patients?
- How can you get involved?
- We want to hear your views?
- How can you contact us?
- Questions?

Marie-Claire Griffiths outlined the areas where we would like people to get involved as part of the engagement, these included views on:

- The recommendation that a hub and spoke model will improve patient outcomes
- The proposal for UHW in Cardiff to be the hub
- The suggested Spoke arrangements
- Any other information we should consider in deciding the future of vascular services
- The process undertaken to reconfigure services
- Any alternative view on the proposals put forward

Attendees were encouraged that if they should have any further questions, thoughts, comments or views in addition to any that they may have today to visit the website at : https://cwmtafmorgannwg.wales/sewalesvascular

In addition questions can also be received by letter to the Health Board Headquarter Offices, via email to: sewales.vascular@wales.nhs.uk, a phone line with voicemail is also available the number for which is: 02921 836068, or the public can search #sewalesvascular on social media. To be received by the 16th April 2021.

7. **Questions:**

Question - For those patients who do not have IT or social media how are their views obtained?

Marie-Claire Griffiths responding by stating that posters have been developed and shared across GP surgeries, mass vaccination centres, posted on hospital TV screens, GP practice screens which outlines that there are a number of options for the public to share their views with us. These include:-

- Via our website https://cwmtafmorgannwg.wales/sewalesvascular
- By email to the address: sewales.vascular@wales.nhs.uk
- By phone to 02921 836068 (there is also a voicemail service)
- Or via social media by searching #sewalesvascular

The public can also write to the Cwm Taf Morgannwg University Health Board with their questions, views or comments. The Health Board are open to any addition suggestions for engagement.

Question - Marie-Claire Griffiths took this question from the pre-prepared 'Frequently Asked Questions. How many patients do the changes affect?

Kevin Conway responded by stating that it is difficult to quantify exactly but we can look at the total population that the Health Board covers and we can tell you the number of operations that we undertake per year, realistically from the Cwm Taf area we are looking at several hundred patients per year will be affected whether they require inpatient treatment or outpatient treatment. I think there are a slightly higher number of patients from the Gwent valley will be affected, probably somewhere between 300 and 500 per year outpatient and inpatient treatment, for South Powys it is a smaller number probably less than 100 patients per year.

Marie-Claire Griffiths added that we do have some figures which are included in the engagement documentation which you can find on the website which show that the total number of patients likely to need a vascular procedure across South East Wales is approximately 1250 each year. This estimate is based on the numbers from the year 2019, which saw 456 patients treated at the Royal Gwent Hospital, Newport, 355 patients treated at the Royal Glamorgan Hospital, Llantrisant and 437 treated at University Hospital of Wales in Cardiff.

Question - **What are the implications on Welsh Ambulance Services NHS Trust? (WAST) (this question was taken from the FAO's)**

Marie-Claire responded to say that conversations are ongoing with the Welsh Ambulance Services NHS Trust ensuring that they are involved and engaged with all the plans. There may be some implications on patient transport but these will be able to be predicted and managed. Robust demand and capacity planning will be undertaken with WAST so that any implications are understood. We will be looking to support patients to their return to their own home for recovery in the first instance but if they can't they will go to their local hospital so there will be some impact for WAST in terms of patient transport but we are engaged with WAST so that they will be prepared for any changes that could happen.

Question – Have you engaged with diabetic patients in primary and secondary care yet? Also have you been in contact with national support groups, County Borough Councils and Stakeholder Reference Groups?

Marie-Clare Griffiths responded that yes we have, the Health Board has a robust stakeholder list with whom we ensured we shared the engagement documentation with, this list included local groups and County Borough Councils. The documentation has also been shared with the Cwm Taf Morgannwg Stakeholder Reference Group and our Chief Executive wrote a letter to all our stakeholders, including the Stakeholder Reference Group and invited them to attend the engagement events. Specifically because of the links with diabetes we have written to the diabetic associations and stroke associations and we have also undertaken an exercise where we have linked in and passed information to past patients of our vascular services as well.

Question – Does this mean that the University Hospital Llandough is the spoke hospital for Cardiff and Vale patients?

Kate Rowlands responded to say that at the moment there is a lot of planning that has been going on but it is hoped that all the plans are in place for us to have some beds over in Llandough Hospital so we would be able to use those to transfer patients from the acute ward at the University Hospital of Wales, for those patients who required further rehabilitation, in order to get them home, those patients will be moved to Llandough Hospital and their discharge further planned from there.

Question - Is there any impact of covid on recovery proposals we are all aware of long waiting lists after the pressures of the last year?

Kevin Conway responded to say that vascular services are probably unique, there is no waiting list for vascular services, most vascular conditions need to be treated promptly when they present. The plans sit outside the covid recovery plans and we do not envisage any impact either of covid recovery or vis versus us on the covid recovery plans.

Marie-Claire Griffiths reiterated how comments/views or questions can be shared with us.

Question - Can you clarify who will undertake the follow up outpatient appointments and where these will be undertaken?

Marie-Claire Griffiths responded to say that we will endeavour to do these in your local spoke hospitals. Kevin Conway stated that one of the areas that has been successful as a result of covid is virtual clinics, using both telephone follow up and video conferencing, feedback from patients has been really good so where we can patients will be followed up virtually, if the patient needs to be seen because they have a wound or because they have an ongoing problem, we will endeavour to see them at a local spoke hospital rather than bringing them back to a hub, although there is occasionally reasons to bring patients back if they require further imaging or further treatment but on the whole patients will be followed up virtually or at spoke hospitals.

Question – Will the Health Board provide transport or cover transport costs for patients or carers who need to travel to Cardiff?

Marie-Claire Griffiths responded to say that building on the response that Kevin just gave we will endeavour to minimise the transport that is required for follow up appointments to minimise the need for patients and carers to travel to Cardiff. If there is that requirement then there are already transport links that

are established between hospital sites so that we can look to support patients and carers to travel through those means and if there are any costs and if this is a problem for patients then we can certainly look into our policies that look at support covering costs for patients and carers who do struggle to be able to travel to Cardiff.

Question – So what are the next steps?

Marie-Claire Griffiths responded to say that this is our opportunity to speak to you and hear your views and we want to hear your thoughts and reflections and we want you to share your views with us. We will be collating all of the information we receive through all of the different channels and the South East Wales region, we will be making sure that we have addressed any concerns and captured any of the implications and thoughts as part of our planning process and we will be working closely with local Community Health Councils to share the views and any concerns that we might have had from the public or patients as part of this. We will then be having conversations with the Community Health Councils as to what the next steps for this are but we don't know the next steps explicitly until we have had the opportunity to hear from you and hear the views of the public.

Marie-Claire Griffiths reiterated that we will consider all of the feedback and share this with the individual Health Boards and the relevant Community Health Councils. We will also publicly make available a report that outlines a summary of comments, questions and suggestions that have been received. We will consider all of the issues and whether there are any mitigating actions that need to be taken. We will also use the information received to update the Equalities Impact Assessment. Subject to further discussions with the Community Health Councils, we may wish to enter a period of formal consultation and should we do that we will once again invite your views.

Marie-Claire Griffiths outlined again ways in which views and questions can be shared in relation to this engagement.

Question – Please can you inform the public that they can also contact the Cwm Taf Community Health Council with any comments/views or questions that they may have.

The contact number for the Cwm Taf Community Health Council is : 01443 405830

Marie-Claire Griffiths outlined that :-

Should you have any feedback in relation to today's event, our engagement and involvement processes or in particular around any of the following areas, we would be happy to receive your feedback by emailing it to: CTT_Planning&PartnershipsTeam@Wales.nhs.uk

- Timings of the event
- Format
- Speakers available
- Usefulness of visuals
- Usefulness of the session
- Feeling that queries were answered
- Or any other suggestions about how we can continue to improve the way we engage.

Question – For those of us in the Bridgend area, can you provide links for us to follow up with the same questions?

Marie-Claire Griffiths stated that any questions from the Bridgend area, firstly you can always contact the Community Health Council but equally if you want to use either the SE Wales Vascular email address or the Planning & Partnerships email address we would be happy to pick up your questions and link you with the most appropriate contact details for the SW Wales area.

Question – Are Cwm Taf Morgannwg planning to undertake more live events like this in the future?

Marie-Claire Griffiths responded to say, yes if there is a specific request to do another live event on the SE Wales Vascular Network then we would be happy to do that to support this engagement process. We would also be happy to undertake other live events in the future on areas.

Lee Leyshon informed attendees that certainly throughout the experience of covid where we have had to drive a lot of our work and day to day lives online, whether that is for schooling or whether it is for work, public engagement is there as well. It is strange to think about life without covid but the sort of access that online access gives us is really helpful and is something that we would want to keep in any engagement activity going forward but equally nothing substitutes face to face engagement which we would want to undertake as well after covid. Your feedback about these types of events, how the timing was, the format of the event is really helpful because we are testing these processes as

well, so any information that you can give us is really helpful and gratefully received as that will inform what we do going forward in the future.

Marie-Claire Griffiths thanked the panel and attendees and closed the event.

Summary of Themes

- **Transport and transport costs**
- **Health Board using live events for engagement going forward**
- **Links for Bridgend questions**
- **Llandough Hospital being the spoke for the University Hospital of Wales**
- **Liaising with diabetic patients, national support groups and stakeholders**

C3. Aneurin Bevan University Health Board

10.03.2021

Aneurin Bevan University Health Board

Vascular Services Network

Public Engagement Meeting

Date: 10/03/21

Time: 2pm

Attendees:

Name	Organisation	
Christopher Dawson-Morris	Assistant Director of Planning ABUHB	Panellist
Mr. David Lewis	Consultant Vascular Surgeon, ABUHB	Panellist
Mr. Peter Lewis	Consultant Vascular Surgeon, ABUHB	Panellist
Heather Barne	Head of Podiatry & Orthotics, ABUHB	Panellist
Annie Clothier	Vascular Clinical Nurse Specialist, UBUHB	Panellist
Kristian Glover	Assistant Vascular Practitioner, ABUHB	Panellist
David Hanks	Head of Service Planning, ABUHB	Panellist
Nicola Jones	GE Healthcare	Attendee
Liz Power	Citizen	Attendee
Pat Powell	Gwent Association of Voluntary Organisations	Attendee
Isobel Jones	Welsh Ambulance Services Trust	Attendee
Geoffrey Davies	Powys Community Health Council	Attendee
Rhiannon Davies	Citizen	Attendee
Gemma Lewis	Powys Teaching Health Board	Attendee

When a patient is referred to a spoke who would they be seen by? Will it be a consultant? Will it be a nurse? What will be the situation when they arrive at the spoke?

We will still take GP referrals in the same way as we do now. There is an electronic referral system where the consultants triage the referrals online. Depending on the referral the consultant will decide on the most appropriate clinic for the patient.

The choices now, due to COVID, have made us realise that a lot of patients like telephone consultations rather than face to face consultations. If you've got a wound, telephone consultations may not be suitable, if someone has a hearing problem then telephone consultations may not be suitable but for almost all other patients they appreciate the fact that they do not need to drive to the hospital and park and relatives don't need to take time off work. So in addition to the telephone consultations we do a virtual consultation via a video link and the software is called 'Attend Anywhere'. You only need a mobile phone or an iPad to do it and we've done a lot of successful online consultations like that and that means the patient or relative can show you a bit of the patient, so if they have a problem with their foot they can you a picture over the internet. It's all secure so there are no problems with patient confidentiality. Other than that we will still be doing outpatient clinics in the spokes that I have mentioned and depending on the condition the patient may be seen by a Vascular Nurse Specialist or a Consultant.

Please could a copy of the presentation be sent to review the information in it and also to share it with Primary Care colleagues in Powys?

Yes of course this will be shared following the session to all that attended today. A similar version is included in the resources on the website.

Why has it taken this long and what are the timeframes for implementation of centralisation structure if it goes ahead?

I don't think it will help going back over the past history of this except to say that it has taken too long. We hope to start the new service off in September /October 2021. There is a fairly long history to developing this service and we are pleased to have got to this point.

You are saying that this new model, you are doing it to improve outcomes, am I right in thinking that the hub is the basis for the outcomes being improved? Why is the hub going to improve outcomes? Are you able to say how outcomes are going to be improved through the hub and spoke model?

In the UK, this dates back to publications by Professor Peter Holt who looked at volume outcome measures. For index operations namely aneurism repair in carotids and found out that there was a unacceptably high mortality rate in small centres. That there was an obvious link to volume in that the larger centres had much better outcomes that's stimulated a lot of centralisation in England and the improvement in outcomes was maintained. The National

Vascular Registry publishes those outcomes every year and you can see a funnel plot / graph showing the relationship between volume and outcome. You asked why that happens, it's been looked at and it's very difficult to put your finger on exactly why it happens. There's some research from the USA that shows that busy surgeons get better outcomes but that isn't a finding across the board, there are other studies that show that busy surgeons aren't the important thing. I think most of us believe that it is the whole package. As much as I or Peter would like to think that we are a really important link in the chain, equally as important are things like the care you get on the ward. The proposal is that we would have a ward of 35 beds and one would imagine and hope that those 35 beds will be over-seen by one or two Senior Sisters that are familiar in caring for vascular surgery patients and who have recruited and trained a team of highly skilled nurses under their wing who will also provide better care for patients. You've then got Emma Richards who is the Vascular Network Coordinator, and roles like that in a bigger unit make sure that patients get seen quicker and quicker in vascular surgery is better and you get better outcomes. It's multi-faceted the definite is that you can't argue with the data that you get better outcomes.

How will the hub model improve you working with other specialities such as Rheumatology?

We will still have a significant presence in spoke hospitals. I know I will be spending a significant proportion of my week here at the Royal Gwent Hospital doing my professional supporting activities. That means that people knock on my door and ask me vascular surgery questions. We have the Diabetes Service here at the Royal Gwent Hospital, which is important. Peter has made good relationships with multiple colleagues in multiple specialties and they know we are very easy to access and very happy to be spoken to at any time. I suspect we will be spending 50% or more of our time either at the Royal Gwent Hospital or up and down the valleys.

What change will it make to the patients in South Powys and more particularly Crickhowell area? Would it be fair to say that the principal difference to us is that for an initial consultation we would be directed to the Grange University Hospital and then onto University Hospital Wales? Nevill Hall Hospital to University Hospital Wales?

It is important to split outpatients and inpatients. The Outpatient service for patients in Gwent and South Powys will remain very similar to what it is at the moment and it may even be better, we may even provide more services in Nevill Hall Hospital or even Brecon on an outpatient basis.

All patients (and this is the minority) that need to go into hospital for a big operation instead of going to the Grange University Hospital will go to the University Hospital Wales.

It's a similar process that we underwent about six years ago when we transferred vascular services from Nevill Hall Hospital down to the Royal Gwent Hospital. We still provided an Outpatient service in Nevill Hall Hospital and Brecon but any of the smaller narrative patients that required admission for major surgery went down to the Royal Gwent Hospital which in the future will be University Hospital Wales.

We actually discussed South Powys among the four vascular surgeons in our weekly business meeting. The four of us are very keen to increase our presence in South Powys, and even venture further north seeing patients closer to their homes. The exact logistics of that still need to be worked out but there is certainly a willingness from our part.

I am a vasculitis patient. Vasculitis services in Wales in general are known to be particularly poor. Will this make any change to the Vasculitis Service?

No it won't. The only time we really get involved with vasculitis patients is for iloprost infusions and we don't do anything because the rheumatologists don't have inpatient beds they've used us in the past. There's no reason if a patient needs an iloprost infusion can be admitted under any speciality, General Medicine would be the ideal one because iloprost infusion is just a protocol for administering the infusion.

There may be some change in the course of time as we develop better relationships with Rheumatologists in Cardiff in particular as it is a bigger unit. If they are providing treatments for vasculitis that that we don't have locally then that would be much easier way for providing that for local patients.

With a centralised service there is much more potential for individuals to develop niche interests. If a surgeon wanted to link up with a Rheumatologist and do joint clinics I'm sure that would be exactly what a regional specialist centre would be expecting and wanting.

Main Themes of Session

 How our pathways work

 How to make sure we are getting the service right up front and that we are not making people travel lots of miles

 Really clear on how people will flow through from local hubs right to the centre

 We think about how we start to develop some of the specialties and some of the wider benefits that come from the centralisation of services and make sure that we get links with other services such as Rheumatology.

16.03.2021

Aneurin Bevan University Health Board Vascular Public Engagement Event

Tuesday 16th March, 2021

18:00hrs via Microsoft Teams

Name	Organisation	
Mr. David Lewis	Consultant Vascular Surgeon, ABUHB	Panellist
Mr. Peter Lewis	Consultant Vascular Surgeon, ABUHB	Panellist
Heather Barne	Head of Podiatry & Orthotics, ABUHB	Panellist
Kristian Glover	Assistant Vascular Practitioner, ABUHB	Panellist
David Hanks	Head of Service Planning, ABUHB	Panellist
Karen Newman	Assistant Director of Communications and Engagement, ABUHB	Staff Member
Amy Sullivan	Engagement Development Manager, ABUHB	Staff Member
Adele Skinner	Engagement Officer, ABUHB	Staff Member
Tony Crowhurst	Disability Advice Project	Attendee
Councillor Judith Pritchard	Caerphilly County Borough Council	Attendee
Janine Harrington	Citizen	Attendee
Susanne Maddax	GAVO	Attendee
Councillor Val Smith	Monmouthshire County Council	Attendee

Has there been technological progress that requires specialist equipı means it is more sensible to have services on one site?

Specialist equipment and medicines evolve all the time and Vascular S went through an incredible evolution in the late 1990's and early 200C minimally invasive techniques really catapulted us into the future. The procedures are ubiquitous throughout the Northern hemisphere, USA Europe. The demand for specialist equipment will always be there and always evolve and it's not a static playing field. Equipment is expensive being assessed and installed as we speak.

Is there going to be room within the University Hospital of Wales as there seems to be lots of things that seem to be pushed there? Will you have an extra building there and how are you going to manage that?

An extremely good planner called Johnathan Haxton, who has now very sadly passed away, completed an extremely complex piece of work on demand and capacity taking data from all three of the Health Board's and that data has been accepted. It means that we will have a large ward of 30 – 35 patients with the potential to have one ward sister or an old fashioned matron looking after a large ward with lots of senior nurses under their wing to make sure that they are all passionate about looking after Vascular Surgical patients. We don't have that at the moment and we think that's one of the things that will probably improve our outcomes in the short, medium and long term.

The other capacity issue is getting into an operating theatre as a surgeon and there are two types of operating theatres that we use: conventional ones and we have secured capacity for that and we also use what's called a hybrid operating theatre when we have fixed high quality imaging in a fully specked out operating theatre so that patients who will be advantaged by high quality imaging can get it immediately and there is a process where the business case for that is being sent to Welsh Government really as we speak.

You mentioned Neurosurgery and my question is based on that. You talked of the large ward of 30 patients, will the level of that be almost one down from Intensive Care? I have experience of T4 Neuro where it's not quite Intensive Care but it's a similar level of nursing. Is that the plan for this proposal that it will be a higher level than specialist care?

There are fairly strict definitions about Critical Care so there is level one and level two units and that depends on the organ support that the patient needs. We wouldn't be providing a Critical Care service on another ward but Vascular Surgical patients by definition often have multiple co-morbidities so they are often diabetic, they may have had strokes, they may have had heart disease, COPD and a lot of them have got social needs on top of that and you need a group of nurses that really understand the complexities of those patients not only to furnish the care they need but to also to get the outcomes that we are so passionate about achieving. Interestingly, this was one of the by-products of centralising Neurosurgery in Cardiff and prior to that Neurosurgical patients that needed support post operatively went to the general Critical Care unit but by putting the whole population into the South Wales centre meant that the

critical mass of patients meant that they were able to develop for all intents and purposes a specialist Neuro Intensive Care. This meant that the staff looking after them were dedicated specialists. Critical mass is a key element to making things viable.

Will a copy of today's presentation be available to be circulated?

Yes. They can be sent out following the meeting.

How do you link in with prevention services such as dietary advice?

As a Surgeon and a trainer I teach my medical students that although I can do some quite clever surgeries, if I make sure that every patient I see has their cardiovascular risk factors managed appropriately, I'm doing a lot better for society than I am by doing occasional big operations. So it is fundamental to us and that's only really happened over the last 20years that our knowledge about risk factor management has increased but also Vascular Surgeons have taken on the role rather than just being a Surgeon and just operating, we have a more holistic approach to the patients now. That interaction goes on in every clinic and it goes on in every teaching session.

Comments:

- Your proposals are sensible and we are fully supportive of them. We wish you the best of luck. Thank you for a very informative talk and for making it so convenient as well. There is one thing that always concerns me and that is the transport issue and it can worry people that live in a rural area but that is something that needs resolving elsewhere.
- I represent a group of patients with Ehlers-Danlos Syndrome (EDS) and there is currently no centre of excellence in Wales. We have people in our group that have to go to London to get letters written by Consultants who will support their welfare rights and applications and we feel this is completely wrong. For a few years no, we have been endeavouring to convince the Welsh Government that some sort of centre of excellence should be established in South Wales to deal with the Welsh population. From our point of view, people in England are far better treated than people in Wales. If there is anyone with experience of EDS we are not allowed to swap from one Health Board to another. Coming into areas that we are talking about today, one of our people has had his gallbladder removed which we understand is a relatively simple operation but it wasn't taken into account that he has EDS and

the people operating on him were failing to understand why he wasn't healing. This is a classic instance of where a lack of knowledge and a lack of an operation being done by a group of people who knew exactly what was going on having a detrimental effect on this particular patient's outcome. The idea of you setting a group up here which brings together people who are excellent in the treatment of Vascular disease is a great idea and we would thoroughly support that but we would want there to be a way that when EDS is being treated on a pan Wales area, we plead that there will be a centre of excellence eventually but people from your group would need to offer their services to patients with EDS.

- *(Comment placed in meeting chat)* We waited a long time to get a hospital like the Grange but yet we would be using the Cardiff Heath again as the main centre. We have had issues with travel to Velindre for cancer services and dental hospital and out of county access being stopped. We are working in Gwent towards integration and care closer to home and preventative services to hopefully prevent people becoming more complex and needing surgical interventions in secondary Care.
- *(Comment placed in meeting chat*) It would be beneficial to engage third sector support for patients that spans secondary and community care

Main Themes of Session:

- Fully supportive of Vascular Service change
- How the pathways / service will work
- Travel and location

17.03.2021

Aneurin Bevan University Health Board

Vascular Services Network

Public Engagement Event

Wednesday 17th March, 2021

18:00hrs via Microsoft Teams

Name	Organisation	
Mr. David Lewis	Consultant Vascular Surgeon, ABUHB	Panellist
Mr. Peter Lewis	Consultant Vascular Surgeon, ABUHB	Panellist
Heather Barne	Head of Podiatry & Orthotics, ABUHB	Panellist
Christopher Dawson Morris	Assistant Director of Planning, ABUHB	Panellist
David Hanks	Head of Service Planning, ABUHB	Panellist
Amy Sullivan	Engagement Development Manager, ABUHB	Staff Member
Eddie Bowen	Citizen	Attendee
Richard Morgan Evans	Citizen	Attendee

If all major surgery is going to be carried out in UHW, what sort of affect will this have on parking there for visitors and the ambulance service delivering patients to the hub and then back out to the spokes?

The Health Board recently moved 900 administrative staff off the UHW site into a new Headquarters which has significantly increased the availability of parking. Also opened a new Park & Ride service two junctions down on the A48 so that has vastly improved the situation there.

With Ambulances queuing outside hospitals at A&E I'm not sure on what the effect of logistics of movement is going to be under these circumstances?

We work very closely with the Welsh Ambulance Service in terms of the service planning and the numerous committees that David

mentioned as part of his presentation. They are well involved in understanding any changes in journeys and flows that would be required. It is part of the planning process, making sure that we have that factored in.

What sort of time do you think this major surgery and rehabilitation will take?

It depends on the procedure being carried out. If you go in for a carotid operation on your neck you'll be out the following day.

If you go in for an amputation you'll probably be in UHW for a short period of time before being transferred for rehabilitation and ongoing care into one of the ABUHB hospitals.

What timelines are we looking at here if the more major vascular surgery is moving to UHW?

This is an engagement process and assuming we don't have to do a follow up public consultation then we'll be looking towards the end of this year to start to implement that change. We're looking at the autumn for implementation.

Why was UHW chosen? I'm conscious it is a tertiary centre for many services already.

There was a fairly rigorous option appraisal process that went on for quite some time and UHW came out on top. Aneurin Bevan and Cwm Taf were considered. That appraisal was around adjoining services, the major trauma centre and other services that are in UHW.

With initial surgery at UHW and then onwards journey back to peripheral hospitals for recovery – would you see that including the Grange University Hospital or are we talking Royal Gwent Hospital and Nevill Hall Hospital?

Much of the outreach work and repatriation will take place across all of our sites, in Nevill Hall, at the Royal Gwent and in the community as-well.
Comments:
- I have no objections whatsoever to the hub being in Cardiff.

- I have participated in Peter Lewis's clinics held in Cwmbran and think they are a very good idea particularly under the COVID circumstances.

- I accept the centralising of service and more people involved and gaining more experience.

Main Themes of Session

- Fully supportive of Vascular Service change
- Car Parkking at UHW
- Timelines of implementation

D. Midpoint Review Report

VASCULAR SERVICES ENGAGEMENT MID POINT REVIEW REPORT

12/04/2021

1. Introduction

This report sets out the progress to date against the plan for public engagement on proposed changes to vascular services in South East Wales.

The public engagement plan for the proposed development of vascular services in South East Wales was developed collaboratively by four Health Boards, namely Aneurin Bevan University Health Board, Cwm Taf Morgannwg University Health Board, Cardiff and Vale University Health Board and Powys Teaching Health Board.

2. Background and Context

Work has been underway for many years regarding the sustainability of vascular services in South East Wales. It remains the only region in the UK without a formal network in situ, although clinicians have worked well together over time to enable joint arrangements to be put in place, particularly during out of hours provision.

There is a range of guidance and reference points that propose that a networked arrangement is the most appropriate configuration for vascular services which is a view supported by clinicians across the three provider Health Boards. A lot of work has been undertaken through clinical teams in exploring potential future options for the delivery of the service in the area, and these were first articulated in a clinical option appraisal undertaken in 2014.

With a strong rationale, clinicians, through their work over many years have arrived at a consensus opinion for a hub and spoke model, with the hub being at University Hospital of Wales and spokes remaining within Health Board footprints.

Clinical engagement has taken place throughout the service development process and there remains good clinical consensus. A letter confirming that

the work undertaken during the clinical option appraisal process in 2014 remains valid has recently been received by the Chair of the Joint Vascular Programme Board. Indeed the clinical body indicated the preferred option had now been strengthened since the location of the Major Trauma Centre was identified at University Hospital Wales.

2.1 Requirements on managing change in NHS Wales

The guidance on changes to NHS services in Wales proposes a two stage process to the management of change that requires consultation and engagement. It should be noted that there is also provision in the guidance for the management of urgent temporary change which is a situation that applies to Cwm Taf Morgannwg University Health Board who had to make this arrangement for vascular services during COVID-19 as the service became unsustainable. The approach to engagement has sought to enable good governance and management of the change as well as enabling the temporary arrangements in place for Cwm Taf Morgannwg to be formally engaged and consulted upon.

3. Engagement Plan

The engagement plan was developed in collaboration with health board engagement leads and the Community Health Councils to support the engagement process.

An Equality Impact Assessment was also completed and used to inform the engagement plan.

1. Scope of Engagement

During October 2020, a report was shared with the Vascular Programme Board which outlined a potential approach to engagement and consultation on the proposals for the service. This was supported and a two stage process of engagement followed by consultation agreed, subject to appropriate engagement with Community Health Council colleagues.

Organisations that were identified as needing to be part of the consultation and engagement were Aneurin Bevan University Health Board, Cardiff and Vale University Health Board, Cwm Taf Morgannwg University Health Board and Powys Teaching Health Board, as commissioners of these services for their local population. It is the responsibility of these organisations to lead the

programme of engagement and consultation in their respective areas, however overall co-ordination is being held within the programme structure.

Further to the decision made by Joint Programme Board for a two stage process, a workshop was held in November 2020 to agree the scope of the engagement and consultation and also to have discussions that would inform the gaps in a skeletal draft engagement document.

As a result of these discussions it was agreed that the scope of the engagement phase would be to:

- Inform people what vascular services are and how they are currently organised
- Explain the challenges facing the services
- Engage in discussions about potential/only viable option and aid understanding on this
- Hear what is important to people in this discussion prior to a period of formal consultation

It was however noted that given the extensive work that had been undertaken on a clinical option appraisal and formulation of ideas regarding a hub and spoke model of delivery, that this information should also be shared at the engagement phase, so as to offer as much information as possible, in order to explore with members of the public, and interested stakeholders views on the process that has been followed and whether there is any other information that should be considered.

The affected Community Health Councils considered together, the proposals for engagement at their meeting of 13th January 2021. There was explicit support expressed by both Cwm Taf Community Health Council and Aneurin Bevan Community Health Council, with further discussions taking place with both Powys and South Glamorgan CHCs. Following further assurances about process and remit, there was subsequent agreement by all CHCs to commence the engagement as proposed.

2. Stakeholders

There are a number of stakeholders that have been considered in this engagement and a variety of methods employed to reach those stakeholders.

All Health Boards have well established mechanisms through which they enable cascade and delivery of engagement and consultation materials and these are being used for this programme. There are also national groups and professional bodies that have been given the opportunity to get involved in the engagement; these were profiled within the programme. Given that the engagement and consultation will be happening within a Covid19 context, different ways of engaging the population have been established

The table below outlines the stakeholder groups together with a high level summary of the actions and responsibilities being undertaken.

Please see appendix 1 for the Vascular Engagement Plan

3. The Engagement Document

The main engagement document and summary document were formally approved by the Health Boards at their meetings in January 2021.

4. Methods of Communication and Engagement

So far…

Web pages	• Web pages hosted on each Health Board website • Template supplied with content and useful documents; including FAQs, Easy Read etc • Link to survey and all relevant contact details including; telephone number, postal address etc Web pages: www.abuhb.nhs.wales/sewalesvascular www.cavuhb.nhs.wales/sewalesvascular cwmtafmorgannwg.wales/sewalesvascular www.pthb.nhs.wales/find/sewalesvascular
Staff/ public updates	• Inclusion in Health Board newsletter • All staff email • Digital screen tiles and posters

	• Letter and assets to GPs
Stakeholder outreach	• Stakeholder letter • Communications Toolkit
Social media	• Promotion of public engagement events • Ongoing social media posts • Videos of key spokespeople explaining rationale for the network
Promotional assets	• Posters • Digital screen tiles • Leaflets • Teams Background • PowerPoint template
Engagement events	• Online public engagement events run in collaboration with CHC

Note: All content translated into Welsh.

Next steps…

Advertising	• Facebook advertising • Digital displays and posters in MVCs
Outreach to public event attendees	• Email follow up to all sign ups, encouraging them to fill out the survey
Social media	• Updated Communications toolkit and social media assets

5. Responding to the Engagement

Responses are being captured using the following methods:

- Email via a generic email address
- Online
- Telephone
- Capturing of notes during public and stakeholder meetings

- Full and comprehensive analysis of survey data

4. Mid-Point Review

The rest of this document will review the responses received to date and has informed discussion around the need to make any adjustments to the engagement for the remaining period. It must be noted that a full and comprehensive analysis of the data received through the online survey has yet to be completed, however emerging themes have been captured through the summary data and notes from public engagements.

As of 23rd March 2021, 66 responses have been received with the majority being online responses to the survey.

All responses, including notes of public sessions are being shared with the Community Health Councils.

1. Responses to date

While a comprehensive analysis of the data is forthcoming, a summary of the data has been included in appendix 1. This details key insights from the 66 responses that we have had to date (23rd March 2021) from the online surveys and notes taken from the public engagements. The insights we can draw from the summary data do not differentiate responses from separate University Health Boards and Teaching Health Boards.

Number of attendees at public engagement events					
Cardiff and Vale UHB		**Cwm Taf Morgannwg UHB**		**Aneurin Bevan UHB**	
16/03/2021	1	11/03/2021	3	10/03/2021	7
18/03/2021	6	23/03/2021	5	16/03/2021	5
				17/03/2021	2

2. Key Emerging Themes

Please note that Powys Teaching Health Board has integrated with the three remaining University and Teaching Health Boards for public engagement, and therefore a discrete set of themes for Powys Teaching Health Boards cannot be offered here.

Cardiff and Vale University Health Board:

- The rationale for the creation of a Vascular Network is sensible and logical
- Transport, parking, and accessibility needs to be considered throughout the design of this service
- Suitability of University Hospital Wales in regards to impact on other services, geographic location and infrastructure requirements

Aneurin Bevan University Health Board:

- There is support for the rationale behind the creation of a Vascular Network
- Transport, parking, and accessibility needs to be considered in terms of becoming a spoke site
- How will pathways and services work after implementation

Cwm Taf Morgannwg University Health Board:

- Transport, parking, and accessibility needs to be considered in terms of becoming a spoke site
- Implications of the new service on other existing services, such as the Welsh Ambulance Service Trust
- The impact of Covid-19 recovery on the proposals for the Vascular Network

3. Demographic Profile of Respondents

From the summary data, which does not differentiate the responses collect by particular University or Teaching Health Board, the following insights can be drawn. Please note that each point is relative to the overall amount of

respondents who chose to answer each question:

- The majority of respondents are in the 45-45 years old category (37.50%). 16-24 and 16 Under categories are the least represented age demographic
- The majority of respondents are female (70.83%). Men are represented at 27.08% and 2.08% chose Prefer not to say.
- 100% of the respondents did not state that they identify as Trans
- The majority of respondents are in full time work
- The majority of respondents stated their ethnic group as White (95.24%)
- The majority of respondents stated that they do not consider themselves a fluent Welsh speaker (93.75%)

1. **Public Event Schedule**

Public online events have been arranged during the engagement period. An agreement was reached by the Health Boards and CHCs to complete all the public events by 25th March ahead of the Pre-Election period.

2. **Additional Actions taken**

A number of actions were agreed during the first half of the engagement to respond to issues raised at public sessions and to ensure sufficient information was in the public domain to allow intelligent consideration of the proposals:

- Additional FAQ to clarify spoke arrangements
- Additional presentation slides to clarify potential impact on residents of each HB area

5. **Post Engagement Phase:**

The programme team will continue to receive and log responses to the engagement. This information will be shared with health boards and CHCs.

Responses will be analysed by the programme team and themes identified.

A report will be produced which will include the findings of the engagement. This will be discussed with the CHCs in May and the Vascular Joint Programme

Board, to consider and agree next steps including whether to proceed to consultation.

E. Equality Impact Assessment

VASCULAR HUB AND SPOKE NETWORK FOR SOUTH EAST WALES
EQUALITY IMPACT ASSESSMENT EVIDENCE DOCUMENT
Introduction

This document presents the evidence collected to date in support of the equality impact assessment (EIA) process for the development of a Hub and Spoke Vascular Network service to serve South East Wales. The Equality Act 2010 places a positive duty on public authorities to promote equality for the nine protected characteristics [1] and requires Welsh public bodies to demonstrate how they pay 'due regard' when carrying out their functions and activities. Equality is about making sure people are treated fairly. It is not about treating 'everyone the same' but recognising that everyone's needs are met in different ways. In the context of this work we are required to assess the impact of policies and services on equality. The purpose of this is to ensure that, as far as is practicably possible, the opportunities for promoting equality and human rights for people with protected characteristics are maximised and any actual or potential negative impact is eliminated or minimised.

The Human Rights Act 1998 also places a positive duty to promote and protect rights. We clearly recognise the importance of putting human rights at the heart of the way our services are designed and delivered. We believe this makes better services for everyone, with patient and staff experiences reflecting the core values of fairness, respect, equality, dignity and autonomy.

In addition we recognise that Wales is a country with two official languages: Welsh and English. We have a responsibility to comply with the new Welsh Language (Wales) Measure (2011). This will create standards regarding Welsh which will result in rights being established that will ensure Welsh speakers can receive services in Welsh. The importance of bilingual healthcare for all patients in Wales is fundamental and is particularly important for four key groups – people with mental health problems; those with learning disabilities; older people and young children. Research has shown these groups cannot be treated safely and effectively except in their first language (Welsh Language Services in Health, Social Services and Social Care, 2012)[2]. Our consideration of equality takes account of this. EIA requires us to consider how the development of a centralised Vascular service, including an arterial centre (Hub), supporting non arterial units (spokes)

and a comprehensive rehabilitation pathway, operating within a network structure for South East Wales, may affect a range of people in different ways. The EIA will help us answer the following questions:

- Do different groups have different needs, experiences, issues and priorities in relation to the proposed service changes?
- Is there potential, or evidence that the proposed changes will promote equality?
- Is there potential for, or evidence that the proposed changes will affect different groups differently? Is there evidence of negative impact on any groups of people?
- If there is evidence of negative impact, what alternatives are available? What changes are possible?
- How will we monitor impact in the future?

This document is not intended to be a definitive statement on the potential impact of the vascular centralisation on protected characteristic groups. The document's purpose is to describe our understanding at this point in the EIA process of the likely impact.

Background

A collaboration between Cardiff and Vale, Cwm Taf Morgannwg and Aneurin Bevin University Health Boards, has been coordinating the development of proposals for a centralised vascular service for South East Wales. Emergency Vascular services have already been centralised at the University Hospital of Wales (UHW).
The project is being led through the SE Wales Vascular steering committee, which is overseeing the work, and is supported by a clinical advisory group, operational group and a number of workstreams. The work will lead on the development of a clinical model and pathways including a comprehensive rehabilitation pathway, operating within a network structure for the region.

Through the steering committee, clinical reference group, clinicians and stakeholders have been working together to examine national guidance and to develop service models to improve care, treatment, rehabilitation and outcomes for vascular patients.

Rationale

Vascular disease accounts for 40% of deaths in the UK, many of which are preventable. The report 'The provision of services for patients with Vascular Disease

(Vascular Society, 2014)[3] compiles key recommendations to deliver standards for the care of vascular patients. The evidence is consistent that the best outcomes following elective and emergency interventions are achieved by concentrating inpatient care into arterial centres, this ensures the most efficient use of staff, specialist equipment and facilities.

A minimum population of 800,000 is often considered the minimum population required for a centralised vascular service. This is based on the number of patients needed to provide a comprehensive emergency service; maintain competence among vascular specialists and nursing staff; ensure the most efficient use of specialist equipment, staff and facilities; and the improvement in patient outcome that is associated with increasing caseload. A minimum population of 800,000 would be appropriate but for a world class service a larger catchment area will be required. The population of SE Wales (the resident population of the Health Boards taking forward this proposal is approximately 1.6 million (StatsWales 2016). The current configuration of services across separate hospital sites across South East Wales are too small to meet the quality and safety standards set out by the Vascular Society and the Royal College of Surgeons. None of the current individual units in SE Wales meet this requirement.

Benefits to the whole population will derive from an Inclusive Vascular System that provides for the needs of patients in its region by moving patients to the hospital best able to provide suitable care, freeing resources at other units.

At present, there is no vascular network or designated arterial centre operating across or within South East & Wales. Evidence demonstrates that the introduction of an arterial centre (hub) supported by non arterial units (spokes) and a comprehensive rehabilitation pathway, working in an integrated and mutually supportive way, is expected to raise the quality of services, reduce deaths, and reduce regional limitations and variations in services.

Expected outcome

The SE Wales Vascular service aims to ensure patients have appropriate, timely access to reliable, safe, high quality and sustainable services at all points along their care pathway, in line with best practice standard requirements, and evidenced through key performance indicators.

The proposal is to establish an arterial centre operating within an integrated Vascular network for South East Wales. This will provide patients with the right level of service 24 hours a day, 365 days a year. The arterial centre or 'hub' will be supported by a network of non-arterial units or 'spokes', and rehabilitation provided through specialist and local rehabilitation services.

Rehabilitation is a process of assessment, treatment and management with ongoing evaluation by which the individual, and their family and carers, are supported to achieve their maximum potential. It is a key part of the patient pathway, commencing before admission to an arterial centre, continuing through the inpatient phase to discharge from the hub or spoke into the community and is a true enabler to achieving the best outcomes for individuals.

How it will be delivered

Based on considerations over recent years, there is good clinical consensus to proposed that if supported, the new vascular service will be based on a hub and spoke model and will have:

- Diagnosis and assessment of vascular disease (including the input of the vascular laboratory and diagnostic imaging);
- Outpatient management of patients with peripheral arterial disease;
- Inpatient spells, emergency and elective activity;
- Day case activity;
- Multidisciplinary outpatient follow up of patients receiving vascular surgery/endovascular interventions;
- Seamless repatriation of patients following rehabilitation care pathways particularly for post amputation care;
- Limb Fitting Service – the vascular service must ensure its patients have access to a local limb fitting service, which meets the standards set by The British Society of Rehabilitation Medicine.
- A dedicated vascular day case facility in both hub & spoke to allow day case surgical & interventional radiology procedure.

It is proposed that the hub and spokes have the following components:

HUB SPOKE

➢ Emergency Vascular Service: ➢ Emergency Vascular Service:**-**

- Amputations and "*nibbling"*
- Aneurysm surgery;
- Patients requiring CEA within 48 hrs of index event;
- Peripheral arterial reconstructions.
- Angioplasty

• Angiogram;
• As noted above, the “front door” will remain the patient’s local hospital, defined as a Local Hospital with an Emergency Department and an Emergency General Surgery Service;
• Rehabilitation.

➢ **Elective Vascular Service:**

• Abdominal Aortic Aneurysm
• Endovascular aneurysm repair
• Carotid endarterectomy

➢ **Elective Vascular Service:-**

• Venous surgery angiography and angioplasty;
• Outpatient clinics

Based on this, the main procedures that are expected to transfer from each of the current sites to any future hub are the following:

➢ Iliac and femoral artery procedures
➢ Carotid
➢ Open Abdominal Aortic Aneurysm
➢ Endovascular Abdominal Aortic Aneurysm
➢ Open Thoracic Aortic Aneurysm
➢ Thoracic endovascular aortic repair (TEVAR)
➢ Operations on vena cava
➢ Other artery.

To achieve delivery, there will be a number of infrastructure requirements for both the hub and the spoke:

HUB SPOKE

➢ Dedicated vascular surgery ward(s). Beds will need to be staffed by an appropriate skill mix of nurses who have been trained in the care of vascular patients. Doppler investigation will need to be available on the ward;
➢ Hybrid theatre, with experienced vascular theatre staff;
➢ Scheduled elective lists (IP / DC);
➢ Anaesthesia – elective vascular services will have dedicated vascular anaesthetic input, from anaesthetists experienced in dealing with vascular patients and with a special interest in this area. This may include anaesthetists from Spoke sites given the opportunity to support elective lists in the hub;
➢ Intensive Treatment Unit (ITU) and High Dependency Unit (HDU) – Facilities with full renal support must be available onsite to support the vascular

- Mixed surgical wards but with ring fenced vascular beds;
- CEPOD theatre model;
- Interventional radiology;
- Scheduled elective DC lists;
- Outpatient Clinics – including access to nurses/therapists experienced in ulcer and wound dressing. Doppler ultrasound machines should be available. To support this, it is also assumed that each of the spoke sites will have the following:
- A consultant led Emergency Department (A&E);
- An Emergency General Surgery service. service. Bookable HDU/ITU with sufficient beds will need to be available for elective patients
- Interventional radiology suite with access to nursing staff trained in vascular procedures.
- Out-patients clinics

Given the range of services already in situ on the University Hospital Wales site, its position as a specialist and tertiary provider, and the co-dependencies between them and the vascular service, particularly major trauma, interventional cardiology and cardio-thoracic surgery, the preferred option for the hub is identified as the University Hospital of Wales, Cardiff. Given the need for consultant led A&E and a general surgery emergency service, the spokes for each of the areas are proposed as:

- **Aneurin Bevan University Health Board** – Grange University Hospital and Royal Gwent Hospital
- **Cwm Taf Morgannwg Teaching Health Board** – Royal Glamorgan Hospital, Llantrisant
- **Cardiff and Vale University Health Board** – Llandough Hospital Vale of Glamorgan

It is important to note that as patients begin their recovery and rehabilitation journey, that this too will be provided from a hospital/community setting which is much more local to them.

Who needs these services?

The prevalence of vascular disease increases with age. Average life expectancy continues to rise especially in males. This suggests that demand for vascular services is likely to increase over time. There are currently an estimated 200,000 people with diabetes mellitus in Wales, and prevalence is increasing.[1] Vascular disease is the major cause of

morbidity in diabetes and the risks of disease progression are higher, with an epidemic of diabetic foot disease expected in the next decade.

1. Diabetes UK

Risk factors for vascular disease include:

- Being over the age of 50
- Smoking
- Being overweight
- Having abnormal cholesterol
- Having a history of cerebrovascular disease or stroke
- Having heart disease
- Having diabetes
- Having a family history of high cholesterol or high blood pressure
- Having high blood pressure
- Having kidney disease or 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 a life or limb, urgent care is planned treatment within a limited number of days.

Patients who receive vascular services may have:

- Had a 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 mean they need a limb amputation

Not all patients admitted to a specialist 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 in a specialised vascular unit.

Vascular services are provided to the populations of South East Wales with the exception of Bridgend who receive care from the South West Wales vascular network. This is a population of approximately 1.6 million people.

Where are we now?

Equality impact assessment is an ongoing process that runs throughout the course of the decision making process, and through implementation

and review.

This paper defines the proposal for change and the rationale, sets out the expected outcomes and who will be affected by the proposal, and considers potential impacts on different groups and any possible actions for reducing or eliminating disadvantage.
Stakeholder engagement is an important part of the development of the proposals. Stakeholders have been involved in reviewing the EIA and further opportunities will be taken to assess the impacts as the work progresses.

What the evidence tells us on the need for change

The case for change is founded on firm clinical evidence and guided by national and international good practice.There is strong evidence that case volume influences outcomes. The 31 highest volume hospitals (which perform 57% of all elective Abdominal Aortic Aneurysm procedures in the UK) have mortality rates that are under half those seen in the 32 hospitals with the lowest volume of procedures. These data lend support to the current move towards performing major arterial surgery in larger volume units in order to further optimise outcomes. The Royal College/national professional view, is that it is no longer acceptable to provide elective or emergency vascular cover outside a fully centralised service or a formalised modern clinical network with a designated single site for all arterial interventions providing a 24/7 on-site service. There are a number of reviews and reports that support this which include:

1. Vascular Society of Great Britain and Ireland Provision of service for patients with vascular disease (2012) http://www.vascularsociety.org.uk/library/quality-improvement.html
2. https://gettingitrightfirsttime.co.uk/wpcontent/uploads/2018/02/GIRFT_Vascular_Surgery_Report-March_2018.pdf

What are the potential impacts on protected characteristic groups?
EIAs require analysing impacts on the basis of protected characteristics: sex; disability; race; religion or belief/non belief; age (younger people and older people); sexual orientation (lesbian; gay and bi-sexual people); gender reassignment; pregnancy and maternity; and marriage and civil partnerships. We have been gathering evidence to inform our assessment of the potential impact of the proposed establishment of a vascular hub and spoke model network on patients, families and carers,

staff, and other stakeholders.

Looking at a range of national research evidence has helped us to consider the potential impact. In particular, we are aware that many people who share certain protected characteristics such as disability, older age, younger people and some minority ethnic groups also face social and or economic disadvantage. Looking at socio-economic disadvantage goes some way to showing due regard to equality considerations. There will also be other distinct areas that are not driven by socio-economic factors but which relate directly to people with different protected characteristics. The proposals under consideration for the establishment of a vascular network will result in the concentration of life-saving treatment for a relatively very small number of patients but with the most serious disease. Non arterial units and a comprehensive rehabilitation service will ensure that as a patient's condition improves responsibility for ongoing care will transfer to healthcare facilities closer to home. The key issue for the protected characteristic groups would seem to be one of access as evidence tells us that some traditionally underrepresented groups' access to health facilities is disproportionately low when compared to the general population. The same can be said with regard to good health outcomes.

Below, from review of national evidence and research, discussion concentrates on the 'at risk groups' and the sections of the population which are likely to be most affected by the Vascular proposals (those groups that are expected to experience impacts which are disproportionate to those experienced by the general population). There is also reference to health care needs in general.

The first observation to make is that Vascular disease tends not to be closely associated with particular equality groups; are not simple to predict on the basis of socio-economic characteristics. Of the protected characteristics, none are particularly susceptible to Vascular disease. However, a few groups are certainly key to consider in this assessment. A literature review was carried out as a first stage of gathering evidence to inform the EIA. The results are provided below against each of the protected characteristics. There has also been engagement with stakeholders through work to develop the rehabilitation pathway.

Age

Engagement with stakeholders on the rehabilitation element of the patient pathway identified that the involvement of carers and family in rehabilitation is more difficult the further away rehabilitation is from local

support mechanisms. It should be recognised that patients are not always able to return 'home', or to the setting they came from. Older patients will have different co-morbidities such as dementia or medical requirements, and it will be necessary to ensure that staff in the vascular network has all the skills required to care for these patients.

Race
There will be a need to consider requirements of those patients who may require translation or interpretation services, and access to volunteers or staff who can converse in a chosen language.

Disability
Rehabilitation services should give choice to patients with preexisting mobility issues. Specific patient needs, such as bariatric needs should be considered to ensure the ability to provide equipment across boundaries and within social care sector. As well as physical disability, there is a need to consider learning disabilities and mental health. It is recognised that the involvement of carers/family in any programme is more difficult the further away rehabilitation is from local support mechanisms, and patients are not always able to return to the 'home/setting' they came from.

Communication needs in these client groups may be more challenging and care should be adapted accordingly. There are specific standards under the All Wales Standards for Communication and Information for People with Sensory Loss[4] that apply directly to emergency and unscheduled care and these outline the staff training requirements, communication systems and patient needs information which should be provided by health boards. Improved service will reduce the rates of disability and increase socioeconomic functioning.

Marriage and civil partnership
No impacts upon this protected characteristic are anticipated.

Pregnancy and maternity
No impacts upon this protected characteristic are anticipated.

Religion or belief (including lack of belief)
It will be important to note that staff consider and recognise that patients' personal beliefs may lead them to ask for a procedure for mainly religious, cultural or social reasons or refuse treatment that you judge to be of overall benefit to them[5]. There are also many issues in relation to

prayer, diet, death and dying rituals that would have to be considered.

Sexual orientation

Despite an appreciation that awareness of sexual orientation and gender identity issues in the health and social care sector has improved, Lesbian , Gay, Bisexual and Trans (LGBT) patients in Wales report significant barriers to health and social care services[6] . Feedback provided at a Stonewall event indicated that service providers often use inappropriate language when dealing with LGBT patients, and make assumptions about patients' sexual orientation or gender identity. This makes LGBT people feel anxious about accessing health or social care and creates barriers to honest discussions about their health needs. Moreover, it can lead to serious health risks. There is a need to ensure that patients' needs and personal circumstances are taken into consideration when providing care along the patient pathway, including any implications for rehabilitation services.

Stonewall has commended work by healthcare employers around setting up LGBT staff networks, putting zero tolerance policies in place towards discrimination, and taking a more active approach to LGBT community engagement as having improved the experiences of staff and their patients. Health boards should continue to seek to make progress in this area.

Transgender

Trans* is an umbrella term used to describe the whole range of people whose gender identity/or gender expression differs from the gender assumptions made at birth. In 'It's just Good Care: A guide for health staff caring for people who are Trans' 2015[19] Trans* people must be accommodated in line with their full-time gender expression. This applies to toilet facilities, wards, outpatient departments, accident and emergency or other health and social care facilities, including where these are single sex environments. Different genital or chest appearance is not a bar to this. Privacy is essential to meet the needs of the trans* person and other service users. If there are no cubicles, privacy can usually be achieved with curtaining or screens. For people who are still in transition, any compromise must be temporary. The wishes of the trans* person must be taken into account rather than the convenience of nursing staff. An unconscious patient should be treated according to their gender presentation. Absolute dignity must be maintained at all times. It also states that breaching privacy about a person's GRC or gender history without their consent could amount to a criminal offence. A medical emergency where consent is not possible may provide an

exception to the privacy requirements. All these issues, as well as others, could be mitigated through training.

Welsh Language

Public services have a responsibility to comply with the Welsh Language (Wales) Measure. This has created standards which establish the right for Welsh language speakers to receive services in Welsh. There is a risk that the location of the arterial centre within the Vascular network may impact negatively on Welsh language users. Service users who prefer to communicate in the medium of Welsh may be required to access services at sites which do not have sufficient Welsh speaking staff. This could affect the service user's ability to communicate with service providers in their preferred language. Meeting the information and communication needs of patients who speak Welsh will need to be taken into account. 'Language is the core of establishing and expressing identity. Responding sensitively to language, whilst focusing on the individual is an essential principle of maintaining dignity and respect in care within a bi-lingual setting (Welsh Language Services in Health, Social Services and Social Care, 2012)[7].

Socio-economic status

While socio-economic status is not a protected characteristic under the Equality Act 2010, there are new legal socio-economic duties for public bodies that will come into force in March 2021 and will apply to any decision made from this date. The overall aim of the duty is to deliver better outcomes for those who experience socioeconomic disadvantage.

The report Transport and Social Exclusion: Making the Connections (Social Exclusion Unit, 2003) highlighted the current challenges faced by socially excluded groups in accessing health and other services. They found people who are socially excluded are more likely to experience a number of factors that in themselves have a negative impact on gaining access to health services. These may include low income, disability and age, coupled with poor transport provision or services sited in inaccessible locations. It also found that the location of health services and the provision of transport to health services can reinforce social exclusion and disproportionately affect already excluded groups.

What are the potential impacts on NHS staff?

Proposals to establish a Vascular network may affect NHS staff as the final configuration may require staff to have to travel to new workplaces and work more flexibly across health board boundaries.

There is anecdotal evidence that the establishment of a Vascular network and arterial centre within South Wales would improve recruitment and retention for those clinicians who wish to practise in such a structure. It would also ensure the arrangements for the delivery of Vascular services in South East Wales are on a par with the structures in the rest of the UK.
Staff will be engaged and consulted on the proposals and any staff affected by the final outcome will be supported by the NHS Wales Organisational Change Policy (2009). A partnership approach with trade union colleagues will be ensured to achieve an effective transition to any new arrangements.

What are the human rights implications of the Vascular development?
The EIA needs to be cognisant of the European Convention on Human Rights incorporated into domestic law through the Human Rights Act 1998 as well as international treaties.
Everyone has the right to participate in decisions which affect their human rights. The convention on the rights of people with disabilities contains protection of the right to participate in decisions and access to support for participation and access to information.
The assessment so far has indicated *Article two: the right to life*, and *Article eight: the right to respect for private and family life, home and correspondence,* are of particular relevance and potential impact to the development of the Vascular network.

Right to life (taking reasonable steps to protect life): It is anticipated that having a regionalised service, with the most complex care provided from an arterial centre, will improve clinical outcomes which will have a positive impact on individuals' right to have their life protected.

Right to respect for private and family life, home and correspondence: the improved quality of care possible through a vascular network structure should result in patients spending less time in hospital. However, increased travel distances could have a negative impact on the right to maintain family life. This would apply to the patient and individual members of the family. This is not an absolute right and any interference should be justified, lawful, necessary and proportionate.

Initial summary conclusion
We believe that the introduction of a vascular network, including rehabilitation and the development of both an arterial centre and nonarterial units, is intended to improve patient care and outcomes for

Vascular disease including timeliness of access, quality of outcome and improved equality of access and reduce inequalities. We believe that the proposed service redesign does not introduce any additional obstacles; improving standardisation for access and specialist
treatment should improve outcomes across all social groups. At this stage, this assessment indicates that there are a relatively small number of cases not currently treated at a centralised site (UHW) and, from national evidence and research, the majority of cases are male and over aged 65.

For those visiting patients whilst being cared for at an arterial centre, longer and more complex journeys are likely to be necessary for some. Being required to travel to an unfamiliar hospital and longer distances could be particularly difficult and disorientating for people. Journey times will be increased for users of public transport, which is highly relevant in terms of equality groups. Car ownership amongst most equality groups and, particularly, socially deprived communities tends to be lower than average, requiring a high reliance on public modes. Early transfer of the patient back to a 'local' hospital would help to mitigate long periods in unfamiliar surroundings.

What happens next?

The work of the South East Wales Steering Committee, Clinical Advisory Group, Operational Group and a number of workstreams, is continuing to plan for a Vascular service, and enter a period of engagement with the arterial centre being located at UHW and a number of supporting non arterial units and a comprehensive rehabilitation pathway, operating within a network structure for South East Wales. The EIA will continue to be reviewed to further develop and refine this assessment and to ensure.