HAMPSHIRE COUNTY COUNCIL

Report

Committee:	Health and Adult Social Care Select Committee
Date of Meeting:	29 March 2016
Report Title:	Proposals to Develop or Vary Services
Reference:	7421
Report From:	Director of Policy & Governance

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1. Summary and Purpose

1.1. The purpose of this report is to alert Members to proposals from the NHS or providers of health services to vary or develop health services provided to people living in the area of the Committee.

1.2. Proposals that are considered to be substantial in nature will be subject to formal public consultation. The nature and scope of this consultation should be discussed with the Committee at the earliest opportunity.

1.3. The response of the Committee will take account of the Framework for Assessing Substantial Change and Variation in Health Services agreed by the Hampshire, Isle of Wight, Portsmouth and Southampton Joint Committee in November 2010, last updated in April 2013. This places particular emphasis on the duties imposed on the NHS by Sections 242 and 244 of the Health and Social Care Act 2006, includes new responsibilities set out under the Health and Social Care Act 2012, and takes account of key criteria for service reconfiguration identified by the Department of Health. The 'Framework' can be found on the website through the link below:
http://www3.hants.gov.uk/councilmeetings/advsearchmeetings/meetingsitemdocuments.htm?sta=&pref=Y&item_ID=4831&tab=2&co=&confidential=

1.4. This Report is presented to the Committee in 3 parts:

1. *Items for action:* these set out the actions required by the Committee to respond to proposals from the NHS or providers of health services to substantially change or vary health services.

2. *Items for monitoring:* these allow for the monitoring of outcomes from substantial changes proposed to the local health service agreed by the Committee.

3. *Items for information:* these alert the Committee to forthcoming proposals from the NHS to vary or change services. This provides the Committee with an opportunity to determine if the proposal would be considered substantial and assess the need to establish formal joint arrangements

1.5. This report and recommendations provide members with an opportunity to influence and improve the delivery of health services in Hampshire, and to support health and social care integration, and therefore assist in the delivery of the Joint Health and Wellbeing Strategy and Corporate Strategy aim of maximising well being.

Items for Action

2. NHS England: Vascular Surgical Services – Full Business Case

Context

2.1 The NHS, or any provider of NHS services, is required to consult the health scrutiny committee on any substantial or temporary variations to the provision of the health service, and to provide any information that the committee may require to enable them to carry out scrutiny of the planning, provision and operation of this service.

Background

2.2 The HASC last received an item from NHS England (Wessex) on vascular surgical services at their last meeting in January 2015, where an interim update was heard on progress made with the options previously reviewed by the Health Overview and Scrutiny Committee in March 2014. It was agreed that the HASC would next review this topic once a Full Business Case was available from NHS England on the future of this specialised service in South Hampshire.

2.3 Since this time, the Chairman has met informally with NHS England (Wessex) to discuss progress made with proposals, and several stakeholder updates have been received and forwarded to Members of the Committee. This included a strategic statement of intent, released by NHS England (Wessex) October 2015, which set out its intention to explore the development of a single vascular surgical 'hub' for South Hampshire, based at University Hospital Southampton NHS Foundation Trust (UHS), with Portsmouth Hospitals Trust (PHT) becoming a 'spoke' hospital.

Update

2.4 The statement of intent released in October 2015 (referred to in paragraph 2.3) raised a number of points for clarification. The Chairman therefore requested that the following information be included within, and considered by, the report to be tabled. The Committee will wish to consider these in its scrutiny of NHS England's proposed model:

2.4.1 Details of the 'two year plan' for UHS to outsource services (and up to 170 beds) in order to create capacity for additional vascular activity.

2.4.2 Confirmation of whether the options presented will include the establishment of a haemodialysis unit at UHS, and the transfer of patients requiring co-dependent services (such as diabetic foot services, nephrology and urology) from PHT to UHS. From this, a clear clinical view (with underpinning evidence) of what impact this will have on the viability and sustainability of affected services provided by PHT and UHS.

2.4.3 A clear clinical view (with underpinning evidence) of which co-dependent services must be co-located on the same site as the 'hub' of a vascular network, and which can be safely co-located at a 'spoke' hospital.

2.4.4 A clear commissioning view of how the options presented will be financed, and what impact they will have on the overall sustainability of the vascular service in South Hampshire.

2.4.5 How planned updates to the 'Provision of Services for Patients with Vascular Disease 2012', and following likely amendments to the service specification, have influenced the options proposed.

2.4.6 A clear commissioning view of whether the options will have an impact on the overall financial sustainability of either PHT or UHS, and if an impact is anticipated, how this will be mitigated.

2.4.7 A definitive statement on whether services in West Sussex will be included in this review or the final options for consideration, and the reasons for this.

2.4.8 The steps to be taken by PHT and UHS to ensure the vascular workforce is sustainable in the interim, and the support to be provided by NHS England (Wessex) to achieve this prior to the implementation of any new service model.

2.5 A covering report (Appendix 1, page 10), Full Business Case (Appendix 2, page 12) and communication and engagement plan (Appendix 3, page 142) are attached to this report.

2.6 The business case confirms that the preferred option for the delivery of vascular services is through a network involving UHS as the 'hub', with Queen Alexandra Hospital, Portsmouth (PHT), St Mary's Hospital, Isle of Wight, and the Royal Hampshire County Hospital, Winchester, as 'spokes'.

2.7 It is noted that engagement with Clinical Commissioning Groups, clinicians and vascular surgeons in Wessex has led to strong clinical consensus around the case for change and the development of a clinical network.

Recommendations

2.8 Members confirm:

a. Whether the proposals constitute a substantial change in service for Hampshire patients.

b. Whether they wish to make any recommendations upon the proposed communications and engagement plan of NHS England (Wessex).

c. If they are satisfied with the next steps proposed by NHS England (Wessex).

d. Whether they require any further information on this issue and the timings for a future update.

3. Southern Health NHS Foundation Trust: Temporary Change of Use to the Stefano Olivieri Unit, Melbury Lodge

Context

3.1 The NHS, or any provider of NHS services, is required to consult the health scrutiny committee on any substantial or temporary variations to the provision of the health service, and to provide any information that the committee may require to enable them to carry out scrutiny of the planning, provision and operation of this service.

Background

3.2 The HASC last received formal items on temporary changes to the Stefano Olivieri Unit in September and November 2014, where Members heard from Southern Health NHS Foundation Trust that the temporary change of use of the Stefano Olivieri unit from an organic Older People's Mental Health unit to a functional illness unit was expected to result in the following improvements to mental health services:

- A needs-appropriate service for those aged 60-70 with functional illnesses.
- The creation of an integrated service for those with organic illnesses.
- Improvement of access to physical health care for those with co-morbid issues.

3.3 The Committee at that time were broadly supportive of the pilot and the innovative way of providing needs-based services this would introduce to Melbury Lodge. Members requested that more detailed proposals were required in order to agree a temporary change in use to the unit, with clear evidence to support them, and these were received in November 2014.

3.4 After considering the additional evidence in November 2014, Members agreed that they supported the proposals for the temporary change in use of the Stefano Olivieri unit at Melbury Lodge, Winchester, and that they would request a further item on this topic once the pilot has ended and details of the evaluation, together with any future proposals, were available for consideration.

Update

3.5 Members received an update briefing from the Trust in July 2015 setting out an evaluation of the pilot to date, feedback from staff and patients, and noting that the intention would be to continue the pilot for a further six months, and to expand it to include admissions to Parklands Hospital in Basingstoke.

3.6 The Trust also provided reassurance that at no stage during the pilot to date had alternative provision been required for acute organic admissions (a concern of the HASC when the pilot was first proposed).

3.7 The issue of increased delays in transfer of care from the organic wards for patients requiring packages of care and placement, resulting in patients staying in hospital longer than is required was raised by the Trust in the update, and it was noted that the ongoing pilot study would need to further review issues relating to this.

3.8 An update report is attached as Appendix 4 (page 165). This sets out the background to the pilot, the pilot project to date, and the findings from it to date, following on from the previous update report. The Trust are asking for support to make this pilot a permanent change in service.

Recommendations

3.9 Members confirm:

a. If they support the proposal for a change in use of the Stefano Olivieri Unit from an acute organic ward to a needs-based service for older patients with functional illness, and the resultant reduction in the number of organic beds in use, following the pilot project.

b. Whether they require any further information on this issue.

4. Solent NHS Trust: Proposed Closure of Baytrees Detoxification Unit

Context

4.1 The NHS, or any provider of NHS services, is required to consult the health scrutiny committee on any substantial or temporary variations to the provision of the health service, and to provide any information that the committee may require to enable them to carry out scrutiny of the planning, provision and operation of this service.

Background

4.2 The Baytrees inpatient unit in Portsmouth provides residential detoxification programmes for people with drug and/or alcohol issues. The unit, provided by Solent NHS Trust, comprises 23 beds and was historically funded through two block contracts: one with Portsmouth City Council (PCC) for 11 beds, the second with Hampshire County Council (HCC) for 11 beds. The remaining (accessible) bed was historically used flexibly.

4.3 PCC cancelled their block contract arrangement with Solent in April 2013 and entered into a framework agreement. Bed occupancy reduced further from July 2015, after the contract for Hampshire substance misuse services was transferred from Solent to a new provider, following a competitive tender process. The change in contracts and change in demand for inpatient detoxification services has resulted in the unit not receiving referrals to the levels previously experienced.

4.4 A background briefing from Hampshire County Council's Public Health team on the closure of Baytrees and the alternative models of care for those in Hampshire who have a complex substance misuse need is attached as Appendix 5 (page 179).

Update

4.5 In January 2016, Solent NHS Trust's Board concluded that the Baytrees service would not have a sustainable future. It was agreed that the Trust cannot sustain the current position whereby other services would need to make savings in order to cover a loss-making service.

4.6 A report from Solent NHS Trust is attached as Appendix 6 (page 183). This sets out that the Trust has committed not to close the Unit until after the end of the financial year.

4.7 The Portsmouth Health Overview and Scrutiny Committee (HOSC) considered this item on 23 February 2016 and agreed that the closure did not constitute a substantial change in service, owing to the small number of beds affected and the alternative services available for those requiring detoxification. They further understood that it was inefficient to continue to operate a health service which was not sustainable in the long term.

Recommendations

4.8 Members confirm:

a. Whether the proposals constitute a substantial change in service for Hampshire patients.

b. If they are satisfied with the next steps proposed by Solent NHS Trust.

c. Whether they require any further information on this issue.

CORPORATE OR LEGAL INFORMATION:

Links to the Corporate Strategy

A. Hampshire safer and more secure for all:	yes
Corporate Improvement plan link number (if appropriate):	
B. Maximising well-being:	yes
Corporate Improvement plan link number (if appropriate):	
C. Enhancing our quality of place:	yes
Corporate Improvement plan link number (if appropriate):	

Section 100 D – Local Government Act 1972 – background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

Document	Location
None	

IMPACT ASSESSMENTS:

1. Equalities Impact Assessment:

1.1 This is a covering report which appends reports under consideration by the Committee, therefore this section is not applicable to this covering report. The Committee will request appropriate impact assessments to be undertaken should this be relevant for any topic that the Committee is reviewing.

2. Impact on Crime and Disorder:

2.1 This is a covering report which appends reports under consideration by the Committee, therefore this section is not applicable to this covering report. The Committee will request appropriate impact assessments to be undertaken should this be relevant for any topic that the Committee is reviewing.

3. Climate Change:

3.1 How does what is being proposed impact on our carbon footprint / energy consumption?

This is a covering report which appends reports under consideration by the Committee; therefore this section is not applicable to this work report. The Committee will consider climate change when approaching topics that impact upon our carbon footprint / energy consumption.

3.2 How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

This is a covering report which appends reports under consideration by the Committee, therefore this section is not applicable to this work report. The Committee will consider climate change when approaching topics that impact upon our carbon footprint / energy consumption.

Appendix 1

Health Overview and Scrutiny
Briefing paper

Title: Business case for development of a vascular network for Hampshire

Purpose of paper:

- To present the case for change for sustainable vascular arterial services in Hampshire/Isle of Wight which consistent with the NHS England Service Specification for Vascular Services.

- To brief members about the communications and engagement strategy to support the above.

Brief Summary:

1. The last overview and scrutiny update was in October 2015, following a review by the Vascular Society of Great Britain and Northern Ireland (VSGB).

   Since that update, NHS England has been working with partners to develop a business case which includes an options appraisal for vascular services.

2. The business case has been assessed through NHS England's internal assurance process and a preferred option agreed. NHS England's intention is to deliver these services as a network involving University Hospital Southampton (UHS) as the hub, with Queen Alexandra Hospital, Portsmouth (PHT), and St Mary's Hospital, Isle of Wight and the Royal Hampshire County Hospital, Winchester as spokes.

Background and Key issues:

1. A vascular network exists in Hampshire with University Hospital Southampton (UHS) as a major arterial centre (hub) and St Mary's Hospital, Isle of Wight and the Royal Hampshire County Hospital, Winchester as spokes. Major arterial surgery is currently also delivered at PHT.

2. Neither UHS nor PHT are able to meet the service specification for vascular services

3. Attempts over several years to resolve these issues have not succeeded largely due to concerns that change would put interdependent services at PHT at risk

4. A review by the vascular society in 2015 recommended a network solution with a single hub at UHS. This review established the clinical evidence-base for change

5. Since the Vascular Society Review, capacity at PHT has worsened due to difficulty in recruiting a replacement surgeon. This results in unsustainable demand in terms of workload and out of hours cover for the remaining vascular surgeons. A contingency plan is being jointly developed by UHS and PHT to support the on-call vascular surgical rota at PHT and ensure the service remains safe in the event of further reduction in capacity.

6. Issues relating to interdependent services at PHT have been addressed by describing a networked solution which will deliver a high level of vascular surgical support on the PHT site which at least matches the current provision.

7. Engagement with CCGs, clinicians and vascular surgeons in Wessex has led to strong clinical consensus around the case for change and the development of a nascent clinical network

8. UHS has developed a high-level capacity plan to deliver the required activity

9. NHS England proposes to engage with patients about their current experience of services and to consider how the evolving service model can improve that patient experience.

Actions required:

1. Members are asked to consider the business case which now has clinical approval

2. Members are asked to note the communications and engagement plan

BUSINESS CASE

Project Name:	Vascular Services Reconfiguration: Tranche 1		
Date:		**Release:**	Draft
Author:	Wessex Vascular Project team		
Owner:	Dominic Hardy		
Client:	NHS Wessex		
Document Number:	V3.4		
Issue Date:	07th March 2016		

Revision History

Revision Date	Summary of changes	Changes Marked
04/02/2016	The resolution of two key issues, namely availability of capacity at UHS and expert clinical opinion on whether PHT interdependent services require 24/7 on site emergency vascular services, has fundamentally changed the recommendations of previous drafts.	

Approvals

This document requires the following approval(s). A signed copy should be placed in the project files.

Name	Signature	Title	Date of Issue	Version
Dominic Hardy				**V3.1**

Distribution

This document has been distributed to:

Name	Title	Date of Issue	Version

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Abbreviations

AAA	Abdominal Aortic Aneurysm
CCG	Clinical Commissioning Group
CEA	Carotid Endarterectomy
EVAR	Endovascular Aneurysm Repair
HASC	Health and Adult Services (Overview and Scrutiny) Select Committee
HDU	High Dependency Unit
HHT	Hampshire Hospitals Trust
HOSP	Health Overview & Scrutiny Panel
IOW	St Mary's Hospital, Isle of Wight
IR	Interventional Radiologists
ITU	Intensive Therapy Unit
MAC	Major Arterial Centre
MDT	Multi-Disciplinary Team
MTC	Major Trauma Centre
NAC	Non-Arterial Centre
NCAT	National Clinical Advisory Team
NCEPOD	National Confidential Enquiry into Patient Outcome and Death
NSS	National Service Specification
NVD/NVR	National Vascular Database / National Vascular Registry
ODN	Operational Delivery Network
PCI	Percutaneous Coronary Intervention
PHT	Portsmouth Hospital NHS Trust
POVS	The Provision of Services for patients with Vascular Disease
R&D	Research and Development
rAAA	Ruptured Abdominal Aortic Aneurysm
RHCH	Royal Hampshire County Hospital, Winchester
SOTW	Surgeon of the Week
SWOT	Strengths, Weaknesses, Opportunities, Threats
TIA	Transient Ischaemic Attack
UHS	University Hospital Southampton NHS Foundation Trust
VSGBI	Vascular Society of Great Britain and Ireland
WSH	Western Sussex Hospitals Trust

Purpose of Document

The purpose of the Full Business Case is to evaluate the progress towards reconfiguration of vascular services in Southern Hampshire, to identify business options, and to recommend the option which provides the most desirable, viable and achievable benefits. The Business Case presents the business justification behind this recommendation to support informed decision making.

1. Executive Summary

In March 2013, the National Service Specification[1] (NSS) for Specialised Vascular Services was issued for adoption from October 2013 (See Appendix A). The report states "There is a strong evidence base that suggests that mortality from elective aneurysm surgery is significantly less in centres with a high caseload than in units that perform a lower number of procedures".

NHS Wessex established a Vascular Programme in April 2014. The overall objective of the programme is to align vascular services across Wessex with the NSS. The scope of this project, Tranche 1, includes vascular services across Southern Hampshire, with emphasis upon the provision of services at University Hospital Southampton NHS Foundation Trust (UHS) and Portsmouth Hospital NHS Trust (PHT).

Reviews of the reconfiguration of vascular services began in 2008 and there have been various reports and recommendations since that date. However, given the changes and advances which have occurred to date, this business case will concentrate on recent issues. The current configuration is that UHS acts as a hub in a network (Wessex Vascular Network (WVN)) with Royal Hampshire County Hospital (RHCH) Winchester and Isle of Wight Trust (IOW) as spokes, and that PHT operates as an arterial centre in its own right.

The Preliminary Business Case recommendation in March 2014 was that all arterial services be centralised at UHS, with PHT becoming a spoke hospital in the network and with a phased transfer of procedures to UHS. When this proposal was presented to Portsmouth Health Oversight and Scrutiny Panel (HOSP) they identified it as a 'significant change' which would require full public consultation.

A strategic review undertaken following the HOSP presentations identified that further impact analysis was required as several key issues were identified:

- **Patient outcomes**: Historical data suggested that PHT outcomes were a cause for concern. Data for the last two years shows, however, that NSS target outcomes are met or exceeded and the mortality from AAA and CEA elective procedures is 0% (see Appendix B Outcomes Data).
- **UHS Capacity:** UHS identified that additional capacity was not currently available to allow the transfer of vascular services from PHT to UHS and would require new funding to be put in place. UHS estimated a minimum of 24 months to build capacity required.
- **PHT interdependent services:** The issue of interdependencies highlights the dichotomy involving the provision of vascular services in Southern Hampshire. UHS is a major trauma centre and major cardiac centre, whilst PHT hosts a regional renal and transplant centre and hyper acute stroke unit.
- **Workforce resilience and sustainability:** Without doubt, from the perspective only of resilience and sustainability, a single site operation would provide both, and a far less onerous on call ratio. Equally, both sites are currently at risk if a key member of the vascular team becomes incapacitated.

A draft Business Case published on 1st April 2015 identified that UHS did not have the capacity to undertake PHT arterial services (and no investment budget to provide capacity). Further, PHT believed that interdependent services required on-site emergency vascular services. UHS expressed their disagreement with this view, believing vascular services could be provided from a network hub if PHT were a spoke. The recommendation was that

[1] A04/S/a 2013/14 NHS Standard contract for Specialised Vascular Services (Adults)

two arterial centres remained and worked in collaboration. This proposal was rejected by the NHS England South Regional Senior Management Team (SMT) as not compliant with the NSS.

Following a review, Fiona Dalton, Chief Executive UHS, identified that UHS had undergone a bed modelling exercise and now believed that they would be able to develop capacity required, and had identified the capital investment required both for vascular ward expansion and for the hybrid theatre build.

This left a fundamental difference of clinical opinion between the two sites as to whether PHT interdependent services required 24/7 on site emergency vascular services, or whether this could be provided by UHS as a Major Arterial Centre (MAC), acting as a network hub. To resolve this question, the Vascular Society (VS) were invited to undertake an expert clinical review.

Paul Blair (President) and Rob Sayers (Vice President (elect)) of the VS undertook a review of Southern Hampshire vascular services, specifically UHS and PHT, on 19th and 20th August 2015. Their findings were:

"*Currently both units are not POVS compliant – Portsmouth have problems with the on call surgical rota and Southampton lack Vascular Radiology*

In terms of the future – it would be possible to make both units POVS compliant and stand alone. This would involve Portsmouth providing vascular services for Chichester and both units would require substantial investment with consultant appointments and development of facilities. However this model would probably only be sustainable in the short term. In the long term both units may have difficulty in recruiting consultants and trainees and 7 day working would need more consultants on a 1 in 8 rota or greater.

The alternative and more appropriate long term sustainable option would be centralisation of services on the Southampton site. This option would likely lead to a high class vascular facility but would require capacity and resource issues to be addressed."

UHS is a designated Major Trauma Centre (MTC) and, as determined by the NHS Standard Contract[2], must provide vascular services; this obviates the consideration of PHT as the sole vascular hub of the network. 'Do nothing' is not an option as neither UHS nor PHT currently provide a compliant service. The two options evaluated in this Business Case (Version 3.1) are:

- **Single Major Arterial Centre (MAC):** All arterial services to be delivered at UHS, with PHT joining the existing operational network which has UHS as a hub, as a Non-Arterial Centre (NAC), in addition to the existing spokes (Winchester and IoW).

- **Two Major Arterial Centres :** UHS and PHT continue as arterial centres, but collaborate to maximise efficiencies, resource utilisation and to provide improved clinical services

Neither UHS nor PHT currently provide a compliant vascular service. As standalone centres, neither provide a 1:6 vascular surgeon and vascular interventional radiologist emergency on call. The loss of a vascular surgeon at PHT in October 15 has made the emergency on call rota unsustainable. PHT would currently need to recruit four additional surgeons to become

[2] D15/S/a NHS Standard Contract for Major Trauma Service (All ages)

a viable centre. PHT have been unable to recruit either a permanent or locum vascular surgeon to date.

Cost/benefit analysis suggests that, as standalone centres, to facilitate a 1:6 vascular surgeon and vascular interventional radiologist on call rota, both sites would operate at a loss. Neither site would have contingency. Further, the number of procedures to maintain professional competency would be marginal. Neither network can afford to invest sufficiently to become fully compliant without additional income. The targets set by the VS for AAA are for each surgeon to undertake a minimum of 10 cases per year. Currently 4 at UHS and 1 at PHT are shown to have averaged this in the latest VSQIP outcomes.

All expert clinical reviews undertaken since 2009 have recommended that PHT join UHS in a network, with major arterial services being provided by UHS The lead vascular surgeons at PHT (Mark Pemberton) and UHS (Mike Phillips) are unanimous in their view that the strategic solution is to have one network with UHS as the MAC and PHT as a NAC. In the preface to their clinical vision they state:

"***The Wessex Vascular Network: Clinical Vision***

This is a document to mark out the clinical vision for a network to provide vascular services to Wessex. This area includes the cities of Portsmouth, Southampton and Winchester, the Isle of Wight and most of Hampshire and Guernsey. The population served is approximately 2 million.

There will be one arterial centre ('hub') based at University Hospital Southampton (UHS) with non-arterial centres ('spokes') at Queen Alexander Hospital (QA) in Portsmouth, Royal Hants County Hospital (RHCH) at Winchester and St Marys Hospital on the Isle of Wight.

There will be tertiary services provided to Dorset, Wiltshire and Sussex.

In accordance with the recent Vascular Society report provided to NHS England (Wessex) and the Provision of Services with Vascular Disease 2015, all arterial work (aneurysms, carotid surgery, bypasses, major amputations, and more) will be undertaken at the arterial centre. All patients with urgent and emergent vascular disease will be treated here as well.

The majority of patients, however, will continue to be cared for in the non-arterial centres close to where they live. This will be in out patients, day case surgery, rehabilitation and recovery and day case vascular radiology."

The challenges which will face vascular networks in terms of seven day working, workforce sustainability and sub-specialisation (and the migration from open surgery to endovascular procedures), together with infrastructure investment, are likely to prove prohibitive for smaller networks to provide comprehensive vascular services and remain financially viable. In addition, in a highly competitive environment with workforce shortages, it is likely to prove increasingly difficult to recruit surgeons and IRs when the opportunity exists to join larger world class centres – in which the trainees will be concentrated.

It is recommended that the VS case for moving to a sustainable long term solution of a single hub with a strong network integrating clinical pathways across Hampshire be implemented.

UHS has committed to develop capacity and infrastructure to absorb the totality of PHT arterial services. Initial estimates indicate 1st December 2016 as the earliest date at which transfer could take place. The development of the detailed capacity and transfer plans will be

closely monitored and assured; there will be no compromise on quality in favour of timescales.

The recent VS review identified that "*There are busy and successful co-dependencies (diabetic foot services, nephrology and urology) that would require significant support if Portsmouth was to become a spoke hospital*". The VS confirmed that none of these services required on site 24/7 vascular services and that this could be provided by a network hub. There will be a significant requirement for on-site vascular surgeon presence (2-3 surgeons) during normal working hours.

Both hospitals have experienced difficulties in providing 24/7 IR on call rotas. POVS15 identifies "*There is currently a particular shortage of practitioners trained to deliver endovascular therapies out of normal working hours. Collaborative, network wide, on call rotas combining interventional vascular radiologists and endovascular trained surgeons are potential solutions to this problem and need to be developed further.*" A pooling of resources should provide a network wide solution.

The model is assessed in Table 1 NHS England Four Tests:

Table 1: NHS England Four Tests

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
4 key tests	• Support from GP commissioners will be essential	• All CCGs (Southampton City, Portsmouth, West Hampshire, Fareham & Gosport and South East Hampshire) are represented on the governing Vascular Steering Group (VSG) and Vascular Implementation Board (VIB) which consider and approve recommendations (with decisions minuted as appropriate).
	• Arrangements for public and patient engagement, including local authorities should be strengthened	• A Comms and Engagement Strategy has been developed, including stakeholder mapping and outline plans for full public consultation if required. Local HASC/HOSPs are regularly updated and proposals will be presented following SMT approval. It should be noted that in March 2014, Portsmouth HOSP requested a full public consultation. Detailed plans are currently being developed for public engagement with regard to recommendations for a strategic network solution.
	• Clarity about the clinical evidence base underpinning proposals	• The Vascular Society (VS) POVS15[3] states: "*The current Vascular Society advice, based on sound clinical evidence, is that high quality vascular care in the UK is best delivered with the establishment of integrated vascular networks. Such networks should decide upon a single hospital which will provide arterial surgery and complex endovascular interventions. The other hospitals in the network need to continue to provide the*

[3] Vascular Society of Great Britain and Ireland "The Provision of Services For Patients with Vascular Disease 2015"

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
	• Proposals take into account the need to develop and support patient choice	*following clinical support: - vascular clinics; diagnostics; interventions such as renal access and varicose vein procedures; review of in-patient vascular referrals; and rehabilitation. Day-case (23-hour stay) peripheral angioplasty and stenting can also be performed at these local sites. This provides the patient with direct local access to the vascular service. The network will function best for the patient when travel to the arterial centre is only for specific arterial and complex endovascular interventions. The pre- and post- procedure care related to these interventions should be delivered whenever possible at the local non-arterial centre*." • Patients in the Wessex Area do not currently have access to a fully compliant vascular network. The recommendations for a strategic Wessex network with UHS as the MAC intends to provide patients with the choice to access a fully compliant vascular network.

2. Reasons

2.1 Background

Vascular services are for people with disorders of the arteries and veins. These include narrowing or widening of arteries, blocked vessels and veins, but not diseases of the heart and vessels in the chest. These disorders can reduce the amount of blood reaching the limbs or brain, or cause sudden blood loss if an over-stretched artery bursts. Vascular specialists also support other medical treatments, such as major trauma, kidney dialysis and chemotherapy.

Complex Vascular surgery covers:

- Abdominal Aortic Aneurysms (AAA)
- Screening people for AAA
- Strokes (such as Carotid Endarterectomy (CEA) or Transient Ischaemic Attacks (TIAs or mini-strokes))
- Poor blood supply to the feet or legs

There are also roles for vascular surgery supporting other major specialities e.g. trauma, neurosurgery, cardiac surgery, dermatology, clinical laboratory services, nephrology, plastic surgery, and other disciplines.

The Vascular Society of Great Britain and Ireland (VS) produced "The Provision of Services for Patients with Vascular Disease 2012" (POVS 12) as the definitive standard for the provision of vascular services. An addendum was issued in 2014, and a further update was issued in November 2015 (POVS 15). POVS is the document upon which the National Service Specification[4] (NSS) for Vascular Services is based. The POVS 15 Executive Statement states:

"1.1. The Vascular Society of Great Britain and Ireland is actively engaged in providing patients with vascular disease the best possible world-class care. The clinical vascular service should be patient focussed and configured to deliver the best possible outcomes. For elective and emergency vascular interventions it is important that the lowest possible morbidity and mortality rates are achieved. Patients should not be denied timely access to effective interventions due to poorly organised networks and referral pathways. The recommendations in this document give detailed guidance relating to all aspects of service organization and structure. The aim is to assist commissioners, clinicians and service providers to deliver the best possible care for their vascular patients.

1.2. The current Vascular Society advice, based on sound clinical evidence, is that high quality vascular care in the UK is best delivered with the establishment of integrated vascular networks. Such networks should decide upon a single hospital which will provide arterial surgery and complex endovascular interventions. The other hospitals in the network need to continue to provide the following clinical support: - vascular clinics; diagnostics; interventions such as renal access and varicose vein procedures; review of in-patient vascular referrals; and rehabilitation. Day-case (23-hour stay) peripheral angioplasty and stenting can also be performed at these local sites. This provides the patient with direct local access to the vascular service. The network will function best for the patient when travel to the arterial centre is only for specific arterial and complex endovascular interventions. The pre- and

[4] A04/S/a 2013/14 NHS Standard contract for Specialised Vascular Services (Adults)

post- procedure care related to these interventions should be delivered whenever possible at the local non-arterial centre.

1.3. Concentrating arterial surgery and more complex endovascular interventions in one arterial centre has a number of benefits. Evidence shows that clinical outcomes are improved with increasing volumes of procedures. Sustainable on-call rotas can be achieved and effective multi-professional training is facilitated. Lack of exposure to sufficient numbers of training opportunities is the biggest problem facing current trainees. This problem is perpetuated when the training opportunities are distributed around a number of providers performing small numbers of cases in a regional network. Finally there are significant economic benefits to be gained by avoiding the replication of expensive technology and staff in hospitals throughout the network. 1.4. The high volume arterial hospital for the network should provide the following facilities:

a) *A 24/7 consultant on-call rota for vascular emergencies of 1:6 or greater, covered by a combination of vascular surgeons and interventional radiologists to ensure adequate care.*
b) *A 24/7 critical care facility with ability to undertake mechanical ventilation and renal support and with 24/7 on-site anaesthetic cover.*
c) *Wards for dedicated vascular patients should be available.*
d) *At least one endovascular theatre or theatre specification endovascular suite is required, preferably with high quality imaging, advanced applications, and a dedicated X-ray table. (MHRA guidance)*
e) *A minimum number of 60 AAA and 40 carotid procedures (elective and emergency) are undertaken per annum. It is recommended that hospitals performing fewer cases than this, averaged over a 3 year period, should not continue to offer these procedures. Commissioners should monitor these numbers in the round.*
f) *The population covered by the network should be sufficient to generate the required volume of procedures at the arterial centre. A minimum of 800,000 is usually required for this.*
g) *An on-site vascular laboratory should be available.*
h) *Hospitals, vascular surgeons and interventional radiologists should submit cases to the National Vascular Registry (NVR) and publish their outcomes in line with the National HQIP programme. Actions should be taken to ensure all outcomes are satisfactory*
i) *Vascular surgeons should undertake regular review of their practice and outcomes (morbidity and mortality / governance meetings).*

1.5. Network care requires well organised, co-ordinated working between all units. When planning and organising a new vascular network, the full patient pathway from primary care through to central intervention and return for rehabilitation needs to be clear. Practical and functional emergency and elective pathways should be developed. Emergency transfer arrangements need to be robust. These can follow trauma network principles and national published guidance for ruptured aneurysms.

1.6. The surgical clinical commitments across the network should be shared between the vascular consultants as much as possible, with most having sessions at both the arterial and non-arterial centres. Consideration should be given to other health care professionals involved in vascular care (interventional radiologists, specialist nurses, podiatrists, scientists) working in a similar cross site manner. As networks develop, manpower planning and training will be increasingly important to deliver the correct numbers of these skilled professionals to maintain the service.

1.7. Many patients with vascular disease are elderly with a number of associated co-morbidities. A multidisciplinary multi-professional approach to their care is required.

Increasingly, input from other specialists such as diabetes, stroke and elderly care will be central to providing the best care in all units of the network.

1.8. Less invasive treatment options can be advantageous and endovascular technology is constantly evolving to provide new treatment options. For a high quality service vascular surgeons and interventional vascular radiologists need to collaborate and lead effective teams in order to provide the necessary range of interventions on a 24/7 basis.

1.9. In some units complex endovascular procedures are performed by appropriately trained endovascular surgeons while in other centres surgeons and interventional radiologists work together for certain procedures such as EVAR. Providing the arterial centre has appropriately trained clinicians and has satisfactory audited outcomes that meet national guidelines, endovascular interventions may be performed by vascular surgeons or interventional radiologists.

1.10. There is currently a particular shortage of practitioners trained to deliver endovascular therapies out of normal working hours. Collaborative, network wide, on call rotas combining interventional vascular radiologists and endovascular trained surgeons are potential solutions to this problem that need to be developed further.

1.11. The service described above requires good leadership, governance, management and administrative support. Clinical and governance lead roles should exist with responsibility across the network. The clinical pathways in place should be documented and audited. Facilities and time in job plans for regular MDT meetings and, if required, travel across the network is required. Submission of data to national registries and network co-ordination needs administrative support.

1.12. In summary, the Vascular Society believes that every patient has the right to consult with a vascular surgeon close to their local hospital, but they may have to travel to obtain access to more complex diagnostic and interventional facilities. Only in this way can equality of access and the patients' desire for a local service be delivered alongside the best possible elective and emergency outcomes for individual patients."

The NSS states that all Trusts that provide a vascular service must belong to a vascular provider network and it is envisaged that all arterial surgery will be provided at a vascular centre. The network must:

- Work towards the aim of all leg amputations being undertaken in arterial centres by 2015
- Provide 24/7 in-patient arterial surgery and vascular interventional radiology with an on call rota for vascular emergencies covered by on site vascular surgeons and vascular interventional radiologists (requiring a minimum team of six of each)
- Cover a population to enable each surgeon to perform at least 10 AAA procedures per annum (guideline 800k).
- A 24/7 vascular interventional radiology rota may need to be organised on a network wide basis to ensure services for interdependent specialities are not destabilised.
- Have a specialist vascular multi-disciplinary team (MDT)
- Provide specialist infrastructure and facilities including Outpatient Clinics, Vascular Laboratory, Vascular Ward, operating theatres, Anaesthesia, Intensive treatment Unit and Limb Fitting Service
- Document care pathways
- Provide for co-dependent, interdependent and related services, and relevant networks and screening programmes e.g. AAA screening

In addition, The Royal College of Surgeons has designated vascular surgery as a speciality meaning general surgeons can no longer treat vascular patients.

2.2 History

NHS Wessex established a Vascular Programme in April 2014. The overall objective of the programme is to align vascular services across Wessex with the NSS. The scope of this project, Tranche 1, includes vascular services across Southern Hampshire, with emphasis upon the provision of services at UHS and PHT.

2.2.1 Reviews undertaken

In December 2008 a review began to determine the best solution for providing vascular services across Southern Hampshire. Given the changes and advances which have occurred to date, this business case will not delve into the various papers and recommendations but will reference three key papers. The first of which is the National Clinical Advisory Team (NCAT) Report: Vascular Services Review - South Central 7 October 2011 (see Appendix C). The second is the Wessex Clinical Senate: Recommendations on Vascular Surgery in South East Hampshire 26 September 2013 (see Appendix D). The third is the Vascular Society Review 19th / 20th August 2015 (see Appendix E).

2.2.2 NCAT Report: Vascular Services Review - South Central 7 October 2011

The NCAT report reviewed what NHS South Central was then but for the purposes of this report, only findings relating to UHS and PHT are within scope.

In terms of Case for Change, Section 4.8 of the report identified that a service specification was outlined in 2010 following the convening of two clinical expert panels which recommended a configuration in the South of the region where UHS would act as the hub. The spoke hospitals would include the Royal Hampshire County Hospital (RHCH) (Winchester), The Queen Alexandra Hospital at Portsmouth (PHT) and St Mary's Hospital on the Isle of Wight (IOW).

Section 4.9 identified that, following patient and public engagement, an alternative proposal was the PHT would remain as a separate vascular hub. There was some discussion as to whether Chichester might be a spoke to PHT, but it was considered likely those Chichester patients and surgeons would move to a vascular hub in Brighton.

In terms of Discussion the following sections are considered key:

"6.7. The proposal for an arterial hub in Southampton appears well founded and robust. There appear to be sufficient surgeons in Southampton to be able to provide 24 hour cover, especially supplemented by surgeons from Portsmouth. As with the potential reconfiguration in the north of region, the capacity issues that will face Southampton if Portsmouth joins as a spoke Hospital should not be under estimated. The transfer of arterial inpatient work from Portsmouth to Southampton would mean a virtual doubling of the number of inpatient arterial operations performed at Southampton. Again, extremely robust and detailed capacity planning and assurances will be needed prior to the transfer of any work from Portsmouth to Southampton.

6.8. The additional proposal that came from patient and public consultation was that Portsmouth should be an arterial hub in its own right. Certainly, Portsmouth has a reasonably busy inpatient arterial practice and has a case load that would be close to that seen in a smaller arterial hub in the rest of the UK. Portsmouth does appear to have

manpower issues with a relatively low number of full-time equivalent Consultant Arterial Surgeons. Given the (present) relatively low number of Consultant Surgeons, it does not appear likely that Portsmouth would be a viable arterial hub in the long term without substantial manpower investment. The Commissioners have indicated that long term sustainability is an issue in this current reconfiguration. There was some discussion about whether Chichester would join Portsmouth as a spoke to Portsmouth hub. If this were possible then Portsmouth might attain a critical mass of both patients and surgeons to allow long term sustainability as an arterial hub.

6.9. One of the constant issues that accompany any reconfiguration of inpatient arterial services is the impact that these reconfigurations have on existing services in the spoke Hospitals. This will affect all potential spoke Hospitals in the region, but would be of particular concern in Portsmouth. Portsmouth has a very large inpatient renal practice which does require vascular input. In all of the spoke hospitals, job plans and working practices would need to recognise the co-dependencies and it would be important, in all of the spoke hospitals, but particularly in Portsmouth, that there is a defined vascular surgical presence during the week. The requirement for the number of hours per week will obviously vary according to the hub. In Portsmouth, it is likely that a Vascular Consultant would need to be on site for all of the working week."

The report concludes:

"that in the South Central region there should be no more than four arterial hubs (Southampton, Oxford, Frimley Park Hospital and Portsmouth), but that two would generate internationally competitive centres with long term sustainability.
If there were only two hubs (Southampton and Oxford), there would need to be a rigorous and robust assurance of capacity planning.
PHT would require a significant investment in manpower to have a long term sustainable future as an arterial centre in the absence of acquiring both patients and consultants from Chichester.
The effects of centralising inpatient arterial surgery needs to be modelled for the provision of interventional radiology both at the hubs and the spoke."

The report recommended that an action plan be agreed based upon the conclusions and that any new proposals which come out of patient and public consultation should be subject to advice from an expert panel.

2.2.3 Wessex Clinical Senate: Recommendations on Vascular Surgery in South East Hampshire 26 September 2013

The recommendations made by the Senate can be found in Appendix D. Key recommendations were that:

Services for patients in South East Hampshire requiring vascular expertise should be provided by a single clinical service across PHT and UHS.
As a matter of urgency a single rota for emergency seven day vascular assessment and interventions should be established.
As a matter of urgency, all emergency and elective major inpatient interventions (such as AAA repair, symptomatic and ruptured aneurysm treatment) should be delivered at UHS.

2.2.4 Health Overview & Scrutiny Panel Proposals March 2014

In March 2014, a further report[5] was presented to the area Health Overview & Scrutiny Panels (HOSPs) of Portsmouth, Southampton and Isle of Wight, and to Hampshire Health and Adult Services (Overview and Scrutiny) Select Committee (HASC), to determine whether proposals would be considered a 'significant change' requiring full public consultation. Various options were considered and the following recommended:

"Option 4: establish a Southern Hampshire Vascular Network and move, on a phased basis, all major complex arterial vascular surgical procedures to Southampton. (Options for surgery following a TIA or stroke (such as carotid endarterectomy CEA) and major amputations will be considered at a later date following the successful implementation of the initial phases.)"

The proposed phased implementation, referred to as 'Option 4' is shown at Appendix F. Portsmouth HOSC considered this a significant change necessitating a full public consultation. At that time there was a vigorous and sustained press campaign in Portsmouth to retain vascular services at PHT.

2.2.5 Vascular Society Review 19th / 20th Aug 2015

On 1st April 2015, a draft Business Case was issued which concluded in the Executive Summary:

"A strategic review undertaken following the HOSP presentations identified that further impact analysis was required before any option could be recommended. The NSS states that "All Trusts that provide a vascular service must belong to a vascular provider network and it is envisaged that all arterial surgery will be provided at a vascular centre"; it has been established that 'do nothing' is not a viable option.

Further, it has been established that 'world class' centres might be achieved by centralising vascular services if the capacity exists to do so, interdependent services are not compromised and patients receive equitable service with emergency travel times not exceeding one hour.

UHS is a designated Major Trauma Centre (MTC) and, as determined by the NHS Standard Contract[6], must provide vascular services; this obviates the consideration of PHT as the sole vascular hub of the network.

The two options being evaluated in this business case are:

- ***Centralised Model:** All arterial services to be delivered at UHS, with PHT joining as a spoke the existing operational network which has UHS as a hub*
- ***Collaborative Model:** UHS and PHT continue as arterial centres in their own right, but collaborating to maximise efficiencies and resource utilisation*

In recognition of the timeframe to date in attempting to resolve this matter, and of the fact that, if a collaborative model is the preferred solution then benefits could accrue immediately, UHS and PHT agreed to enter into a pilot collaboration. The pilot will continue to explore opportunities until a decision has been made regarding strategic direction.

Several key issues informing the recommendation of strategic direction were identified:

[5] 20140311_HOSC paper March 2014 final

[6] D15/S/a NHS Standard Contract for Major Trauma Service (All ages)

- ***Patient outcomes****: Historical data suggested that PHT outcomes were a cause for concern. Data for the last two years shows, however, that NSS target outcomes are met or exceeded and the mortality from AAA and CEA elective procedures is 0% (see Appendix B Outcomes Data).*
- ***UHS Capacity:*** *UHS have identified that additional capacity is not currently available to allow the transfer of vascular services from PHT to UHS and would require new funding to be put in place. UHS estimate a minimum of 24 months to build capacity required.*
- ***PHT interdependent services:*** *The issue of interdependencies highlights the dichotomy involving the provision of vascular services in Southern Hampshire. UHS is a major trauma centre and major cardiac centre, whilst PHT hosts a regional renal and transplant centre and hyper acute stroke unit.*
- ***Workforce resilience and sustainability:*** *Without doubt, from the perspective only of resilience and sustainability, a single site operation would provide both, and a far less onerous on call ratio. Equally, both sites are currently at risk if a key member of the vascular team becomes incapacitated.*

As the impact of these key issues needs to be understood before determining a final strategic choice, work to this point has focussed on understanding these issues in more depth.

It is not currently feasible to centralise arterial services at UHS. Whilst this does not strategically preclude this option, weight of evidence suggests that, notwithstanding the strategic guidance regarding centralisation of vascular services on a single high volume site in the modern clinical network, it is considered that there is a compelling case for arterial services to remain at PHT, and for UHS and PHT to form a twin-hub collaborative vascular network."

This recommendation that two arterial centres remained and worked in collaboration was rejected by the NHS England South Regional Senior Management Team (SMT) as not compliant with the NSS.

Following a review , Fiona Dalton, Chief Executive UHS, identified that UHS had undergone a bed modelling exercise and now believed that they would be able to develop capacity required, and had identified the capital investment required both for vascular ward expansion and for the hybrid theatre build.

This left a fundamental difference of clinical opinion between the two sites as to whether PHT interdependent services required 24/7 on site emergency vascular services, or whether this could be provided by UHS as a MAC, acting as a network hub. To resolve this question, the VS were invited to undertake an expert clinical review.

Paul Blair (President) and Rob Sayers (Vice President (elect)) of the VS undertook a review of Southern Hampshire vascular services, specifically UHS and PHT, on 19th and 20th August 2015. Their findings were:

"*Currently both units are not POVS compliant – Portsmouth have problems with the on call surgical rota and Southampton lack Vascular Radiology*

In terms of the future – it would be possible to make both units POVS compliant and stand alone. This would involve Portsmouth providing vascular services for Chichester and both units would require substantial investment with consultant appointments and development of facilities. However this model would probably only be sustainable in the short term. In the

long term both units may have difficulty in recruiting consultants and trainees and 7 day working would need more consultants on a 1 in 8 rota or greater.

The alternative and more appropriate long term sustainable option would be centralisation of services on the Southampton site. This option would likely lead to a high class vascular facility but would require capacity and resource issues to be addressed. The success of this centralised model would require-

1. ***Significant cooperation from the vascular surgeons to provide adequate services at the hub and spoke hospitals.***
2. ***Capacity issues at Southampton to be addressed.***
3. ***A clinical lead to be agreed and appointed.***
4. ***Clear demonstration by Southampton Trust of a willingness to invest and develop vascular services.***
5. ***A staggered merger should be avoided.***
6. ***Reconfiguration of services is difficult and can be prone to misinformation therefore early engagement between local politicians and professional bodies should take place as soon as possible in order to provide accurate information for the public through local media"***

2.2.6 Reviews summary

All expert clinical reviews undertaken since 2009 have recommended that PHT join UHS in a network, with major arterial services being provided by UHS The lead vascular surgeons at PHT (Mark Pemberton) and UHS (Mike Phillips) are unanimous in their view that the strategic solution is to have one network with UHS as the MAC and PHT as a NAC. In the preface to their clinical vision they state:

"***The Wessex Vascular Network: Clinical Vision***

This is a document to mark out the clinical vision for a network to provide vascular services to Wessex. This area includes the cities of Portsmouth, Southampton and Winchester, the Isle of Wight and most of Hampshire and Guernsey. The population served is approximately 2 million.

There will be one arterial centre ('hub') based at University Hospital Southampton (UHS) with non-arterial centres ('spokes') at Queen Alexander Hospital (QA) in Portsmouth, Royal Hants County Hospital (RHCH) at Winchester and St Marys Hospital on the Isle of Wight.

There will be tertiary services provided to Dorset, Wiltshire and Sussex.

In accordance with the recent Vascular Society report provided to NHS England (Wessex) and the Provision of Services with Vascular Disease 2015, all arterial work (aneurysms, carotid surgery, bypasses, major amputations, and more) will be undertaken at the arterial centre. All patients with urgent and emergent vascular disease will be treated here as well.

The majority of patients, however, will continue to be cared for in the non-arterial centres close to where they live. This will be in out patients, day case surgery, rehabilitation and recovery and day case vascular radiology."

2.3 Current Status

Southern Hampshire Vascular Network:

UHS	University Hospital Southampton NHS Foundation Trust	HUB
	HHT Hampshire Hospitals NHS Foundation Trust	
	RHCH Royal Hampshire County Hospital, Winchester (some Andover War Memorial Hospital patients referred via Winchester to UHS)	SPOKE
	IOW Isle of Wight Trust	SPOKE
PHT	Portsmouth Hospital NHS Trust	ARTERIAL CENTRE

UHS acts as a MAC, providing all arterial interventions for Winchester and IOW, with outpatient assessment, diagnostics and vascular consultations being undertaken at the spoke hospitals.

PHT acts as an arterial centre in its own right.

Chichester is a spoke hospital in the Sussex Vascular Network (SVN), with Brighton as MAC hub. PHT has in the past provided services to Chichester and more recently provided services on an informal basis when Brighton were unable to recruit a replacement vascular surgeon to provide services to Chichester. Brighton has now successfully recruited, and services have been resumed from within the SVN.

UHS undertakes AAA screening for the network, including PHT. UHS currently covers a population of 900,000 and Portsmouth 650,000. Due to the demographics of the area, PHT undertake the required number of AAA procedures required by an arterial centre.

Table 1 Major procedure numbers for 2009/10 (HES) and 2013/14 and 2014/15 (providers).

Procedure		**UHS**			**PHT**		
		2009/10	2013/4	2014/15	2009/10	2013/14	2014/15
AAA	Open	45	52	20	32	7	18
	EVAR	25	60	61	6	41	36
	rAAA	17	14	21*	25	17	12
TOTAL AAA		87	126	102	63	65	64
CEA		113	62	71	69	52	81
Bypass Surgery		59	95	79	112	76	90
Major Amputation		30	40	34	52	71	69
TOTAL		289	323	286	286	264	306

* 4 EVAR

As part of the VS review, both UHS and PHT have undertaken a detailed Quality Assurance self-assessment.

2.3.1 UHS Compliance Assessment

UHS successfully operates as a network hub with Winchester and IoW as spoke hospitals. UHS self-assessment rates as almost fully compliant with the NSS.

The first area which UHS highlights as not fully compliant relates to a Core Standard:

"As the new speciality of vascular surgery is established provision will need to be made for the separation of vascular and general surgery with vascular surgeons only treating patients with vascular disease; this will be required at both consultant and trainee level"

UHS identify that five of six consultants are vascular only and that one consultant also supports minor paediatric activity at RHCH. The centre is recognised for vascular training.

In context, vascular surgery was established as a speciality in 2013. Prior to that, most surgeons were registered as general surgeons. The VSGBI has provided a report[7] resulting from a survey of consultant vascular surgeons (ordinary members of the VSGBI) which identifies that 74% of respondents identify themselves as Vascular Surgeons and 26% as General or Vascular surgeons. 77% of overall respondents indicated that more than 75% of their job involved Vascular Surgery.

The report also states that it cannot be assumed that all practicing Vascular Surgeons in the UK are members of the Vascular Society. It identifies that the National Vascular Registry (to which Vascular Surgeons have been expected to submit outcomes activity and data since 2008) identifies 458 surgeons undertaking AAA repair, which many consider to be an index procedure for a specialist vascular surgeon and an essential skill for a Vascular *Generalist*. It is recognised that the separation of vascular and general surgery will take place over time.

A more pressing concern is that whilst Interventional Radiology (IR) is available 24/7, vascular IR is not always available. UHS has recently recruited two vascular interventional radiologists to replace two who have left and will have a complement of 5. Recruitment and retention is an issue as there is a national shortage.

Key service outcomes for 2013/2014 (source: UHS) are tabled in Appendix B; UHS exceeds all targets for which data is available, with the exception of mortality rates resulting from lower limb amputations which is within acceptable criteria. Further work will be required on establishing the position against targets in those areas for which data is not currently available.

UHS do not have a hybrid theatre, but do have IR suites to operating theatre standards as an interim solution. Plans to build the hybrid theatre have been brought forward to 2016 calendar year and have been approved by UHS Board.

2.3.2 PHT Compliance Assessment

PHT operates as an independent arterial centre. PHT is the largest stroke and renal centre in Southern England and both are highly dependent on vascular and vascular IR services. There is a high incidence of diabetes in the population also requiring vascular services. Hospital facilities were built with this in mind.

In terms of compliance, PHT is not part of a network model in the sense of formally identified hub and spoke providers.

In October 2015, a vascular surgeon left PHT, leaving 2 vascular surgeons and one renal transplant surgeon to provide 24/7 emergency on call services. Since that time, UHS have provided some informal support at weekends. A recent recruitment campaign for a locum failed to secure a candidate and this post has been re-advertised. Attempts to recruit to

[7] Vascular Surgery UK Workforce report 2014: Results of a Survey of the Consultant Vascular Surgery Workforce in the UK: Paper 2

permanent vascular surgeon positions have been unsuccessful. PHT attribute this to the uncertainty which has dogged the service for several years. Whilst outcomes are good and 24/7 on call cover is provided, sustainability is very much in question.

As an interim measure, it has been agreed that a joint appointment will be made by UHS and PHT to the strategic network solution. This will provide additional resource to support emergency on call at PHT, but the rota will continue to be onerous (and non-compliant).

PHT have recently established a 24/7 IR cover. PHT also has 5 vascular interventional radiologists, facing the same issues as UHS.

Key service outcomes for 2013/2014 (source: PHT) are tabled in Appendix B. PHT exceeds all targets for which data is available, with the exception of mortality rates resulting from lower limb amputations which is within acceptable criteria. Further work will be required on establishing the position against targets in those areas for which data is not currently available.

PHT have purpose-built IR suites which provide the majority of facilities seen in a hybrid lab.

3. Business Options

3.1 Introduction

The NSS states that "All Trusts that provide a vascular service must belong to a vascular provider network and it is envisaged that all arterial surgery will be provided at a vascular centre"; it has been established, therefore, that ‘do nothing’ is not a viable option.

Further, it has been established that 'world class' centres might be achieved by centralising vascular services if the capacity exists to do so, interdependent services are not compromised and patients receive equitable service with emergency travel times not exceeding one hour.

The VSGBI 2014 Workforce Report estimates that the minimum number of surgeons required to provide a safe service is 1 per 150,000 population, the current ratio, with a UK population of circa 63 million and 458 surgeons in the UK on the National Vascular Registry, is approximately 1 per 137,000 and, for large tertiary centres, 1 per 100,000 may be needed. Table 2 below reflects these figures for PHT and UHS.

Table 2 Estimates of Vascular Surgeons required per capita

Network	Population	Vascular Surgeons required per capita		
		1:100k	1:137k	1:150k
UHS (including Winchester & IoW)	900k	9	6.6	6
PHT	650k	6.5	4.8	4.3
UHS + PHT	1550k	15.5	11.4	10.3
PHT with Chichester	880k	8.8	6.4	5.9

6 surgeons are required as a minimum for a viable on call rota.

According to the VSGBI 2014 Workforce report, the UK annual population is projected to increase by 4.9 million over the next 10 years, an annual average rate of growth of 0.8%.

UHS is a designated Major Trauma Centre (MTC) and, as determined by the NHS Standard Contract, must provide vascular services; this obviates the consideration of PHT as the sole vascular hub of the network.

'Do Nothing' is not an option as neither site is compliant. The key options to be evaluated are:

Single Major Arterial Centre (MAC) : All arterial services to be delivered at UHS, with PHT joining as a Non-Arterial Centre (NAC) the existing operational network which has UHS as a hub, in addition to the existing spokes (Winchester and IoW).

Two Major Arterial Centres: UHS and PHT continue as arterial centres, but collaborate to maximise efficiencies, resource utilisation and to provide improved clinical services

Tables 3 and 4 below provide a SWOT analysis of these two options.

Table 3: Single Major Arterial Centre (UHS MAC hub with PHT as NAC Spoke)

Strengths	Weaknesses
• Complies with NSS network model • Increases critical mass of population (1550k) • Strengthens core vascular team numbers, with potential to reduce on call ratio • Facilitates optimisation of resources • Larger centre can attract and sustain vascular workforce and trainees • Outcomes currently meet or exceed NSS targets (where data available) • Recommended strategic solution following an expert clinical review by the VS (supporting opinion of past expert clinical reviews) • Fully supported by clinicians • Supported by the Boards of both UHS and PHT • Supported by CCGs • Supported by GPs • Co-location of Major Trauma and Vascular Services at UHS • Future proof	• Lack of some elements of PHT management buy in • Historic Portsmouth media and public opposition to the single hub model • Increased travel time for Portsmouth patients and families • IR services are provided to most specialities and 24/7 cover needs to be maintained at both sites; this may impact the ability to have a vascular-specific IR on call. • UHS does not currently have capacity to absorb PHT arterial services and this needs to be developed • Underused high standard facilities at PHT
Opportunities	**Threats**
• Increased workforce resilience with capacity to absorb future increased workload e.g. seven day working • Increased sub specialisation • UHS to become regional 'supercentre' for complex vascular (rather than London) • Standardise pathways • Maximise efficiencies in terms of R&D, new technologies etc. and resource utilisation • Commissioners can enforce change via contracts • Merger of trusts to obviate conflicts of interest and maximise efficiencies across all areas • Utilise spare capacity at PHT for UHS electives (not necessarily restricted to vascular)	• Capacity issues at UHS may result in degradation of services at either or both sites • On site presence at PHT may prove inadequate to support interdependent services for in patients / non-emergency urgent cases • PHT staff may be unwilling to transfer • Expansion of capacity for vascular may adversely impact other UHS services • PHT ability to recruit and retain Interventional Radiologists for other services if no on site vascular • Inadequate arrangements for repatriation may impact UHS capacity • Financial impact (to be assessed)

Table 4: Twin Major Arterial Centres (both UHS and PHT as MACs)

Strengths	Weaknesses
• Outcomes currently meet or exceed NSS targets • Can be developed from 'business as usual' with inter-dependent services robustly supported • No additional patient travel • Joint MDT already in place • No requirement to develop capacity at UHS • Ability to continue to use good facilities at PHT	• PHT is non-compliant as not in a network • Maintenance of two emergency on call rotas (neither of which is 100% resourced) • Workforce resilience and sustainability; PHT workforce is currently not sustainable • PHT reliance on one key individual vascular surgeon • May need to invest in duplicate technologies • There is insufficient scale of procedures to support two teams. • It is likely that neither service is cost effective without economies of scale • There is no workforce contingency • Recruitment and retention may prove difficult in what are perceived to be two small centres rather than a larger centre of excellence • The VS consider this to be a possible short term solution if Chichester becomes a spoke to a PHT hub. Chichester is already established in the Brighton network who consider Chichester a crucial component. • Service not future proof • Patients may still not have the choice of a fully compliant network
Opportunities	Threats
• UHS to become regional 'supercentre' for complex vascular (rather than London) • Standardise Pathways • Maximise efficiencies in terms of R&D, new technologies etc. and resource utilisation • Explore merger of trusts to obviate conflicts of interest and maximise efficiencies across all areas • Utilise spare capacity at PHT for UHS electives (not necessarily restricted to vascular)	• Seven day working and potentially increasing population will further stretch on call arrangements • Geographical boundaries and parochialism will prevent cross border patient flows and choice • As dependent upon Chichester patient flows, this may destabilise the Brighton network. • Quality of vascular training at both sites may be diluted leading to loss of some training places

3.2 Key Issues

Several key issues informing the recommendation of strategic direction are discussed in the following sections.

3.2.1 Patient outcomes

Historical data suggested that PHT outcomes were a cause for concern. Data for the last two years shows, however, that NSS target outcomes are met or exceeded and the mortality

from AAA and CEA elective procedures is 0% (see Appendix B). There is no longer a clinical outcomes basis that supports an urgent transfer of procedures, either emergency or elective, from PHT to UHS in terms of patient outcomes.

2013-14 data for UHS stands at 3% because of two deaths. Caution should be employed in using annual figures with regard to AAA procedures as they are not statistically significant. The VSGBI use 5 year average data in their outcomes report to assuage this factor but, by definition, this data is not current. It is possible that one death can have a significant impact on outcomes data which may, in fact, simply be down to chance. It should also be noted that UHS undertake the more complex and, by definition, more inherently risky procedures. Complex arterial patients are currently transferred from PHT to UHS, with a reverse flow of complex renal to PHT.

rAAA procedures are not included in outcomes data as there is a national mortality rate of up to 90%

Interestingly, the VSGBI Outcomes Report 2013 (for AAA this report gives rolling 5 year numbers) reveals that in the majority of, if not all, centres (including St Georges Vascular Institute) 2-3 surgeons perform the majority of elective AAA procedures. This suggests that sub-specialisation occurs. This is supported by the acknowledgement in the NSS that "a 77% reduction in mortality was observed for every 100 endovascular repairs performed".

Because a minimum of 6 surgeons are required to provide a 1:6 rota for emergency on call, one of the NSS measures is that a centre undertakes a minimum of 60 AAA procedures (emergency and elective) per annum in order that surgeons do a minimum of 10 procedures to gain and maintain experience.

Again, as an example from the VSGBI 2013 outcomes report, St Georges did 626 AAA elective procedures of which:

Surgeon 1	237
Surgeon 2	140
Surgeon 3	99
5 others	less than 60 per surgeon

Of the 5, some could have been new trainees who had less than 5 years data etc. but it illustrates the trend. Even if procedures were averaged out, on the basis of 10 per annum it would take 10 years to get the experience of 100 procedures. In practical terms, this is achieved by sub specialisation. Clearly, the bigger the centre, the more opportunity to achieve this.

VSGBI outcomes published in 2015 for UHS and PHT are shown in Appendix G. Confirmation of the trend to move from Open to EVAR procedures is given in the St Georges figures. Of a total of 556 AAA procedures, only 11 were open.

The fact that most AAA elective procedures are mainly done by 2-3 surgeons would suggest that sub specialisation is to the benefit of the patient.

Statistics are maintained for mortality rates for rAAA and, whilst not statistically significant, PHT figures show that mortality rates are well below the national average. Following discussions with the clinical leads, it has been agreed to also maintain statistics on rAAA patients where it is not considered that intervention is appropriate. This will provide a more comprehensive picture of all cases of rAAA attended.

One of the key objectives of centralisation of arterial services is to ensure that the emergency on call vascular surgeon has undertaken the minimum 10 AAA procedures considered necessary to maintain experience and, therefore, outcomes.

As can be seen in Appendix G, at the point of publication, PHT has one surgeon who has performed in excess of 50 AAA elective procedures over the five year period and UHS have four. It should be noted that:

- the one surgeon who has sub-specialised at PHT has 0 mortality rate for elective procedures, as have the other PHT surgeons
- the five year average may skew recent experience and, therefore, not accurately reflect current position; one additional UHS surgeon has undertaken 47 procedures.

3.2.2 UHS Capacity

A draft Business Case published on 1st April 2015 identified that UHS did not have the capacity to undertake PHT arterial services (and no investment budget to provide capacity). Further, PHT believed that interdependent services required on-site emergency vascular services. UHS expressed their disagreement with this view, believing vascular services could be provided from a network hub were PHT a spoke. The recommendation was that two arterial centres remained and worked in collaboration. This proposal was rejected by the NHS England South Regional Senior Management Team (SMT) as not compliant with the NSS.

Following a review , Fiona Dalton, Chief Executive UHS, identified that UHS had undergone a bed modelling exercise and now believed that they would be able to develop capacity required, and had identified the capital investment required both for vascular ward expansion and for the hybrid theatre build.

UHS has committed to develop capacity and infrastructure to absorb the totality of PHT arterial services and have developed a detailed capacity and transfer proposal (Appendix H), including expansion of the vascular ward and building of the hybrid theatre. Initial estimates suggest that the earliest date at which capacity to transfer all major arterial services concurrently, including emergency services, will be available would be 1st December 2016. The development of the detailed capacity and transfer plans will be closely monitored and assured; there will be no compromise on quality in favour of timescales.

A series of work streams are underway to support the proposal and these will provide the detailed plans against which NHS England will assure; these are summarised below.

3.2.2.1 Pathways

Pathways and protocols already exist for the current network. These are being reviewed by the clinical leads to encompass the requirements of PHT as a NAC.

3.2.2.2 Ward Capacity

The expansion of the vascular ward, and related facilities, to manage the additional workload from PHT.

3.2.2.3 Hybrid Theatre

A key technological advance is the 'hybrid' theatre. This is a combined operating theatre and interventional radiology suite which can function either as a conventional operating theatre, or as a radiology facility. Crucially, it allows intra- and post-operative on-table imaging and

intervention. Current facilities are either focused around the adaptation of angiography suites to allow limited open access surgery, or the utilisation of portable imaging equipment in a standard operating theatre; both of these solutions provide limitations. The hybrid theatre is a significant investment (circa £2.5 million), but is seen as a key element of vascular services provision, equipped to meet the challenges of complex endovascular procedures and improve patient service and safety.

UHS have brought forward plans for a hybrid theatre build to 2016 to facilitate the transfer of procedures from PHT. This is a critical path work stream to ensure sufficient theatre capacity.

3.2.2.4 Estates

The planning of the estate changes required to facilitate implementation of work streams where required.

3.2.2.5 Therapies / rehabilitation

A pilot has already identified a significant reduction in length of stay for amputation patients by reconfiguring the approach to rehabilitation. This work stream will continue to examine opportunities for length of stay reductions.

3.2.2.6 Renal

Several options have been identified to service vascular patients with renal failure. This work stream will analyse the options, recommend a solution and seek agreement to proposals.

3.2.2.7 Interventional Radiology

This work stream will examine the interventional radiology requirements across the network to propose a solution which will allow a 1:6 vascular interventional radiology emergency on call rota at the MAC, whilst ensuring the needs for interventional radiology at NACs are met.

3.2.2.8 Repatriation

Repatriation of patients, or more specifically potential delays in transfers and repatriation, can cause serious difficulties in terms of bed utilisation and, potentially, delays to rehabilitation. A Chief Executive initiative to address this issue and seek agreement on protocols is underway.

3.2.2.9 Contracting / Finance

This work stream will ensure that all contract and finance negotiations are complete prior to transfer.

3.2.3 PHT Interdependent Services

The VSGBI UK Workforce Report 2014 identifies that "there are many complex interactions between vascular surgeons and other specialists who manage some of the most common and morbid conditions that affect our population such as stroke, heart disease, diabetes, trauma and cancer".

The issue of interdependencies highlights the dichotomy involving the provision of vascular services in Southern Hampshire. UHS is a major trauma centre and major cardiac centre, whilst PHT hosts a regional renal and transplant centre and hyper acute stroke unit.

3.2.3.1 Renal

PHT hosts the regional Wessex Renal Unit (nephrology and renal transplantation) which covers a population of 2.2 million people from Andover in the north, Chichester in the east and Salisbury in the west. Renal failure leads to some form of renal replacement therapy, which will include the options of temporary or permanent, haemodialysis or peritoneal dialysis. Haemodialysis (whether temporary or permanent) requires vascular access. Renal transplant surgery involves the harvesting of kidneys and their blood vessels and then joining them again to the recipient, this is mostly a vascular operation. In additions, 150-200 native renal biopsies are performed in Portsmouth every year and 2-3% of these will require emergency treatment (usually by an interventional radiologist) for bleeding. Temporary vascular access by way of jugular venous cannulation is also frequently performed and complications of this procedure, although rare, also require emergency treatment by an interventional radiologist.

PHT is a major renal centre and is listed by the Renal Association as having 490 haemodialysis and 104 peritoneal dialysis patients (making PHT the 8th largest centre by number respectively in the UK). All larger renal centres also host vascular services.

The following is extracted from the VSGBI POVS 2012 report:

"5.76 Vascular patients are susceptible to acute kidney injury (AKI) either as a result of contrast induced nephropathy or following intervention. Facilities for haemofiltration must be available in HDU and ITU. Where AKI is recognised, the involvement of a nephrologist, or a physician with an interest in renal medicine, is required to minimise the risk of permanent renal failure.

5.77 Patients with vascular disease often have significant chronic kidney disease and expert nephrology input may help to minimise the adverse effect of surgical intervention on renal function.
Nephrologists provide valuable assistance on the need for, and timing of dialysis in patients with established renal failure.

5.78 Patients with chronic renal failure or those needing dialysis are best managed by a vascular service linked to an in-patient nephrology service. The management of renal artery stenosis and vascular access for dialysis require close collaboration between nephrologists, vascular, renal transplant and interventional specialists to provide optimal care.

5.79 Renal access surgery is a growing part of vascular surgical practice. This work requires careful organisation and a service of sufficient size is best served by the appointment of a dedicated specialist vascular access co-ordinator. Complications of AVF include thrombosis and bleeding and often result in an urgent requirement for renewed vascular access; this necessitates the provision of an on-site emergency vascular service."

The renal centre at PHT is effectively self-contained in terms of vascular surgery services. One transplant surgeon is a vascular surgeon who participates on the vascular on call rota. The VS review identified that this, in fact, was concurrent with being on call for renal which was not considered acceptable practice. There are four additional renal transplant surgeons, all of whom, undertake vascular surgery as part of the transplant process.

There is, however, extensive use of vascular IR and it is essential that these services are maintained.

The VS review found that renal services at PHT could be supported by UHS as a MAC; particularly as the renal surgeons are able to carry out some of the necessary related vascular procedures.

3.2.3.2 Venous access for haemodialysis

There are about 600 patients receiving haemodialysis from the PHT Wessex renal unit and 80-85% of these patients will have had creation of at least one arterio-venous fistula to allow venous access. This is a multi-disciplinary process involving vascular lab investigations with venous mapping (138 patients last year), surgical procedures (212 new and 150 re-dos last year) and management of short and long term fistula problems. Last year the interventional radiologists performed 226 fistulograms and operated on 128 that required fistuloplasties. Thus, on most working days a vascular service intervention will be required for this group of patients, often performed as an urgent procedure. Once again this is a multi-disciplinary team that work together on a daily basis to provide good patient care with surgeons, specialist nurses, interventional radiologists and vascular technicians working together. This is a significant workload.

There is extensive use of vascular IR for routine repairs for vascular access.

The following is extracted from the VSGBI POVS 2012 report:

"4.33 Patients undergoing haemodialysis require a means of access to the circulation to allow the rapid withdrawal and return of blood so that it can pass through a dialysis machine at a rate of at least 300ml/min. Whereas this can be achieved using a double lumen central venous catheter in the short term, long term catheter use is associated with increased infection, higher mortality and central venous stenosis or thrombosis, which compromises further access to the circulation. Central venous catheter use should be minimised. Formation of an arteriovenous fistula, preferably in the non-dominant arm, at least six months before the anticipated need for renal replacement therapy is the ideal. This allows adequate time for maturation before needles can be inserted for dialysis. Some patients will require the insertion of a prosthetic graft between an artery and a vein for access because of poor vessels or the thrombosis of previous arteriovenous fistula (AVF).

4.34 Approximately 100 patients per million population start dialysis in the UK every year, of which 70 will undergo haemodialysis. The total dialysis population was over 20,000 in 2005 (based on 17,409 prevalent patients reported by 62 of the 72 renal units in the UK) and is increasing at about 6% per annum. About a quarter of these are undergoing peritoneal dialysis leaving about 15,000 on haemodialysis (approximately 250 per million population).

4.35 Because of the known failure rate of new AV fistula, it has been estimated that 135 new vascular access operations are required for every 100 patients starting haemodialysis. In addition, 30 new access operations are required per 100 patients undergoing chronic haemodialysis because of intercurrent thrombosis of their fistula. This would indicate the need was about 210 procedures per million population per year in 2005 (total approx 12,600 per annum in the UK), rising to an expected 281 procedures per million (17,140 total) by 2010. It has been estimated that one dedicated vascular access operating list is necessary for each 120 patients on dialysis (including peritoneal) assuming 3- 4 patients can be operated upon per list.

4.36 Most patients can be operated on under local anaesthesia and many of the operations can be performed as a day case procedure. In addition, there is a need for up to 2 IR sessions per week per 100 patients on dialysis for preoperative imaging, postoperative surveillance and for percutaneous angioplasty or thrombectomy of failing or thrombosed AV fistulae and grafts61. Vascular radiologists also deal with central line access problems, particularly where the central veins have occluded. These procedures are time consuming, with a significant morbidity and mortality.

4.37 At present, about two thirds of vascular access is provided by vascular surgeons and a third by transplant surgeons; the involvement of vascular surgeons is likely to increase as more peripheral dialysis units are opened outside transplant centres. There is a considerable under provision of vascular access surgery in the UK, resulting in long waiting times for definitive vascular access and a much higher proportion of patients starting and continuing to dialyse on a central venous catheter compared with other European countries and Japan. There is a need for increased numbers of vascular surgeons and radiologists to become involved with dialysis access formation and maintenance. Vascular surgeons who are required to commence vascular access work late in their careers as part of service reconfiguration need to be properly trained."

It has been established that, in the case of PHT, the renal transplant surgeons undertake all vascular access surgery.

The NSS for Renal Dialysis[8] states:

"Haemodialysis patients are dependent on the maintenance of 'vascular access' to allow repeated connection to the HD machine. The need to maintain a satisfactory vascular access coupled with a high susceptibility to cardiovascular disease, dialysis patients present some of the most serious challenges encountered by vascular surgeons and interventional radiologists. A significant proportion of these interventions are required to be delivered urgently or as an emergency. The safety of dialysis patients while hospitalised with vascular complications of their disease requires special consideration in the commissioning of dialysis services."

"Providers of ICHD (sic In Centre Haemodialysis) should have clear referral pathways be in place for vascular surgery and interventional radiology in order to establish new fistulae and for fistula salvage and maintenance. This includes pathways for urgent interventions.

Providers shall ensure that haemodialysis patients are managed in a safe environment when hospitalised with vascular complications of their disease. There should be 24/7 and urgent on-site cover available from vascular surgeons, interventional radiologists, nephrologists and acute dialysis team."

UHS have proposed the following:

"Transfer of arterial work from PHT would result in 5 patients per annum requiring renal support whilst at UHS for their vascular treatment. The initial thought was that this could be delivered as per the current model for cardiac and neurosurgical patients i.e.: Haemofiltration on ICU.

There is an opportunity to deliver renal support to this pt cohort using one of the new portable "at home" dialysis machines which may be suitable for not only the new vascular patients but would also release bed days and the nursing staff who currently deliver the existing haemofiltration demand. Activity and impact of this is being assessed.

[8] A06/S/a 2013/14 NHS Standard contract for renal Dialysis; Hospital and Satellite (Adult)

UHS already undertakes renal dialysis within paediatrics (4 machines available). This unit links closely with the P'mth renal unit and staff training with regard to needling of fistula's is supported by the satellite unit at Totton. Similar training arrangements could support the ICU development."

The top ten renal transplant service providers (by patient numbers) were asked to provide details of their model of care in relation to their requirement for vascular surgical support, and to give their views on the requirement for co-location of services. Two responses were received which identified quite different models.

Newcastle has vascular and renal co-located on the Freeman Hospital site, together with the renal and liver transplant unit. Newcastle are also a Major Trauma Centre which is located at Royal Victoria Infirmary, some two miles distant. For historical reasons, vascular surgeons do not do the primary dialysis access work, but are involved with complex problems arising from fistulae and there is significant IR input, with a close interaction between IR and vascular surgery. The view was expressed that renal and vascular are best located together, along with transplant services, but that it was not impossible to work with the units in separate hospitals.

Sheffield Teaching Hospital is located across several sites. Northern General Hospital is the larger acute site and hosts renal which is co-located with A&E, vascular surgery and interventional vascular radiology and the major critical care provision as well as other major specialities. The renal service provides all renal replacement modalities and employs four consultant transplant surgeons who also provide the dialysis access surgery and a 24/7 on call service. Renal surgical problems are initially managed by the renal physician team under supervision of the on call renal surgeon. IR offers a 24 hour service but this is rarely required.

Whilst vascular surgery is undertaken by the renal transplant surgeons at PHT, there is a high dependence upon the current PHT vascular IR service.

3.2.3.3 Stroke

PHT has the largest stroke unit in Wessex with annual admissions to the stroke unit of around 1100 patients per year. It is a hyper-acute stroke unit offering thrombolysis 24/7 for the patients around Portsmouth including those presenting out of hours from West Sussex. A proportion of these will require vascular services input with imaging, Doppler scanning and surgery. The objective of surgery, where it is indicated, is to reduce the risk of a second, more serious and disabling stroke occurring. The round four UK endarterectomy audit indicated that PHT did 92 cases in the one-year audit. It is very likely that there will be in future a clinical standard that these patients are operated on within 48 hours of presentation which will require a very rapid clinical pathway and surgeon availability. The decision about surgical intervention is multi-disciplinary involving stroke physicians, therapists, radiologists, anaesthetists and surgeons. The procedure itself is almost always under local anaesthetic and the hospital stay is short – usually less than 24 hours.

The following is extracted from the VSGBI POVS 2012 report:

"4.39 CEA is a well established evidence based treatment for symptomatic patients with a significant carotid stenosis, including patients with good recovery from recent stroke. Recent research suggests that the risk of stroke is highest soon after the onset of symptoms and that the quicker the surgery is done, the greater the reduction in the risk of subsequent

stroke. The latest DoH guidelines on stroke prevention recommend that by 2017, carotid endarterectomy should be performed within 48 hours of onset of symptoms[9]. The establishment of such rapid access treatment requires the development of new referral and diagnostic pathways, and close co-operation with stroke physicians and neurologists. Vascular teams will also need to work flexibly in order that carotid endarterectomy can be expedited, and may need to create referral networks to ensure prompt treatment is always available. Outcomes from interventions should be audited regularly and surgery should only be undertaken by specialist teams with the full range of facilities expected for elective procedures, since the risks of urgent surgery may be higher than in less acute patients"

The NCAT report identifies in section 6.5 that there are models whereby hyper acute stroke units do not have vascular on site and patients requiring CEA are referred to a hub in an expedited fashion.

NICE guidance is currently 14 days. The VSQIP 15 report on outcomes identifies the Days from symptom to surgery Median for CEAs as 9 at UHS and 12 at PHT.

3.2.3.4 Diabetes

The bulk of vascular service work comes from patients with peripheral vascular disease and diabetes. PHT currently run three (and have just agreed with commissioners to move to five) rapid access diabetic foot clinics where patients are seen by the diabetic team. The clinics are timed during the week to ensure that a vascular surgeon is available to see the patient immediately to provide advice and / or immediate action.

There has been concern expressed in the past regarding the care of diabetic patients in the area with patients in the Portsmouth and Fareham and Gosport area having a high amputation rate (related to their community diabetic care, compliance with treatment, and availability of expert advice from an MDT at an early stage). The increase in MDT clinics has significantly contributed to improvement in amputation rates of 2.4/1000 major amputations to 1.3/1000 major amputations over three years. PHT has an established weekly MDT involving clinicians from the diabetes team and vascular services to discuss every patient both pre and post amputation to ensure high quality decision making and subsequent care.

The following is extracted from the VSGBI POVS 2012 report:

"5.88 Patients with diabetes form a significant and increasing part of a vascular specialist practice. Protocols for the management of these patients should be developed with diabetic specialist colleagues. Many patients with diabetes present with limb and life threatening ischaemia and sepsis. Such patients need joint care with the diabetic team to optimise care and minimise tissue loss.

5.89 The development of formal pathways of care and/or combined clinics for diabetic foot disease is a potential means to minimise the risk of amputation in this vulnerable group. In the outpatient setting these patients have complex foot problems requiring multi-specialty input. A multidisciplinary foot care team comprising a diabetologist, diabetes nurse specialist, a surgeon with expertise in managing the diabetic foot, a podiatrist and a tissue viability nurse should be available to manage inpatients with diabetic complications. The specialists involved in such a team will be determined by local interest and expertise"

3.2.3.5 Emergency / Urgent Needs

[9] Department of Health. **National Stroke Strategy** London 2007 www.dh.gov.uk/stroke

A hospital of the size and complexity of PHT will, on occasion, require urgent vascular surgical or interventional radiology expertise at short notice. PHT has the largest Percutaneous Coronary Intervention (PCI) unit in the region for patients with ischaemic heart disease. Several times a year incidents will occur where very rapid help from a vascular surgeon will be required to resolve a complication of the procedure. PHT is also a National Cancer Centre and thus undertakes a high volume of major cancer operations. Once again complications from this type of surgery will occur and rapid intervention is essential. At the current time there is always a vascular surgeon available and close by to assist in these events.

3.2.4 Workforce Resilience and Sustainability

In considering strategies for vascular services, the POVS 2012 states:

"6.4 The Provision of Surgery for Patients with Vascular Disease (POVS) 2009 document described the case for Centralisation or Networking as the two favoured models of care. Although each model has in many instances been able to deliver high quality care to patients with vascular disease, it has become apparent that many networks are unable to adequately provide the required 24/7 access to vascular and radiological expertise. When clinical networks are set up to allow for arterial intervention on multiple sites, it is often difficult for on call vascular surgeons and interventionalists to provide adequate care to all patients at all times of the day. This is especially true, and to the disadvantage of patients, when they develop complications on differing sites within the network at the same time, resulting in stretching of the expert cover arrangements.

6.5 In addition, strong volume outcome data is emerging suggesting a benefit for patients receiving their arterial intervention at high volume arterial hospitals with 24/7 cover from a team of specialists dedicated to the treatment of patients with vascular disease. It is also clear from this volume outcome data that the results of vascular intervention are not only dependent upon the mortality and morbidity associated with the primary procedure, but also the availability of experts to deal with complications as and when they occur.

6.6 Coupled with the introduction of the 48 hour week, the reduction in both consultant and trainee numbers which will result from specialty status, and the strict mortality standards set for the provision of aortic aneurysm surgery by the NAAASP, it is apparent that the Society's advice on the provision of vascular services to our patients requires updating.

6.7 The current Vascular Society advice is that high quality world class vascular care can be delivered in the UK with the establishment of high volume arterial centres. Modern clinical networks of care should be established for the assessment and treatment of vascular patients who do not require arterial intervention in network hospitals nearer to their homes."

This highlights a major concern that networks with arterial procedures on more than one site (as proposed in the two arterial centre model) are at risk of not providing a resilient and sustainable 24/7 emergency on call service.

The NSS identifies that a vascular hub must provide a minimum 1:6 vascular surgeon and 1:6 vascular interventional radiologist 24/7 emergency on call rota. Whilst both UHS and PHT provide 24/7 vascular emergency cover, this is not provided by 6 full time equivalent (FTE) vascular surgeons. This means that those involved in the emergency rota are providing cover in excess of a 1:6 rota which is not considered sustainable and which over stretches participants. This is neither in the interest of the surgeons nor the patients.

POVS15 identifies that " *Interventional radiologists are radiologists who have undergone additional specialist training in the practical elements of interventional procedures. Interventional Radiology (IR) procedures are minimally invasive, targeted treatments performed under imaging guidance. A range of procedures are performed in oncology, urology, gynaecology, GI and hepatic conditions as well as vascular disease. Diagnostic radiology remains a core element of IR. There are however additional clinical responsibilities on the interventional radiologist for preintervention assessment, consent and follow–up.*

Interventional Vascular Radiologists and Vascular Surgeons have traditionally worked in collaboration to provide endovascular aneurysm repair and angioplasty and stenting for the treatment of peripheral and aortic vascular disease."

The Royal College of Radiologists (RCR) IR training programme provides training in both vascular and non vascular IR. A fellowship can then be completed in vascular IR for those who wish to specialise. A vascular IR should have basic competency in EVAR, arterial angioplasty and stenting and thrombolysis. High risk vascular IR procedures include Arteriovenous Malformation (AVM), venous intervention, fEVAR, thoracic EVAR and fistuloplasty.

Neither site have been able to provide 24/7 emergency vascular interventional radiologist (IR) cover which has meant that there are occasions where endovascular procedures, which can reduce the need for major surgery, with its associated risks, enable patients to recover more quickly, and reduce their length of stay in hospital, may not be available to emergency patients.

UHS currently has 6 Vascular Surgeons (one of whom supports minor paediatric at RHCH) and 9 Interventional Radiologists, of whom 5 undertake vascular work, who provide a 1:6 emergency vascular on call service.

The recent redeployment of a consultant has left PHT with 2 Vascular Surgeons and 1 part time who is also a renal transplant surgeon leaving a rota of, at best, 1:3. There are also 5 Interventional Radiologists, of whom 1 currently undertakes EVARs, who provide a 1:5 emergency on call service. PHT have Board approval to recruit additional Vascular Surgeons, but have been unable to do so. PHT believe this is due to the on-going uncertainty surrounding service provision. PHT would need to recruit 4 additional Vascular Surgeons to facilitate a 1:6 emergency rota.

Taken as whole these shortfalls against national standards mean that the local NHS is not able to consistently provide the quality of care that patients are entitled to expect; and which is compliant with NHS England's Vascular NSS. This is no reflection on the commitment of staff providing local vascular services. It does, however, highlight the need to change the way in which their services are organised. Elsewhere in the country, patients are already benefiting from changes which have been put in place to deliver the NSS standards

Without doubt, a single MAC would provide resilience and sustainability, and a far less onerous on call ratio for vascular surgery and vascular interventional radiology. Equally, both sites are currently at risk if a key member of the vascular team becomes incapacitated. The workforce resilience issue is an area that commissioners have been closely monitoring. The PHT position is currently unsustainable.

On the assumption of an approximate split of time between in and outpatient services of 50% (based on the approximate split of financial payments), and considering the minimum number of surgeons required to provide a safe service of 1 per 150,000 population, PHT would require a minimum of 2.15 vascular surgeons on site through the working week to undertake outpatient services alone as a Non-Arterial Centre..

3.2.5 Vascular Services - Financial Break Even Point

UHS identified in 2010 that vascular services were running at a 15% loss.

Whilst UHS has a population of 900k and PHT 650k, the demographics of the PHT population has resulted in some vascular procedures being proportionally higher at PHT (see Table 1).

An estimate of costs (Appendix J) suggests that to staff a 22 bed vascular ward with a minimum of 6 vascular surgeons and 6 interventional radiologists would be in the region of £3.4 million. This would require an income of £6.8 million to cover staffing and infrastructure costs. This would suggest a roughly 25% increase in population to reach a break even point i.e from 900k to 1125k for UHS and from 650k to 837k for PHT, assuming a similar demographic distribution.

The requirement for a minimum 6 vascular surgeons and 6 vascular interventional radiologists to allow a minimum 1:6 24/7 emergency on call rota dictates this as a minimum number, rather than vascular services required by patients. It would appear that the current staffing levels may be more demand-driven.

3.2.6 Public Opinion

Historically, public opinion in Portsmouth, driven by the local media, has been opposed to arterial surgery moving off the PHT site. Efforts have been made to better inform the public and the media and this will be on-going in terms of the Communications & Engagement work stream. Since the announcement of NHS England's decision to pursue a clinically-led solution following the Vascular Society Review, there has been little sensational media coverage. Local clinicians have been speaking informally at various fora supportive of the move to a single arterial centre. The Public reaction indicates two concerns; firstly that moving vascular surgery would result in the loss of other services at PHT and secondly concerns about transport for patients and carers. The communications and engagement strategy seeks to understand more of the detail of these issues in order to ensure the development of the patient pathways are informed by patient experience. The narrative will also offer assurance that dependent services will be supported at PHT. It will also highlight other services which result in patients being treated at either UHS or PHT involving transport between the two centres and demonstrate that for some more specialised procedures quality of treatment outweighs the inconvenience of transport.

3.3 Options Appraisal

3.3.1 Do Nothing

It has been established that 'Do Nothing' is not an option as neither UHS nor PHT are currently compliant with either POVS guidelines or the NSS.

3.3.2 Single Major Arterial Centre

3.3.2.1 Background

All arterial services to be delivered at UHS, with PHT joining as a Non-Arterial Centre (NAC) the existing operational network (now formally designated the Wessex Vascular Network (WVN)) which has UHS as a hub, in addition to the existing spokes (Winchester and IoW).

3.3.2.2 UHS Wessex Major Arterial Centre

As UHS is a Major Trauma Centre (MTC) which must have vascular services co-located, any proposal for a single hub would mandate that it is sited at UHS.

The recent VS review identified that "*There are busy and successful co-dependencies (diabetic foot services, nephrology and urology) that would require significant support if Portsmouth was to become a spoke hospital*". The VS confirmed that none of these services required on site 24/7 vascular services and that this could be provided by a network hub.

The clinicians across both sites are unanimous in their view that the strategic solution is to have one network with UHS as MAC and PHT as NAC. The lead vascular surgeons at PHT and UHS, Mark Pemberton and Mike Phillips, have developed a clinical vision of how services will be delivered (Appendix K) . The clinical vision includes the following description of MAC services:

"*This will be where most arterial procedures (abdominal aortic aneurysm, carotid disease, leg bypass and trauma) and emergency work will be undertaken.*

There will be 10 vascular surgeons serving the Wessex Vascular Network. Three will be contributing to the non-arterial activities at QAH (see above (sic description of PHT as Non-Arterial Centre)), one will have activities at Winchester and one on the IoW. As a group, all surgeons will have the flexibility to provide cover at each of the non-arterial centres, mainly during times of annual, study and sick leave. All surgeons will undertake a SOTW slot at UHS and take part in the on call rota.

The well-established SOTW at UHS will continue but in an expanded form. The additional duties will include managing emergency patients from QAH and liaising with the QAH surgeon over repatriation. This will be reflected in the on call arrangements, where the rota will be 1 in 10. To allow for the increase in volume of work load, particularly at night, the surgeons will be given appropriate time off. For instance a surgeon on call at night or weekend will hand over to the SOTW in the morning and will have no elective duties that day.

There will be five vascular interventional radiologists based at UHS and a rota of 1 in 6 or 1 in 7 will be created with the vascular radiologists from QAH. All the radiologists (UHS and QAH) will undertake complex endovascular and EVAR work at the arterial centre.

A hybrid lab (a facility that can accommodate vascular surgery and interventional radiology at the same time) will be available to undertake vascular procedures, both elective and emergency. There will be 2 EVAR lists (2 days or the equivalent of 4 sessions) per week, which will undertake most of the endovascular aneurysm work from the network. An additional list will be available for other work that requires surgery and radiology at the same time (e.g. combined bypass and angioplasty). The hybrid lab will also be used for TAVI (cardiology) procedures.

The current vascular theatre will be made available for 5 full days per week (currently not in use for approximately 1 day/week when EVAR lists occur and during annual leave) to undertake other vascular procedures and will be run by network surgeons and anaesthetists. This is where most of the carotid (150) and bypass operations (100) will be undertaken as well as other procedures including unplanned work. For emergencies, the CEPOD list will continue to be used.

The vascular ward will move from D4 to E4. There will be an increase in beds from 22 to 34 in a refurbished ward with vascular-orientated facilities including a treatment room. The

success of this ward will be dependent on careful repatriation planning to local hospitals. A joint appointment of a vascular nurse specialist or similar will facilitate the transfer of patients between the 2 sites. This ward will receive emergency vascular admissions and transfers on a 24 hour basis.

The current allocation of deanery trainees will need to be directed to where training opportunities occur within the network, irrespective of whether this is the arterial or non-arterial centres. Vascular training will be based at the arterial hub with trainees being allocated to appropriate sessions in the spoke hospitals based on the training requirements. Vascular Surgical trainees and general surgery trainees who are undertaking a period of Vascular Training in the hub will take part in a vascular emergency rota (under consultant supervision) to give them exposure to the management of vascular emergencies.

The Wessex Vascular Network will require a full complement of junior doctors (training and non-training grades) sufficient to support an out of hours registrar-equivalent on call rota which will be based at UHS. Out of hours vascular problems at QAH will be assessed by the general surgery registrar on call and discussed with the consultant vascular surgeon at the arterial centre

A vascular lab where non-invasive vascular investigations take place needs to be re-established in UHS as a matter of urgency. This will require cooperative working between medical physics and radiology.

A weekly half-day multidisciplinary vascular learning/teaching slot will be established for training all grades of clinicians involved in the delivery of vascular care. This will include the discussion of mortality and morbidity and other governance issues.

There will be a weekly MDT to discuss patients across the network using the video conference facilities, so that workers at the arterial and non-arterial centres are fully engaged. Because of the large volumes of cases to be discussed, a separate aortic MDT is likely to be required."

3.3.2.3 PHT Wessex Non-Arterial Centre

As identified in the VS report " *There are busy and successful co-dependencies (diabetic foot services, nephrology and urology) that would require significant support if Portsmouth was to become a spoke hospital*."

The clinical vision developed by Mike Phillips and Mark Pemberton includes the following description of NAC services:

"*There will need to be 2-3 vascular surgeons working at QA. This is a busy city hospital and an on site presence is required to support dependent services such as A&E, diabetes and the renal failure unit as well managing patients with vascular disease under other specialities on the wards and in outpatients.*

This would mean one surgeon at QAH acting as 'surgeon of the week' (SOTW), able to attend A&E, theatres and inpatients at short notice. A facility to see patients on an urgent clinic basis will be provided, supported by the vascular lab. They will also need to review vascular patients who are rehabilitating. If necessary, the SOTW will liaise with UHS if an urgent transfer is required. This service will be 8am-6pm and supported by vascular nurse specialists. Junior doctors are not required (other than foundation doctors on the wards) but can be present for training in out patients, vascular access and in vascular radiology. The current trainees will follow the arterial work to UHS. Out of hours and at weekends, the on

call general surgery registrar at QAH will see and assess patients with vascular problems and discuss with the on call vascular surgeon who will be based at UHS. A single session/week list will be required to undertake minor vascular procedures such as debridement.

The second surgeon will be undertaking elective outpatients and peripheral clinics (Havant, Petersfield and Gosport) and attending day case theatre and working on administration. They will also attend patients in preassessment clinic. The 3rd surgeon who works at QA, will, as the other 2 surgeons, work at UHS undertaking arterial elective work and on call and SOTW duties.

Where possible, one surgeon will work extended hours to cover the QAH site in the evening In order to ensure that at least one consultant vascular surgeon is on site at QAH during office hours, flexibility will be built into all network surgeons' job plans and the rota.

Interventional vascular radiology will be available on a day case basis (for angioplasty and diagnostics). Cases for intervention will be discussed in a combined vascular MDT (with the arterial centre) as to suitability as day cases. The cross-sectional imaging service (CT and MR angiography) and Vascular Lab for duplex imaging will continue to be used as now. The vascular radiologists based at QAH will also be attending UHS to perform complex endovascular procedures and EVAR.

Renal failure patients (those undergoing regular dialysis) will be seen and assessed at QAH. Patients who require management of haemodialysis fistulas will continue to be cared for by the separate renal transplant team. Where possible these patients will remain at QAH. If they require urgent intervention, transfer will be made to UHS. If the inpatient stay at UHS is significant, arrangements will be made for temporary haemodialysis in the same way as other specialties (such as neurosurgery and cardiac surgery) undertake at present. This should not be more than 5 patients/year.

Patients with diabetes and peripheral vascular disease will largely be managed at QAH except where there is a need for bypass surgery, complex interventional radiology or major amputation. A weekly MDT (involving diabetologists, podiatrists and vascular surgeons and radiologists) for these patients will be established at QAH.

Other specialists such as anaesthetists will be encouraged to follow their patients to UHS. The vascular lab and therapy teams do not need to change but will work closely with their UHS counterparts particularly with repatriated patients.

The current QAH vascular ward that is shared with urology will receive less patients but will continue to play an important role in admitting and caring for patients for rehabilitation and those that do not require transfer to UHS. As there will be a significant presence of vascular surgeons at the QA site these patients could be cared for under their names. It is important that the QA diabetic and podiatry teams be involved in managing these patients, who will have had minor amputations at QAH or will have returned from UHS having undergone limb-saving procedures such as a bypass and major amputations."

3.3.3 Two Major Arterial Centres

3.3.3.1 Background

UHS and PHT continue as arterial centres, but collaborate to maximise efficiencies, resource utilisation and to provide improved clinical services.

UHS and PHT currently both provide arterial services. UHS operates an existing network with HHT and IoW as spoke hospitals. PHT acts as a standalone centre.

The VS report states "In terms of the future – it would be possible to make both units POVS compliant and stand alone. This would involve Portsmouth providing vascular services for Chichester and both units would require substantial investment with consultant appointments and development of facilities. However this model would probably only be sustainable in the short term. In the long term both units may have difficulty in recruiting consultants and trainees and 7 day working would need more consultants on a 1 in 8 rota or greater."

St Richards is currently part of the Sussex Vascular Network with Brighton as the hub. At the end of 2014, the vascular surgeon who had provided services to St Richards resigned and Brighton had difficulties in recruiting a replacement or locum. The travel time meant that other vascular surgeons were unable to provide a full outreach service which has resulted in Portsmouth providing some informal out patient clinics (and elective referrals). It is understood that a vascular surgeon has now been appointed by Brighton.

Since 2014, St Richard's Hospital, Chichester has been a non-arterial spoke in the Sussex Vascular Network, with the hub at Brighton & Sussex University Hospitals (BSUH). Clinical services provided at St Richard's Hospital in Chichester consist of vascular outpatient clinics, minor amputations and varicose vein related procedures. Facilities include non-complex interventional radiology and a vascular laboratory.

The Sussex Vascular Network is now compliant with the National Service Specification following the recent appointment of a vascular surgeon. With the establishment of the Wessex Vascular Network, under normal patient choice arrangements, Chichester and West Sussex patients will be able to access elective non-arterial and out-patient services either at the St Richard's site from the Sussex Vascular Network or at the Queen Alexandra Hospital site in Portsmouth from the Wessex Vascular Network. They will be able to have elective major arterial surgery carried out either at BSUH by Sussex Vascular Network staff or at University Hospitals Southampton (UHS) by Wessex Vascular Network staff. NHS England and both Vascular Networks will continue to work with the ambulance services to establish conveyance protocols for patients in West Sussex with a vascular emergency, who may be received at either BSUH or UHS. Both vascular networks seek to advance the principle of "care closer to home" by ensuring that pre-operative and post-operative outpatient visits will be increasingly available at the respective hub sites.

3.3.3.2 UHS - Existing Network Hub - Compliance Issues

UHS already acts as a hub in the existing network with HHT and IoW. The VS review identified that UHS, a Major Trauma Centre, does not currently provide an adequate vascular service as a network hub and, in particular, does not provide 1:6 24/7 vascular IR rota.

Investment is required to address compliance issues. Under a two MAC agreement, it would be difficult to generate sufficient income in order to make the necessary investment.

3.3.3.3 PHT Existing Arterial Centre - Compliance Issues

The NSS states that all Trusts that provide a vascular service must belong to a vascular provider network and it is envisaged that all arterial surgery will be provided at a vascular centre. PHT is not currently in a network but is standalone.

The VS report states “The *vascular surgical rota at Portsmouth is poor. They have 6 surgeons but one does no on call and one is also on the transplant rota at the same time. We have since learned that one surgeon will shortly be leaving. The majority of the vascular work at Portsmouth is done by 1-2 surgeons and according to the National Vascular Registry (NVR) one surgeon does no aortic work and another did no aortas in a 5 year period.*"

The report also identified that one of the on call surgeons is a renal transplant surgeon who is also on call for renal at the same time; this is not acceptable practice.

The surgeon referred to by the VS has now left PHT. By necessity, PHT will continue to act as an arterial centre until a strategic solution is agreed and implemented. PHT do not currently have a sustainable workforce. Contingency planning in October 2015 suggested that the current on call rota could be sustained until mid-December 2015 at which point a locum will need to be recruited. This in fact was unsuccessful and the locum position has been re-advertised. The on call rota is being supported on a voluntary basis by UHS surgeons.

PHT have been unable to recruit permanent vascular surgeons. PHT attribute this to the uncertainty of the future of vascular services at PHT.

In 2009 PHT shared a vascular service with St Richards, Chichester providing a vascular service to a population exceeding 800,000. This service was established by clinicians in order to maximise patient service provision. This service was dismantled when the national vascular reviews were undertaken in 2009. The Chichester HOSC chair requested in March 14 that that the Chichester population should be considered in the Southern Hampshire review of vascular services reconfiguration.

Chichester population is 230k which would increase the total population covered by PHT to 870k. The inclusion of Chichester patient numbers in a network with PHT might marginally increase income sufficiently to reach a break even position, but not if the demographic of the Chichester population was more akin to that covered by UHS. Without the addition of Chichester, the PHT population of 650k does not make the necessary investment in workforce to provide a 1:6 rota for a 24/7 on call emergency service cost-effective. With the addition of Chichester, cost-effectiveness will at best be marginal.

In addition, this would have the potential to destabilise the Sussex Vascular Network with the resulting reduction in population covered.

As identified by the VS, whilst it might be possible to establish two networks were Chichester a spoke hospital in a network with PHT as a hub, this would result in two networks which are unlikely to break even on the cost of vascular services provision, and which are also marginal in terms of procedure numbers. In addition, the VS assumption had been that this would require funding for two additional PHT vascular surgeon posts. PHT would currently need to recruit four additional surgeons to become a viable centre. Neither network can afford to invest sufficiently to become fully compliant without additional income.

In particular, in consideration of AAA procedures, the VS had established a minimum of 60 per annum on the basis that 6 vascular surgeons needed a minimum of 10 procedures to maintain professional competency. In fact, most providers see sub-specialisation occurring whereby a smaller number of surgeons perform the majority of AAA procedures. This is compounded by the fact that where EVARs are performed, the lead surgeon is 'credited' with the EVAR, even though they may not perform endovascular procedures and these may have been performed by a vascular interventional radiologist.

The 2014/15 figures show that PHT carried out 64 AAA procedures, only just reaching the minimum number for surgeons to maintain professional competency. In fact, as previously identified, the majority of vascular work is carried out by 1-2 surgeons. This means that emergency patients may be seen by a surgeon who is not considered to have undertaken the requisite number of procedures required by the VS to maintain professional competency.

3.3.4 Recommendations

The challenges which will face vascular networks in terms of seven day working, workforce sustainability and sub-specialisation (and the migration from open surgery to endovascular procedures), together with infrastructure investment, are likely to prove prohibitive for smaller networks to provide comprehensive vascular services on a sustainable basis and remain financially viable.

In addition, trends suggest that there will be insufficient procedures to maintain currency of skills for vascular surgeons and vascular interventional radiologists unless services are centralised to a smaller number of centres.

Current trends show reductions in ruptured aneurysms due to the (AAA) screening programme. The reduction in smoking, and improvements in diabetic care, are also seeing reductions in vascular procedures, with fewer strokes and gratifying improvements in amputation rates.

Technological advances, and the concomitant investment in supporting technologies has seen a trend towards the vast majority of elective AAA procedures (85%) being EVAR rather than open procedures. This, in itself, requires a different workforce skill set of complex endovascular techniques, with even more complex endovascular and minimally invasive procedures being undertaken, in addition to emergencies being increasingly endovascular procedures.

With the future likely to see a seven day week requiring on call rotas to increase from 1:6 to 1:8, together with the increasing sub-specialisations, not only will smaller units find it financially not viable, but it is likely to improve increasingly difficult to recruit surgeons and IRs when the opportunity exists to join larger world class centres – in which the trainees will be concentrated.

Both hospitals have experienced difficulties in providing 24/7 IR on call rotas. POVS15 identifies "*There is currently a particular shortage of practitioners trained to deliver endovascular therapies out of normal working hours. Collaborative, network wide, on call rotas combining interventional vascular radiologists and endovascular trained surgeons are potential solutions to this problem and need to be developed further.*" A pooling of resources should provide a network wide solution.

It is recognised that in the context of these challenges, and the recommendations of the VS, a strategic solution for Southern Hampshire must be developed. In terms of options, 'do nothing' has already been ruled out as current services are not compliant with the NSS. The options identified by the VS are to make both sites POVS compliant and standalone or to create a longer term sustainable high class vascular facility by centralising services at UHS.

All expert clinical reviews undertaken since 2009 have recommended that PHT join UHS in a network, with major arterial services being provided by UHS. For many years UHS and PHT have provided good vascular services to local patients and currently both have excellent outcomes. It is highly likely that these services have been provided at a loss; this is also likely to be the reason why there is a reluctance to invest in further resource to achieve a full

1:6 complement which procedure numbers may be unable to support in full time employment.

It is acknowledged that the introduction of a hub and spoke network may result in an overall increase in workload as travel between hub and spoke is an overhead. The advantages of scale, however, are likely to outweigh this overhead.

It is recommended that the VS case for moving to a sustainable long term solution of a single hub with a strong network integrating clinical pathways across Hampshire be implemented.

It should be noted that neither PHT nor UHS consider that they are in a position to address existing shortcomings in service until this decision has been taken and that time is of the essence as the PHT workforce is now unsustainable.

Once this decision has been taken, a plan must be developed to address these shortcomings as a matter of urgency. There is already agreement for a joint appointment to recruit a vascular surgeon to the strategic network, who will initially address the shortfall at PHT. There is also a need for the development of network-wide interventional radiology services utilising existing resource from both sites. It is recognised that PHT interdependent services are highly dependent upon IR and this aspect of service must be fully catered for.

4. Expected Benefits

4.1 Compliance with NSS and POVS15

One larger network will generate sufficient income at the MAC to fund the investment required to become fully compliant with the NSS and POVS15 guidance.

4.1 Patient Outcomes

Patients will have the choice to attend a fully compliant vascular network service provider. Wider expertise and excellence should facilitate continued excellent outcomes.

The potential for greater sub-specialisation should mean that more complex procedures will be done locally rather than being referred to London.

Whilst patient outcomes meet or exceed targets at both Trusts, a single clinical network will facilitate compliance with VS standards for 24/7 emergency on call rotas adequately resourced. Neither provider has historically been able to provide this service.

4.2 Cost Effective Service

A network covering a population of 1550k should not only facilitate development of a service which is cost effective and optimises resource, but will future-proof the service if the forecast trends materialise. Neither site on their own could sustain a 1:8 rota either in terms of cost effectiveness or in terms of numbers of procedures to maintain individual professional competency.

POVS15 states "*The provision of an effective vascular service is relatively expensive. Vascular units have high bed occupancies, particularly where repatriation in the network is delayed. The surgery is technically challenging with significant demands on both theatre time and critical care. readmission rates due to disease progression are significant. advances in*

endovascular treatment may offset some of this expense, but many of those procedures are also technically demanding, and time-consuming and require sophisticated and often expensive facilities and disposables. Replicating these services in every hospital is not cost effective."

4.3 Workforce

Not only will a network of this size facilitate the provision of a 1:8 emergency on call rota, it will also provide an attractive environment facilitating specialisation, complex procedures and training and research opportunities. In an increasingly competitive marketplace, with known shortages of skills, this will provide a competitive advantage in recruiting and retaining vascular surgeons, vascular interventional radiologists and trainees of the highest calibre. The numbers also provide contingency in terms of on call servicer provision.

UHS and PHT already have joint MDTs for vascular services and the existing informal links will be formalised.

Clinicians will have increased opportunities for sharing expertise, supporting learning and development, and career development.

In addition, the provision of one rather than two 24/7 emergency on call services will result in cost savings.

4.4 Future Proof Network

If the forecast trends materialise, this strategic solution will future-proof the network.

5. Expected Dis-benefits

5.1 Additional workforce travel between sites

Additional travel should be offset by the cost savings resulting from the provision of one rather than tow 24/7 emergency on call services.

5.2 Additional ambulance by pass and transfers for repatriation

PHT Procedure Numbers 15/16

Procedure	No.	To UHS	LoS UHS (nights)	From UHS	LoS PHT (nights)
AAA Open	18	Private	1	Private	n/a
AAA EVAR	36	Private	1	Private	n/a
rAAA	12	Ambulance	?	?	?
CEA	81	Private	1	Private	n/a
By Pass	90	Ambulance	2-3	Ambulance	?
Major Amputation	69	Ambulance	3-5	Ambulance	?

The detailed numbers of procedures, transfer modes and estimated length of stay are being evaluated in accordance with revised pathways and protocols; these figures will be updated following this work.

5.3 Additional patient and family travel

The visiting hours at UHS are from 15.00pm to 20.00pm and parking charges are from £2.00/hour. Table 6 illustrates the likely travel implications for various options.

Table6 Travel Options

Option	Route	Mode	Time each way (Approx)	Cost return (From)*
Train / Bus	Portsmouth & Southsea Rail Station to Southampton Central Bus Station	Train	40 mins	£11.00
	Southampton Central Rail To Bus Stop (Wyndham Place)	Walk	02 mins	-
	Bus Stop (Wyndham Place) to UHS	Bus	25 mins	£2.50
		TOTAL	67 mins each way	£13.50 return
Coach / Bus	International Port, Wharf Road to Southampton Central Coach Station	Coach	50 mins	£6.00
	Southampton Central Coach to Bus Stop (Wyndham Place	Walk	07 mins	-
	Bus Stop (Wyndham Place) to UHS	Bus	25 mins	£2.50
		TOTAL	82 mins each way	£8.50 return
Car	Portsmouth & Southsea Rail Station to UHS (23 miles @ 0.45 per mile))	Car	33 mins	£20.70 return
Taxi	Portsmouth & Southsea Rail Station to UHS	Taxi	33 mins	£80.00 return

The above times and duration of journey was taken on the base of a person arriving at Southampton General Hospital by 3.30pm on Monday 8th February 2016.

* Transport costs vary depending on time of travel / booking.

5. 4 PHT loss of income

A separate evaluation of financial impact will be undertaken when proposals are finalised. This will include the opportunity for UHS to utilise PHT capacity where appropriate outside of vascular services.

6. Timescale

A high level plan has been circulated with the Business Case. Following approval of recommendations, UHS will develop detailed capacity and transfer plans, together with a target transfer date.

7 Costs

It is anticipated that costs incurred by providers will be met within their existing financial plans.

8. Investment Appraisal

8.1 Contract Income

The following tables show the vascular contract income predicted for 2014/15. These are based upon month 1-6 data provided by Provider and extrapolated to full year (Table 8.1.3 is based upon the transfer plan outlined in Section 3.3.1).

Table 8.1.1 Vascular Contract income as % of Provider Turnover

Provider	Turnover (£m)	Contract Income	% of Turnover
UHS	644.5	5.4	0.8
PHT	476.1	5.3	1.1

Table 8.1.2 Vascular Contract income by Commissioner

Provider	Commissioner	14/15 Plan (£m)	14/15 FOT (£m)	Difference (£m)
UHS	CCGs	3.8	3.6	(0.22)
	NHS England	1.6	1.6	0.04
	Total	5.4	5.2	(0.20)
PHT	CCGs	4.1	3.9	(0.20)
	NHS England	1.0	0.9	(0.10)
	Total	5.1	4.8	(0.30)

Table 8.1.3 Projected income transfer

Phase	Timeframe	Procedures	Cost (£)
Phase 1 (requiring 1 months notice)	Months 1-6	17 rAAA for surgery 14 elective open AAA 10 patients from NAAASP screening programme 10 rAAA non-operative	141,457 104,888 86,102 63,140
		SUB TOTAL	395,587
Phase 2	Months 6-12	34 EVARs	201,654
Phase 3	Month 12-18	52 CEA	209524
Phase 4*	Month 19-21	76 Inguinal Bypass	561,222
Phase 5	Month 22-24	71 Lower limb amputations	1,108,994
		TOTAL	2,476,981

* included 100 Vascular emergencies - no costing available

It should be noted that the contract income figures are based upon 14/15 figures extrapolated from the first 6 months Provider figures whilst the projected income transfer is based upon the 13/14 procedure figures. Whilst this does not provide a direct like for like comparison, the assumption has been made that, for the purposes of a high level overview, this is acceptable. On the basis of the above figures, a working assumption has been made that, in terms of total vascular income, the split is approximately 50:50 in terms of outpatient and inpatient.

UHS Capital investment

It is understood that UHS capital investment will be from existing capital budget.

8.2 Transition Costs

None identified

8.3 Ambulance Costs

It is understood that these would be incorporated within current contracts.

9. Major Risks

9.1 Inability to maintain sustainable 24/7 emergency on call

It is acknowledged that the PHT emergency on call rota is not sustainable. It is providing 24/7 cover by PHT surgeons working 1:2/3 rota with some voluntary support from UHS surgeons. There is a high risk that this will not be sustainable until a strategic solution is implemented.

Mitigation: UHS have been asked to provide a contingency plan identifying an interim solution of the transfer of all emergency services from PHT to UHS.

9.2 Workforce - inability to recruit and retain full complement

There is a projected shortfall in both vascular surgeons and vascular interventional radiologists in the next five years. In addition, existing surgeons will be retiring.

Mitigation: The strategic solution will facilitate the provision of a centre of excellence for both working and training to attract recruits.

9.3 Seven day working

Seven day working will see a requirement to change working patterns further.

Mitigation: The strategic solution will facilitate a 1:10 vascular surgeon rota which will permit a seven day working rota. .

10 Four Tests and Best Practice Checks

NHS England has developed a guidance toolkit for effective service change[10] which provides an assurance framework. The single MAC model is evaluated against this framework (see Appendix K)

10.1 Equality & Impact Assessment

Evidence

[10] NHS England: Effective Service Change: A Support and Guidance Toolkit: Publications Gateway reference 00814

What evidence have you considered?
People with diabetes are at a higher risk of vascular disease. Prevalence of diabetes is caused by a number of factors such as an ageing population, obesity and low levels of activity.
Another important factor for diabetes is the changing ethnic mix of the population. People from black and minority ethnic communities are six times more likely to develop the disease, suffer from a 50% increased risk of heart disease and have much higher levels of kidney disorders. The care of people with diabetes can also be complex with 25% of people suffering from three or more other long-term conditions.
NHS England now has an accessible information standard which needs to be considered/adhered to in the engagement https://www.england.nhs.uk/wp-content/uploads/2015/07/access-info-upd-er-july-15.pdf

Age

Patients using vascular services tend to be older. Although there is an increasing prevalence of older people using online services it will be important for the communications and engagement process to consider the needs of older people by producing some documentation in print/large print to allow for age-related changes in vision.

Disability

- Because a proportion of patients accessing vascular services have diabetes it is likely that some will have visual impairment beyond the usual age-related changes in vision. This means that the consultation will need to be available in alternative formats. These patients will be unable to drive and may have difficulties accessing public transport so consideration needs to be given to whether they will be able to attend meetings.
- Arterial disease in some patients requires lower limb amputation which will also affect accessibility to attend meetings
- Patients with chronic mental health problems and learning disability (particularly Down's) are at increased risk of diabetes and arterial disease. There will be a requirement for easy read versions of documentation

Gender reassignment (including transgender) No impact

Marriage and civil partnership No impact

Pregnancy and maternity No impact

Race

Diabetes is more common in people of South Asian origin with earlier onset of significant arterial complications. People of Afro-Caribbean origin are more prone to high blood pressure which may be more difficult to control than in other groups, hence increased incidence of renal disease and stroke. Narrative content of the communications does not need to be adjusted but appropriate images this group can identify with should be used in any design. It will also be appropriate to make translations available for people whose first language is not English.

Religion or belief
Patients whose religion or belief does not allow blood transfusion or particular blood products will have complications relating to accessing vascular services.

Sex
Vascular disease is more likely to affect men than women. Narrative content of the

communications does not need to be adjusted but appropriate images this group can identify with should be used in any design.
Sexual orientation No impact
Carers As vascular patients tend to be older and may already have disabilities (or develop a disability as a result of vascular surgery/amputation) they may already have a carer or may need the support of a carer. The consultation will seek to engage with carers to understand the impact of the proposals and possible solutions such as community transport for visitors.
Other identified groups. Parts of Portsmouth and Southampton have areas of socio economic deprivation. Smoking, obesity and low levels of activity are more common in areas that have socio economic deprivation. As these lifestyle risk factors are also linked to prevalence of diabetes (and therefore risk of vascular disease) the communications and engagement must consider the communications needs of this group. A review by Ofcom indicates that socio economic deprivation influences access to ICT which can itself be a form of social exclusion. However, more recent research by Public Health England for the One You campaign shows people aged 40-60 in lower socio economic groups are heavy users of mobile communications including text messaging and digital social media such as Facebook. The mix for the campaign needs to take these preferences into account.

Engagement and involvement
How have you engaged stakeholders with an interest in protected characteristics in gathering evidence or testing the evidence available? Sharing of this document with Council for Voluntary Services; Healthwatch; Health Overview and Scrutiny; Establishment of Patient Reference Group
How have you engaged stakeholders in testing the policy or programme proposals? Sharing of this document with Council for Voluntary Services; Healthwatch; Health Overview and Scrutiny; Establishment of Patient Reference Group
For each engagement activity, please state who was involved, how and when they were engaged, and the key outputs: TBC as engagement is implemented

APPENDIX A A04/S/a 2013/14 NHS Standard contract for Specialised Vascular Services (Adults)

A04/S/a

2013/14 NHS STANDARD CONTRACT
FOR SPECIALISED VASCULAR SERVICES (ADULTS)

PARTICULARS, SCHEDULE 2- THE SERVICES, A- SERVICE SPECIFICATIONS

Service Specification No.	A04/S/a
Service	Specialised Vascular Services (Adults)
Commissioner Lead	
Provider Lead	
Period	12 months
Date of Review	

1. Population Needs

1.1 National/local context and evidence base

National Context

Vascular disease relates to disorders of the arteries, veins and lymphatics. Conditions requiring specialised vascular care include: lower limb ischaemia; abdominal aortic aneurysm (AAA); stroke prevention (carotid artery intervention); venous access for haemodialysis; suprarenal and thoraco- abdominal aneurysms; thoracic aortic aneurysms; aortic dissections; mesenteric artery disease; renovascular disease; arterial/graft infections; vascular trauma; upper limb vascular occlusions; vascular malformations and carotid body tumours.

The scope of the specialised service includes deep vein reconstruction and thrombolysis for deep vein thrombosis (DVT) but excludes varicose veins and inferior vena cava (IVC) filter insertion.

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 3m people with diabetes mellitus in England, 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.

Smoking is a major cause of vascular disease and over 80% of vascular patients are current or ex smokers. Around 20% of the population over 60 years of age have peripheral arterial disease, with about a quarter of these affected being symptomatic. Approximately 4% of men aged 65 have an enlarged aorta although not all go on to develop a significant aneurysm. The National AAA Screening Programme (NAAASP) will be fully instituted in the next year.

Historically the UK does not compare well internationally for certain vascular procedures. It had the highest mortality rates in Western Europe following elective abdominal aortic aneurysm surgery (7.9% UK vs 3.5% Europe (Vascunet 2008) and is among the slowest nations for uptake of new endovascular technology. Patients are not always treated by a vascular specialist and stay longer in hospital following their surgery than the rest of Europe. There are also significant gaps in the provision of emergency vascular interventional radiology services.

The Vascular Society of Great Britain and Ireland (VSGBI) and the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) have called for a reorganisation of vascular services for emergency and elective care to optimise outcomes for patients. The Abdominal Aortic Aneurysm Quality Improvement Programme (AAA QIP) was initiated after the UK's higher mortality was recognised.

A minimum population of 800,000 is considered necessary for an AAA 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; the most efficient use of specialist equipment, staff and facilities, and the improvement in patient outcome that is associated with increasing caseload.

Over the last few years there have been a number of changes in the structure of vascular services which will start to influence and improve service quality, efficiency and clinical outcomes. However more restructuring will be required to deliver high quality services on an equitable basis. A number of services are currently under active review with implementation plans delivering service changes during 2012/13. Progress will need to continue on these reviews and the further reviews required, ensuring the appropriate service configuration is achieved in the next 2-3 years. The context of these reviews also needs to take into account changes in training and the service implications, for all the specialists involved in the delivery of vascular services. Vascular surgery became an independent specialty in 2012.

Local Context

Evidence Base

In outlining the level and nature of service expected from providers, this service specification is written in the light of the recommendations and published evidence of the Department of Health (DH), the VSGBI, the Royal College of Radiologists (RCR), NCEPOD and all relevant NICE Guidance.

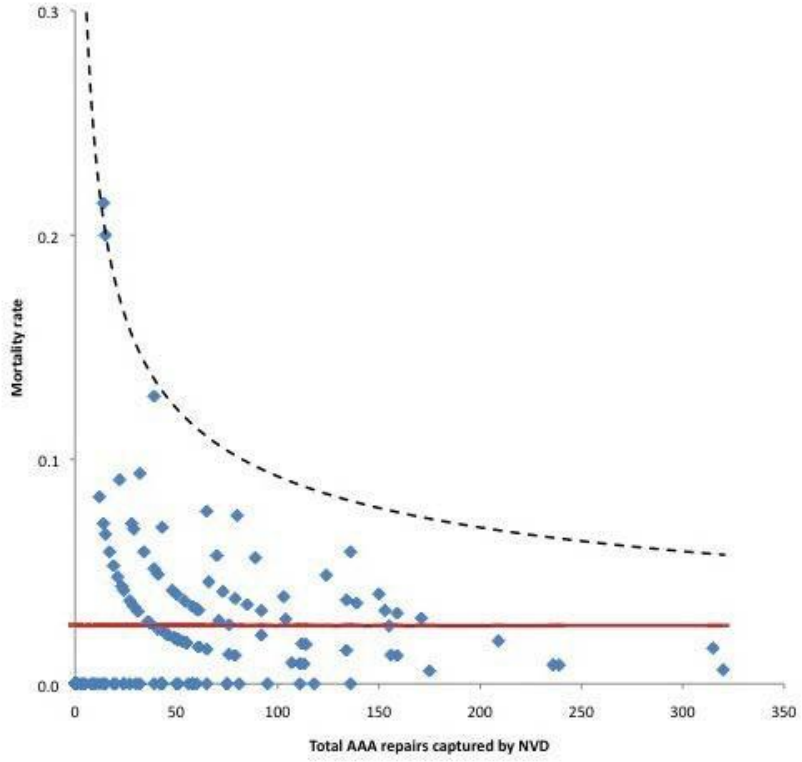
The NCEPOD Report 2005 into patient outcome and death following abdominal aortic aneurysm (AAA) found the overall mortality rate for elective surgery was 6.2%.

The VSGBI and NCEPOD guidance on the provision of emergency and elective vascular surgery services states that the best outcomes are achieved in specialist vascular units with dedicated vascular teams available 24 hours a day, seven days a week.

The VSGBI recommends fewer and higher volume units. The evidence supports minimum numbers of elective procedures that vascular units should undertake and links surgeon elective volume with outcome.

The evidence base concerning the relationship between patient outcome and the organisation of vascular services has become more extensive over the past few years. There is a strong evidence base that suggests that mortality from elective aneurysm surgery is significantly less in centres with a high caseload than in units that perform a lower number of procedures. A meta-analysis of the existing literature(Holt, Poloniecki et al. 2007) reviewed studies containing 421,299 elective aneurysm repairs and reported a weighted odds ratio of 0.66 in favour of higher volume centres dichotomised at 43 cases per year. This result echoes meta-analyses of most complex surgical interventions and should be regarded as definitive and highly informative.

However, although robust, meta-analyses can be criticised due to publication bias, heterogeneity and the predominance of data from certain countries, additional information may be gathered by analysing national administrative data. HES data for elective aneurysm repair in the UK between 2000-2005 (Holt, Poloniecki et al. 2007) demonstrated that the mean mortality for an elective repair was 7.4%, and that 80% of all aneurysm repairs were carried out in units performing less than 33 cases annually. Importantly, the mortality rate in the units with lowest caseload was 8.5% as compared to the 5.9% reported by units with a higher workload. Even more worrying were the many small volume centres where the elective mortality may often exceed 20%. A similar pattern was seen in a recent report from the Vascular Society – Outcomes
after Elective Repair of Infra-Renal AAA 2012, and it remains noticeable that some low volume units have mortality rates vastly in excess of the national average:



Interim for adopt /10/13

Recent data have demonstrated that the early mortality difference observed between low and high volume units is maintained in the long term (Holt, Karthikesalingam et al. 2012).

With regard to ruptured AAA, the absolute mortality differences between hospitals in the lowest and highest volume quintiles reached 24% (Holt, Karthikesalingam et al.). Data on operative mortality in isolation, only tells part of the story, as case mix and patients considered “unfit” for surgery must also be considered. In these areas there is evidence to suggest disparate practices, with no surgical intervention being offered to over 50% of emergency patients with ruptured AAA in low volume units as compared to approximately 20% in the highest volume centres(Holt, Karthikesalingam et al.).

Two recent studies have investigated the effect of endovascular repair on the volume-outcome relationship for elective aneurysm surgery. The studies demonstrated that:

- Hospital volume was significantly related to elective aneurysm mortality for open repair, endovascular repair and the combined (open + endovascular) group (Holt, Poloniecki et al. 2009). There was a significant difference between endovascular mortality between the lowest and highest quintile providers (6.88 vs. 2.88%), and a 77% reduction in mortality was observed for every 100 endovascular repairs performed
- Higher volume hospitals were more likely to adopt endovascular therapy (44% in high volume hospitals vs. 18% in low volume hospitals)(Dimick and Upchurch 2008).
- Hospital volume was an independent predictor of mortality.
- Results were defined by the total aneurysm caseload rather than either endovascular or open cohorts alone i.e. hospitals with a large, predominantly

endovascular, caseload also reported better than average results from open aneurysm repair.

Screening for men over the age of 65 for AAA has been introduced: National Abdominal Aortic Aneurysm Screening Programme (NAAASP) with full roll out to be achieved by 2013. It is hoped that there will therefore be an increase in activity for elective aneurysms and a gradual decrease in emergency aneurysm activity.

The use of endovascular and minimally invasive techniques is a rapidly developing area within vascular services and there is likely to be a further shift towards endovascular repair of aneurysm over coming years.

The evidence for volume-outcome relationships has been described for abdominal aortic aneurysms. However, there is evidence that similar relationships affect the performance of other vascular procedures including lower limb arterial reconstruction and carotid endarterectomy (Karthikesalingam et al 2010;Moxey et al 2012)

- Dimick, J. B. and G. R. Upchurch, Jr. (2008). "Endovascular technology, hospital volume, and mortality with abdominal aortic aneurysm surgery." J Vasc Surg 47(6): 1150-1154.
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- Karthikesalingam A, Hinchliffe RJ, Loftus IM, Thompson MM, Holt PJ. Volume-outcome relationships in vascular surgery: the current status. J Endovasc Ther. 2010 Jun;17(3):356-65.
- Moxey PW, Hofman D, Hinchliffe RJ, Poloniecki J, Loftus IM, Thompson MM, Holt PJ. Volume-outcome relationships in lower extremity arterial bypass surgery. Ann Surg. 2012 Dec;256(6):1102-7.

2. Scope

2.1 Aims and objectives of service

Vascular services are commissioned to provide diagnostics and treatment for vascular disease. The principal specialities involved are vascular surgery and interventional vascular radiology.

The overarching aim of elective and 24/7 emergency vascular services is to provide evidence-based models of care that improve patient diagnosis and treatment and ultimately improve mortality and morbidity from vascular disease.

The service will deliver this aim by:-

- Improving the patient experience, providing equality of access to the full range of vascular diagnostics and interventions and ensuring that patients are receiving a high quality of service, with access to the most modern techniques.
- Developing and sustaining the resilience of vascular services and the workforce providing those services.
- Improving mortality and morbidity rates for people with vascular disease and improving survival rates following hospitalisation.
- Improving complication rates following a vascular admission (short and long term).
- Reducing mortality rates by preventing death from ruptured abdominal aortic aneurysm, stroke, lower limb ischaemia and vascular trauma.
- Providing early intervention and treatment to achieve regional reductions in the incidence of stroke due to carotid artery disease and leg amputation due to peripheral arterial disease.
- Supporting other services to control vascular bleeding and manage vascular complications.
- Working jointly with the diabetic and podiatry service to optimise care, minimise tissue loss and prevent amputation.

Although care for varicose veins is often provided by vascular teams this specification excludes these procedures as they are not included in the specialised definition.

2.2 Service description/care pathway

This service comprises the following elements:-

- 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.
- Outpatient follow up of patients receiving vascular surgery/endovascular interventions.
- Rehabilitation services particularly for post amputation care.

Service Model

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.

There are two service models emerging which enable sustainable delivery of the required infrastructure, patient volumes, and improved clinical outcomes. Both

models 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.

One provider network model has only two levels of care: all elective and emergency arterial vascular care centralised in a single centre with outpatient assessment, diagnostics and vascular consultations undertaken in the centre and local hospitals.

The alternative network model has three levels of care: all elective and emergency arterial care provided in a single centre linked to some neighbouring hospitals which would provide non arterial vascular care and with outpatient assessment, diagnostics and vascular consultations undertaken in these and other local hospitals.

The network model adopted will follow the principles and governance set out in the national guidance on Operational Delivery Networks.

Vascular Networks

All Trusts that provide a vascular service must belong to a vascular provider network.

The network arrangements must be clearly documented and have clearly articulated governance arrangements. As well as the weekly multi-disciplinary team meetings there will be regular business meetings to ensure an inclusive and coherent approach to audit, education and training.

To avoid any misunderstanding, it is envisaged that all arterial surgery will be provided at a vascular centre, with the facilities outlined below.

Leg amputations should be undertaken in the arterial centres due to the need to improve/reduce the current perioperative mortality rate. It is recognised that, at present, due to capacity pressures, in the short-term, leg amputations may need to continue to be undertaken out-with the centres in designated units. Provider networks will work towards the aim of all leg amputations being undertaken in arterial centres by 2015 and develop a robust implementation plan to achieve this.

In circumstances where leg amputations are undertaken outside the arterial centre the patient must be under the care of the arterial network and the procedure undertaken by a vascular specialist. All patients considered for leg amputation including those operated on locally should be be discussed by the vascular multi- disciplinary team and will be given the same opportunities for limb salvage as those treated in the arterial centre. All leg amputation patients/procedures will be included in the network audit.

In-patient arterial surgery and vascular interventional radiology will be available 24/7 within the arterial centre with a vascular on call rota for vascular emergencies covered by on site vascular surgeons and vascular interventional radiologists to ensure immediate access for emergency procedures and post operative care. In practice that means a vascular medical

team of a minimum of 6 vascular surgeons and 6 vascular interventional radiologists to ensure comprehensive out of hours emergency cover.

Each surgeon will need to have an appropriate arterial workload (e.g in the region of 10 AAA emergency and elective procedures per surgeon per year and commensurate numbers of lower limb and carotid procedures), which will necessitate an appropriate catchment area to generate sufficient case volume. A minimum population of 800,000 would be appropriate but for a world class service a larger catchment area will be required.

A 24/7 vascular interventional radiology rota may need to be organised on a network wide basis to ensure that interventional radiology services for other specialties, in local hospitals, are not destabilised. All participants in the rota must have the appropriate skills and competencies to undertake the full range of vascular interventional radiological procedures. Emergency access to vascular interventional radiology must be within 1 hour from initial consultation to intervention.

Where appropriate, day case and first line diagnostics procedures will be provided locally.

The network may also agree that low risk peripheral vascular interventions can be undertaken locally, to utilise local skills and local interventional vascular radiology capacity. The scope of this local provision must be clearly defined and the activity must be included in the network audit arrangements. (See appendix A).

With regard to services for patients with chronic vascular conditions arising from venous insufficiency and diabetes, local models of care will be developed.

Each vascular network will have a formalised description of where inpatient, day case and outpatient services are provided in the network.

Local protocols will be agreed to provide high quality specialist care at any non- arterial hospitals in the network. Clear written arrangements will exist for cover of inpatients and the transfer of emergencies out of hours. Formal arrangements will also exist to enable vascular-specialists working predominately at a spoke hospital to support out-patient clinics, ward work and non arterial surgery on appropriate sites across the network.

The provider network will nominate a lead vascular clinician and a lead manager with responsibility for ensuring and maintaining implementation of the standards set out in this service specification and locally agreed policies/protocols.

All patients with vascular disease or vascular complications cared for outside the main arterial centre must have access to the same high quality of care and the same opportunities/choices of care as those patients who are in the arterial centre hospitals.

The vascular service will provide a diagnostic and treatment service through a multidisciplinary team model.

Specialist Vascular Team

Patients with vascular disorders will be cared for by specialist vascular teams. These teams will include vascular surgeons, consultant anaesthetists, interventional vascular radiologists, vascular scientists, nurses,

radiographers, physiotherapists, occupational therapists and rehabilitation specialists.

The vascular multidisciplinary team will be hosted by the arterial centre. Clinicians providing emergency care will be part of the vascular services multi-disciplinary team and be delivering both in and out of hours care in the network arterial centre.

Care of patients will be managed through regular multi-disciplinary team meetings which will occur at least once a week. The membership requirements for the multi-disciplinary team meeting will include a range of clinical disciplines and be formalised. The documentation will include statements on minimum levels of attendance for individuals and quoracy. It is expected that all clinicians will attend multi-disciplinary team meeting on a regular basis.

Emergency procedures will be reviewed at the next multi-disciplinary team meeting.

Discussion at the multi-disciplinary team meeting will precede elective vascular procedures being undertaken, although protocols will be developed to ensure that urgent cases are not delayed inappropriately.

The specialist vascular team will also support the care of patients under the management of other specialties.

Infrastructure/Facilities

With regard to the whole vascular service across the network there will be access to the following:

- Outpatient Clinics – will include access to nurses experienced in ulcer and wound dressing. Doppler ultrasound machines should be available. There will be access to Doppler machines in the clinic.
- Vascular Laboratory – the vascular laboratory service will be available for the diagnosis and assessment of arterial and venous disease. (Service availability does not necessarily have to be within the confines of a vascular laboratory).
- Vascular Ward – patients with vascular disease will have access to dedicated vascular beds. There will be sufficient dedicated beds to accommodate the routine elective work and emergency admissions. Beds will be staffed by an appropriate skill mix of nurses who have been trained in the care of vascular patients. Doppler investigation will be available on the ward.
- Interventional radiology suite with access to nursing staff who have been trained in vascular procedures.
- Operating Theatres – a 24 hour NCEPOD emergency theatre will be accessible at all times to undertake emergency vascular procedures.
- Operating theatres – a vascular operating theatre with experienced vascular theatre staff should be available for elective activity.
- Operating theatres – facilities for endovascular aneurysm repair should be available with facilities as described by the Joint Working Group to produce guidance on delivering an Endovascular Aneurysm Repair Service

- Anaesthesia – elective vascular services will have dedicated vascular anaesthetic input into elective services, from anaesthetists experienced in dealing with the vascular patient and with a special interest in this area.
- 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 be available for elective patients.
- 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.

Care Pathways

The following care pathways will be documented by each vascular network:

- Management of acute rupture of AAA
- Investigation and management of unruptured AAA
- Investigation and management of carotid disease (link to stroke care pathway)
- Management of acute limb ischaemia
- Investigation and management of chronic vascular insufficiency
- Management of vascular access for renal patients, if undertaken by vascular specialists
- Management of vascular injury (including complications of angiography)

The following pathways are published by the Map of Medicine:

- Abdominal Aortic Aneurysm Screening
- Peripheral Arterial Disease Pathways including suspected disease, secondary care investigations, surgical revascularisation and shared care
- Venous thromboembolism pathways (VTE) risk assessment and prophylaxis and diagnosis and management

Highly Specialised Interventions

Some interventions/treatment are complex, rare or require other specialist input such as cardiothoracic surgeons e.g. thoraco-abdominal aneurysms. These procedures will only be carried out in arterial centres with the required skills and clinical linkages.

There needs to be a close relation between vascular services and cardiology/cardiac surgery services and whilst colocation is desirable it is not essential.

The introduction of new technologies will need to be managed and developed in line with commissioning policies. This may mean that only a small number of centres nationally are identified as a provider, with a greater catchment population than general arterial centres.

The use of fenestrated and branched endovascular stents for repairing aneurysmal disease of the aorta is an area of developing practice in vascular surgery. A separate commissioning policy will describe the appropriate patient group to receive this treatment and the service provision requirements in order to deliver this treatment.

Commissioners will need to judge whether or not there is a need to develop capacity to meet population need, taking into account existing case series.

2.3 Population covered

Patients will experience varied contact with the service depending on the nature and severity of their condition. Patients will fall outside the scope of this specification when discharged from the care of the specialist vascular team.

The service outlined in this specification is for patients ordinarily resident in England*, or otherwise the commissioning responsibility of the NHS in England (as defined in *"Who Pays?[1]": Establishing the responsible commissioner* and other Department of Health guidance relating to patients entitled to NHS care or exempt from charges).

Emergency admissions ambulance coverage will reflect the network footprints. Bypass arrangements will operate to ensure arterial emergencies are taken directly to the arterial centre.

2.4 Any acceptance and exclusion criteria

The service will accept all patients who have been referred via their GP or other health care professional to a vascular specialist within secondary or tertiary care, or who have presented as an emergency in secondary care and identified as a vascular emergency. There will also be referrals from the National AAA Screening Programme.

This specification excludes the care of varicose veins as these procedures are outside the scope of the specialised service definition.

Vascular services for children are covered in the specialist paediatric surgery service specification.

2.5 Interdependencies with other services

Vascular services link to a range of other clinical specialties and services: Co-

located services
- Intensive care
- Interventional vascular radiology

Interdependent services
- Stroke surgery and vascular opinion on stroke management
- Limb salvage surgery
- Diabetes specialist hospital services and diabetic community services
- Renal inpatient units
- Interventional cardiology
- Cardiac surgery
- Thoracic surgery
- Major trauma centres and trauma units

Related services
- Rehabilitation services
- Limb fitting service

Relevant networks and screening programmes include:-

- Cardiac/Stroke networks
- Renal networks
- Critical Care networks
- Trauma networks
- AAA screening programme

3. Applicable Service Standards

3.1 Applicable national standards e.g. NICE, Royal College

There is a range of guidance available covering vascular services which set out the required service standards. The most significant are:-

- VSGBI: The Provision of Services for Patients with Vascular Disease 2012.
- NHS Abdominal Aortic Aneurysm Screening Programme Guidance for Public Health and Commissioners, July 2009.
- Royal College of Radiologists – Setting the Standards of Providing a 24 hour Interventional Radiology service, September 2008.
- Royal College of Radiologists – Standards in Vascular Radiology – 2011.
- NCEPOD Report 2005 – Abdominal Aortic Aneurysm – A service in need of surgery.
- VSGBI and the Royal College of Surgeons – Training in Vascular Surgery and Standards for Vascular Training – 2011.
- Medicines and health products Regulatory Agency (MHRA) Joint Working Group to produce guidance on delivering the Endovascular Aneurysm Repair (EVAR) Service (RCR, BSIR, VSGBI, Vascular Anaesthesia Society of Great Britain and Ireland(VASGBI), MHRA Committee on the Safety of Devices) – December 2010.

CORE STANDARDS

The core standards which ultimately shape the configuration of vascular services include:-

- As the new specialty of vascular surgery is established provision will need to be made for the separation of vascular and general surgery with vascular surgeons only treating patients with vascular disease, this will be required at both consultant and trainee level.
- Patients with a vascular emergency will have immediate access to a specialist vascular team at the arterial centre with on site vascular surgery and interventional vascular radiology.

The arterial centre in the network will perform a high volume of vascular procedures per year. There is debate about the minimum/ideal volume of procedures. However, 6 surgeons, each with around 10 AAA procedures per surgeon per year would indicate at least 60 AAA procedures per centre. There would be a commensurate number of lower limb procedures.

The arterial centre will also perform a high volume of carotid endarterectomy procedures. A minimum number of 50 is indicated.

All vascular consultants working in vascular networks must routinely enter data onto the following databases/audits:-

- The National Vascular Database
- The Carotid Endarterectomy Audit (CEA)
- National Vascular Registry (when functional)
- The British Society of Interventional Radiology BIAS databases

Endovascular aneurysm repair (EVAR) will only be performed in specialist centres by clinical teams experienced in the management of AAAs. These teams will have appropriate expertise in all aspects of patient assessment and the use of endovascular aortic stent-grafts including the necessary expertise to manage complications encountered during these procedures.

Vascular centres providing post screening AAA repair must meet all the standards set out by the NAAASP

NB: The AAA and CEA volumes quoted are currently indicators but over time as services are reconfigured will become the minimum.

NICE guidance of significance to elective and emergency vascular services, exists as follows:-

- CG10 Type 2 diabetes footcare – (January 2004)
- CG66/87 Diabetes – type 2 (update): (May 2008/May 2009)
- CG68 Stroke - (July 2008)
- CG92 Venous thromboembolism – reducing the risk (January 2010) o CG119 Diabetic foot problems-inpatient management – (March 2011)
- CG127 Hypertension – (August 2011)
- CG147 Lower limb peripheral arterial disease – (August 2012)
- TA167 Endovascular stent-grafts for the treatment of abdominal aortic aneurysms – (February 2009)
- TA210 Vascular disease – Clopidogrel and Dipyridamole – (December 2010)
- IPG52 Endovenous laser treatment of the long saphenous vein - (March 2004)
- IPG60 Thrombin injections for pseudoaneurysms - (June 2004)
- IPG74 Balloon angioplasty with or without stenting for coarctation or recoarctation of aorta in adults and children - (July 2004)
- IPG79 Stent placement for vena caval obstruction - (July 2004)
- IPG127 Endovascular stent-graft placement in thoracic aortic aneurysms and dissections – guidance (June 2005)
- IPG163 Stent-graft placement in abdominal aortic aneurysm – Guidance (March 2006)
- IPG229 Laparoscopic repair of abdominal aortic aneurysm - (August 2007) (February 2009)
- IPG388 Carotid artery stent replacement for asymptomatic extracrarial carotid stenosis – (April 2011)
- IPG390 Endovascular stent-grafting of popliteal aneurysms – (April 2011)
- IPG389 Carotid artery stent placement for symptomatic extracrarial carotid stenosis – (April 2011)

[1] Note: for the purposes of commissioning health services, this EXCLUDES patients who, whilst resident in England, are registered with a GP practice in Wales, but INCLUDES patients resident in Wales who are registered with a GP Practice in England. Specifically, this service is for adults with vascular conditions requiring specialised intervention and management, as outlined within this specification.

4. Key Service Outcomes

Abdominal Aortic Aneurysm

Metric	Agency	Definition	Target	Acceptable
Mortality	NVD/NVR	Unit overall elective AAA in hospital mortality (by end 2013)	≤3.5%	<6%
Length of Stay	NVD/NVR	LOS for elective AAA repair	<7d	<10d
Number of AAA repairs per arterial centre	NVD/NVR	Number of AAA repairs (total – elective and emergency)	>60	>50
Mortality: elective repair	NVD/NVR	All cause mortality at 1 year (collect from ONS)	≤15%	≤20%
Time to treatment	NAAASP	% of subjects with AAA ≥5.5cm deemed fit for intervention operated on by vascular specialist within eight weeks	≥80%	≥60%

Carotid Intervention

Metric	Agency	Definition	Target	Acceptable
Stroke rate	NVD/NVR*	Stroke rate 30 days after surgery	<2%	<3%
Mortality	NVD/NVR	Death rate 30 days after surgery	<1%	<2%
Referral	National Stroke Strategy	Delay from symptom to treatment for suitable patients (by 2013)	<7 days	<14 days

*National Vascular Database/National Vascular Registry

Peripheral Arterial Disease – Lower Limb Bypass (PAD)

Metric	Agency	Definition	Target	Acceptable
Mortality	NVD/NVR	Death 30 days after surgery	<5%	<10%
Amputation free survival	NVD/NVR	Amputation free survival 1 year post surgery	Needs Bench-marking in NVR	

Lower limb amputation

Metric	Agency	Definition	Target	Acceptable
Mortality	NVD/NVR	In hospital mortality	5%	≤15%

Interim for adoption 01/10/13

Procedure	VSGBI QIF*	Patients should undergo surgery on day time lists (between 0800 and 2000)	90%	75%
Procedure	VSGBI QIF	Ratio of below to above knee amputation in unit	>1	1
Outcome	VSGBI QIF	Rate of amputation revision to higher level	<10%	<12%

*Quality Improvement Framework

For clarification - this is an appendix to the specification and not the Business Case

Appendix A

The Provision of Vascular Interventional Radiology Services to Patients at Non Arterial Hospitals within a Vascular Network

What constitutes an MDT?
Major arterial cases that are being considered for intervention should be discussed at a Vascular MDT. The MDT should be held at least once a week and involve all clinicians concerned with the care of vascular patients. This will include vascular surgeons and interventional radiologists and may include vascular nurses, radiographers, radiology nurses, other medical specialities and anaesthetists.

There should be one MDT meeting for each vascular network, where patients can be considered for all available open and endovascular treatments. Clinicians from non- arterial networked hospitals should be encouraged to attend in person, but arrangements for teleconferencing should also be available. In some centres it may be appropriate to have separate specialised MDTs.

What sorts of patients are suitable for peripheral angioplasty or stenting at non-arterial sites?
All major arterial interventions should be performed on the designated arterial site with 24/7 cover from vascular surgery, interventional radiology and anaesthesia/ITU. Subject to locally agreed protocols audited for quality of outcomes against agreed standards, some patients may be managed on non-arterial sites, so long as there are robust arrangements for transfer in case of emergency. These will primarily involve patients which can be managed as day cases. Patients requiring an overnight stay for social rather than medical issues must be managed on a ward experienced in the care of vascular patients; this should include 24/7 cover arrangements for the management of complications. Renal patients requiring intervention can be treated within a designated renal access/transplant centre, so long as there are firm 24/7 protocols for vascular referral if required.

What sorts of workloads are appropriate to maintain skills?

All patients undergoing vascular interventional procedures should be recorded on locally or nationally held databases. Those hospitals with insufficient workload to maintain competency, should discuss transferring their caseload to a designated arterial centre.

How do we measure competency?

All patients undergoing peripheral vascular intervention should be audited through the national databases (e.g. NVR/British Society of Interventional Radiologists Iliac Angioplasty and Stenting database (BIAS)) and complications discussed at a regular mortality & morbidity meeting. This should be convened centrally and outcome measures should include death or major complication (i.e. bleeding, occlusion, amputation). In addition, details of urgent transfer or request for assistance should be monitored and audited annually.

Should a surgeon be present on site if intervention is being carried out?

All vascular surgeons involved in a vascular network should perform their major

arterial cases at a designated arterial hospital, but must provide a daily service to non-arterial sites. This will involve attendance at OPD clinics, ward rounds to review patients, either prior to or after their intervention at the major arterial centre, and to support colleagues from other specialties requiring vascular assistance. There will not necessarily be a vascular surgeon present at all times, but there should be formal on- call rotas to allow for 24/7 cover for all patients in an emergency.

What should the transfer arrangements be if patients require emergency surgical intervention?

These should be decided by agreed protocols and will vary depending on the local arrangements for provision of specialty services and geography. Where 24/7 cover is not possible, this must be provided by the designated arterial centre with robust arrangements in place for review/transfer. This should apply to all clinicians performing arterial or venous catheterisation.

APPENDIX B Vascular: Key Service Outcomes 2013/2014

Abdominal Aortic Aneurysm:

Metric	Definition	Target	Accep-table	UHS	PHT
Mortality	Unit overall elective AAA in hospital mortality	≤3.5%	<6%	3%	0%
Length of Stay	LOS for elective AAA repair	<7d	<10d	NC	NC
Number of AAA repairs	Total – elective and emergency	>60	>50	112	64
Mortality: elective repair	All cause mortality at 1 year (collect from ONS)	≤15%	≤20%	NC	NC
Time to treatment	% of subjects with AAA ≥5.5cm deemed fit for intervention operated on by vascular specialist within eight weeks	≥80%	≥60%	NC	NC

Carotid Intervention:

Metric	Definition	Target	Accep table	UHS	PHT
Stroke Rate	Stroke rate 30 days after surgery	<2%	<3%	0%	0%
Mortality	Death rate 30 days after surgery	<1%	<2%	0%	0%
Referral	Delay from symptom to treatment for suitable patients (by 2013)	<7 days	< 14 days	NC	NC

Peripheral Arterial Disease – Lower Limb Bypass (PAD)

Metric	Definition	Target	Accep table	UHS	PHT
Mortality	Death 30 days after surgery	<5%	<10%	4%	3.8%
Amputation free survival	Amputation free survival 1 year post surgery	Needs benchmarking in NVR		NC	NC

Lower Limb Amputation:

Metric	Definition	Target	Accep table	UHS	PHT
Mortality	In hospital mortality	5%	≤15%	6%	9.5%
Procedure	Patients should undergo surgery on day time lists (between 0800 and 2000)	90%	75%	92	NC
Procedure	Ratio of below to above knee amputation in unit	>1	1	10	NC
Outcome	Rate of amputation revision to higher level	<10%	<12%	N/K	NC

NC Not Collated Source: Providers

APPENDIX C National Clinical Advisory Team (NCAT) Report: Vascular Services Review - South Central 7 October

To: NHS South Central

NCAT Report: Administrator – Judy Grimshaw

Vascular Services Review – South Central Tel: - 020 3299 5172

Date of Visit: 7 October 2011 Email: judy.grimshaw:nhs.net

Visitor:

King's College Hospital
Denmark Hill
London SE5 9RS

Professor Matt Thompson, Professor of Vascular Surgery, St George's Vascular Institute

1. Introduction

1.1 NCAT was invited by NHS South Central to review the development and on-going plans for reconfiguration of vascular services in the South Central Strategic Health Authority. The visit took place at the Strategic Health Authority Headquarters in Newbury. The visit took the form of a number of group interviews and telephone conversations.

2. InformationProvided

Prior to visit

- Board of Commissioners Thames Valley Vascular Review recommendation (05.10)
- A paper providing an update on progress of the reconfiguration of the vascular/and major trauma services dated 22nd July 2011. Developing safe and sustainable acute services in South Central. Vascular Stroke and Major Trauma services. Engagement and consultation.
- Board of Commissioners. SHIP vascular review recommendations dated 22.12.2010.
- NHS South Central Cardiovascular Network. MOBBB Vascular Surgery Service Model recommendation. Board of Commissioners summary paper. 27.10.10.
- NHS South Central. Developing safe and sustainable acute services in South Central. Stroke Major Trauma and Vascular Surgery engagement document dated August 2011.
- Project Brief dated 5 August 2011

3. Discussionswereheldwiththefollowing:

3.1 Project Group Members:

Sue Nunney	Consultation Project Manager South of England SHA
Gail Rossiter	Associate Director Communications and Engagement, South of England SHA
Beverley Meeson	Cardioascular Network Manager
Simon Cook Emma McKinney Judy McCulloch	Associate Director, Acute Care Programme South of England SHA Communications Manager, SHIP Communications and Engagement

3.2 Senior Managers:

Steve Fairman	Director of Improvement and Efficiency South of England SHA
Debbie Fleming	Chief Executive Officer, SHIP
Edward Baker	Medical Director, Oxford Radcliffe Infirmary
Steve McManus	Director of Operations, Southampton General Hospital

3.3 Patient and Public Representatives:

Harry Dymond	LINk SHIP
Tony Lloyd	LINk West Berkshire

3.4 Clinicians and General Practitioners:

Cliff Shearman	Professor of Vascular Surgery, Southampton
Mike Phillips	Vascular Surgeon, Southampton
David Gerrard	Vascular Surgeon, Frimley Park Hospital
Sabin Sonneberg	Vascular Surgeon, Basingstoke and Frimley Park Hospitals
Simon Holmes	Medical Director, Portsmouth Hospital
Andy Northeast	Vascular Surgeon, Wycombe Hospital
Peter Rutter	Vascular Surgeon, Wexham Park Hospital
George Boulas	General Practitioner, North and West Reading GP Commissioning Consortium

4. CaseforChange

4.1. The proposal to reconfigure vascular surgery (along with major trauma surgery and Stroke treatments) in the South Central Strategic Health Authority is driven by a desire to improve quality of care for patients undergoing both elective and emergency arterial surgery in the population served by the South Central Strategic Health Authority. The background to this review is a nationwide review of vascular surgery which is being carried out piecemeal throughout the National Health Service in England.

4.2. The basis of many strategic reviews has been the fact that outcomes from arterial surgery in England are poorer than those reported by international comparators. In particular, a European report suggested that the mortality from aneurysm surgery in the United Kingdom was significantly higher than that reported elsewhere in Europe. Alongside these poor mortality results, there have been a significant number of studies published in recent years that have documented a significant association between the individual hospital operative case load for aortic surgery and outcome. These investigations have demonstrated that outcome following surgery for abdominal aortic aneurysm is highly significantly associated with the case load of

the hospital in question. Increasing case load is associated with better clinical outcomes, access to endovascular surgery and an increase in the percentage of patients offered emergency aortic surgery.

4.3. The United Kingdom has recently approved and instituted a National Screening Programme for abdominal aortic aneurysms aimed at men of 65 years of age. This programme is currently being rolled out across the United Kingdom and a population base of approximately 800,000 is required to sustain the activity within the vascular surgical centre associated with the screening programme.

4.4. There is also an association between outcome and the number of carotid endarterectomies performed in the centre. This relationship is not as strong as for aortic aneurysm surgery. However, there are other drivers in carotid endarterectomy at present which may require a change in service provision. There is now widespread acceptance that patients who have neurological symptoms attributable to a carotid stenosis should undergo their operation in a relatively short space of time. The guidelines for performance of carotid endarterectomy differ, but the maximum benefit to patients occurs if patients undergo surgery as soon after their neurological symptoms as possible. The requirement to perform carotid endarterectomy in a short time frame poses significant challenges for the provision of vascular services.

4.5. There are several studies which suggest that the provision of lower limb bypass surgery is diverse within the United Kingdom, with variable outcomes. Again, there is a relationship between volume and outcome in the performance of lower limb bypass surgery.

4.6. Vascular surgery faces work force issues in the future. Vascular surgery is about to become a separate specialty from General Surgery. This will require dedicated on- call teams supported by Specialists in interventional radiology. Vascular surgery has a significant number of co-dependencies which would include an association with interventional radiology, specialised anaesthesia, specialised nurses, a dedicated critical care unit, and access to non-invasive vascular investigations. There is also a relationship between vascular surgery and interventional cardiology, and renal services.

4.7. In common with many other Strategic Health Authorities, South Central Strategic Health Authority has suggested that there is a requirement to reconfigure vascular surgery provision in order to improve patient outcomes and provide a sustainable service in the long term. There is a desire to create centres with sufficient activity so that outcomes are improved and the service remains sustainable. This will inevitably mean centralising some services where necessary. In addition, there is a commitment to providing strong local services which would include appropriate resources to ensure provision of adequate inpatient consultation, outpatient consultation, local access to diagnostic services, and local access to minor surgical procedures.

4.8. The vascular services reconfiguration in South Central commenced in 2008. A

service specification was outlined in 2010 following the convening of two clinical expert panels. The proposed configuration included:

- In the north of South Central: vascular services to be centred on the Oxford Radcliffe which would act as a hub for the north of the region. The Oxford Radcliffe would take patients from its associated spokes which would include Wycombe Hospital, Wexham Park Hospital and the Royal Berkshire Hospital.
- In the South of the region, Southampton General Hospital would act as the hub. The spoke hospitals would include the Royal Hampshire County Hospital, The Queen Alexandra Hospital in Portsmouth and St Mary's Hospital on the Isle of Wight.
- The central part of South Central Region which includes Basingstoke Hospital, would direct their patients to be treated at Frimley Park Hospital in Surrey, which would act as a vascular hub.

4.9. Following patient and public engagement, alternatives to the plan set out above have been proposed. The variants from the plan include the following configuration:

- In the North of South Central region, Oxford Radcliffe Hospital to act as the arterial hub for spoke hospitals including Wycombe Hospital, Wexham Park Hospital, and the Royal Berkshire Hospital. Wycombe Hospital to continue to perform elective carotid endarterectomy on site.
- In the South of the region, Southampton to act as a hub hospital with spokes including Winchester Hospital and St Mary's Hospital, Isle of Wight. Portsmouth would remain as a separate vascular hub. There was some discussion as to whether Portsmouth Hospital could act as a hub with a spoke hospital in Chichester which would increase both the patient numbers and the number of Vascular Surgeons at Portsmouth. The potential movement of patients from Chichester to Portsmouth is currently the subject of local discussion, but there is an impression that this is unlikely to happen. It is more likely that patients and surgeons from Chichester will move to a vascular hub in Brighton.

4.10 The plan from October 2011 onwards was to convene a further clinical expert panel which would include Jonathan Earnshaw, and David Mitchell as Vascular Surgeons, David Kessel and Iain Robertson as Interventional Radiologists plus representatives from renal services and cancer services. This expert panel would be asked to give an opinion on the options that have arisen out of public and patient engagement (notably the performance of elective carotid surgery in Wycombe and that Portsmouth should become as a vascular hub).

4.11. Following the Clinical Expert Panel various options as outlined above will be put to public consultation at the end of November. There are various forms of public consultation planned depending on the exact geography within the region. It is likely

that proposals from South of the South Central region (namely those involving Southampton and Portsmouth) will go to public consultation in November. It is considered unlikely that there will be consultation in the north of the South Central region apart from a wider public consultation of services in Buckinghamshire.

5 Views expressed

5.1 The evidence base regarding configuration is clear. There needs to be a reconfiguration of arterial services in the South Central region to produce vascular centres treating an appropriate number of patients. It is anticipated that increasing the case load and concentrating expertise in a smaller number of centres will lead to improved patient outcomes and sustainable services for the future.

5.2 The South Central region is keen to make a decision on vascular reconfiguration for the medium to long term, recognising that this is a once in a generation opportunity. The region is looking to make a step change in vascular surgical outcomes.

5.3 There is broad support across the commissioning teams for the change, although there Are some local issues in Portsmouth that will need to be addressed.

5.4 There is difficulty in ascertaining the exact numbers of Consultant Vascular Surgeons within the South Central region due to many consultants having interests in fields outside vascular surgery, whether this is in surgical academia, general surgery, or renal transplant services. The difficulties in defining the exact number of Full-time Equivalents has led to some disagreements requiring the need for centralisation, particularly between Southampton and Portsmouth.

5.5 The South Central Strategic Health Authority defined a relationship between vascular services, major trauma centres and stroke services. There was a perceived requirement that vascular services should be on a major trauma site, but that a network approach might be utilised for stroke.

5.6 It was considered that in addition to vascular reconfiguration, attention needed to be directed towards other co-dependent services that might require a vascular presence on site. There was particular concern about renal services on the Portsmouth site if inpatient arterial surgery moved to Southampton.

5.7 The rationale for reconfiguration of stroke and trauma services was accepted. It was considered that there was too long a delay between panel recommendations and patient and public engagement for vascular surgery. There needs to be a piece of work done to ensure that the proposals to reconfigure inpatient arterial services on the Southampton and Oxford Radcliffe sites are real and sustainable in terms of capacity. There is also the impact to consider on other co-dependent services, particularly renal and cancer services in centres where inpatient arterial services are being withdrawn. It is important that any reconfiguration is sustainable in the long

term. There needs to be a clear assessment on the impact on other co-dependent services.

5.8 Team working throughout the patch has been good to date. Team working will be required to ensure that there is sufficient capacity at the arterial hubs to accommodate work from the spoke hospitals.

5.9 The system for arterial surgery in the south of the region (Southampton, Portsmouth) is broken and a reconfiguration is urgently needed. Reconfiguration can be successfully achieved with sustainable capacity as long as the medical work force is integrated to ensure that adequate consultant presence is provided at all hospitals within the proposed reconfiguration.

5.10 Patients want a regional centre with excellent outcomes. The trade off in travel is worthwhile as long as improved outcomes can be guaranteed.

5.11 The new options which include carotid surgery at Wycombe Hospital and a vascular hub at Portsmouth were not discussed at the original Clinical Expert Panels. These options should not be put on the table for public consultation without having gone through another clinical expert panel to define whether they are viable and in the best interests of the patients.

5.12 There were suggestions that patient involvement in the arterial reconfiguration in the South Central region was not very strong and that patient comments have been largely ignored in the process.

5.13 From a commissioning stand point, one of the Commissioning Consortia were happy with the proposals and no major objections were raised

5.14 Whatever configuration is finally adopted for arterial surgery, it is essential that the services are provided without excessive use of trainees due to changes in the training structure. The drivers for arterial reconfiguration should be quality, but service needs to be sustainable.

5.15 It was recognised that it was key to provide constant consultant presence on the Portsmouth site.

5.16 With regard to Wycombe Hospital, a view was expressed that there was little support for moving elective work although Wycombe would like to centralise emergency surgery on the Oxford site. There was little evidence that moving elective surgery would improve outcomes. There are two and a half Full-Time Equivalent Vascular Surgeons on the Wycombe site.

5.17 A view was expressed regarding Wexham Park Hospital that in view of the low number of Surgeons at Wexham Park, there was a desire to move services to Oxford to achieve a critical mass and continue arterial surgery.

5.18 With regard to patients at Basingstoke Hospital, there was support that these patients

should be treated at Frimley Park Hospital. At present, Frimley Park Hospital is in a Surrey network with St Peter's Hospital, Chertsey. There was recognition that Frimley Park.

Hospital did not provide 24 hour, on-site consultant presence as some of the emergency on- call rota was covered by the Chertsey Surgeons. As Basingstoke only wanted to send their patients for emergency services to Frimley, this would be inconsistent with the suggested provision of 24/7 on site emergency services in the rest of the region.

5.19 It is difficult to talk about vascular services in isolation. The close relationship and requirements for co-locating arterial inpatient surgery and interventional radiology should not be ignored in any potential reconfiguration of services.

5.20 There was a discussion amongst the clinicians' about whether carotid surgery should be treated differently from elective aneurysm and lower limb surgery. There was a disparate range of views expressed. These ranged from the fact that if outcomes were good and a service could be offered then there was little advantage to the patients in moving carotid endarterectomy. The opposing view was that it would be difficult, given the relatively few surgeons on a spoke hospital site, to offer patients carotid endarterectomy within a 48 hour time window given the movement of arterial services to other sites and the absence therefore of regular arterial operating lists. There was a discussion regarding the logistics of the number of lists and surgeons that would be required on a spoke site to be able to maintain an effective carotid surgical practice and to ensure that these patients had access to senior consultant decision makers in the post-operative period.

6. Discussion

6.1. The evidence base for the changes proposed in the South Central SHA reconfiguration can be strongly supported. It is clear that there is a relationship between the number of cases performed in a particular centre and outcomes. There is no definitive number that identifies a particular threshold for each individual procedure. There needs to be a common sense approach to interpreting the volume outcome data and how units are placed geographically and strategically within the region. Clearly travel times will play a part in the positioning of the arterial hubs. There is evidence in the South Central region that travel times will be reasonable even if only two hubs are commissioned.

6.2. As with the threshold number for operations, there is debate around what size of catchment population is required to support an arterial hub. The National Aneurysm Screening Programme recommends a screening population of at least 800,000 patients to support an arterial hub. It may be, that world class centres can only be fashioned if there is a catchment population of between 1.2 and 1.5 million.

Interpreting these population data, it would be suggested that there could be a maximum of four hubs in the South Central Strategic Health Authority region, although two hubs are more likely to achieve world class outcomes with a sustainable service.

6.3. It would appear from discussion during the NCAT visit that the most robustly worked through configuration is a suggestion of two arterial hubs in the South Central region. Issues that have arisen during the patient and public engagement have suggested a compromise whereby Portsmouth is also an arterial hub, and Wycombe remains as a spoke to Oxford, but continues to perform carotid endarterectomy. The proposal for the Radcliffe Infirmary to be an arterial hub appears logical given the geography in the North of the South Central region. The movement of arterial cases from Wycombe, Wexham Park and the Royal Berkshire Hospital will substantially increase the arterial case load at the John Radcliffe Infirmary. This would undoubtedly provide a critical threshold of arterial cases. However, there needs to be a robust assurance process to ensure that there is sufficient capacity in Oxford to accommodate these cases. The reconfiguration proposed in South Central is reasonably radical and will lead to a greater increase in arterial cases than has been seen in other areas of the country. In this particular regard, capacity is key and Commissioners would need to ascertain that there is sufficient inpatient operating facility, sufficient inpatient ward facility, and diagnostic facilities to make this transfer of patients successful.

6.4. The proposal that has arisen following patient and public engagement to retain carotid services at Wycombe needs further careful analysis and discussion. In the future, it is extremely likely that patients will require carotid endarterectomy within 48 hours of neurological symptoms. This is in order to maximise the absolute risk reduction that carotid endarterectomy confers. There appears to be no discussion about retaining lower limb bypass surgery and aortic aneurysm surgery at Wycombe. The movement of these cases, and the associated movement of the Wycombe Consultants to perform these cases at Oxford, may potentially leave Wycombe with insufficient arterial infrastructure to continue to perform carotid endarterectomy within an expedited time frame. The movement of both patients and surgeons to Oxford outside of carotid

endarterectomy, will also render the arterial infrastructure at Wycombe somewhat sparse and logistically, if Commissioners wish to retain carotid surgery at Wycombe, then robust assurance is needed that these cases can be performed safely and within the expedited time frame that will be required. The Commissioners would also need to satisfy themselves that there is going to be sufficient arterial consultant presence at Wycombe to give patients undergoing carotid endarterectomy access to senior

medical decision makers in the post operative period.

6.5. Due to the proposed stroke reconfiguration in South Central, not all of the hyper acute stroke units will have vascular surgery on site. There are models of this type of service elsewhere in the country whereby a network approach is used to ensure that patients requiring carotid endarterectomy are referred from the hyper acute stroke unit to the regional vascular centre in an expedited fashion.

6.6. The arrangement for Basingstoke to perform their arterial elective and emergency surgery at Frimley requires comment and discussion. In the rest of the South Central region, there is a desire from the Commissioners that arterial surgery should be performed in an arterial hub where there is constant elective and emergency cover. Frimley Park Hospital has a large vascular case load and has sufficient surgeons to provide 24 hour cover. However, at the moment, Frimley Park Hospital has entered into an arrangement with St Peter's Hospital in Chertsey to provide a 24 hour rota utilising the Surrey Vascular Network. This means that there is not 24 hour, 7 days a week provision for on-site emergency vascular services at Frimley Park Hospital. In a significant proportion of the year, the cover will be provided from St Peter's Hospital and by the St Peter's surgeons travelling to Frimley. This arrangement would be significantly different from the emergency cover proposed in Oxford and Southampton in the original two centre proposal, and would be difficult to recommend.

6.7. The proposal for an arterial hub in Southampton appears well founded and robust. There appear to be sufficient surgeons in Southampton to be able to provide 24 hour cover, especially supplemented by surgeons from Portsmouth. As with the potential reconfiguration in the north of region, the capacity issues that will face Southampton if Portsmouth joins as a spoke Hospital should not be under estimated. The transfer of arterial inpatient work from Portsmouth to Southampton would mean a virtual doubling of the number of inpatient arterial operations performed at Southampton. Again, extremely robust and detailed capacity planning and assurances will be needed prior to the transfer of any work from Portsmouth to Southampton.

6.8. The additional proposal that came out patient and public consultation was that Portsmouth should be an arterial hub in its own right. Certainly, Portsmouth has a reasonably busy inpatient arterial practice and has a case load that would be close to that seen in a smaller arterial hub in the rest of the UK. Portsmouth does appear to have manpower issues with a relatively low number of full-time equivalent Consultant Arterial Surgeons. Given the (present) relatively low number of Consultant Surgeons, it does not appear likely that Portsmouth would be a viable arterial hub in the long term without substantial manpower investment. The Commissioners have indicated that long term sustainability is an issue in this

current reconfiguration. There was some discussion about whether Chichester would join Portsmouth as a spoke to Portsmouth hub. If this were possible then Portsmouth might attain a critical mass of both patients and surgeons to allow long term sustainability as an arterial hub.

6.9. One of the constant issues that accompanies any reconfiguration of inpatient arterial services is the impact that these reconfigurations have on existing services in the spoke Hospitals. This will affect all potential spoke Hospitals in the region, but would be of particular concern in Portsmouth. Portsmouth has a very large inpatient renal practice which does require vascular input. In all of the spoke hospitals, job plans and working practices would need to recognise the co-dependencies and it would be important, in all of the spoke hospitals, but particularly in Portsmouth, that there is a defined vascular surgical presence during the week. The requirement for the number of hours per week will obviously vary according to the hub. In Portsmouth, it is likely that a Vascular Consultant would need to be on site for all of the working week.

7. Conclusions

7.1. The evidence base for the changes proposed for vascular services in the South Central region is acceptable and robust. Interpreting the catchment area, there should be no more than four arterial hubs in the South Central region (this would be Southampton, Oxford, Frimley Park Hospital and Portsmouth). The proposal for two arterial hubs would generate internationally competitive centres with long term sustainability.

7.2. The proposals for two arterial hubs at both Southampton and the John Radcliffe Hospital in Oxford would appear to be ambitious, appropriate and are likely to create long term sustainable vascular centres in the South Central region, with units capable of producing results comparable with international competitors. There are however issues regarding capacity planning in both Southampton and Oxford. Although the Operational Managers at these sites are convinced that there is sufficient capacity to accommodate the transfer of inpatient work from the spoke Hospitals, this process should be subject to a rigorous and robust SHA assurance process.

7.3. With regard to the proposals that came out of patient and public engagement, the ability of Portsmouth to act as an arterial hub in its current state is questionable. There are relatively low consultant numbers (FTE) and significant investment in manpower would be required if Portsmouth was to have a long term sustainable future as an arterial hub in the absence of acquiring both patients and consultants from Chichester.

7.4. The proposal to perform carotid endarterectomy in isolation at Wycombe Hospital

needs careful consideration as to whether, given the transfer of inpatient arterial consultant sessions to Oxford (to deal with aneurysms and lower limb revascularisations) there is sufficient on-site consultant presence at Wycombe to offer these patients a safe and effective service, in light of the requirement for expedited carotid endarterectomy in the future. It is difficult to recommend an isolated carotid service in such a setting as this may weaken both hub and spoke.

7.5. The arrangement between Basingstoke and Frimley Park Hospital appears sensible geographically, but Frimley Park Hospital does not meet the requirements of being a vascular hub. Frimley Park Hospital does not offer 24 hour, 7 day a week on-site consultant emergency cover. If this situation is not rectified, then the service offered to the patients of Basingstoke would not be equitable (in comparison to the arterial hubs in Southampton and Oxford) to the rest of the patients in the region.//The effect of moving inpatient arterial surgery on co-dependent services in the spoke needs to be carefully considered. It is likely that cover can be provided with a two hub model if consultants are prepared to work flexibly and are willing to accept the importance of providing high quality diagnostic, inpatient consultation and minor surgical procedures in a spoke hospital. This has particular importance for the renal services in Portsmouth that would require, a full-time Consultant to be based in Portsmouth during working hours.

7.6. The review has concentrated largely on inpatient arterial surgery with regard to the reconfiguration. In the current climate, there is relatively little distinction between interventional vascular radiology services and vascular surgical services. The effect of centralising inpatient arterial surgery needs to be modelled for the provision of interventional radiology both at the hubs and the spoke.

8. <u>Recommendations</u>

8.1. The project team to consider the conclusions as above and develop an action plan to be agreed with NHS South Central.

8.2. New proposals that have come out of patient and public consultation should be subject to advice from a clinical expert panel that is due to convened to consider these recommendations.

APPENDIX D Wessex Clinical Senate: Recommendations on Vascular Surgery in South East Hampshire: 26th September 2014

Recommendation on Vascular Surgery in South East Hampshire

On 26th September 2013, the Wessex Senate Council met for its inaugural meeting. The Council was asked by NHS England (Wessex) to consider three options for reconfiguration of vascular surgery in South East Hampshire:

Option 1 Maintain two independent vascular centres

Option 2 Network model as described in the NHS Contract for Specialised Vascular Services[1] with all inpatient surgery at University Hospital Southampton
N.B. This was the preferred option of NHS England (Wessex)

Option 3 Move all surgery from Portsmouth Hospitals Trust to University Hospitals Southampton

The Senate Council was asked to review these options for vascular services against national and local guidance and to advise on the potential impact on patient outcomes, co-dependencies, co-location of services and standards for inter-organisational and inter-agency collaboration.

Portsmouth Hospitals Trust presented Option 4 on the day:

Continue the present network arrangements for screen-detected aneurysms
Shared multi-disciplinary team for complex cases
Shared training in vascular surgery (replicating interventional radiology model) Shared research
Two way movement of complex cases: Complex EVAR to University Hospitals Southampton and Renal compromise cases to Portsmouth Hospitals
Create the environment where a regional emergency endovascular service could be developed.

The Senate Council reviewed all of the options and found that:

The proposed options for the provision of vascular surgery in South East Hampshire did not identify a sustainable pathway and workforce, which would withstand shortages in key skills and keep up with rapid technological changes. There was a need for

greater focus on the

delivery of elective and emergency services with high quality pre and post discharge rehabilitation, re-enablement and psychological support close to where the patients live.

1. There is a need to future-proof any service change

The Senate Council noted that new national medical training in both surgical and endovascular procedures commenced this year. The first cohort of vascular specialists will be working in hospitals in 5 or 6 years' time. In the interim, there is need for both surgical and vascular interventional radiology rotas around the clock, 7 days a week.

2. Option 1

The Senate Council recognised that there were no local circumstances which would justify deviation from the service model for abdominal aortic aneurysm (AAA) as described in the NHS Standard Contract for Specialised Vascular Services[2]. Surgeons need to be able to demonstrate assurance that they are achieving high quality outcomes. Furthermore, a larger number of surgeons would allow for enhanced care due to the ability to sub-specialise in particular areas.

The Senate Council was not persuaded that the Renal Service at Portsmouth Hospitals NHS Trust required co-location with a vascular centre. Transplant surgeons would be expected to have competencies in vascular access and should have access to further vascular surgical advice and expertise when required on occasions.

There are insufficient vascular surgeons undertaking a high enough volume of procedures and insufficient interventional radiologists to provide sustainable 24 hour specialist emergency care independently on the Portsmouth Hospitals and University Hospitals Southampton sites. Portsmouth Hospitals stated that they have organised adequate out of hours cover from a mixture of locum, vascular and renal surgeons with a vascular interest and by helping each other out in a crisis. However, this is not sustainable in the longer term, particularly when there is also a need to change the current provision of a 5 day a week vascular service to a 7 day service in both Portsmouth and Southampton without additional resources.

The Senate Council does not support two independent vascular centres for the population of South East Hampshire because the model is unsustainable in a 5-10 year time frame. This is due to a forecast reduction in the number surgical procedures due to screening and technological advances in other treatments which will reduce the need

for surgery. There is also a national shortage in skilled medical, nursing and allied health care professionals. Future technological advances would require an unsustainable level of investment at both sites and there is a requirement for subspecialist expertise and for the future employment of trained endovascular surgeons.

3. Option 2 and Option 3

The Senate was concerned that the provision of vascular services other than major surgery was not adequately addressed in these options. The Senate noted the high morbidity from diabetes and the significant deprivation in areas of both major cities.

The Senate also considered the need for re-enablement and psychological support for patients and the importance of local delivery of these components of a vascular service to a patient population with mobility problems, including a significant number of amputees.

4. Option 4

The Senate recognised the potential value of a network in delivering clinical synergies. However, this option did not address the issues of sustainability in terms of 24/7 consultant rotas nor did it provide a solution to the anticipated costs of technological advances in a time of constrained resource.

Given the historical difficulties in collaboration between the Trusts, the Senate was not confident that the described arrangements were sustainable.

5. Recommendation

The Senate Council makes the following recommendations:

1) Services for patients in South East Hampshire requiring vascular expertise are provided by a single clinical service across the Portsmouth Hospitals and University Hospitals Southampton NHS Trusts

2) The single clinical service includes all vascular surgeons, vascular radiologists, together with other staff as the service and commissioners determine

3) The service has a single clinical director and management team who are accountable for patient access, safety, experience and outcomes of the service4) The clinical director and management team are accountable for the

sustainability of high quality services, research, innovation, teaching and training

5) The service should ensure that interventional clinicians undertake an appropriately high volume of procedures as determined by the NHS Standard Contract for Specialised Vascular Services[3] and at the same time meet the challenge of
providing local services to support an extended pathway into primary and community care

6) The service should establish, as a matter of urgency, a single rota for emergency seven day vascular assessment and interventions, including radiological, endovascular and surgical procedures and support for the Regional Major Trauma Centre

7) As a matter of urgency, all emergency and elective major inpatient interventions (such as AAA repair, symptomatic and ruptured aneurysm treatment) should be delivered at University Hospitals Southampton

8) The service should bring forward proposals, with implementation dates, for the management of carotid arterial disease and major amputations, with local assessment and re-enablement, in the light of the NHS Standard Contract for Specialised Vascular Services[3], for agreement with commissioners

9) The service should focus on the needs of the local populations for vascular clinical care including diagnosis and day case surgery with demonstrable high quality outcomes, re-enablement and psychological support of patients as close to their homes as possible

10) Commissioners should regularly monitor performance and quality metrics and ensure that vascular outcomes improve in accordance with Domains 1 to 5 of the NHS Outcomes Framework. The metrics should reflect the recommendation to provide care closer to home and the extended recovery and re-enablement pathway.

APPENDIX E VASCULAR SOCIETY REVIEW OF SOUTH HAMPSHIRE VASCULAR SERVICES AUGUST 19-20 2015

Mr Paul Blair, President VS
Professor Rob Sayers, Vice President-elect VS

We were asked by the commissioners to conduct a review of vascular services in South Hampshire. Our findings and recommendations are set out below-

1. There have been several previous reviews that have failed to make progress. The workforce are now demoralised and frustrated by lack of decisions making and action.
2. There are difficulties with geographical boundaries but the catchment population seems adequate.
3. A wider review of the Central South Coast may be necessary in the future. This should include Brighton and Bournemouth.
4. Chichester should be considered in this present review. Concerns were raised about the safety of current vascular support to Chichester .These concerns should be investigated and if confirmed then patient safety issues may need to be addressed as a matter of urgency. We have escalated our concerns via the commissioners.
5. We were given conflicting information and opinion within and between Trusts regarding current working practices and there was a degree of mistrust on both sides.
6. Both sides concentrated on the deficiencies of the other side rather than the positive aspects of their own bid.
7. There were significant differences between the two trusts regarding a willingness to invest in vascular services.

We were able to visit both units (Southampton and Portsmouth) and travel between them. Some specific views about each unit are as follows-

Portsmouth

1. The current practice is probably not sustainable in the long term due to overall low case volume, marked disparity in distribution of cases between surgeons and very low volume of major arterial cases for two surgeons.
2. There was lack of clear clinical leadership in Vascular Surgery.
3. There was an excellent vascular laboratory but no dedicated hybrid room and no dedicated vascular ward (shared with urology).
4. Portsmouth and Southampton currently undertake regular MDT for complex cases with transfer of some cases for treatment in Southampton.
5. There will shortly be 5 vascular radiologists in Portsmouth, all will be on the on call rota and 4 out of 5 are trained in EVAR. There is Trust Board approval for appointment of the 6th. We made considerable efforts to clarify this situation and were re-assured that Portsmouth can provide a full on-call vascular radiology rota.
6. There are busy and successful co-dependencies (diabetic foot services, nephrology and urology) that would require significant support if Portsmouth was to become a spoke hospital.
7. The vascular surgical rota at Portsmouth is poor. They have 6 surgeons but one does no on call and one is also on the transplant rota at the same time. We have since learned that one surgeon will shortly be leaving. The majority of the vascular work at Portsmouth is done by 1-2 surgeons and according to the National Vascular Registry (NVR) one surgeon does no aortic work and another did no aortas in a 5 year period.

Southampton

1. We were concerned about potential lack of capacity at Southampton.
2. The Senior Management Team did not appear keen to invest in Vascular Services unless there was centralisation on the Southampton site.
3. There are appropriate surgical services for an arterial hub currently on site including cardiothoracic and trauma
4. In patients requiring chronic haemodialysis require admission to HDU/ICU, the development of a small dedicated area for intermittent use should be considered.
5. There are 7 consultant vascular surgeons however 2 no longer take part in out of hours on call at weekends.
6. There are only 4 IR consultants.
7. There is no hybrid room but plans to develop one.
8. There is no VSU.
9. There is an active complex EVAR programme.

Currently both units are not POVS compliant – Portsmouth have problems with the on call surgical rota and Southampton lack Vascular Radiology

In terms of the future – it would be possible to make both units POVS compliant and stand alone. This would involve Portsmouth providing vascular services for Chichester and both units would require substantial investment with consultant appointments and development of facilities. However this model would probably only

be sustainable in the short term. In the long term both units may have difficulty in recruiting consultants and trainees and 7 day working would need more consultants on a 1 in 8 rota or greater.

The alternative and more appropriate long term sustainable option would be centralisation of services on the Southampton site. This option would likely lead to a high class vascular facility but would require capacity and resource issues to be addressed. The success of this centralised model would require-

7. Significant cooperation from the vascular surgeons to provide adequate services at the hub and spoke hospitals.
8. Capacity issues at Southampton to be addressed.
9. A clinical lead to be agreed and appointed.
10. Clear demonstration by Southampton Trust of a willingness to invest and develop vascular services.
11. A staggered merger should be avoided.
12. Reconfiguration of services is difficult and can be prone to misinformation therefore early engagement between local politicians and professional bodies should take place as soon as possible in order to provide accurate information for the public through local media

APPENDIX F "Option 4"

Option 4: establish a Southern Hampshire Vascular Network and move, on a phased basis, all major complex arterial vascular surgical procedures to Southampton. (Options for surgery following a transient ischaemic attack (TIA) or stroke (such as carotid endarterectomy CEA) and major amputations will be considered at a later date following successful implementation of the initial phases.)

Our fourth, and preferred option, is that all of the hospitals in Southern Hampshire work in partnership to deliver vascular services as part of a Vascular Network achieved on a phased basis, the initial phases concentrating on surgery for AAA .
Major amputations and infra-inguinal by-pass surgery have not been included in the initial phase as there are a larger numbers of patient numbers who undergo these procedures, some of whom will require long episodes of post- operative recovery and rehabilitation. Our aim is that any ongoing treatment takes place as close to the patients' home as possible. We therefore need to make sure that any proposed changes in services mean that patients can return to their local hospital at the earliest opportunity.

The national service specification for vascular services allows for a period of evaluation stating that "Provider networks will work towards the aim of all leg amputations being undertaken in arterial centres by 2015 and develop a robust implementation plan to achieve this"

Larger numbers of patients undergo a CEA each year which means that centralising this service would impact on a larger number of people. It will be beneficial to allow some time for evaluation before taking any further steps to centralise services, when this will involve more significant numbers. It is also noted that further work is underway nationally to assess the provision of CEAs surgery across the country, so allowing some time to elapse will enable more evidence to be obtained that will support future decisions as to where this procedure is best undertaken.

The network would have one major arterial centre which would be located in Southampton the major trauma centre for the area, but provided by a single clinical service across both Southampton and Portsmouth. The arterial centre would undertake the small number of major complex arterial procedures with minor procedures being undertaken as close to the patients home as possible. The single clinical service would bring together clinicians from across the network into joint surgical and interventional radiological rotas. This will ensure adequate clinical expertise is available across the network. Joint multidisciplinary teams (MDT) would meet on a regular basis to discuss the care of patients and how they should most appropriately be managed. The network will focus on the needs of the local population and will ensure that where possible, diagnosis, day surgery, reablement and rehabilitation takes place as close to the patients home as possible.

It is proposed that there would be a phased approach to the implementation of this option, which is based on and takes account of the recommendations made by the Wessex Clinical Senate in September 2013:
Phase 1 would include:

- stablishing a single rota for emergency seven day vascular assessment and interventions and support for the major trauma and renal centres.
- ll emergency AAA patients (open and EVAR) being operated on in Southampton. This work will take place in collaboration with the South Central Ambulance Service

and local A&E departments to ensure that there are no delays in patients receiving the care they need.

- nsuring that out-patient clinics, initial investigations, surgery for venous disease, reablement and rehabilitation would also be carried out as close to the patients home as possible. All of these services would continue to be provided in the local hospitals providing that they meet with defined quality standards.
- stablishing regular MDTs and joint training opportunities.
- onsidering the options and timescales for redirecting all non-emergency AAA patients, including those who have been picked up as part of the AAA screening programme, so that they are operated on in Southampton.

Phase 1 would be implemented before the end of December 2014. This date could potentially be brought forward but this is dependent on the providers reaching agreement sooner.

Phase 2 would include:

- ll non-emergency AAA patients (open and EVAR), including those who have been picked up as part of the AAA screening programme, being operated on in Southampton, if not already implemented as part of phase 1.
- onsidering the options for phase 3.

Phase 2 would be carried out immediately after Phase 1, and therefore be implemented from January 2015.

Phase 3

As part of this phased approach, it is proposed that there is a formal review before the end of 2015/16, once phases 1 and 2 have been completed and the new arrangements have had time to become properly established. Under phase 3, commissioners and providers should review the options relating to surgery following a transient ischaemic attack (TIA) or stroke (such as carotid endarterectomy CEA) and major amputations, and agree the way forwards by the end of March 2016.

The options and timescales for patients who need a infra-inguinal by-pass may also need to be considered as part of phase 3, if no formal decision about this surgery has been made under phase 2 of the proposal. It is important to note that the management of patients needing an infra-inguinal by-pass is key to reducing the number of major amputations, which means that this will need careful consideration.

As previously highlighted, no decisions have been made as to the outcome for the procedures that need to be considered under phase 3, and further discussion will need to take place between all key stakeholders before any further recommendations are made.

The work being undertaken nationally in regard to major amputations and CEAs will influence any future recommendations. The exact details of any future proposals will need to be planned in collaboration with vascular surgeons and other key clinicians from both Portsmouth and Southampton.

APPENDIX G VSQIP Surgeon Outcomes

University Hospital Southampton NHS Foundation Trust

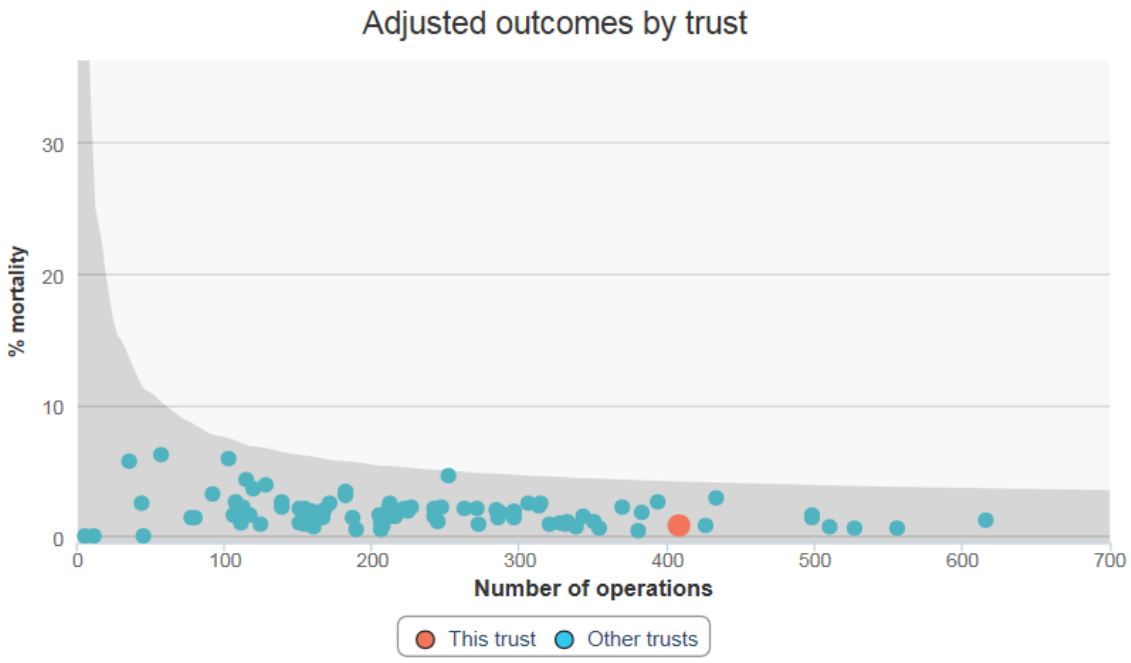
Vascular specialists working at University Hospital Southampton NHS Foundation Trust perform vascular surgery at Southampton General Hospital.

Elective Infra-Renal AAA Repair

Trust outcomes

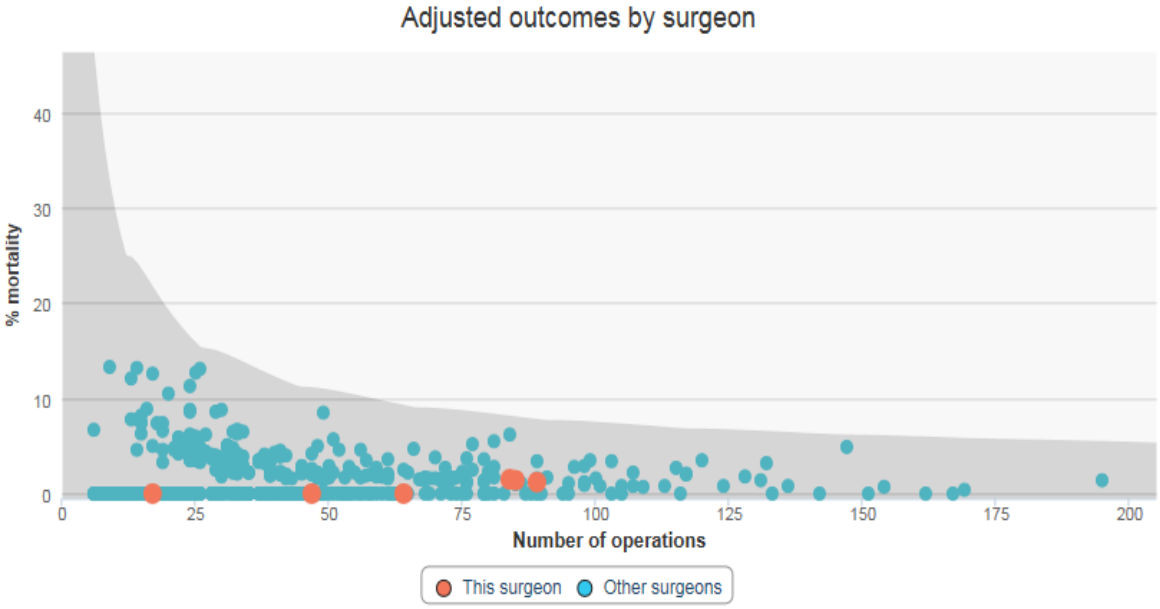
In the funnel plots below, each dot represents an NHS trust or surgeon. The vertical axis indicates the mortality rate with dots higher up the axis showing NHS trusts or surgeons with higher values. The horizontal axis shows surgical activity with dots further to the right showing the NHS trusts or surgeons who perform more operations.

This NHS trust provided information on between 90% and 100% of their expected cases



No. of procedures	Patients discharged alive	Adjusted mortality rate %	Length of stay (days) Median (IQR)
408 165 open, 243 EVAR	405	0.8	6 (3,8)

Surgeon outcomes



Name	No. of procedures	Patients discharged alive	Adjusted mortality rate %	Length of stay (days) Median (IQR)
Mr Stephen Baxter [4248202] VS	47 26 open, 21 EVAR	47	0.0	7 (4,8)
Mr Gareth Morris [2373766] VS	84 48 open, 36 EVAR	83	1.5	7 (4,9)
Mr Ian Nordon [4624574] VS	64 9 open, 55 EVAR	64	0.0	4 (3,7)
Mr Mike Phillips [3179626] VS	85 26 open, 59 EVAR	84	1.4	6 (3,8)
Prof Cliff Shearman [2497217] VS	17 10 open, 7 EVAR	17	0.0	8 (5,9)
Mr Nicholas Wilson [2726209] VS	89 42 open, 47 EVAR	88	1.2	6 (3,8)

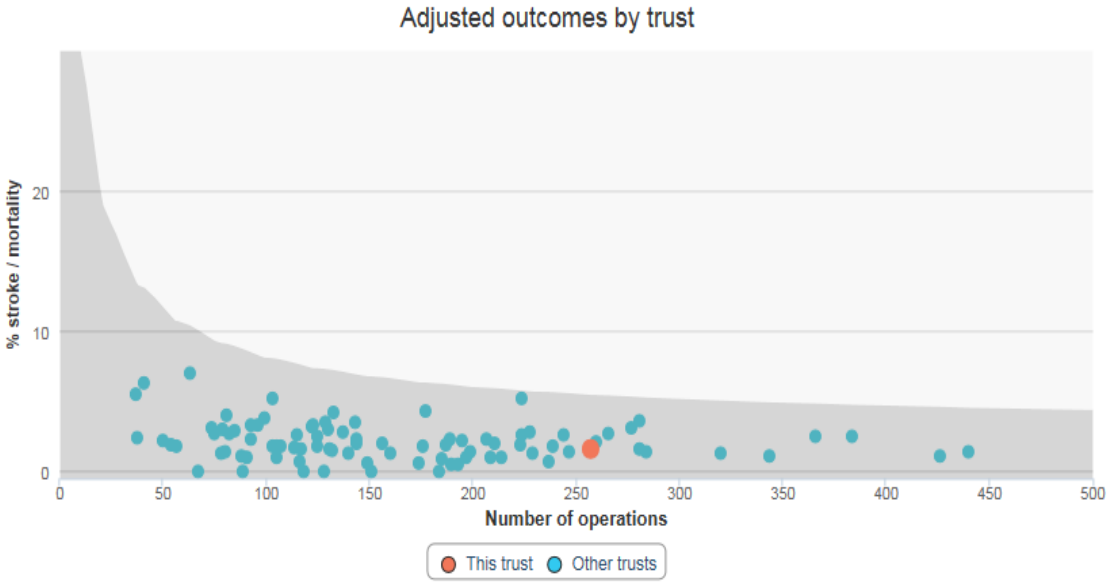
KEY: VS = Member of VSGBI, M = Surgeon operates at multiple NHS trusts, A = Surgeon is newly appointed consultant.
For a surgeon with few procedures, the symbols ▲ and ■ indicate whether the surgeon had outcomes within or outside the expected range.

[Carotid Endarterectomy]

Trust outcomes

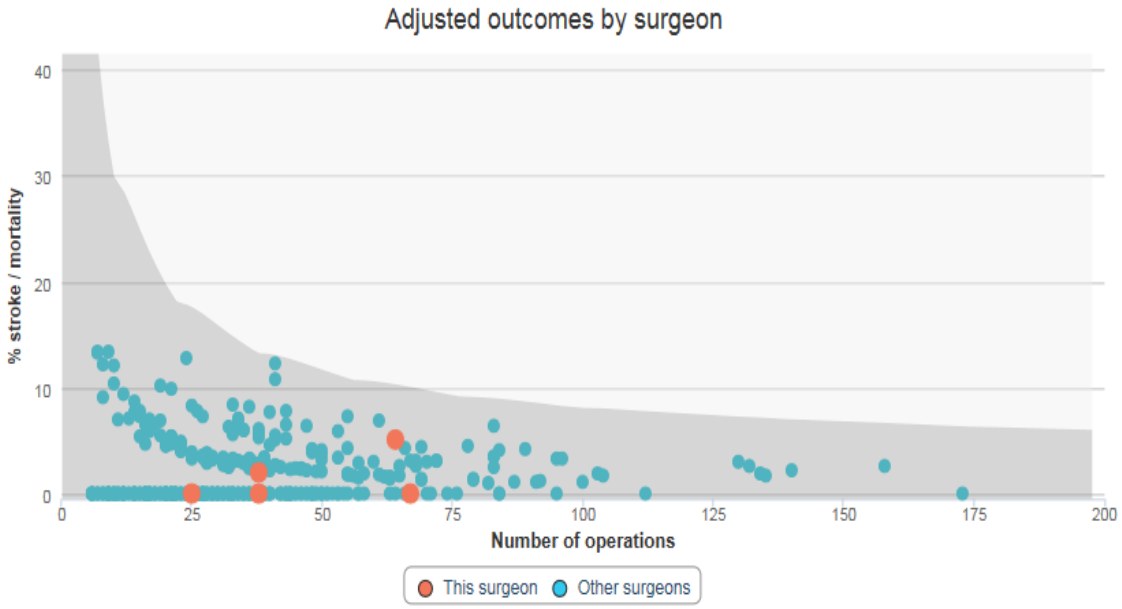
In the funnel plots below, each dot represents an NHS trust or surgeon. The vertical axis indicates the mortality rate with dots higher up the axis showing NHS trusts or surgeons with higher values. The horizontal axis shows surgical activity with dots further to the right showing the NHS trusts or surgeons who perform more operations.

This NHS trust provided information on between 90% and 100% of their expected cases



No. of procedures	Patients discharged alive	Adjusted mortality rate %	Days from symptom to surgery Median (IQR)	Length of stay (days) Median (IQR)
257	252	1.6	9 (6,12)	3 (2,5)

Surgeon outcomes



Name	No. of procedures	Patients discharged alive	Adjusted mortality rate %	Length of stay (days) Median (IQR)
Mr Stephen Baxter [4248202] VS	38	38	0.0	3 (2,5)
Mr Gareth Morris [2373766] VS	64	60	5.1	3 (2,5)
Mr Ian Nordon [4624574] VS	25	25	0.0	2 (2,3)
Mr Mike Phillips [3179626] VS	38	37	2.0	3 (2,5)
Mr Nicholas Wilson [2726209] VS	67	67	0.0	3 (2,5)

KEY: VS = Member of VSGBI, M = Surgeon operates at multiple NHS trusts, A = Surgeon is newly appointed consultant.

For a surgeon with few procedures, the symbols ▲ and ■ indicate whether the surgeon had outcomes within or outside the expected range.

Portsmouth Hospitals NHS Trust

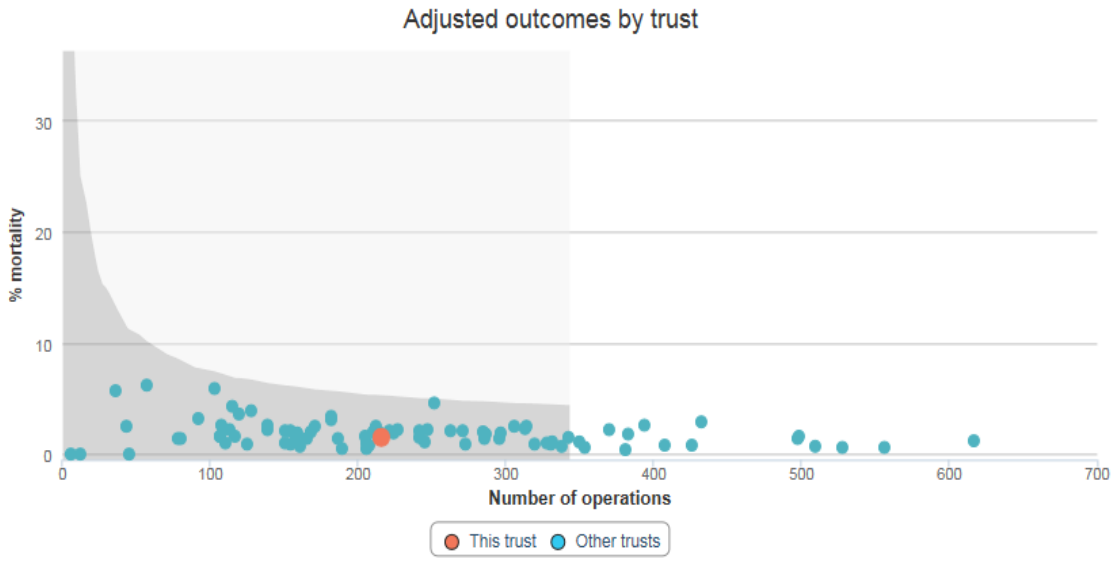
Vascular specialists working at Portsmouth Hospitals NHS Trust perform vascular surgery at Queen Alexandra Hospital.

Elective Infra-Renal AAA Repair

Trust outcomes

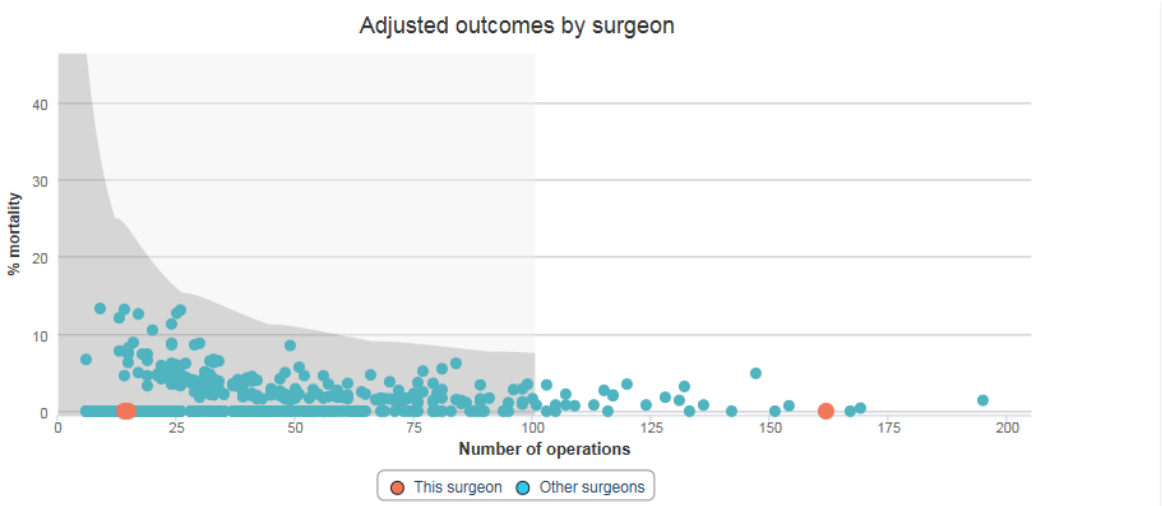
In the funnel plots below, each dot represents an NHS trust or surgeon. The vertical axis indicates the mortality rate with dots higher up the axis showing NHS trusts or surgeons with higher values. The horizontal axis shows surgical activity with dots further to the right showing the NHS trusts or surgeons who perform more operations.

This NHS trust provided information on between 90% and 100% of their expected cases.



No. of procedures	Patients discharged alive	Adjusted mortality rate %	Length of stay (days) Median (IQR)
216 77 open, 139 EVAR	213	1.5	2 (1,6)

Surgeon outcomes



Name	No. of procedures	Patients discharged alive	Adjusted mortality rate %	Length of stay (days) Median (IQR)
Mr Paul Gibbs [3588507]	14 14 open, 0 EVAR	14	0.0	8 (6,9)
Mr Perbinder Grewal [4532992] VS	15 3 open, 12 EVAR	15	0.0	1 (1,5)
Mr Richard Mark Pemberton [3179750]	162 41 open, 121 EVAR	162	0.0	2 (1,5)
Mr Timothy Whitbread [2580508] VS	*	*	▲	*

KEY: VS = Member of VSGBI, M = Surgeon operates at multiple NHS trusts, A = Surgeon is newly appointed consultant.

For a surgeon with few procedures, the symbols ▲ and ■ indicate whether the surgeon had outcomes within or outside the expected range.

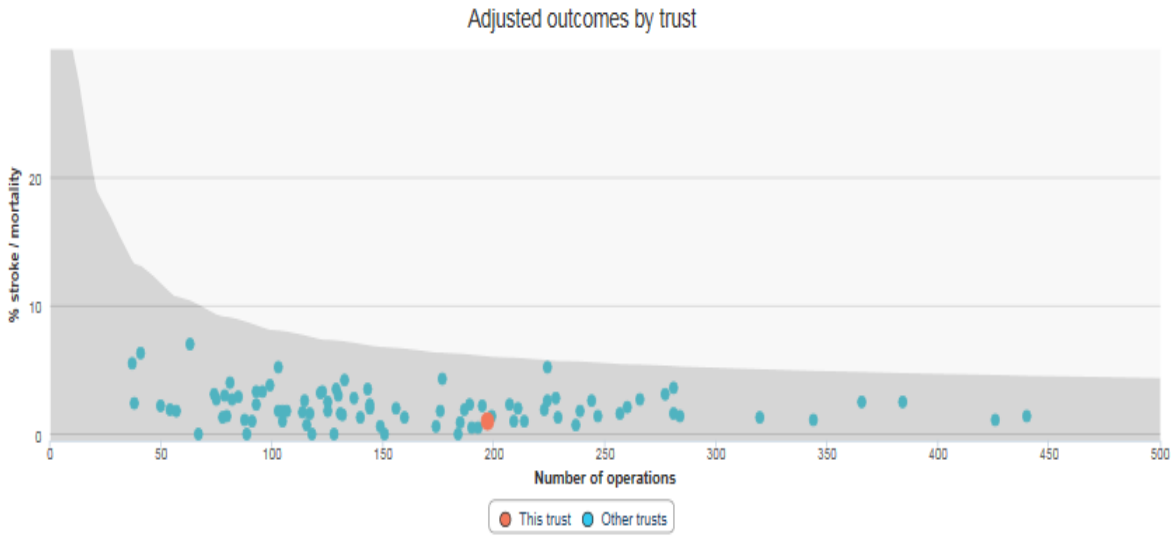
-

Carotid Endarterectomy

Trust outcomes

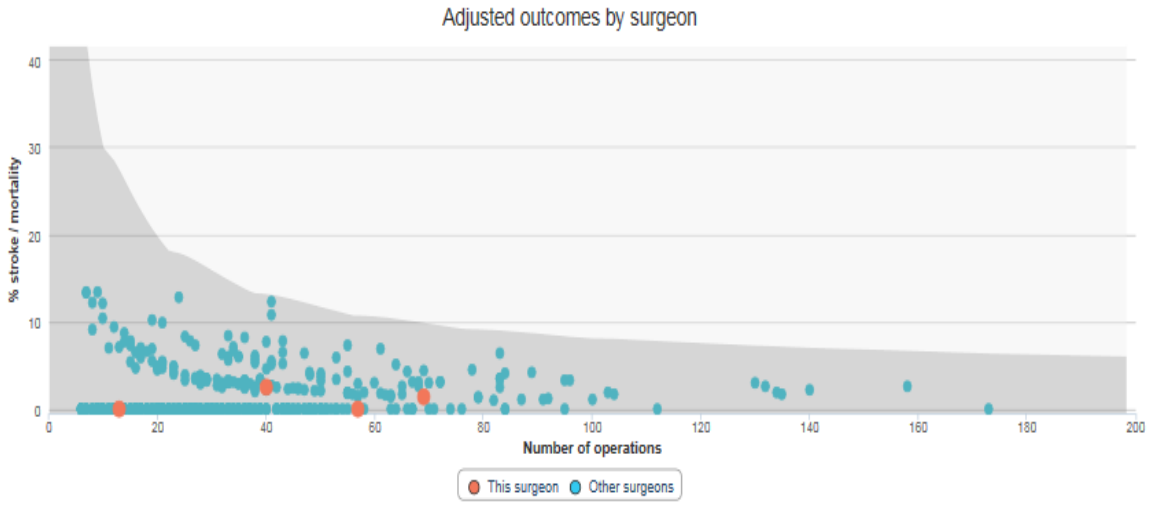
In the funnel plots below, each dot represents an NHS trust or surgeon. The vertical axis indicates the mortality rate with dots higher up the axis showing NHS trusts or surgeons with higher values. The horizontal axis shows surgical activity with dots further to the right showing the NHS trusts or surgeons who perform more operations.

This NHS trust provided information on between 80% and 90% of their expected cases



No. of procedures	Patients discharged alive	Adjusted mortality rate %	Days from symptom to surgery Median (IQR)	Length of stay (days) Median (IQR)
197	195	1.0	12 (7,30)	1 (1,2)

Surgeon outcomes



Name	No. of procedures	Patients discharged alive	Adjusted mortality rate %	Length of stay (days) Median (IQR)
Mr Perbinder Grewal [4532992] VS	40	39	2.5	1 (1,4)
Mr Simon Payne [3115950] VS	69	68	1.4	1 (1,2)

Name	No. of procedures	Patients discharged alive	Adjusted mortality rate %	Length of stay (days) Median (IQR)
Mr Richard Mark Pemberton [3179750]	57	57	0.0	1 (1,2)
Mr Timothy Whitbread [2580508] VS	13	13	0.0	1 (1,2)

KEY: VS = Member of VSGBI, M = Surgeon operates at multiple NHS trusts, A = Surgeon is newly appointed consultant.

For a surgeon with few procedures, the symbols ▲ and ■ indicate whether the surgeon had outcomes within or outside the expected range.

National Vascular Registry

Clinical Effectiveness Unit Royal College of Surgeons of England

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Tel 0207 869 6621
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Proposal

Wessex Regional Vascular Service

University Hospital Southampton NHS Foundation Trust
(UHS) Portsmouth Hospitals NHS Trust (PHT)
Hampshire Hospitals NHS Foundation Trust (HHFT)
Isle of Wight NHS Primary Care Trust (IOW)

UNIVERSITY HOSPITAL SOUTHAMPTON NHS FOUNDATION TRUST

PROPOSAL FOR THE WESSEX REGIONAL VASCULAR CENTRE FOR THE PROVISION OF EMERGENCY AND COMPLEX ELECTIVE VASCULAR SURGERY
For Southampton, Hampshire, Isle of Wight and Portsmouth

Foreword

UHS submits this proposal to NHS England in support of the recent recommendations from the Vascular society of Great Britain and Ireland (VS) that PHT join the existing Wessex network and that UHS acts as the major arterial centre (MAC) for that network.

Paul Blair (President) and Rob Sayers (Vice President (elect)) of the VS undertook a review of Southern Hampshire vascular services, specifically University Hospital Southampton NHS Foundation Trust (UHS) and Portsmouth Hospital NHS Trust (PHT), on 19th and 20th August 2015. Their recommendation was

"The alternative and more appropriate long term sustainable option would be centralisation of services on the Southampton site. This option would likely lead to a high class vascular facility but would require capacity and resource issues to be addressed."

UHS believes that it can assure commissioners and the public that it has addressed those issues and that implementation of that recommendation is the best for the future of sustainable vascular services in the region.

University Hospital Southampton NHS Trust (UHS) provides local hospital services to around 1.3 million people living in Southampton and Southern Hampshire. It also provides specialist services such as neurosciences, cardiac services, gastrointestinal, respiratory, women and children's and cancer services to more than 3.5 million people within central southern England and the Channel Islands. UHS is a designated Major Trauma Centre (MTC) and, as determined by the NHS Standard Contract must provide vascular services .The Trust is also a major centre for teaching and research in association with the University of Southampton and partners include the Medical Research Council and Wellcome Trust.

Introduction

Background

The options regarding vascular services in Southern Hampshire have been under consideration for several years. In order to move this forward NHS England commissioned the Vascular Society of Great Britain and Ireland to carry out a review of those services in August 2015.

Following the review of services in both in Portsmouth and Southampton the Vascular Society identified a range of issues at both hospitals that needed to be addressed in order to ensure a high quality & sustainable services for the future. The report recommended that the best way of ensuring that vascular provision was resilient would be the extension of the existing Wessex network to include PHT with University Hospital Southampton operating as the MAC.

The report and a subsequent letter to Fiona Dalton , CEO at UHS from Dominic Hardy, Director of Commissioning Operations NHS England – South (Wessex) in October 2015, stated that success would be based on a clear demonstration by UHS of willingness to invest and develop vascular services and the recommendation also emphasised that a staggered merger should be avoided. In order to meet NHS England's deadline for presentation of their option appraisal to the various local health oversight committees in March, UHS have prepared this summary document in order to inform the decision making process.

Specifically UHS were asked to:

- Address bed capacity issues with designation of a VSU (ward) and clarify how this would be achieved.
- Approve plans for the installation of a hybrid theatre at UHS.
- Formalise arrangements for renal pts who would be transferred to UHS for arterial surgery - (5 pts per annum.)
- 1:6 24/7 vascular Interventional Radiologist (IR) rota via a network solution.

A UHS Vascular working group has been established to develop a solution for arterial centralisation.

This group has representation from across the divisions and is working on delivering a sustainable plan which would support the transfer of all arterial work to UHS in quarter 3 2016.

UHS believes that it is ideally placed to deliver this service because it has excellent outcomes, strong multidisciplinary teams and 24-hour vascular and interventional radiology cover. The trust has an excellent EVAR and TEVAR programme that has embraced the adoption of new technologies. UHS also hosts the regional AAA screening programme since January 2011. In summary, UHS has outstanding results and a committed, clinically excellent service that already delivers excellent patient outcomes.

Current Service Provision Model

Referral patterns and geography currently dictate where and by whom patients are treated, rather than patient need. The current provision at each trust for vascular services is as follows:

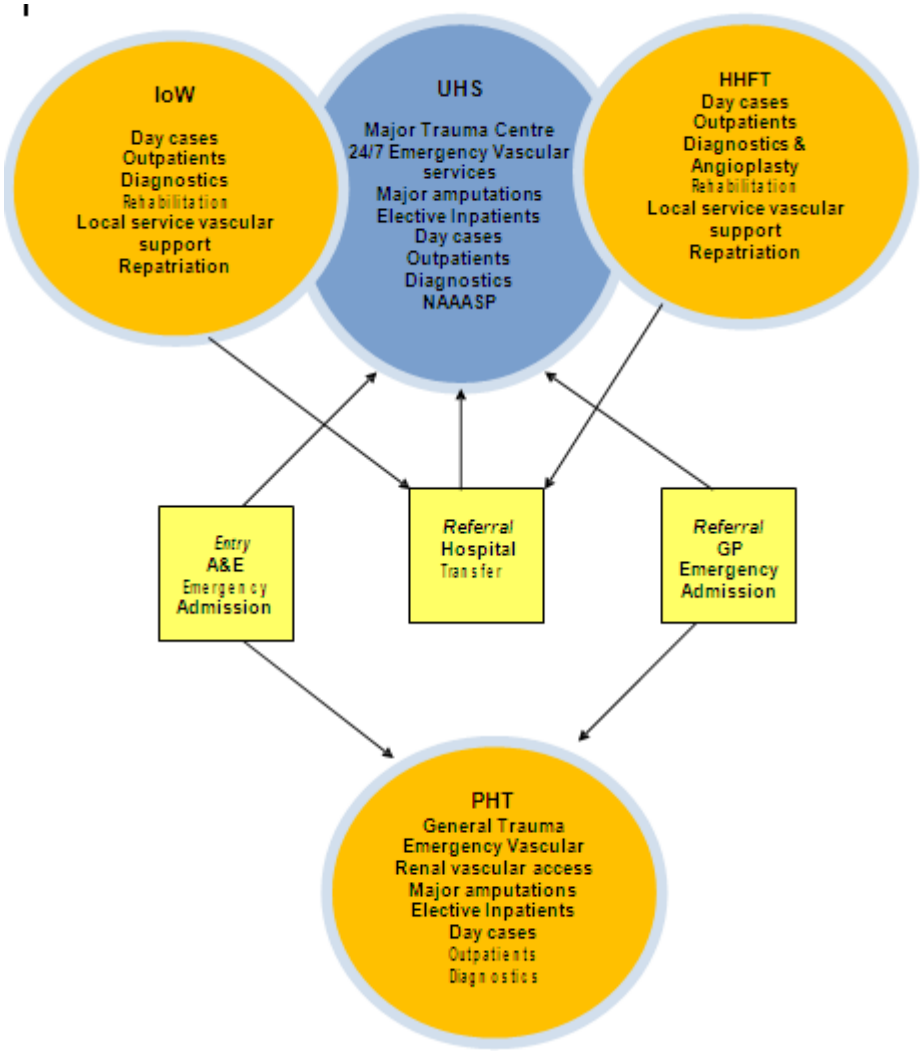
UHS, HHFT, and IoW: To support the ongoing move towards complexity and specialisation of services UHS has already developed a network with HHFT and IoW for the provision of vascular services covering a population in excess of 900,000. This model already delivers a co-located vascular service, combining expertise and improved clinical outcomes, with the 2015 National Vascular Registry publications demonstrating UHS to be one of the busiest vascular units in the country with superior outcomes in a number of index vascular procedures. As already identified within the need for change, the current service model underpins the tertiary services provided within Southampton hospitals, for example cardiac surgery, major trauma and stroke

UHS provides 24/7 vascular surgeon cover with 6.5 WTE vascular surgeons and the necessary associated support services. There are five full day vascular theatre lists per week, with additional access to emergency theatre when required. UHS has the following diagnostic facilities on site: MR angiography, CT angiography, non-invasive imaging and interventional radiology (IR). A Hybrid theatre is scheduled for opening in November 2016. Outpatient facilities are provided in the newly commissioned outpatient's area.

HHFT - WINCHESTER HOSPITAL has vascular surgeon cover three days per week, plus outpatient cover. At other times, vascular advice is available via UHS and when required, patients will be transferred to UHS. A theatre is available for minor surgery.

IoW has a UHS vascular surgeon visiting 1 day per week, who undertakes day surgery, outpatient clinics and ward patient reviews. At other times, vascular advice is available via UHS and if required, patients will be transferred to UHS.

PHT: There are vascular 2.5WTE vascular surgeons providing cover, with 2.5 remote clinics per week and 3.25 vascular lists per week for major elective work. The necessary associated support services are present on site including 1 nurse practitioner, 1 vascular specialist nurse and 4 WTE vascular technologists.



Current Referral and Entry Routes

Discharge/Exit Routes

Patients can be transferred from UHS to HHFT and IoW following inpatient care. Plans to discharge back to primary or local hospital care is made as early as possible to enable the patients to be closer to home. A discharge communication, including ongoing management plan, is provided. Work is currently underway, initiated by the CEOs from the network hospitals and operationally overseen by the Chief Operating Officers within those organisations to ensure that repatriation of patients back to their local services is prioritised on a daily basis regardless of the hospitals overall alert status. NHS England is aware of this important work stream and has committed to support any contractual discussions.

Proposed Service Provision Model

The Wessex Regional Vascular Service

NHS Abdominal Aortic Aneurism Screening Programme (NAAASP)

UHS is the designated host for the Hampshire NAAASP service. Staffed by UHS vascular surgeons, vascular technicians and administrative staff, the service commenced in 2011.The relevant data on surgeons outcomes is submitted to the NVD and the unit ensures that the unit estimate for elective mortality for infra renal aortic aneurysm procedures is at 6% or lower, taken from the 30 day mortality data for patients as appropriate. The necessary action can be taken to review the case mix should the mortality rate be higher than this. The unit has adopted the Quality Improvement Framework set out by the VSGBI1.

General

UHS's proposed model for a Wessex Regional Vascular Service, bringing together the services in the four trusts in line with the recent review recommendations, meets the necessary requirements for ensuring the provision of a high quality, robust, sustainable vascular service for Southern Hampshire and is in line with the recent report from the Vascular society of Great Britain and Ireland (VSGBI)

The proposal from UHS is that UHS, PHT, HHFT and IoW work together in a partnership to provide the Vascular Service for Southern Hampshire with UHS serving as the arterial hub the for the system. The clinical service would then have four sites, each playing an important part in service delivery. With similar working arrangements already in place with HHFT and IoW, UHS believes that the inclusion of PHT into the service model would provide the necessary assurances required for a robust service whilst enabling ongoing improvements in clinical outcome and patient experience. The full range of vascular surgery services would be covered, with robust 24/7 specialist emergency vascular care and input from dedicated, experienced vascular teams.

The proposed service will maintain world class outcomes for all patients within the catchment area who have been referred via their GP to a vascular specialist within secondary or tertiary care and in addition it will ensure that those excellent outcomes are available to all patients across a 24hour

period should they present as a vascular emergency out of hours or at weekends. It complies with the appropriate POVS 2015 report national standards and meets the requirements within the NHS England Vascular Surgery Service Specification. The service model being proposed will ensure patients receive the best possible treatment in a timely manner, with improving clinical outcomes and patient experience. This will be supported through the Trust's service portfolio, which includes:

- The regional AAA screening service
- Level one major trauma centre designation
- A centralised, dedicated vascular unit with the appropriate staff, which manages both acute and chronic patients.
- Equity of access for all patients to 24/7 dedicated vascular surgical and IR service at UHS with timely discharge home or to local partner hospital.

When proposing this service model, all aspects of the vascular surgery service specification were carefully considered to ensure compliance, including the minimum numbers and types of procedures that vascular units should undertake, given the link between the volume of procedures undertaken by surgeons and clinical outcomes. The aim is to ensure a reasonable and sustainable elective and 24/7 emergency vascular surgery service providing the highest standard of care equitably and with excellent patient outcomes. The reconfigured Wessex Regional Vascular Service will provide the following assurances:

- The provision of robust 24/7 specialist vascular care for all emergencies in IoW, PHT, UHS, HHFT, with input from both dedicated, experienced vascular teams, which include consultant vascular surgeons and interventional radiologists
- Sufficient throughput volume and associated capacity, plus access to the appropriate staff, equipment and facilities required ensuring optimum clinical outcomes.
- Sufficient throughput volume to ensure that the service is financially viable in the longer term and provides best value for the whole Health care economy.
- Use of the latest technology in UHS for procedures, including endovascular techniques, in order to attain the best possible clinical outcomes and effective use of hospital resources.
- Adherence to evidence based best practice and national guidance.
- Internal service improvement to reduce patient length of stay, together with continuous and effective monitoring around the Patient Care Improvement Framework (PIF) to ensure an improved patient experience, clinical outcomes and appropriate safety and including the need to minimize patient and family travel.
- Accurate recording and audit of procedures and outcomes onto the relevant databases.

Volume Figures

The figures in the next table were provided by NHS England and reflect the appropriate vascular interventions that require an inpatient stay and which would transfer to UHS. UHS has based the proposal on the figures provided and will work with commissioners once the outcome of the

options appraisal is made to accurately verify the data. The plan to deliver the increase in capacity, including future proofing the bid, is shown under the separate headings for staffing, facilities and operational delivery.

Indicative case mix from Portsmouth (based on actual activity 15/16 Mth 9 SLF)

	Code	Volume	% uplift on UHS current activity
Fem Pop	QZO3Z	22	98%
Fem distal	QZO2A	18	
Carotid endarterectomy	QZO4Z	56	
Fem endarterectomy	QZO2A / QZO2B	38	
AAA open	QZO1B	8	40%
Amputation	QZ11A/QZ11B	49	144%
EVAR	QZ01A	43	70%
TVAR	AC12R-E	26	69%
Non Elective			
Trauma		25	
Ruptured AAA		17	
AAA for non elective mgmt		10	

Staffing Levels

Staff Requirement

The necessary staff requirement for each specialty is detailed in the table below.

Staff Group	Current Provision		Required Provision for Wessex network	Action
	UHS/HHFT/IOW	PHT		
Vascular Surgeons	6.3	2.5	10	Advertise for network appointment
Vascular Anaesthetists	6	6	TBC	Explore network solution with PHT consultants.
Interventional Radiologists	9 (Vascular 5)	5 (Vascular 1)	6	Network solution for vascular & to support non vascular work at PHT.
ICU – L 3 staff ratio 6.1:1 but rising to 6.8:1 HDU – L 2 staff ratio 3.5:1	UHS: UHS: 39 level 3 beds (Neuro ICU 13 beds excluded) @6.8 :1 HDU 8 beds @ 3.5 :1 (medical & cardiac HDU beds excluded from current provision)	Tbc Tbc	(Additional required) UHS - Level 3 + 1 bed =6.8wte UHS - Level 2 +1 bed = 3.5wte	Options: Deliver from LoS schemes Commission vacant bed space Implement flexible use of CICU/ CHDU capacity Increased monitored beds in VSU – 3 beds
Ward beds – L1staff ratio 1:5	UHS – current 22 beds ration 1.5	Mixed ward 10-12 beds	UHS UHS: 34 beds, ratio of 1.5 (from October 2016)	Bed capacity and AWL delivered as part of CV&T ward reconfiguration

- **Vascular Surgeons**

Onsite, 24/7 service provided at UHS. The current UHS, HHFT and IoW service has 6.3 WTE vascular surgeons. There are 2.5 surgeons plus 1 vacant post at PHT. This vacant PHT post is to be advertised as a joint appointment to the network, hosted by UHS but based in PHT. The consolidation of clinical service will fulfil the requirements of the service specification. In practical terms, this means that for Portsmouth patients, the vascular surgeons will come to UHS to undertake the elective vascular lists and would contribute to the emergency on-call rota.

- **Nursing Staff**

In November 2013 as part of the national response to the Francis enquiry, the National Quality Board published a guide to nursing, midwifery and care staffing capacity and capability (2013) 'How to ensure the right people, with the right skills, are in the right place at the right time'. UHS had already developed a sustainable model of systematic review for staffing levels on the wards using evidence based and triangulated nationally recognised methodological approach which has been strengthened year on year. The review for 2015 has shown that the current staffing model within vascular meets the national recommendations, which ensures that staffing levels remain safe and effective. This model equates to 1.5wte per bed with a ratio of 68:32; trained and untrained staff. Therefore, the additional beds should be staffed to support these levels. This arrangement will allow better throughput for fast track patients onto the ward and will also reduce the need for HDU level 2 beds with three ward beds fully monitored.

- **Anaesthetists**

On site, 24/7 service provided at UHS. The Anaesthetic / Critical care service has over 90 consultants' anaesthetic staff & is further supported by a number of clinical fellows. All staff who cover theatre sessions are trained to manage vascular emergencies, and there are dedicated vascular anaesthetists available for elective sessions in UHS. There would be an opportunity to network with P'mth vascular anaesthetists should they wish to follow the work and surgeons from PHT.

- **Interventional Radiologists**

On site, 24/7 IR service provided at UHS. All participating radiologists can provide a basic vascular service although advanced vascular intervention (EVAR, Complex stenting, Thrombolysis /Thrombectomy) is currently only provided by 5 radiologists, with the option to train up a 6th. Urgent CTA is available 24/7.

The consolidation of clinical service will mean that the Portsmouth IRs will attend UHS to undertake elective EVAR and complex IR work and contribute to the emergency radiology rota. They would still undertake elective diagnostic and interventional vascular radiology and renal services support at PHT. A networking solution is being explores to ensure that PHT non vascular services would not be compromised.

UHS Facilities detail:

- **Operating Theatre**

Dedicated 5 day vascular lists per week, with additional access to 24hr NCEPOD emergency theatre if required for emergency vascular procedures. Access to radiolucent operating tables, x-ray and specialist consumables readily available. Theatre data shows that currently vascular theatre utilisation runs at < 75 %.

The installation of a Hybrid theatre will support the back fill of the vascular theatre lists which currently remain on standby and empty whilst EVAR procedures take place in the IR suite. A combination of these empty theatre lists on EVAR sessions, lists that are not cross covered prospectively by the vascular surgeons during AL and an increase in theatre utilisation to > 85%, should provide sufficient capacity for the additional open elective cases which would transfer from PHT. If theatre capacity did prove to be a capacity constraint then UHS also has the option of moving vascular theatres to 6 day operating, replicating a delivery model already established in general surgery, T&O, urology , ENT and Neurosurgery.

- **Emergency theatre time**

Indicative requirement 17 AAA cases per annum. The assumption is to allow 6 hours CEPOD time for each of the 17 ruptured AAA cases. The move of some non vascular theatre activity to the Hybrid lab affords some options to UHS around providing additional CEPOD capacity should that be required.

- **Blood Bank and Cross Matching Facilities**

There is a fully staffed Haematology and Blood transfusion service on site, run by state registered clinical scientists and laboratory staff, supported by clinical consultants. This service is manned 24/7 offering a rapid full Haematology service and has full Clinical Pathology Accreditation (CPA) compliance and is registered, ensuring the appropriate level of service and quality.

- **Vascular ward**

UHS already has a 22 bed vascular ward D4. The Cardio-Vascular care group, who manage the service, is working with UHS estates to move vascular to a larger 34 bedded footprint on E4. Bed and nursing capacity has been released from elsewhere in the Care Group to support this move via a number of improvement schemes e.g.:

- Move of all cardiology elective interventions to Day case
- Weekend catheter laboratory service extended to include NSTEMI resulting in shorter LoS.
- Move of surgical admissions to day of surgery admission (supported by the use of Heartbeat House for cardiac admissions)
- Targeted LoS work by physiotherapy which has reduced LoS for elective amputee pts by 10.5 days (demonstrated by pilot)
- Use of UHS @ home for vac dressing patients
- Up to 12 beds available offsite for long stay patients awaiting packages of care or nursing home placement
- Ongoing discussion regarding direct referral to Portsmouth @ Home Service for suitable patients (mirrors the UHS @ home model)

In addition the LoS benefits from installation of the Hybrid theatre (releasing other IR rooms and theatre space) indicate a minimum of 6 beds across the organisation released if the impact on current waiting lists improves by an average of 2 days per patient for pts awaiting procedures such as vascular access.

- **Interventional Radiology & Image transfer**

UHS has all of the necessary equipment for vascular intervention procedures available, with a Hybrid theatre scheduled to open in November 2016. The other 2 interventional rooms are scheduled for replacement in 2017 as part of UHS's multi million pound investment in radiology infrastructure.

The Radiology department has developed a system that enables both trust wide and remote manipulation of images to improve workflow, diagnostic confidence and enable tertiary image review and increase collaboration with partner trusts. Work is ongoing with our PACs provider but the current system allows review of complex imaging by staff appropriately trained to undertake that work. It also allows the imaging performed locally to be reviewed at other sites, particularly at UHS for emergency transfer of patients or indeed prevention of transfer. This will decrease unnecessary travel, improve utilisation of expensive resources and assist in patient experience. Staff will be able to remotely access and manipulate complex imaging studies both off site and within MDT's and theatres.

- **Non-Invasive Imaging**

The necessary equipment for non-invasive vascular procedures is available at UHS or neighbouring hospitals, where UHS consultants already provide vascular cover. In UHS vascular imaging sits across 2 services, Medical physics covering the venous and radiology covering the arterial. The plan from April 2016 is to amalgamate the service with increased leadership input from vascular surgery.

- **EVAR**

UHS was one of the first centres in the UK to introduce an EVAR service and now has an established, successful EVAR programme with all necessary facilities in place. All patients with

detected AAA and deemed suitable for repair are considered for EVAR, with 75 % of elective AAA repair currently performed using endovascular techniques. New devices are also currently being explored, which will improve the service and also increase the percentage undertaken. 15 TEVAR procedures were undertaken at UHS in the past 12 months.

- **ITU / HDU**

UHS has reviewed its current ICU & HDU requirement from vascular surgery over a 2 year period.

Level 3

- 26 elective pts over a 24 month period
- 81 non elective pts over a 2 year period

Level 2

- 175 elective pts over a 24 month period
- 74 non elective pts over a 2 year period

Based on average LoS and occupancy for both units current vascular use is

- Level 3 – 1.1 bed per annum
- Level 2 – 1 bed per annum

Discussion is underway with critical care regarding delivery of the additional 1 level 3 & 1 level 2 bed to support the transfer of arterial work from P'mth.

Pathway changes have already commenced across other areas within Division D , Trauma & Specialist service (includes vascular) which will release ICU beds and staffing , specifically removal of TAVI (femoral) cases, removal of plasma exchange, development of an increased acuity Major Trauma bay in T&O.

Division A, Surgery & Critical Care have several LoS schemes already identified for 16/17which are based on roll out of successful early mobilisation schemes in 15/16 , specifically these relate to releasing capacity across cardiac , trauma & neurosurgical level 3 beds.

In addition ICU is investigating an alternative for pts requiring Haemofiltration which would also contribute to the release of capacity,

If pathway review and LoS schemes do not deliver there remains one bed space that could be opened.

- **Renal patients for transfer**

Transfer of arterial work from PHT would result in 5 patients per annum requiring renal support whilst at UHS for their vascular treatment. The initial thought was that this could be delivered as per the current model for cardiac and neurosurgical patients i.e.: Haemofiltration on ICU.

There is an opportunity to deliver renal support to this pt cohort using one of the new portable "at home" dialysis machines which may be suitable for not only the new vascular patients but would also release bed days and the nursing staff who currently deliver the existing haemofiltration demand. Activity and impact of this is being assessed.

UHS already undertakes renal dialysis within paediatrics (4 machines available). This unit links closely with the P'mth renal unit and staff training with regard to needling of fistula's is supported by the satellite unit at Totton. Similar training arrangements could support the ICU development.

Table Showing Changes Required For Additional Volume

Facility	Required Provision	Action
Operating theatres	UHS – same provision	Prospective cover from vascular surgeons. Backfill lists vacated to support EVAR Increase current utilisation Option to move to extend to Saturday elective operating.
Vascular Laboratory	Develop vascular lab	Combine services currently delivering arterial and venous imaging under single management structure with increased managerial / operational input from vascular surgeons.
Endovascular theatre	UHS	Plan to be operational by November 2016
EVAR facilities	Increased facilities required	Commissioning of endovascular theatre as above
ITU	UHS - 1 additional Bed.	Pathway redesign to remove cases from ICU underway. One uncommissioned bed space remains available. No estates work required
HDU	UHS – 1 additional bed.	Pathway redesign to remove cases from HDU underway. No estates work needed
Ward Beds	UHS: 10-12 additional beds	Service improvement work streams have already delivered the capacity to support transfer and have facilitated vascular surgery to move into a larger footprint. Work remains on going to reduce LoS further. Some assumptions regarding repatriation of P'mth post surgery have been made as per CEO agreement to support 24 hour transfer (January 2016)

Operational Delivery

- **General**

UHS is ideally placed to deliver this service because it has excellent outcomes, strong multidisciplinary teams and 24-hour vascular and interventional radiology cover. Consultant Vascular surgeons already deliver weekend ward rounds which ensure consistent senior level decision making and intervention across a 7 day period. The trust has an excellent EVAR and TEVAR programme that has embraced the adoption of new technologies. UHS has hosted the regional AAA screening programme since January 2011. In summary, UHS has outstanding results and a committed, clinically excellent service that is demonstrated in its outcomes.

- **Patient Experience**

UHS has a robust, dynamic Patient Improvement Framework (PIF), underpinned by interrelated strategies which have evolved since its initial presentation within UHS in 2013. Aspects of patient safety, experience, and clinical outcomes have been key features of the framework and are linked with the national performance targets to ensure effective management of activity and patient experience. This year it has been agreed that the PIF will reflect the Care Quality Commission (CQC) domains and the priorities are presented under the headings of, safe, effective, caring and responsive and well led. The PIF priorities identified have been developed thus far through consultation with UHS staff, clinical commissioning groups, and external stakeholders and from patient feedback. Measurable and SMART performance indicators for each priority are currently under development and consultation on the priorities will be presented as part of the consultation of the Quality Account 2016/2017 during the 30 day consultation.

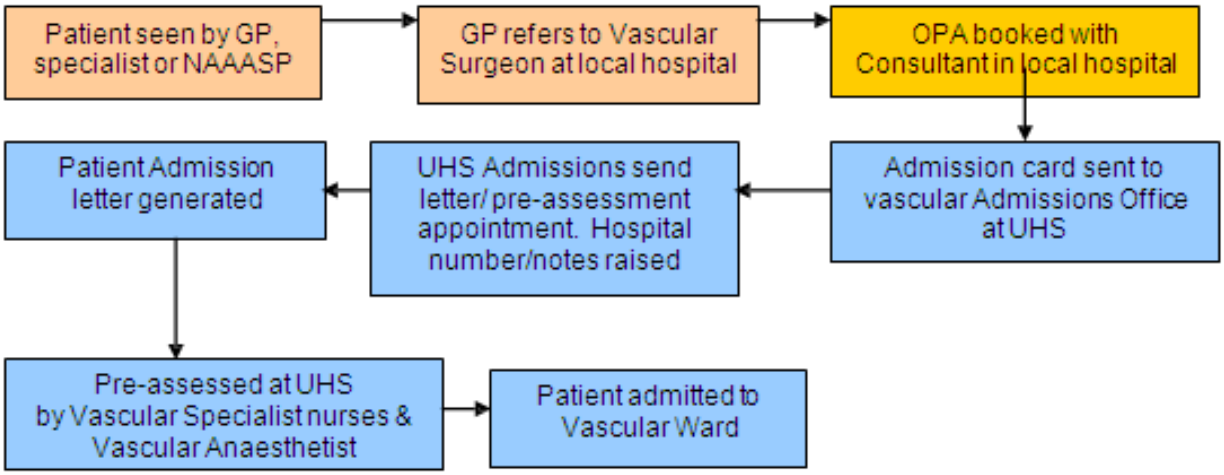
The Friends and Family Test (FFT) for the vascular service has provided the following results for the first three quarters of the financial year. The trust target for response rate is currently at 20%.

2015 / 16	Response Rate	Positive Response Rate	Negative Response Rate
Q1	78%	97.3%	0.0%
Q2	58%	98.1%	0.0%
Q3	74%	96.9%	0.0%
January	90%	94.7%	0.0%

Patient Improvement Framework (PIF) Priorities for 2015/16 (Final)

Outcomes	Experience	Safety	Performance
• Every speciality to identify a clinical outcome measure • Improving Hospital Standardised Mortality Rate • Promote learning from reviews of hospital death certification • Every specialty to support recruitment to an NIHR portfolio research study	• Improving patients meal experience • Support & protect patients who have visual and auditory impairments • Improving End of life care • To promote safe and timely discharge of all patients from UHS	• To continue to improve reporting and learning from incidents. • To reduce avoidable high harm pressure ulcers & falls • Reduce complications from failure to interpret or act on abnormal CTG tracing in labour	• To deliver the referral time to treatment (RTT) • 95% of patients will wait no longer than four hours in the emergency department • To deliver all cancer waiting times for patients • Managing complex discharges
Ongoing Priorities			
• Deliver year 2 of the dementia strategy • Achieve the National Stroke Pathway Standards • Improving care for patients with diabetes	• Effective Safeguarding of children & adults • Delivery of the Equality Delivery System • Continued implementation of the Mental Capacity Act	• Infection prevention and control • Theatre safety checklist • Preventing Never Events • To improve the identification and care of the deteriorating patient	• Delivery of screening programmes • Reducing readmissions • Improving outpatient services • Developing our 7 day service
Commissioning for Quality and Innovation (CQUINS)			
• Deliver 3 elements of the National dementia CQUIN	• Person centred planning and shared decision making	• Prevent & minimise the impact of acute kidney injury • Improve the recognition & timely management of sepsis	• Deliver urgent and emergency care CQUIN • Reduction in outpatient follow up • Delayed transfer of care & excess bed days
Supporting Strategies			
• NICE guidance and Quality standards • Trust policies and guidance • Dementia Strategy • Clinical Effectiveness & Outcomes strategy	• Patient Experience strategy • Patient & Public Involvement strategy • Nursing 6 C's (compassion, care, competence, commitment, courage, communication) • End of life Care Strategy	• Patient safety strategy • Health and safety strategy • Values & Culture • Infection Prevention Strategy • Education Strategy • Staff Experience strategy	• Monitor Compliance framework • CQC Fundamental Standards • NHS operating plan • Internal performance monitoring framework
Trust Vision & Values			
NHS Constitution			
Equality and Diversity Strategy			
Risk Management Strategy			
Quality Governance Strategy			

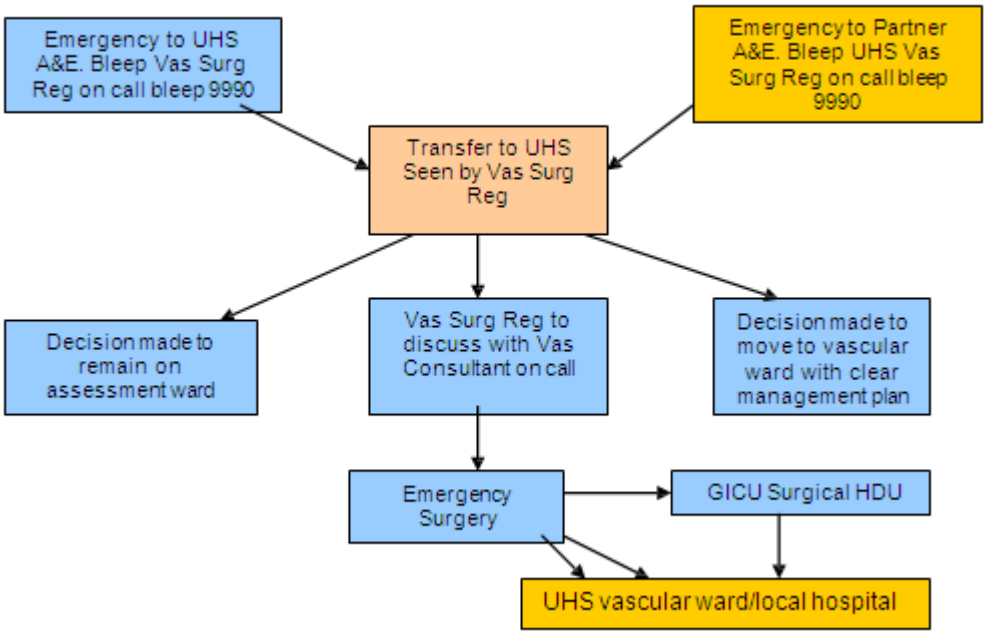
- **Elective Pathways**



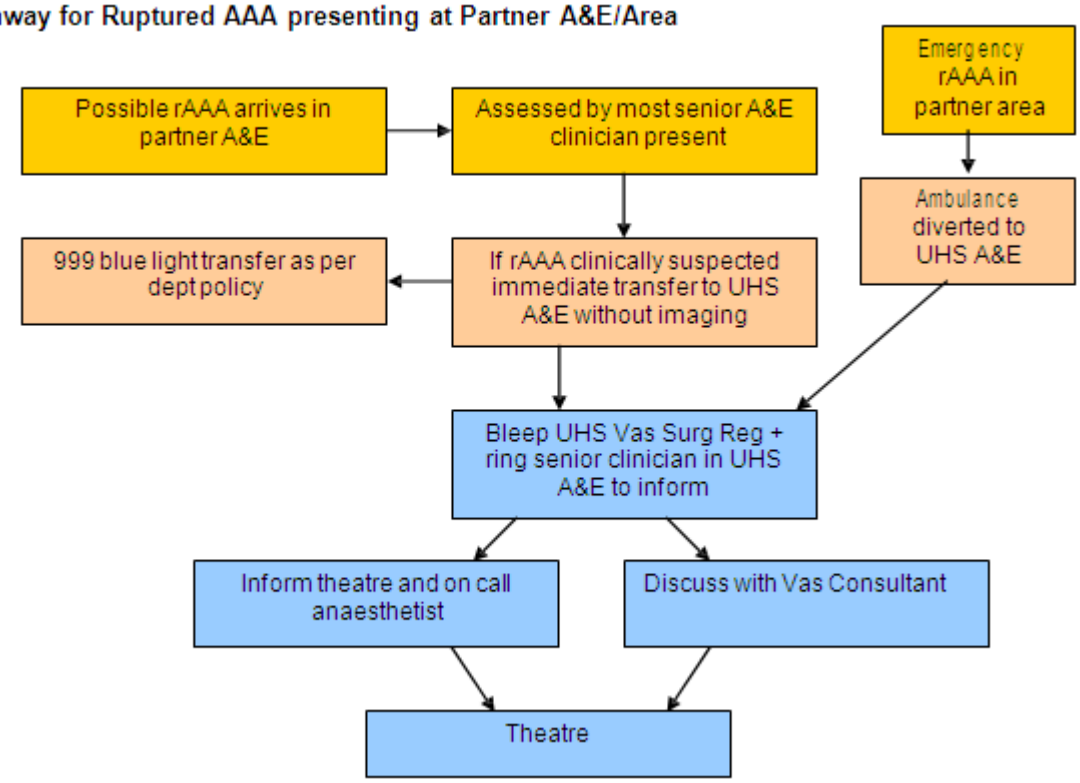
Patients requiring minor surgery or day surgery will continue to have this service provided at the local hospital.

Emergency Pathways

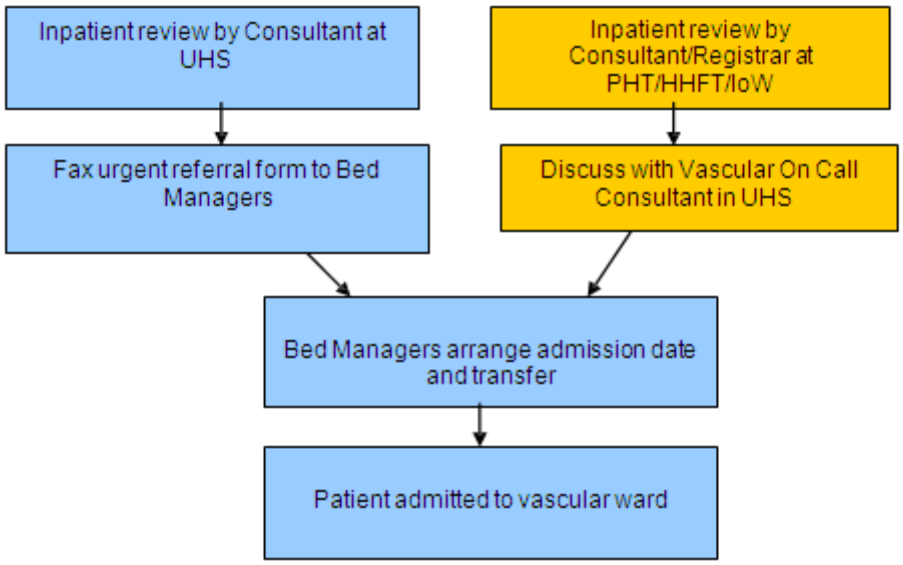
Pathway for emergency transfers (20:00 to 08:00 hrs and at weekends)



Pathway for Ruptured AAA presenting at Partner A&E/Area



Urgent Inpatient Transfer 0800 - 2000 for Non Elective Cases.



The regional transfer unit, currently working and located in the Care Group, is able to expand to ensure sufficient capacity for the vascular patients.

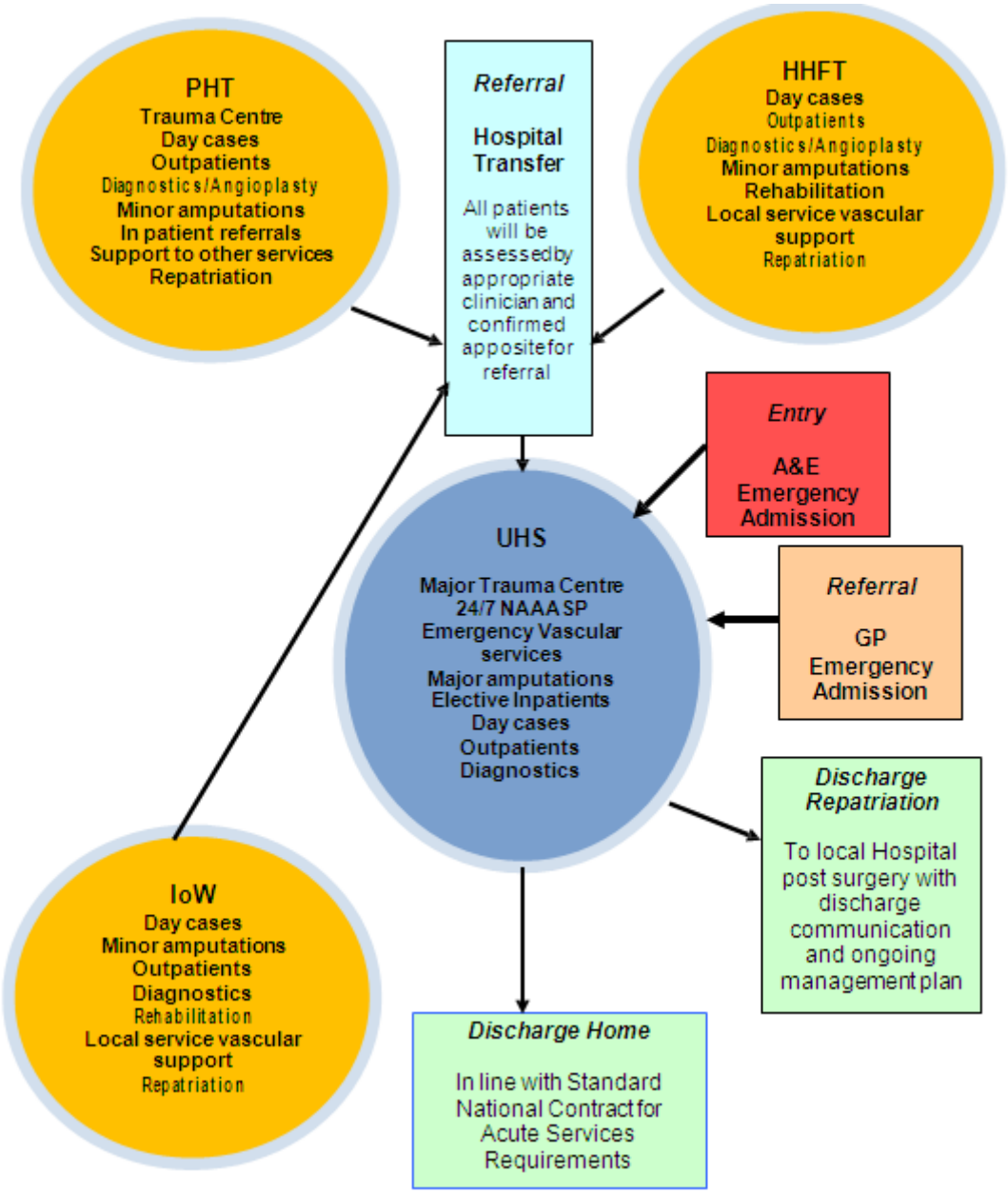
- **GP access to service**

See elective and emergency patient pathways. All emergency GP referrals will be made through the consultant surgeon on-call at UHS, through a single point of access contact number. There will also be GP access to the vascular service at UHS & in PHT where patients can be sent to an urgent daily clinic, staffed by the surgeon of the day and specialist nurses. This service will reduce unnecessary admittance, with clinical assessment and non-invasive imaging being undertaken at the clinic.

- **Direct Patient Access**

Self-presentation will be enabled within the Monday- Friday clinics to be held at UHS and in Portsmouth. Maintaining strong links with the diabetic foot services will enable direct patient self-presentation to the appropriate location.

Proposed Emergency and Elective Referral Entry and Discharge Routes



Service Delivery at Partner Hospitals

Supporting services at partner hospitals will remain viable after the reconfiguration of the vascular service by the continued vascular consultant cover as specified below.

PHT Vascular Service:

- 2-3 vascular surgeons working at QA Monday –Friday supporting dependent services such as ED, diabetes and the renal failure unit as well managing patients with vascular disease under other specialities on the wards and in outpatients.
- QAH would replicate the UHS model with 'surgeon of the week' (SOTW), able to attend A&E, theatres and inpatients at short notice. This service will be 8am-6pm and supported by vascular nurse specialists.

- OP capacity to see patients on an urgent basis to be provided, supported by the vascular lab. Review of vascular patients who are rehabilitating.
- SOTW will liaise with UHS if an urgent transfer is required.
- Out of hours and at weekends: on call general surgery registrar at QAH will see and assess patients with vascular problems and discuss with the on call vascular surgeon based at UHS.
- Weekly theatre list to undertake minor vascular procedures.
- Second surgeon undertaking elective outpatients and peripheral clinics (Havant, Petersfield and Gosport) and attending day case theatre and working on administration.
- Local reassessment clinic will be provided.
- Extended hours to cover the QAH site in the evening
- Interventional vascular radiology will be available on a day case basis (for angioplasty and diagnostics).
- Cases for intervention will be discussed in a combined vascular MDT (with the arterial centre) as to suitability as day cases.
- The cross-sectional imaging service (CT and MR angiography) and Vascular Lab for duplex imaging will continue to be used as now. The vascular radiologists based at QAH will also be attending UHS to perform complex endovascular procedures and EVAR.
- Renal failure patients (those undergoing regular dialysis) will be seen and assessed at QAH. Patients who require management of haemodialysis fistulas will continue to be cared for by the separate renal transplant team. Where possible these patients will remain at QAH. If they require urgent intervention, transfer will be made to UHS.
- If the inpatient stay at UHS is significant, arrangements will be made for temporary haemodialysis in the same way as other specialties (such as neurosurgery and cardiac surgery) undertake at present. This should not be more than 5 patients/year.
- Patients with diabetes and peripheral vascular disease will largely be managed at QAH except where there is a need for bypass surgery, complex interventional radiology or major amputation.
- Current QAH vascular ward (shared with urology) will receive fewer patients but will continue to play an important role for rehabilitation and for those patients that do not require transfer to UHS. Close links between QA diabetic and podiatry teams will be maintained to support managing patients who will have had minor amputations at QAH or will have returned from UHS having undergone limb-saving procedures such as a bypass and major amputations.

  PAH should have 12 bed capacity to accept these patients as a result of the transfer of arterial work to UHS.

HHFT, IoW Vascular Service

- Vascular service cover would remain at the current provision of vascular surgeon cover either 3 days (HHFT - Winchester) or 1 day (IoW) during core hours.
- Outpatient consultations, diagnostic procedures, elective minor surgery and day-cases will be performed and some vascular surgery provision, such as minor amputations, would also be maintained to safeguard the necessary expertise for the treatment of patients in

other specialties within the hospital that require vascular surgery input, such as diabetes, cardiology and stroke.

- **Non-English Speaking Patients**

There is a UHS rota for multi language interpreters who are available 24/7 for both emergency and non-emergency patients.

- **Complex Healthcare Issues**

If a patient has complex healthcare issues, they will be appropriately linked to the relevant specialist teams whilst an inpatient. This is more likely to occur in UHS who will host the complex vascular emergency service and all appropriate specialties, such as diabetes, endocrinology, and cardiology, are located on site at UHS.

- **Stroke Strategy Supporting the DoH National Stroke Strategy**.

UHS has focused on delivering the National Stroke Strategy and delivers its stroke services from a hyper acute /acute ward based in the Wessex Neurological centre and a lower acuity ward based in the main building. The service is consultant led and is supported by a team of advanced nurse practitioners and an Early Supported Discharge Team.

- **MDT**

A weekly MDT (involving diabetologists, podiatrists and vascular surgeons and radiologists) for these patients is already established with PHT. Other specialists such as anaesthetists will be encouraged to follow their patients to UHS. The vascular lab and therapy teams in PHT do not need to change but will work closely with their UHS counterparts particularly with repatriated patients.

- **Emergency cover -** The following arrangements are in place.

UHS: the on-call vascular surgeon and team, with 24/7 cover.

PHT: in core hours, the onsite vascular surgeon will manage the patient, with transfer to UHS if required. Outside core hours, the patient will be assessed by the emergency surgical team and transferred to UHS if necessary.

HHFT - WINCHESTER: in core hours, the patient will either be managed by the on-site vascular surgeon or transferred to UHS via the on-call surgeon. This system is currently in operation. Outside core hours, the patient will be assessed by the emergency surgical team and transferred to UHS if necessary.

- **Direct Emergency Admissions to Non-emergency Centres**

Appropriate measures are in place to ensure that any direct emergency admissions would be sent to UHS, which is the designated major trauma centre for the region and as a result can receive patients directly. Clear guidance to the appropriate ambulance service would also be required, which is already in place, and works, for other tertiary transfers and for major trauma.

Direct emergency admissions to PHT would be seen as currently and stabilised before transfer if appropriate (as per the model in HHFT and IoW) There would be sufficient vascular services remaining on site to enable this action.

- **Inter-hospital transfers**

A commitment to repatriate patients to their local Trusts within 24 hours has been endorsed by CEO's in January 2016. Work streams are being led by each organisations COO.

The processes for inter-hospital transfers have been carefully defined, with clear protocols.

Cross transfer of patients from HHFT and IoW to UHS already occurs and works well. Repatriation of patients post treatment or surgery is also in place, with clear guidance and parameters for discharge.

- **Access times for vascular surgeons**

Vascular surgeons who are on call for emergencies will be within 30 minutes from UHS or, as an alternative, resident accommodation will be available.

- **Out of Hours Cover Provision**

The vascular out of hours emergency cover at UHS will be provided by the vascular surgeons on an appropriate rota, which is consultant led and supported by junior staff and advanced nurse practitioners. There will be 10 vascular surgeons with the service reconfiguration, on a 1:10 rota. During this duty, they will be free from elective commitments and will carry a bleep to enable them to be the first point of contact for GPs and hospital referrers. They will undertake a ward round of patients admitted acutely and attend an emergency clinic in the morning, which will prevent further admissions. Weekends will be covered on a rota basis as per the current UHS model.

- **Admission Prevention**

This proposal is based on a consultant delivered service, with a consultant vascular surgeon accepting all GP emergency referrals in UHS via a direct line single point of contact. A surgeon will, if required, initially review these patients in a daily emergency clinic. Prompt admission will be arranged for those requiring further care, although some patients will be reviewed daily in clinic if appropriate rather than being admitted. Consultant input at this stage of care will reduce admission rates, ensure prompt intervention, prevent further deterioration and ensure early discharge. UHS already successfully uses UHS@ home services enabling some pts to stay in their homes with supporting clinic visits and outreach support.

- **Length of stay reduction**

The duty surgeon conducts a daily ward round of all vascular patients, ensuring appropriate investigation and progression of treatment. Patients will generally receive intervention procedure within 24 hours of admission. Estimated dates for discharge are provided for each patient, with the nursing staff engaged in the process.

The ward undertakes 2 x daily board rounds to ensure agreed actions are followed up and acted upon. Robust plans for service improvement, which include length of stay reductions for vascular patients, are currently in progress throughout UHS. The Cardiovascular and thoracic care

group hold regular focus groups that involve the appropriate clinical staff, to identify patient pathway blockages and then appoints project teams to work through any proposal to fruition.

- **Data collection and Audit**

UHS has been submitting AAA, carotid and amputation data to the National Vascular Database since January 2008. With database expansion, data from infrainguinal bypass has also been submitted. Data from HHFT cases undertaken in UHS are also added and the experienced vascular nurse specialists manage data entry. Reports from The National AAA Quality Improvement Programme (AAAQIP) shows good correlation between NVD and HES data. Local data recording for all vascular procedures is held centrally within the trust and there is a robust audit process within the care group to ensure data input is accurate. In addition, regular audits are undertaken within and outside the vascular unit. Appropriate levels of data entry and audit staff are employed within the Cardiovascular and Thoracic care group to ensure the data submissions to the NVD and HES data correlate. This is monitored by the National Carotid Audit and AAAQIP.

Through the Trust governance structure, the Medical Director reviews the report and briefs the Chief Executive, with recommendations ratified by Trust Board.

Existing Unit Outcomes

Latest **unadjusted** outcome data (risk adjusted outcomes, data set to be finalised)

Abdominal Aortic Aneurysm - Data 1/1/10 -31/12/14
Elective infra-renal repair (open & EVAR)

Trust Name	Total AAA	Open	EVAR	Length of Stay (days): Median (IQR)	Deaths	Crude Mortality Rate *	Earliest analysed discharge/death date	Latest analysed discharge/death date
UHS	408	165	243	6 (3,8)	3	0.7%	02/01/2010	19/12/2014

Overall UK mortality rate = 1.7%

Carotid - Data 1/10/11 – 30/9/14

Trust Name	Total CEAs	Length of Stay (days): Median (IQR)	Total number of deaths and/or strokes within 30 days post CEA	Percentage of stroke and/or death *	Earliest analysed operation date	Latest analysed operation date	Delay from symptom to surgery for time period 01/10/13 – 30/09/14 (days): Median (IQR)
UHS	257	3 (2,5)	5	1.9%	04/10/2011	25/09/2014	9 (6,12)

Overall UK rate of stroke /death = 2.1 %

- **Adoption of New Technology**

At present there is sufficient resource to provide elective facilities for EVAR and open AAA repair. As previously referenced in this proposal UHS is due to commission its Hybrid theatre in November 2016.

The management of complex thoracoabdominal aneurysms and dissections has been changed by the adoption of advanced EVAR devices and, in combination with cardiac surgery, 15 TEVAR devices have been placed in the last year. Vascular surgery also allows UHS cardiology specialists to undertake endovascular aortic valve replacement (TAVI), with the unit on target to deliver its contracted activity of 75 cases per annum this year.

- **Geography**

There are good transport to and from UHS, with a local airport and ferry also within close proximity. The hospital is also located close to motorway links to Portsmouth and Winchester. Buses are available outside the main entrance and there is also a taxi rank outside the main entrance, and a free taxi phone in the corridor just inside the main entrance. The nearest mainline train station is Southampton Central and Southampton Airport is 5 miles by train, 3 miles by taxi or bus. The current transfer time is 30 minutes from each hospital site for ambulance transfers. Helipad transfers are undertaken including night flying.

- **Minimising travel**

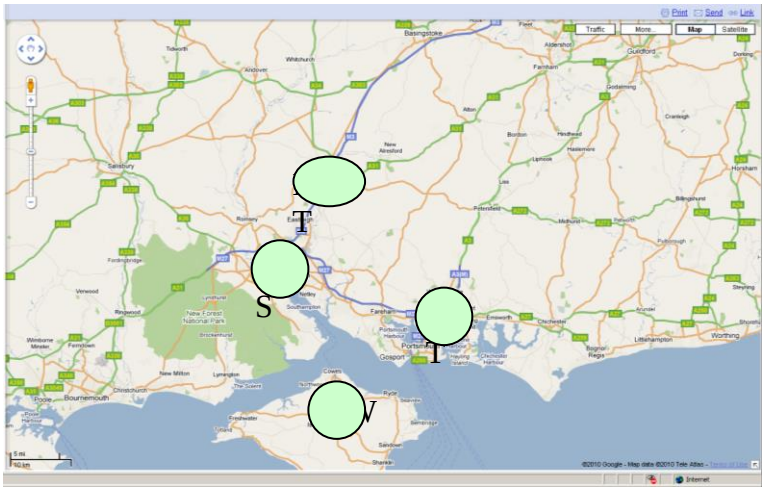
Patient travel will be minimised by enabling them to be seen at their local hospital for appropriate treatment. This will include day case, diagnostic, outpatient appointments as well as minor amputations, which would require an inpatient stay. Complex, arterial vascular work would be carried out at UHS, which would be arranged following the appropriate pathway. The additional benefit for Portsmouth residents is that some procedures currently referred to London due to complexity would be able to be carried out at UHS.

- **Repatriation**

As soon as appropriate, patients will be repatriated back to their local hospital following their treatment or surgery at UHS, which will also reduce the necessity for family members to travel.

A commitment to repatriate patients to their local Trusts within 24 hours regardless of overall Trust operational status has been endorsed by CEO's in January 2016. Work streams are being led by each organisations COO reinforcing the processes for inter-hospital transfers and ensuring that protocols are adhered too.

Map showing location of the four sites for the Wessex Regional Vascular Service



Education and training

Delivering Vascular Surgery Training

The current allocation of deanery trainees will need to be directed to where training opportunities occur within the network, irrespective of whether this is the arterial or non-arterial centres. Vascular training will be based at the arterial hub with trainees being allocated to appropriate sessions in the spoke hospitals based on the training requirements. Vascular Surgical trainees and general surgery trainees who are undertaking a period of Vascular Training in the arterial centre will take part in a vascular emergency (separate to general surgery) rota to give them exposure to the management of vascular emergencies.

In order to run a 10 consultant arterial centre and based on other similar centres of equivalent acuity, the junior medical staff should be as follows:

- 3 F1 and 1 F2 doctors (to share late and weekend duties with urology F1s as now)
- The extra F1 would follow work from Portsmouth
- 2 Core surgical trainees
- 2 Specialty Trainees (ST1-8, two of whom are vascular trainees)
- 2 core clinical fellows or registrar clinical fellows
- 1 post-CCT fellow.

Currently Portsmouth is allocated 3 trainees to vascular surgery and the expectation would be that these trainees will follow arterial work to UHS but all trainees will receive training in Portsmouth (renal access, OP, day case, minor surgery).

6 of these trainees will constitute a middle-grade equivalent rota to provide non-resident out of hours (evening and weekend cover).

- **Nursing**

UHS has taken steps to address junior doctor shortfall and has ongoing training for advanced nurse specialists in most surgical areas, including vascular. Cover is clinical and provided 24/7. Each Division at UHS has a training team who lead for this aspect and they regularly ensure that the plan and training meets the requirement of the service.

- **R&D**

UHS has a strong track record in research, with 2 National Institute of Research funded Biomedical Research Units (BRU). There is also a purpose built, 5-storey research building and a Welcome Trust Clinical Research facility on site.
In 2014 UHS was successful in its bid to one of the 11 designated Genomic Medicine Centres (GMCs) in the UK.
In partnership with the University of Southampton, the ambition is to develop further strong platforms of research.

Financial Factors

Through the costing analysis carried out at UHS for this proposal, it shows the vascular service over the past 18 months has made a loss of around 15%. It is envisaged that through efficiencies, which can be made by centralising the service, the Trust would be able to deliver the service at national tariff. Capital expenditure is identified in the 16/17 capital plan to equip the endovascular theatre and to refurbish the vascular ward, although the main infrastructure is already in place to be able to deliver the additional activity.

The financial implications (revenue and capital) of this proposal, to centralise all complex elective and emergency vascular surgery to a single centre, have been assessed against the provided activity data from Portsmouth (actual 15/16 Mth9)

Based on that data the additional UHS income at average national tariff including MFF would be:

- **c. £0.5m pa Hybrid lab income**
- **c. £1.8m pa additional non-hybrid activity (Portsmouth transferred activity)**

Income relating to Critical Care activity is excluded from this figure.

UHS can confirm that capacity exists to accommodate this activity.

The development of the endovascular hybrid theatre is within the IISS programme for 16/17 and the Trust capital programme has allocated £750k for ward refurbishment and £500k for non radiological capital equipment associated with the development of the arterial centre. There is already the required capacity for the additional ward and Critical Care beds, so no major capital work to ward infrastructure will be required.

The staffing requirements have been assessed to deliver the required level of activity and it is through the economy of scale that the increased activity brings that will allow UHS to deliver the service within national tariff.

Following a final recommendation the activity planned and associated financial implications will need to be revisited in a more rigorous and robust manner.

Indicative additional activity & income from Portsmouth arterial transfer

(based on actual data from P'mth 15/16 Mth 9 SLF)

Procedure	Code	Volume		Total
Fem Pop	QZ03Z	22		£ 241,774
Fem distal	QZ02A	18		£ 141,228
Carotid endarterectomy	QZ04Z	56		£ 252,403
Fem endarterectomy	QZ02A	38		£ 298,147
	QZ02B			£ -
AAA open	QZ01B	8		£ 46,806
Amputation	QZ11A	49		£ 824,903
	QZ11B			-
EVAR /TVAR		69		£ 501.236
Total				**£ 2,306,497**

Conclusion

It is well documented that the centralisation of specialist services delivers improved outcomes for patients. UHS is ideally placed to fulfil the ambitions of this programme and has the full support from the Chief Executive, the Trust Board and most importantly, the clinical team, who are central to the delivery of a successful clinical model. In summary, the proposal is aligned to the Trusts strategic objectives of Trusted on Quality, Delivering for Taxpayers and Excellence in Healthcare.

APPENDIX I Project Plan

APPENDIX J Vascular Break Even Analysis

Note: This is a high level analysis developed as a 'straw man'. A more detailed financial evaluation is required to develop a break even model.

Assuming a population of 900k and a dedicated 22 bed ward, an estimate of staffing levels is as follows:

Staff Requirements

Staff Group	**Current Provision**
Vascular Surgeons	6
Vascular Anesthetists	6
Interventional radiologists	6
ICU – L3 staff ratio 6:1 but rising to 6.8:1	13 beds total staffed at 6:1 wte per bed; 1 for vascular
HDU – L2 staff ratio 3.5:1	7 beds total staffed at 3.5 wte per bed; 2 for vascular
Ward beds L1 staff ratio 1:3	22 beds, ratio of 1.3 = 29.65wte; 2wte ANP; 0.4wte Spec nurse

Taking the 'current provision' figures, for a population of 900k, this equates to:

Staff Group	Salary	Plus 30% Overhead	No	Total
Vascular Surgeons	£90,000	£117,000	6	£702,000
Vascular Anaesthetists	£90,000	£117,000	6	£702,000
Interventional Radiologists	£90,000	£117,000	6	£702,000
L3 Nurse (1 * 6.8)	£30,000	£39,000	6.8	£265,200
L2 Nurse (2*3.5)	£25,000	£32,500	7	£227,500
L1 Nurse (22*1.3)	£20,000	£26,000	28.5	£741,000
ANP	£25,000	£32,500	2	£65,000
Spec nurse	£25,000	£32,000	0.4	£12,800
			TOTAL	£3,417,500

Assuming tariff split is 50% infrastructure and 50% procedure costs, this suggests income of £6.835m is required to break even.

Note: UHS calculate that vascular services currently runs at a 15% loss. If 14/15 income was £5.3 million, this would suggest an income of £6.24m is required.

APPENDIX K Four Tests and Best Practice Checks

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
4 key tests	• Support from GP commissioners will be essential	• All CCGs (Southampton City, Portsmouth, West Hampshire, Fareham & Gosport and South East Hampshire) are represented on the governing Vascular Steering Group (VSG) and Vascular Implementation Board (VIB) which consider and approve recommendations.
	• Arrangements for public and patient engagement, including local authorities should be strengthened	• A Comms and Engagement Strategy has been developed, including stakeholder mapping and outline plans for full public consultation if required. Local HASC/HOSPs are regularly updated and proposals will be presented on completion of Stage II Assurance for a decision on consultation. Detailed plans are currently being developed for public engagement with regard to recommendations for a strategic network solution.
	• Clarity about the clinical evidence base underpinning proposals	• The Vascular Society (VS) POVS15[11] states: "*The current Vascular Society advice, based on sound clinical evidence, is that high quality vascular care in the UK is best delivered with the establishment of integrated vascular networks. Such networks should decide upon a single hospital which will provide arterial surgery and complex endovascular interventions. The other hospitals in the network need to continue to provide the following clinical support:- vascular clinics; diagnostics; interventions such as renal access and varicose vein procedures; review of in-patient vascular referrals; and rehabilitation. Day-case (23-hour stay) peripheral angioplasty and stenting can also be performed at these local sites. This provides the patient with direct local access to the vascular service. The network will function best for the patient when travel to the arterial centre is only for specific arterial and complex endovascular interventions. The pre- and post- procedure care related to these interventions should be delivered whenever possible at the local non-arterial centre*."
	• Proposals take into account the need to	

[11] Vascular Society of Great Britain and Ireland "The Provision of Services For Patients with Vascular Disease 2015"

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
	develop and support patient choice	• Patients in the Wessex Area do not currently have access to fully compliant vascular networks. The recommendations for a strategic Wessex network with UHS as the MAC intends to provide patients with the choice to access a fully compliant vascular network.
Qipp/ Finance	• How does the proposal support commissioner and provider financial sustainability?	• There is no significant impact on commissioner finances. • Vascular services account for less than 1% of provider income; proposals are unlikely to impact upon provider financial sustainability.
	• Does the proposed change improve quality and reduce cost? How (e.g. reduced duplication, increased efficiency)	• Quality in terms of patient outcome is currently very good at both provider sites. Neither site currently offers a fully compliant, sustainable service and this proposal seeks to secure a strategic and sustainable network solution, particularly in terms of workforce sustainability. • It must b e stressed that this initiative is solely quality driven and does not seek to reduce costs. There is, however, a likelihood of cost saving in the reduction of potential duplication in the future in terms of, in particular, requirements for an increased on call rota, and technological developments.
	• What are the savings in financial terms?	• None
	• What capacity is being taken out of the system and where?	• There is an opportunity to consider utilisation of capacity which will become available at PHT if elective arterial services transfer to UHS; this is not within the scope of this project.
	• How, when and where is a saving made? Is it a cash releasing saving? •	• None
	• Are the transitional costs (including non-recurring revenue and capital) identified and properly accounted for?	• UHS are currently identifying transition costs as part of the detailed capacity and transfer plan.
	• How will they be funded?	• UHS will fund transition costs?
	• Capital investment implications have	

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
	been considered in terms of the viability, deliverability and sustainability of the proposal and the economic (value for money) impact • Finance links consistently to workforce and activity models	• UHS are currently identifying capital investment costs as part of the detailed capacity and transfer plan, including partial funding of the hybrid theatre (utilised by more than one speciality) and the expansion of the vascular ward. • High level cost/benefit analysis suggests that neither site with current volumes of procedures could break even as a compliant vascular service; it is anticipated that UHS as MAC would become economically viable. • Workforce and activity models have driven income projections and models.
Clinical quality and strategic fit	• Clear articulation of patient, quality and financial benefits • Clinical case fits with national best practice • Fit with local H&WB strategy and aligned with local commissioning plans • Options appraisal (inc. consideration of a network approach, cooperation and collaboration with other sites and/or organisations) • Macro-impact is properly considered • Alignment with QIPP workstreams	• The benefits are articulated in the NSS[12], which is derived from the VS POVS guidelines. • The objective is to deliver a sustainable strategic network solution which is compliant with the NSS. • The current Vascular Programme ensures alignment with CCGs and, therefore, their H&WB strategies • Following the VS review in August 2015, an Options Appraisal has been developed and used to update the Business Case; the clinical case identifies a network as the optimum solution for vascular services.. • In the macro environment, there is strong clinical evidence that larger centres have improved outcomes • This solution provides improved workforce resilience and sustainability • No savings or efficiencies envisaged

[12] A04/S/a 2013/14 NHS Standard contract for Specialised Vascular Services (Adults)

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
	• Full impact analysis across CCG / NHS England commissioned services and shared sign up of all parties to analysis	• Governance Structure includes all parties
Activity	• All relevant patient flows and capacity are properly modelled, assumptions are clear and reasonable	• Overall patient flows modelled and capacity modelled accordingly
	• What are the changes in bed numbers?	• See UHS Capacity & Transfer Plan
	• Activity and capacity modelling clearly linked to service change objectives	• See UHS Capacity & Transfer Plan
	• Activity links consistently to workforce and finance models	• See UHS Capacity & Transfer Plan
	• Modelling of significant activity, workforce and finance impacts on other locations / organisations	• See UHS Capacity & Transfer Plan
Workforce	• Do you have a workforce plan – integrated with finance and activity plans?	• No detailed workforce plan has yet been considered pending the Business Case recommendations • A high level clinical strategic vision has been developed, with high level estimates.
	• Are you making the most effective use of your workforce for service delivery and is it compliant with all appropriate guidance?	• Yes
	•	
	• Consider the implications for future workforce	• Future workforce implications are a key driver for the centralisation of arterial services in a smaller number of larger units within the UK.
	•	

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
	• Have staff been properly engaged in developing the proposed change?	• Clinicians have developed a strategic vision upon which the change will be based. Once the recommended solution has been approved, there will be workforce engagement on an individual basis.
	• Has the travel impact of proposed change been modelled for all key populations including the analysis of available transport options, public transport schedules and availability / affordability of car parking?	• It has been established that "In an emergency situation, such as in the case of a ruptured AAA, the maximum expected travel time under blue light conditions is 40 minutes." (sic PHT to UHS) • Travel impact analysis is currently underway. Because of the nature of the patients (elderly and co-morbidities) this is considered to have a significant potential impact.
Resilience	• How will the proposed change impact on the ability of the local health economy to plan for, and respond to, a major incident • Has a business impact analysis been conducted for all impacted organisations and appropriate changes made to Business Continuity Plans? • Has the local Health Resilience Partnership assessed the impact on resilience?	• UHS is a Major Trauma Centre and, as such, must have vascular services co-located. • Organisations outside of the providers are not considered to be impacted in any significant way. • ?
Ambulance Services	• Have the implications for ambulance services (emergency and PTS) been identified and impact assessed and appropriate discussions been held with ambulance service providers?	• See UHS Capacity and Transfer Plan
Comms and Engagement	• Are there plans to appropriately and effectively engage and involve all	• A Comms and Engagement Strategy has been developed, including identification of all key stakeholders and engagement proposals. Detailed plans are currently being prepared

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
	stakeholders (to include: staff, patients, carers, the public, Healthwatch, GPs, media, local authority overview and scrutiny functions, Health and Wellbeing Boards, local authorities, MPs, other partners and organisations) and fulfil commitments under s14Z2 and s.13Q of the Health and social Care Act?	as part of the Business Case. • Following a previous presentation of proposals to centralise services at UHS, Portsmouth HOSP requested a Full Public Consultation; plans are being made for this eventuality.
Equality Impact	• There has been an appropriate assessment of the impact of the proposed service change on relevant diverse groups? • Has engagement taken place with any groups that may be affected? • What action will be taken to eliminate any adverse impacts identified?	• An Equality Impact Assessment is required as vascular services affect diverse groups including: ○ elderly ○ asian ethnicity prone to diabetes at an earlier age ○ afro-caribbean ethnicity prone to hypertension and therefore renal problems ○ inverse social class - prevalent in more deprived areas • It is considered that this is generic to vascular services reconfiguration and analysis of other reconfigurations will be made before further action is taken in this regard.
TDA/Monitor	• Is proposal aligned with the TDA's / Monitor's approach	•
IT	• Does proposal make best use of technology? • Assessment of the impact on local informatics strategy & IT deployments • Are there likely to be any data migration costs? • Are there any implications for specialist or network technology/equipment	• No current major technology impact

Criteria	Best Practice Checks	UHS as Major Arterial Centre (MAC) with PHT as Non-Arterial Centre (NAC)
	contracts associated with the service?	
Others	• Consistent with rules for cooperation and competition (Monitor/OFT/CC) • Consideration given to the most effective use of estates	• Yes • A separate project will consider the opportunity to make effective use of capacity made available at PHT

Appendix 3

Southern Hampshire

Vascular Services Reconfiguration

Communications, Engagement and Consultation

March 2016

Southern Hampshire Vascular Services Reconfiguration

Communications, Engagement and Consultation

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1 Introduction

This communications, engagement and consultation strategy outlines how NHS England Specialised Commissioning, in collaboration with NHS England South (Wessex), plans to inform and involve stakeholders, patients and local people in proposed improvements to vascular services in Southern Hampshire in line with the National Vascular specification.

Following a review, the Vascular Society of Great Britain and Ireland (Vascular Society) found that the services currently available at University Hospital Southampton NHS Foundation Trust (UHS) and Portsmouth Hospitals NHS Trust (PHT) were not fully compliant with the society's guidelines for safe high quality care for patients requiring vascular surgery.

The Vascular Society recommended the development of a single vascular surgical hub for Southern Hampshire, based at University Hospital Southampton NHS Foundation Trust (UHS). UHS already operates as a hub with a network for Hampshire Hospitals Foundation Trust (HHFT) and The Isle of Wight NHS Trust (IOW) and the Vascular Society recommended that this network should be extended to include PHT as another spoke.

This was seen as maximising the benefits of other networking arrangements such as that for major trauma.

NHS England has been working with partners, led by senior surgeons, in developing detailed proposals to provide these vital services for the whole of Hampshire.

2 Background

Vascular services are for people with disorders of the arteries and veins. These include narrowing or widening of arteries, blocked vessels and veins, but not diseases of the heart and vessels in the chest. These disorders can reduce the amount of blood reaching the limbs or brain, or cause sudden blood loss if an over-stretched artery bursts. Vascular specialists also support other medical treatments, such as major trauma, kidney dialysis and chemotherapy.

Complex Vascular surgery covers:

- Abdominal Aortic Aneurysms (AAA)
- Screening people for AAA

- Strokes (such as Carotid Endarterectomy (CEA) or Transient Ischaemic Attacks (TIAs or mini-strokes)
- Poor blood supply to the feet or legs

There are also roles for vascular surgery supporting other major specialities e.g. trauma, neurosurgery, cardiac surgery, dermatology, clinical laboratory services, nephrology, plastic surgery, and other disciplines. Vascular patients are often treated by other specialties including cardiology, renal, diabetology and podiatry.

In common with other specialties, there is strong national clinical consensus that patients who need vascular surgery receive better quality care when they are treated by specialists who deal with a high volume of patients and who, therefore, have significant expertise in this field.

Reviews of the reconfiguration of vascular services in Southern Hampshire began in 2008 and there have been various reports and recommendations since that date.

3 Approach

3.1 Legal and policy context

The legal context for this document is the duty to involve the public (section 13Q) of the National Health Service Act 2006 (as amended by the Health and Social Care Act 2012), NHS England has a statutory duty to 'make arrangements' to involve the public in commissioning services for NHS patients.

The section 13Q duty is aimed at ensuring that NHS England acts fairly in making plans, proposals and decisions in relation to the health services it commissions, where there may be an impact on services. The duty requires NHS England to make arrangements for public involvement in commissioning.

Public involvement in commissioning is about offering people ways to voice their needs and wishes, and to influence plans, proposals and decisions about their NHS services. Patients and the public can often identify innovative, effective and efficient ways of designing and delivering services if given the opportunity to provide meaningful and constructive input.

There are four tests that must be met before there can be any major changes to NHS Services:

1. Support from GP commissioners
2. Strengthened public and patient engagement
3. Clarity on the clinical evidence base
4. Consistency with current and prospective patient choice

In addition, NHS England's service change guidance states:

> ***Effective proposals should have on-going involvement with staff, patients and the public. Proposing organisations should avoid presenting a fully worked up set of service change options to the public unless there has been on-going dialogue.***

In line with this guidance it is proposed to undertake the communications and engagement programme in five distinct phases:

1) Pre-consultation to inform the model
2) Live consultation/engagement
3) Analysis and reporting
4) Decision making and feedback
5) Implementation.

.

3.2 Working in partnership

The work will be co-ordinated through the Communications and Engagement workstream which reports to the Vascular Implementation Board and comprises CCG, NHS England Wessex and Trust communications together with representation from Healthwatch.

3.3 Phase one Pre-consultation to inform the model

The first phase will run prior to purdah for local elections in May and is aimed at informing the development of the final proposals. This will be achieved by:

- Holding 5 drop in/listening events in Hampshire and on the Isle of Wight to listen to the experiences and views of the public/patients about how the services could be more responsive to patient/carer needs.

- Establishing a patient reference group to advise and support any formal consultation. The group will include membership from previous and current patients, carers, voluntary sector services which represent the views of service users (eg Stroke Association, Diabetes UK) as well as members of the public who may have no experience of vascular services.

- Build on the initial engagement with the local authority overview and scrutiny committees for Hampshire, Isle of Wight, Portsmouth and Southampton

- Using existing CCG clinical fora to engage with GPs across Hampshire and the Isle of Wight and to build on clinical engagement achieved

through the Vascular Implementation Board. This includes identifying any key local issues that impact on or will be impacted by the review.

- To use existing CCG and Trust communications and engagement channels and forthcoming events to engage with the public (see appendix).

- To brief the Health and Well Being Board about the review.

- To help shape the second phase engagement/consultation.

We will also seek guidance from the overview and scrutiny committees whether the proposals constitute significant service variation and therefore whether a full consultation is required. Given the history of vascular services in South Hampshire it is anticipated that full consultation may be required.

3.3.1 How will the pre-engagement inform the proposals?

We will seek the views of stakeholders and service users in Portsmouth about the proposed changes to:

- Check understanding of what is being proposed
- Identify key issues relating to proposed changes

We will also seek the views of stakeholders and service users in the current University Hospital Southampton network (including Southampton, Isle of Wight and Winchester) to:

- Check understanding of what is being proposed
- Identify key issues relating to existing services and to understand how the changes being proposed can take account of those issues.

Appendix includes the draft questions for the engagement.

3.4 Phase two Live Engagement/Consultation on the final option

- To communicate openly and widely about how the public views in phase one have helped influence the model.
- To communicate openly and widely that no change is not an option. Provide a clear explanation about the option that has been developed, with a proactive campaign and direct engagement with patients, public and key stakeholders with the aims of:
    - ensuring understanding of the reasons for the change
    - enabling commissioners and the service providers to understand issues for patients, public and key

stakeholders with a view to ensuring the final model has taken these into account

Dependent on the views of the Overview and Scrutiny Committees this may take the format of an informal engagement or a formal consultation.

In both cases the objectives will be:

- To provide clear and consistent messages and information to all stakeholders
- To explain the option and the benefits to patients
- To allow patients and the public to voice any concerns/raise issues/ask questions about the chosen option
- To gain views on associated services (for patients undergoing amputation for example)
- To balance any negative perception and concerns
- To increase public confidence in NHS England as a listening and responsive commissioning organisation.

3.4.1 Informal Engagement

- If Overview and Scrutiny agrees that an informal engagement can be undertaken in this phase, the approach will be to inform of the chosen option and asked whether any concerns need to be taken into account in its implementation. This process will not ask for views on options. This will not constitute a statutory process and can be conducted over a much shorter time frame.

3.4.2 Formal consultation

- Should the preferred solution constitute “significant service variation” the phase two consultation and engagement plan will become a formal consultation about the detail of the proposed model seeking to address why there is only one option. It will also ask what concerns need to be taken into account in implementation. In this instance there will be a full 12 week consultation in line with Cabinet Office best practice guidance.

  The difference between the informal and the formal process will be in the length of the engagement and also the decision making process.
  The formal consultation may also provide some options around, for example, transport or associated services such as access wheelchairs or prosthetics.

3.5 Format

3.5.1 Channels

For both an informal engagement and an informal consultation there will be a mix of channels

Specific drop in events

Held in a range of locations across South Hampshire, in accessible venues and at a variety of times to give people a range of choices.

- These events will give people an opportunity to hear about the proposals, discuss their views and have the opportunity to talk with those involved in the programme – particularly, but not exclusively, clinical leaders.

Attendance at existing community forums/events

- Attending existing community events and forums gives the opportunity to talk about the consultation and find out how they can give their views. These events would be identified by working in partnership with local authority and voluntary sector colleagues to identify suitable forums/meetings.

Working closely with the community and voluntary sector

- The community and voluntary sector have wide ranging communications networks. We will aim to work with the CVS through events they host directly with their clients to get their views – this often works well with hard to reach groups. We will also often supply consultation information through their distribution channels.

Collaboration with CCGs, Trusts and Healthwatch to make use of existing engagement channels

- The workstream members will aim to use all.

Online opportunities to respond to the engagement/consultation

- The consultation will be made available on the NHS England consultation hub. This is the central online resource for all NHS England consultation and engagement projects. It provides a mechanism for consultation documents to be uploaded and for people to provide their feedback.

Engage with staff

- NHS staff will be engaged, with briefings organised at their place of work and including senior trust staff. Staff are key influencers of patient views and also members of the public and use local health services

themselves, so briefings will focus on the case for change as a whole, not just their role as employees.

Robust media approach

- There will be a responsive, agile and robust media handling plan including proactive briefing about the proposals. There are agreed media sharing protocols in existence.

Multi-channel communications

- People get their information from a variety of different sources. Social media and websites together with other existing communications mechanisms such as newsletters will be used.

- As the key clinical leaders are not always likely to be available. We propose to produce videos communicating the consultation's key messages which will be made available on websites and presented at events.

Materials in appropriate formats

- NHS England has an Accessible Information Standard which sets out expectations for communications for those with disabilities (see Section 5).

- Our Equality Impact Assessment also indicates a potential need for translations into languages other than English.

3.5.2 Key messages

There will be a core narrative and a set of key messages around the proposals themselves, using terms that will be applied consistently across all materials.

Overarching messages

We will develop services which are:

- High quality with excellent outcomes for patients;
- Developed in line with the best available evidence to increase the chance of survival for patients;
- Can be sustained, despite future challenges; and
- Offer a good patient experience.

We are committed to:

- Engaging and involving stakeholders, partners and the public to find out what matters most to people;

- Making sure all the feedback received is considered as part of the decision making process;
- Being open and transparent throughout the consultation process.

3.5.3 Core Narrative Key Messages

- There will be more doctors with the right specialist skills available to treat vascular patients through the creation of a Wessex Vascular Network.
- Patients needing non-emergency treatment or out-patient appointments will be seen in clinics at the hospital closest to their home.
- Patients will continue to be treated at Portsmouth for:
    - some simpler procedures and minor surgery (such as the removal of unhealthy tissue from a wound to promote healing) and some minor amputations (eg toes)
    - diagnostic tests and treatments which do not need an overnight stay
    - rehabilitation following major surgery at Southampton
    - support services such as footcare (podiatry) for patients who have had minor surgery
- Portsmouth will continue to provide a vascular ward which will provide care for patients who do not require treatment at Southampton or have returned from Southampton for rehabilitation
- There will be two or three vascular surgeons available at Portsmouth during the daytime every weekday to see patients in outpatients or on the wards
- Out of hours and at weekends there will be an on call vascular surgeon at University Hospital Southampton who can be contacted by surgical teams at Portsmouth, Winchester and on the Isle of Wight
- Portsmouth will continue as the major regional renal (kidney) centre and patients will continue to be treated there for complications that arise from dialysis. There will be a handful of cases each year where a patient who needs dialysis will need urgent/emergency treatment at Southampton which needs an overnight stay and temporary dialysis will be available for them at Southampton during their stay.
- Emergency and most planned major treatment will be provided at University Hospital Southampton where there will be:
    - A refurbished ward with extra beds which will receive emergency patients 24 hours a day
    - An additional vascular nurse specialist who will support the transfer of patients back to their local hospital and/or to home
    - A newly built theatre that can offer vascular surgery and interventional radiology at the same time

- A key to the success of the expanded service at Southampton will be the return of patients home (where they are fit to do so) or transfer back to their local hospital for rehabilitation as soon as possible
- Transport arrangements for emergency (24/7) and non-emergency admission
- Transport arrangements for visitors

Supporting messages

- Surgeons at all of the hospitals have worked together to develop these options
- We want to end uncertainty for patients and for staff
- We want to provide safe, high quality services in line with the recommendations of the experts (Vascular Society of Great Britain and Ireland)
- The need for vascular surgery is reducing due to improving health of the population.
- The impact of a reducing number of smokers and better care for people with diabetes means the demand for vascular surgery will continue to reduce.
- The way vascular services are provided has also changed from major surgical procedures to less invasive techniques which require specialist training and the introduction of preventative surgery which reduces the risk of stroke.
- To ensure services remain safe and high quality it is important that surgeons remain practiced in these specialist techniques which means they should undertake a minimum number of procedures to maintain their expertise
- The number of surgeons available to provide these services is limited and the hospitals in Hampshire have had difficulty in recruiting enough to provide sufficient cover for existing rotas.
- Over the next five years hospitals will move to 7 day working which will increase pressure on having enough qualified staff to cover rotas. It is unlikely that Hampshire will be able to attract enough surgeons to staff two hubs
- No change is not an option

3.6 Timeline

Key dates:

Pre-consultation	Live-consultation / engagement	Analysis and reporting	Decision	Implementation
Feb – April	**June – September**	**September-October**	**November**	**December**
Development of communications and engagement strategy	Consultation / Engagement launch	Responses analysed	Decision taken	Implementation – communication and engagement to be provided by the providers
Stakeholder analysis	Activities logged for audit trail	Report written	Stakeholders updated on outcome	
Establishment of Patient Reference Group	All feedback stored in line with Data Protection		Communicate decision to patients / public	
Plan and schedule pre-engagement event opportunities			Public meeting to announce the decision	
Develop pre-engagement and consultation material				
Work with voluntary sector on reach and breadth				
Production of patient/clinician videos (14 March – 17 March)				
Stakeholder briefings				
Media briefing				

Pre-engagement events schedule including attendance at Health Overview and Scrutiny:

Events need to be held in Southampton, Portsmouth, Gosport, Winchester and on the IOW.

Date	Event	Location	Attendees
March 2016			
Tuesday 15 March 9.30 am	Portsmouth HOSP	The Executive Meeting Room - Third Floor, The Guildhall	Dominic Hardy Liz Mearns Carol Wood
Tuesday 22 March - TBC	Pre engage drop in event	Holiday Inn Southampton Avon Room TBC as negotiating on cost Room cap: 70 9.7 metres by 8.8metres – height 2.9 metres 2-8pm The Hub Atrium (Rebecca) venue hire contact off this week – costs/availability to be emailed over. Southampton Guildhall – call Jodie on 02380 832453 w/c 22	Liz Mearns Emily Grainger Carol Wood Kulvinder Naga Surgeon/Clinician TBC
Wednesday 23 March - TBC	IOW trust members event	1.5 hours presentation/focus group to members	Liz Mearns Carol Wood Pauline Swan Kulvinder Naga Surgeon/Clinician TBC
Thursday 24 March 6.00pm	Southampton HOSP	Civic Centre, Southampton	Dominic Hardy Liz Mearns Carol Wood
Tuesday 29 March 10.00am	Hampshire HASC	Ashburton Hall Winchester	Dominic Hardy Liz Mearns Carol Wood
Tuesday 29 March - TBC	Pre engage drop in event	Winchester Guildhall – voicemail left with booking team re availability on this day and costs	Liz Mearns Pauline Swan Emily Grainger Carol Wood Kulvinder Naga Surgeon/Clinician TBC
Wednesday 30	Pre engage	Portsmouth Guildhall	Liz Mearns

March (pm) - TBC	drop in event(s) – Portsmouth ones to happen on the same day	Portsmouth Room tentatively booked from 8am-12 noon Room cap: 100 Gosport Community Association – The Theatre Room is tentatively booked from 12-6pm (might change to 1-6pm) Room cap: 150	Pauline Swan Emily Grainger Carol Wood Kulvinder Naga Surgeon/Clinician TBC
April 2016			
Tuesday 5 April (am)	Pre engage drop in event	TBC – date if needed	TBC
Thursday 7 April (am)	Pre engage drop in event	TBC – date if needed	TBC
Monday 11 April	Isle of Wight HASC 17.00	County Hall High Street Newport	Dominic Hardy Liz Mearns Carol Wood
Wednesday 13 April	SEH CCG Community Engagement Committee	Attended by key stakeholders Meets quarterly (subject to purdah)	Liz Mearns Pauline Swan Emily Grainger Carol Wood Kulvinder Naga Surgeon/Clinician TBC
Thursday 21 April	Gosport Locality Patient Group	TBC (subject to purdah) Attended by all local PPG chairs	Liz Mearns Pauline Swan Emily Grainger Carol Wood Kulvinder Naga Surgeon/Clinician TBC
Tuesday 26 April	IOW existing patient event – Jo Cram to confirm if we can attend to present		Liz Mearns Pauline Swan Emily Grainger Carol Wood Kulvinder Naga Surgeon/Clinician TBC

3.7 Analysis and reporting

During this phase all feedback will be analysed. It is recommended that this work is undertaken independently regardless of whether an informal engagement or a formal consultation is undertaken. A report will also be written following agreed approvals process and signed off.

3.8 Decision making

If a full formal consultation is held there should be an open and transparent decision making process with a meeting held in public where considerations that have arisen during consultation are decided upon.

The report will be available for the public and for overview and scrutiny and will also be presented at the relevant CCG and provider board meetings.

A media and communications plan will be required for the decision.

It is also good practice (and necessary if there has been significant noise) to do this in public.

3.9 Implementation

Communications for this phase to be led by providers.

4 Risks and Issues

All proposals to change hospital services inevitably face some challenges that are not specific to the proposals in question or the area in which they are taking place. These include:

- Emphasis among local people and opinion-formers on importance of hospital, sometimes to the exclusion of other services
- Fear of loss of local services
- Fear that local hospital will become unsustainable
- Concern about travel to get to appointments or visit loved ones
- Fear of longer distances or poor roads leading to safety risks
- Local people and politicians equating services in local hospital with status of the area

In the case of South Hampshire reviewing vascular services is a longstanding issue. There has already been significant media coverage and public opposition to proposals put forward to date. It will be a challenge to clearly communicate the benefits of the change.

The issue is also compounded by the likelihood that one area will feel that it has lost out to the other – as already demonstrated in past media coverage.

NHS England's responsibility is to put forward a service proposal which will give the best possible outcomes to patients across its whole geography. Any

engagement/consultation will inevitably generate noise and interest and this is to be expected. What is important is the approach that is applied to engagement/consultation and making sure it is as robust as possible, following due process.

The level of public scrutiny applied to any public consultation should not be underestimated. Legal challenges are likely to relate to communications and engagement activities.

Challenge often comes from a programme's lack of involvement opportunities for the public at the earliest possible stage. It will be important to demonstrate with clear evidence how this has been achieved.

The four health overview scrutiny committees and panels involved with this process have agreed a framework for assessing major service change[13]. The consultation strategy must pay due regard to the expectations expressed in this important document.

Communications Risk	**Mitigation**
We are unable to secure effective clinical engagement, leading to lack of support for proposals	Local lead clinicians are fully involved in the review and are programme board members. External clinical expertise has been used to support the local clinicians using nationally agreed clinical guidance as the benchmark for the review. The clinical model has been developed by the local lead clinicians. Clinical case will be convincingly described and promoted Clinical leaders to provide visible, public support
Inaccurate information causes undue concern among patients/public/stakeholders	All communication to be open and transparent and shared at the earliest opportunity allowing for clarity and consistency of the message. All co-dependencies to be identified and any possible impacts to be discussed and shared with stakeholders. All communications from stakeholders to be coordinated to ensure consistent clear messages.
Inadequate information causes undue concern among patients/public/stakeholders	Patient reference group established to ensure materials are clear, consistent and comprehensive Ensure the issues most likely to excite local opinion – money, transport and emergency care

[13] Southampton, Hampshire, Isle of Wight and Portsmouth Health Overview and Scrutiny Committees: Arrangements for Assessing Substantial Change in NHS provision (revised April 2013)

	are adequately covered within the case for change and the consultation document Ensure the consultation document addresses how sustainability and capacity are being addressed
The review causes anxiety which impacts on current services and/or ability to engage effectively	The process to be open and transparent. All concerns to be raised to the Programme Board at the earliest opportunity. Clear communications to be agreed and shared across key stakeholders. Risk and issues logs to be maintained and regularly reviewed through the process. Key stakeholders to be identified and communicated with as early as possible. Process is conducted across the whole of the area where the services are provided including those already operating in a network i.e. Isle of Wight and across South Hampshire in addition to Southampton and Portsmouth Equality impact assessment will identify groups with characteristics which are impacted by the service/service change A mix of approaches will be used to ensure a wide range of voices are heard
Purdah impacts on engagement activity. Local elections happen in Southampton and Portsmouth on 5 May followed by EU Referendum on 23 June.	Guidance to be sought from Health Overview and Scrutiny. Full consultation (if required) to be scheduled after the EU Referendum closes. Timescales for service implementation allow for this amendment. Some pre engagement is scheduled prior to the local election purdah period (7 April to 5 May)
The public and/or local authorities contest service change either through judicial review or through referral to the Secretary of State by health overview and scrutiny committees.	Learning from the Independent Reconfiguration Panel to be adopted as best practice within the communications and engagement process: • community and stakeholder engagement in the planning process • equalities impact assessment and careful analysis of particularly affected groups to ensure the right methods are used to engage • adequate attention given to the responses during and after the consultation including maintaining a thorough evidence log of all communications and engagement activities

4.1 Section 1: Equality analysis

Evidence
What evidence have you considered? People with diabetes are at a higher risk of vascular disease. Prevalence of diabetes is caused by a number of factors such as an ageing population, obesity and low levels of activity. Another important factor for diabetes is the changing ethnic mix of the population. People from black and minority ethnic communities are six times more likely to develop the disease, suffer from a 50% increased risk of heart disease and have much higher levels of kidney disorders. The care of people with diabetes can also be complex with 25% of people suffering from three or more other long-term conditions. NHS England now has an accessible information standard which needs to be considered/adhered to in the engagement https://www.england.nhs.uk/wp-content/uploads/2015/07/access-info-upd-er-july-15.pdf
Age Patients using vascular services tend to be older. Although there is an increasing prevalence of older people using online services it will be important for the communications and engagement process to consider the needs of older people by producing some documentation in print/large print to allow for age-related changes in vision.
Disability • Because a proportion of patients accessing vascular services have diabetes it is likely that some will have visual impairment beyond the usual age-related changes in vision. This means that the consultation will need to be available in alternative formats. These patients will be unable to drive and may have difficulties accessing public transport so consideration needs to be given to whether they will be able to attend meetings. • Arterial disease in some patients requires lower limb amputation which will also affect accessibility to attend meetings • Patients with chronic mental health problems and learning disability (particularly Down's) are at increased risk of diabetes and arterial disease. There will be a requirement for easy read versions of documentation

Gender reassignment (including transgender) No impact
Marriage and civil partnership No impact
Pregnancy and maternity No impact
Race Diabetes is more common in people of South Asian origin with earlier onset of significant arterial complications. People of Afro-Caribbean origin are more prone to high blood pressure which may be more difficult to control than in other groups, hence increased incidence of renal disease and stroke. Narrative content of the communications does not need to be adjusted but appropriate images this group can identify with should be used in any design. It will also be appropriate to make translations available for people whose first language is not English.
Religion or belief Patients whose religion or belief does not allow blood transfusion or particular blood products will have complications relating to accessing vascular services.
Sex Vascular disease is more likely to affect men than women. Narrative content of the communications does not need to be adjusted but appropriate images this group can identify with should be used in any design.
Sexual orientation No impact
Carers As vascular patients tend to be older and may already have disabilities (or develop a disability as a result of vascular surgery/amputation) they may already have a carer or may need the support of a carer. The consultation will seek to engage with carers to understand the impact of the proposals and possible solutions such as community transport for visitors.
Other identified groups. Parts of Portsmouth and Southampton have areas of socio economic deprivation. Smoking, obesity and low levels of activity are more common in areas that have socio economic deprivation. As these lifestyle risk factors are also linked to prevalence of diabetes (and therefore risk of vascular disease) the communications and engagement must consider the communications needs of this group. A review by Ofcom indicates that socio economic deprivation influences access to ICT which can itself be a form of social exclusion. However, more recent research by Public Health England for the One You campaign shows people aged 40-60 in lower socio economic groups are heavy

users of mobile communications including text messaging and digital social media such as Facebook. The mix for the campaign needs to take these preferences into account.

Engagement and involvement
How have you engaged stakeholders with an interest in protected characteristics in gathering evidence or testing the evidence available? Sharing of this document with Council for Voluntary Services; Healthwatch; Health Overview and Scrutiny; Establishment of Patient Reference Group
How have you engaged stakeholders in testing the policy or programme proposals? Sharing of this document with Council for Voluntary Services; Healthwatch; Health Overview and Scrutiny; Establishment of Patient Reference Group
For each engagement activity, please state who was involved, how and when they were engaged, and the key outputs: TBC as engagement is implemented

5 Associated documentation

NHS England Statement of Arrangements and Guidance on Patient and Public Participation in Commissioning

ppp-policy-statement.pdf

Planning, assuring and delivering service change for patients

plan-ass-deliv-serv-chge.pdf

Accessible Information Standard

access-info-spec-fin.pdf

Independent Reconfiguration Panel (2010) *Learning from Reviews*

6 Appendix I Key Audiences

It is important to identify key audiences and assess them according to the level of interest they have in the issue and their influence on developments. This will enable the messages developed below to be tailored to each specific audience, and will also allow judgements to be made on the amount of effort to devote to each audience. Following are the key audiences we will need to engage with throughout the review, development of proposals and implementation process, working in a phased approach as set out below.

- **Patient and public representative groups** - this includes:
    - Active or recent vascular patients and their carers/relatives
    - Healthwatch
    - Patient panels or health networks run by CCGs/trusts
    - Hospital – patient experience groups
    - VCS organisations interested in diabetes, cardiovascular disease, stroke, amputees,
    - CCG patient reference groups
    - Patient support groups
    - Health and wellbeing boards
    - PPGs
    - Seldom heard groups such as LD partnerships, MH service users, prisoner, BAME communities, veterans
    - Faith groups

- **Public**

- **GPs and GP commissioners** - this includes:
    - Isle of Wight, Southampton, Portsmouth and West Hampshire CCGs
    - Representatives of all GP practices across the CCG membership
    - Any GPs with a particular interest in vascular issues
    - Neighbouring CCGs

- **Council representatives** - these include:
    - council scrutiny committees
    - County, borough/district and parish councils
    - Leaders
    - Health cabinet members
    - Chief executives

- **MPs** - comprising:
    - All members of parliament in the affected areas

- **Campaign groups** - comprising:
    - Any existing campaigns relating to health services in the affected areas

- **Media** - this includes:
    - Local and regional broadcast media, routinely
    - Local print and online media, routinely

Any national or trade media that expresses an interest

7 Appendix II Questions for Pre Consultation Engagement

When thinking about vascular services what is important to you? (rank in order of importance)

- Patient safety
- Expertise/right number of staff
- Increased positive outcomes for patients
- Services based at a hospital which is near to home
- Transport to get to the hospital for treatment
- Transport for visitors whilst I am in hospital
- The way different services interact with each other to provide a seamless service (eg wheelchair/prosthetic services/physiotherapy/occupational therapy)

When thinking about the proposals for changes Do you?

- Understand the need for change
- Feel confident your views will be listened to

Appendix 4

SOUTHERN HEALTH NHS FOUNDATION TRUST

Report

Committee:	**Health and Adult Social Care Select Committee**
Date:	**29 March 2016**
Title:	**Stefano Olivieri Unit pilot update**
Report From:	**Paul Thomas, Head of Business Management, East Integrated Service Division, Southern Health NHS Foundation Trust**

Contact name: Dr Tracey Eddy and Kathy Jackson

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3 Executive Summary

3.9 This report seeks to update the Hampshire Health and Adult Social Care Select Committee regarding the pilot project for needs-based inpatient care on the Stefano Olivieri Unit at Melbury Lodge, Winchester.

3.10 This is a report for discussion regarding the success of the pilot at the unit, which is part of the inpatient Older People's Mental Health Service offering by Southern Health NHS Foundation Trust. It is also a report for decision regarding a proposal for the temporary change in use of the unit to be made permanent.

3.11 The pilot project involved changing the function of the Stefano Olivieri Unit from an acute organic ward to a needs-based service for older patients with functional illness. The pilot started in November 2014 and continues to run at the present time. This report follows an update provided to Hampshire Health and Adult Social Care Select Committee members in July 2015.

3.12 At no stage during the pilot was it necessary to seek alternative provision for acute organic admissions outside of that provided by Southern Health NHS Foundation Trust.

3.13 The Trust will ensure the Health and Adult Social Care Select Committee is kept fully updated.

4 Recommendations

4.9 That the Health and Adult Social Care Select Committee (HASC) notes the success of the pilot project for needs-based inpatient care on the Stefano Olivieri Unit at Melbury Lodge, Winchester, and discusses the report.

4.10 That the Committee supports the proposal for the change in use of the Stefano Olivieri Unit from an acute organic ward to a needs-based service for older patients with functional illness and reducing the number of organic beds in use being made permanent, following the success of the pilot project.

3. Background

3.1 The Stefano Olivieri Unit is based at Melbury Lodge in Winchester. The unit is part of the inpatient Older People's Mental Health service offering by Southern Health which has a total of 119 beds across Hampshire.

3.2 The pilot project involved changing the function of the Stefano Olivieri Unit from an acute organic ward to a needs-based service for older patients with functional illness and reducing the number of organic beds in use. The pilot started in November 2014 and continues the run at the present time.

3.3 The inpatient beds are managed within the East Integrated Care Division of Southern Health. The beds we currently provide are divided between organic and functional illness:

- **Functional illness** – this term generally describes conditions such as depression, anxiety, bipolar disorder, schizophrenia, personality disorders and alcohol/drug addiction
- **Organic illness** – this term generally describes conditions associated with memory loss and cognitive impairment, such as dementia. Dementia describes a syndrome, which may be caused by a number of illnesses in which there is a progressive decline in multiple areas of function

3.4 Inpatient beds for patients with functional or organic illness currently provided within the East Integrated Care Division of Southern Health:

- **Gosport War Memorial Hospital**
  - Dryad ward – 16 functional beds
  - Daedalus ward – 17 organic beds
- **Western Community Hospital, Southampton**
  - Berrywood ward – 18 functional beds
  - Minstead ward – closed during pilot study
  - Beaulieu ward – 17 organic beds

- **Melbury Lodge, Winchester**
    - Stefano Olivieri Unit – 15 functional beds
- **Parklands Hospital, Basingstoke**
    - Beechwood ward – 18 functional beds
    - Elmwood ward – 18 organic beds

4. Pilot project

4.1 The first stage of the pilot project required stopping admissions to the Stefano Olivieri Unit. This resulted in a reduction of 15 acute organic beds across Hampshire. However it is important to note that at no stage during the pilot was it necessary to seek alternative provision for acute organic admissions outside of that provided by Southern Health NHS Foundation Trust.

4.2 The second stage of the pilot required re-opening the Stefano Olivieri Unit, offering a needs-based service for patient with functional illness and stopping admissions to Minstead ward at Western Community Hospital in Southampton. This resulted in functional beds being more evenly distributed across the county and improved access for carers and relatives, as well as improved discharge planning. The needs-based service aimed to:

- Provide a needs-based assessment not based on age alone
- Enable patients to access either Adult Mental Health or Older People's Mental Health services which better meet their needs
- Ensure patient care needs were met by the service most appropriate to each individual's needs
- Further develop staff skills and services available to older people, improve access to psychological services and incorporate the recovery model of care by closer working with Adult Mental Health in patient service
- Improve joined up care received by individuals with complex physical and mental health needs via closer working with integrated teams and Adult Mental Health teams through in-reach work and clear discharge planning

5. Outcomes

5.1 The pilot has resulted in a reduction in the number of organic beds required for acute admissions. This is due to the fact we have continued to improve our discharge processes during the pilot period to prevent people from staying in hospital longer than is necessary. This has been achieved by:

- Reviewing working patterns with Adult Services, Clinical Commissioning Groups (CCGs), patients and carers to discharge patients in a timely way
- Completing joint training between Health and Adult Services staff to implement the section 117 aftercare pathway in Hampshire. (This is the section 117 aftercare responsibility that Health and Social Services have for patients detained under section 3 of the Mental Health Act)

- Conducting pilots with North Hampshire Clinical Commissioning Group to improve the process required to apply for Continuing Healthcare funding
- Ensuring a robust care pathway from admission to discharge - care planning meetings involving the patient, carer and care co-ordinator are held at an early stage of the admission and all referrals to Adult Services, where required, are made promptly
- Holding regular carer support groups on each of the wards
- Monitoring weekly all stages of the admission/ discharge pathway to identify delays and take prompt action to remedy the situation where possible
- Working with Integrated Care Teams to help discharge planning, enabling people to return to the community quickly and safely where appropriate
- Working with the Integrated Care Teams to look at admission prevention where appropriate and keeping people well in the community to avoid them being admitted to hospital unnecessarily
- Ensuring all patients are reviewed by a senior clinician to explore all options of care available to each individual prior to admission

5.2 The number of patients accessing the service from Adult Mental Health remains small between two and four patients at any one time. We continue to offer an environment and service that meets the needs of older people.

5.3 There has been evidence of much closer joint working between Adult Mental Health and Older People's Mental Health. An example of this is some patients being able to receive care in an Older People's Mental Health setting with support from Adult Mental Health nurses in order which has meant patients have not had to be cared for in a Psychiatric Intensive Care Unit bed.

5.4 There has been access to Adult Mental Health psychological therapies and development of therapy groups, and patients have also had access to the gym and treadmill.

5.5 Staff feedback has been largely positive. Minimal concerns raised by some staff at the start of the pilot in 2014 about where they were working for the duration of the pilot but these were resolved swiftly and to staff and Union satisfaction. Completed patient feedback questionnaires received since the pilot began have also been largely positive. Patients have been complimentary about the engagement with and from staff and report that they feel involved in their care.

6 Next steps

6.1 We will be working closely with Commissioners and stakeholders to determine the future organic care pathway. We will also ensure that the Hampshire Health and Adult Social Care Select Committee is kept fully updated.

Patient type admissions and actual age upon admission – all patients (organic)

	Organic														
	Beaulieu			Daedalus			Elmwood			Stefano Olivieri			Total		
	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65
Feb 15	2	88.5	0	8	75.8	0	1	89.0	0				11	79.3	0
Mar 15	1	81.0	0	9	81.8	0	2	64.5	1				12	78.8	1
Apr 15	7	75.9	0	4	75.8	1	3	76.0	1				14	75.9	2
May 15	4	84.8	0	3	69.0	1	5	80.8	0				12	79.2	1
Jun 15	9	83.1	0	8	82.0	0	4	83.0	0				21	82.7	0
Jul 15	4	76.3	1	4	79.5	0	3	79.0	0				11	78.2	1
Aug 15	1	82.0	0	3	86.0	0	0	-	0				4	85.0	0
Sep 15	3	84.3	0	4	82.8	0	4	82.3	0				11	83.0	0
Oct 15	3	80.7	0	3	75.0	0	4	74.0	0				10	76.3	0
Nov 15	10	76.1	1	11	80.9	0	3	75.0	1				24	78.2	2
Dec 15	8	78.6	0	4	80.3	0	8	83.6	0				20	81.0	0
Jan 16	6	79.5	0	6	73.2	0	2	75.5	0				14	76.2	0

Patient type admissions and actual age upon admission – all patients (functional)

	Functional																	
	Beechwood			Berrywood			Dryad			Minstead			Stefano Olivieri			Total		
	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65
Feb 15	7	77.0	0	4	73.0	0	6	77.8	0				8	74.4	0	25	75.7	0
Mar 15	7	75.3	0	9	76.8	0	7	78.0	0				3	76.0	0	26	76.6	0
Apr 15	9	77.7	0	5	74.6	0	5	77.2	0				3	77.0	0	22	76.8	0
May 15	11	72.9	0	6	74.3	0	5	74.0	0				4	80.5	0	26	74.6	0
Jun 15	8	73.5	0	11	77.4	0	4	76.3	0				6	70.0	1	29	74.6	1
Jul 15	12	77.3	0	6	77.2	0	4	77.8	0				4	71.8	0	26	76.5	0
Aug 15	5	72.8	0	8	71.9	0	7	75.1	0				4	84.3	0	24	75.1	0
Sep 15	5	69.4	1	9	77.0	0	3	77.0	0				6	70.3	0	23	73.6	1
Oct 15	3	75.7	0	7	77.3	0	6	77.7	0				7	79.3	0	23	77.8	0
Nov 15	13	71.4	1	7	75.1	0	7	73.7	0				7	80.0	0	34	74.4	1
Dec 15	8	75.0	0	8	76.8	0	1	76.0	0				4	68.5	2	21	74.5	2
Jan 16	11	75.5	1	6	76.8	0	3	69.0	0				4	76.0	0	24	75.1	1

CCG admissions and average age upon admission – all wards

	NHS FAREHAM AND GOSPORT CCG			NHS SOUTH EASTERN HAMPSHIRE CCG			NHS NORTH HAMPSHIRE CCG			NHS NORTH EAST HAMPSHIRE AND FARNHAM CCG			NHS WEST HAMPSHIRE CCG			NHS Portsmouth CCG			NHS Southampton CCG			Other		
	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65	Total	Av Age	Under 65
Feb 15	6	78.7	0	3	76.0	0	5	75.0	0	0	-	0	15	78.0	0	0	-	0	4	74.0	0	3	74.7	0
Mar 15	13	76.8	0	5	80.6	0	4	76.0	0	0	-	0	10	74.7	1	0	-	0	5	80.4	0	1	83.0	0
Apr 15	6	74.7	0	4	80.0	0	5	81.6	0	0	-	0	13	76.2	0	1	60.0	1	5	76.6	0	2	70.5	1
May 15	5	77.4	0	7	77.4	0	6	73.8	0	0	-	0	10	73.7	1	1	84.0	0	8	76.8	0	1	83.0	0
Jun 15	10	76.2	0	9	82.1	0	6	74.7	1	0	-	0	18	79.0	0	0	-	0	6	76.5	0	1	70.0	0
Jul 15	4	74.8	0	4	78.3	0	4	80.3	0	0	-	0	21	76.7	1	0	-	0	4	76.3	0	0	-	0
Aug 15	10	77.2	0	1	93.0	0	4	74.0	0	0	-	0	10	76.4	0	0	-	0	3	72.3	0	0	-	0
Sep 15	4	81.0	0	3	82.0	0	8	76.3	1	0	-	0	14	74.3	0	0	-	0	4	79.0	0	1	70.0	0
Oct 15	5	75.4	0	4	79.8	0	3	75.3	0	0	-	0	17	77.4	0	0	-	0	4	78.5	0	0	-	0
Nov 15	10	77.9	0	7	80.6	0	7	74.3	1	0	-	0	22	73.6	2	1	78.0	0	10	75.8	0	1	87.0	0
Dec 15	3	91.0	0	4	77.5	0	3	84.7	0	0	-	0	20	77.2	1	0	-	0	10	72.9	1	1	73.0	0
Jan 16	9	77.3	0	6	73.8	0	7	72.7	1	0	-	0	10	75.2	0	0	-	0	6	78.3	0	0	-	0

Patient type discharges and average length of stay – all CCGs

	Organic										Functional											
	Beaulieu		Daedalus		Elmwood		Stefano Olivieri		Total		Beechwood		Berrywood		Dryad		Minstead		Stefano Olivieri		Total	
	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS
Feb 15	5	126.8	8	65.0	1	129.0			14	91.6	7	108.4	4	83.5	8	86.6			7	46.6	26	81.2
Mar 15	0	-	4	42.3	4	273.5			8	157.9	10	40.2	11	69.5	4	66.5			5	33.6	30	53.3
Apr 15	5	136.4	7	32.0	3	83.0			15	77.0	8	70.9	3	52.3	6	71.8			4	42.0	21	63.0
May 15	7	79.7	4	94.0	3	110.3			14	90.4	9	41.3	4	70.8	6	70.5			3	47.3	22	55.5
Jun 15	5	196.2	5	61.4	2	119.0			12	127.2	7	69.3	12	72.7	5	183.6			6	144.2	30	104.7
Jul 15	3	82.7	3	70.0	6	90.3			12	83.3	12	72.8	11	90.5	4	93.8			6	80.2	33	82.5
Aug 15	4	70.0	4	127.8	6	70.7			14	86.8	6	66.2	7	62.4	4	87.8			4	78.0	21	71.3
Sep 15	6	131.0	10	89.4	2	66.5			18	100.7	6	53.2	7	66.0	6	93.0			6	59.7	25	67.9
Oct 15	5	103.8	7	115.4	2	95.0			14	108.4	9	118.2	8	48.5	5	84.0			7	100.9	29	88.9
Nov 15	3	215.7	1	48.0	3	792.7			7	439	8	54.5	11	62.5	6	63.7			7	86.6	32	66.0
Dec 15	7	80.7	4	53.8	6	324.7			17	160.47	6	78.7	10	132.3	1	10.0			6	50.7	23	91.7
Jan 16	5	52.4	7	67.9	0	-			12	61.417	7	79.6	6	51.3	5	73.2			8	137.8	26	89.7

CCG discharges and average length of stay – all wards

	NHS FAREHAM AND GOSPORT CCG		NHS SOUTH EASTERN HAMPSHIRE CCG		NHS NORTH HAMPSHIRE CCG		NHS NORTH EAST HAMPSHIRE AND FARNHAM CCG		NHS WEST HAMPSHIRE CCG		NHS Portsmouth CCG		NHS Southampton CCG		Other	
	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS	Total	Av LOS
Feb 15	9	72.8	9	71.8	5	139.6	0	-	10	74.8	0	-	6	104.7	1	20.0
Mar 15	4	64.3	2	34.0	7	143.0	0	-	17	60.3	0	-	5	64.2	3	63.7
Apr 15	6	57.5	5	45.6	7	81.4	0	-	11	69.0	1	2	4	110.8	2	65.5
May 15	3	56.3	6	63.0	5	49.2	0	-	15	74.3	0	-	6	90.7	1	33.0
Jun 15	9	113.0	5	67.4	5	66.8	0	-	15	161.9	0	-	7	76.0	1	18.0
Jul 15	6	69.7	4	29.5	9	95.7	0	-	14	90.7	0	-	10	85.0	2	103.5
Aug 15	8	93.0	5	60.6	4	67.5	0	-	14	72.4	0	-	4	95.5	0	-
Sep 15	11	80.8	5	86.8	3	36.7	0	-	16	71.4	0	-	8	116.9	0	-
Oct 15	8	95.4	5	110.0	7	154.3	0	-	15	72.6	1	150	7	66.1	0	-
Nov 15	4	34.8	2	40.5	6	431.3	0	-	22	83.2	0	-	3	51.3	2	196.0
Dec 15	5	45.0	2	170.0	5	379.4	0	-	20	73.8	0	-	7	123.6	1	34.0
Jan 16	7	72.1	4	67.3	2	51.5	0	-	17	109.8	0	-	8	40.8	0	-

Discharge method – all patients/wards

	Discharged on professional advice	Discharged against professional advice	Transferred to other health care provider not medium/high secure	Transferred to other health care provider medium secure unit	Patient Deceased	Other	Not Recorded	Total
Feb 15	33	0	6	0	1	0	0	40
Mar 15	27	2	6	0	2	0	1	38
Apr 15	25	2	7	1	0	1	0	36
May 15	27	2	5	1	0	0	1	36
Jun 15	35	0	6	0	1	0	0	42
Jul 15	39	0	4	0	0	2	0	45
Aug 15	23	0	2	0	4	6	0	35
Sep 15	27	0	2	1	2	11	0	43
Oct 15	29	1	4	0	2	6	1	43
Nov 15	26	1	2	0	2	5	3	39
Dec 15	29	0	3	0	2	6	0	40
Jan 16	28	0	3	0	3	3	1	38

Discharge destination – all patients/wards

	Usual / Temporary Place of Residence	Care Home	Local Authority residential accommodation ie where care is provided	NHS other hospital. Ward for general patients or the younger physically disabled	NHS other hospital. Ward for mentally ill patients or those with learning disab	Non-NHS (other than Local Authority) run Hospice	Patient Deceased	Other	Not Known / Recorded	Total
Feb 15	22	7	4	4	0	0	1	0	2	40
Mar 15	24	7	2	1	0	0	1	0	3	38
Apr 15	21	5	1	6	0	0	0	1	2	36
May 15	18	11	3	2	1	0	0	0	1	36
Jun 15	25	9	1	2	0	0	0	1	4	42
Jul 15	21	15	4	3	0	0	0	0	1	44
Aug 15	20	7	2	1	0	0	2	0	2	34
Sep 15	18	13	5	1	0	0	2	0	1	40
Oct 15	16	16	2	1	0	1	1	0	2	39
Nov 15	22	7	3	1	0	0	2	0	3	38
Dec 15	20	12	1	0	0	0	1	0	1	35
Jan 16	0	0	0	0	0	0	0	0	0	0

Available and occupied bed days – all patients (organic)

Organic		Feb 15	Mar 15	Apr 15	May 15	Jun 15	Jul 15	Aug 15	Sep 15	Oct 15	Nov 15	Dec 15	Jan 16	2015/16
Overall	OBD including leave	1,149	1,306	1,464	1,426	1,509	1,599	1,448	1,145	968	1,192	1,437	1,539	16,182
	OBD excluding leave	1,073	1,181	1,384	1,360	1,459	1,562	1,402	1,108	947	1,177	1,368	1,486	15,507
	Available Bed Days	1,456	1,612	1,560	1,612	1,560	1,612	1,612	1,560	1,612	1,560	1,612	1,612	18,980
	% occupancy inc leave	78.9%	81.0%	93.8%	88.5%	96.7%	99.2%	89.8%	73.4%	60.0%	76.4%	89.1%	95.5%	85.3%
	% occupancy ex leave	73.7%	73.3%	88.7%	84.4%	93.5%	96.9%	87.0%	71.0%	58.7%	75.4%	84.9%	92.2%	81.7%
Beaulieu	OBD including leave	411	436	508	457	492	525	482	382	312	373	473	538	5,389
	OBD excluding leave	411	408	441	441	477	520	467	369	297	364	443	496	5,134
	Available Bed Days	476	527	510	527	510	527	527	510	527	510	527	527	6,205
	% occupancy inc leave	86.3%	82.7%	99.6%	86.7%	96.5%	99.6%	91.5%	74.9%	59.2%	73.1%	89.8%	102.1 %	86.8%
	% occupancy ex leave	86.3%	77.4%	86.5%	83.7%	93.5%	98.7%	88.6%	72.4%	56.4%	71.4%	84.1%	94.1%	82.7%
Daedalus	OBD including leave	303	377	481	451	474	524	500	388	232	374	518	492	5,114
	OBD excluding leave	259	295	468	401	461	512	469	364	226	374	488	483	4,800
	Available Bed Days	476	527	510	527	510	527	527	510	527	510	527	527	6,205
	% occupancy inc leave	63.7%	71.5%	94.3%	85.6%	92.9%	99.4%	94.9%	76.1%	44.0%	73.3%	98.3%	93.4%	82.4%
	% occupancy ex leave	54.4%	56.0%	91.8%	76.1%	90.4%	97.2%	89.0%	71.4%	42.9%	73.3%	92.6%	91.7%	77.4%
Elmwood	OBD including leave	435	493	475	518	543	550	466	375	424	445	446	509	5,679
	OBD excluding leave	403	478	475	518	521	530	466	375	424	439	437	507	5,573
	Available Bed Days	504	558	540	558	540	558	558	540	558	540	558	558	6,570
	% occupancy inc leave	86.3%	88.4%	88.0%	92.8%	100.6 %	98.6%	83.5%	69.4%	76.0%	82.4%	79.9%	91.2%	86.4%
	% occupancy ex leave	80.0%	85.7%	88.0%	92.8%	96.5%	95.0%	83.5%	69.4%	76.0%	81.3%	78.3%	90.9%	84.8%

Available and occupied bed days - all patients (functional)

Functional		Feb 15	Mar 15	Apr 15	May 15	Jun 15	Jul 15	Aug 15	Sep 15	Oct 15	Nov 15	Dec 15	Jan 16	2015/16
Overall	OBD including leave	1,496	1,545	1,580	1,657	1,565	1,668	1,614	1,544	1,427	1,467	1,639	1,581	18,783
	OBD excluding leave	1,343	1,392	1,490	1,530	1,375	1,517	1,432	1,378	1,272	1,290	1,374	1,410	16,803
	Available Bed Days	1,456	1,612	1,560	1,612	1,560	1,612	1,612	1,560	1,612	1,560	1,612	1,612	18,980
	% occupancy inc leave	102.7%	95.8%	101.3%	102.8%	100.3%	103.5%	100.1%	99.0%	88.5%	94.0%	101.7%	98.1%	99.0%
	% occupancy ex leave	92.2%	86.4%	95.5%	94.9%	88.1%	94.1%	88.8%	88.3%	78.9%	82.7%	85.2%	87.5%	88.5%
Beechwood	OBD including leave	535	489	525	533	490	587	539	513	434	440	502	509	6,096
	OBD excluding leave	473	431	490	501	438	537	481	456	368	373	388	455	5,391
	Available Bed Days	504	558	540	558	540	558	558	540	558	540	558	558	6,570
	% occupancy inc leave	106.2%	87.6%	97.2%	95.5%	90.7%	105.2%	96.6%	95.0%	77.8%	81.5%	90.0%	91.2%	92.8%
	% occupancy ex leave	93.8%	77.2%	90.7%	89.8%	81.1%	96.2%	86.2%	84.4%	65.9%	69.1%	69.5%	81.5%	82.1%
Berrywood	OBD including leave	486	496	532	584	563	574	560	549	528	554	592	529	6,547
	OBD excluding leave	460	460	514	534	474	520	475	470	479	501	503	478	5,868
	Available Bed Days	504	558	540	558	540	558	558	540	558	540	558	558	6,570
	% occupancy inc leave	96.4%	88.9%	98.5%	104.7%	104.3%	102.9%	100.4%	101.7%	94.6%	102.6%	106.1%	94.8%	99.6%
	% occupancy ex leave	91.3%	82.4%	95.2%	95.7%	87.8%	93.2%	85.1%	87.0%	85.8%	92.8%	90.1%	85.7%	89.3%
Dryad	OBD including leave	475	560	523	540	512	507	515	482	465	473	545	543	6,140
	OBD excluding leave	410	501	486	495	463	460	476	452	425	416	483	477	5,544
	Available Bed Days	448	496	480	496	480	496	496	480	496	480	496	496	5,840
	% occupancy inc leave	106.0%	112.9%	109.0%	108.9%	106.7%	102.2%	103.8%	100.4%	93.8%	98.5%	109.9%	109.5%	105.1%
	% occupancy ex leave	91.5%	101.0%	101.3%	99.8%	96.5%	92.7%	96.0%	94.2%	85.7%	86.7%	97.4%	96.2%	94.9%
Minstead	OBD including leave													
	OBD excluding leave													
	Available Bed Days													
	% occupancy inc leave													
	% occupancy ex leave													
Stefano Olivieri	OBD including leave	379	402	444	470	433	447	417	452	440	443	449	402	5,178
	OBD excluding leave	348	399	427	420	398	439	356	368	386	431	398	357	4,727
	Available Bed Days	420	465	450	465	450	465	465	450	465	450	465	465	5,475
	% occupancy inc leave	90.2%	86.5%	98.7%	101.1%	96.2%	96.1%	89.7%	100.4%	94.6%	98.4%	96.6%	86.5%	94.6%
	% occupancy ex leave	82.9%	85.8%	94.9%	90.3%	88.4%	94.4%	76.6%	81.8%	83.0%	95.8%	85.6%	76.8%	86.3%

Out-of-area placements

	NHS FAREHAM AND GOSPORT CCG	NHS SOUTH EASTERN HAMPSHIRE CCG	NHS NORTH HAMPSHIRE CCG	NHS NORTH EAST HAMPSHIRE AND FARNHAM CCG	NHS WEST HAMPSHIRE CCG	NHS Portsmouth CCG	NHS Southampton CCG	Other
	Total	Total	Total	Total	Total	Total	Total	Total
Feb 15	0	0	0	0	0	0	0	0
Mar 15	0	0	0	0	0	0	0	0
Apr 15	0	0	0	0	0	0	0	0
May 15	0	0	0	0	0	0	0	0
Jun 15	0	0	0	0	0	0	0	0
Jul 15	0	0	0	0	0	0	0	0
Aug 15	0	0	0	0	0	0	0	0
Sep 15	0	0	0	0	0	0	0	0
Oct 15	0	0	0	0	0	0	0	0
Nov 15	0	0	0	0	0	0	0	0
Dec 15	0	0	0	0	0	0	0	0
Jan 16	0	0	0	0	0	0	0	0

HAMPSHIRE COUNTY COUNCIL

Briefing

Committee:	Health and Adult Social Care Select Committee
Date:	29 March 2016
Title:	Baytrees Closure – HCC Briefing Note
Report From:	Interim Director of Public Health

Contact name: Simon Bryant, Consultant in Public Health

Tel: 02380 383326 **Email:** Simon.Bryant@hants.gov.uk

1. Purpose of Report

1.1 The purpose of this report is to inform the HASC of the strategic context and mitigating actions in relation to the closure of the Inpatient Substance Misuse Detoxification Unit, Baytrees.

2. Contextual Information

2.1 Baytrees is a 23-bedded inpatient detoxification unit based at St James Hospital in Portsmouth and operated by Solent NHS Trust (Solent). The unit provides specialist medically-led stabilisation and detoxification for drug and alcohol depend adults. There are only appropriate for a small number of service users who have complex needs. Demand within Hampshire is estimated at 50 admissions per year.

2.2 In July 2015, as part of its re-commissioning of specialist substance misuse services, the County Council devolved commissioning responsibility for substance misuse detoxification (including inpatient) to its new specialist provider, Inclusion Recovery Hampshire (IRH). IRH adopted a spot-purchase approach to commissioning beds at Baytrees in line with the approach Portsmouth Commissioners took in 2012.

2.3 In January 2016, Solent informed local commissioners that due to a reduction in demand they would be decommissioning the service.

2.4 Baytrees is currently utilised by Hampshire residents who have *complex* substance misuse needs. This affects approximately 50 clients a year (based on current usage rates). Admissions are commissioned on a spot-purchase basis.

2.5 The nearest alternative services offering this type of specialist medically-led inpatient service are Windmill House (Surrey & Borders Partnership NHS Foundation Trust) in Chertsey and Marchwood Priory (The Priory Group) in the New Forest.

3 Consultation

3.1 Solent have written to service users resident in Portsmouth and user groups in Hampshire advising that the trust is “having to consider closing the unit” and offering the opportunity for further consultation.

4 Rationale for Change

4.1 National Institute of Health & Clinical Excellence (NICE) provides guidance[14] that detoxification services should ordinarily occur in a community–setting and that a medically-led in-patient admission should only be considered for clients with certain complex substance misuse needs (see Appendix 1). The Council took the opportunity offered by the re-commissioning of these services to ensure that local treatment model was fully compliant with this guidance.

4.2 As a result of the full implementation of the NICE guidance, the Council’s use of Baytrees has fallen from 11 beds (approximately 287 admissions per year) to a projected 1.5 beds or approximately 50 admissions per year.

5 Proposal to Close Baytrees

5.1 In January 2016, the Council and other commissioners received notice from Solent of their intention to close the Baytrees unit due to continued decline in occupancy rates leading them to have a significant deficit position on this service. Following this letter we have been working with Solent to agree a joint approach to managing the process and reduce impact on clients

6 Actions taken to Mitigate Impact of Closure

6.1 Following discussions with Solent we have proposed a closure date in May with an option to close before this if occupancy levels fall to a point that the unit no longer remains an appropriate therapeutic environment or becomes clinically unsafe.

6.2 Prior to this proposed closure and as part of the requirements of the current Council contract, IRH were already developing a framework agreement with a range of alternative in-patient detox providers in order to facilitate service user choice and secure a more equitable spread of provision. Upon receipt of the January letter from Solent, IRH expedited this process.

6.3 IRH has confirmed that all service users already referred to Baytrees and currently awaiting admission can be accommodated within the proposed timescales for closure.

6.4 Inclusion have begun identifying alternative in-patient detox providers. Options so far considered that provide the appropriate level of specialist clinical input are:

Grieg House Addiction Services (Salvation Army), London
Windmill House (Surrey & Borders Partnership NHS Foundation Trust) - Surrey
Clouds House (Action on Addiction) – Wiltshire
City Roads – London
Broadreach – Plymouth
Marchwood Priory (The Priory Group) – Hampshire

[14] NICE CG115: Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence https://www.nice.org.uk/guidance/cg115
NICE CG52: Drug misuse in over 16s: opioid detoxification https://www.nice.org.uk/guidance/cg52

6.5 Inclusion have provided a report outlining their operational risk mitigation response.

7 Consequences for Access to Treatment

7.1 The closure of the Baytrees unit will not prohibit access to this specialist service. However, it may require service users resident in South East Hampshire to travel further for treatment. Conversely for some service users, living elsewhere in Hampshire, there may be reduced travel requirements.

8 Legal Considerations

8.1 The Council is meeting its duty of care to its population by continuing to provide access to appropriate and necessary clinical treatment in accordance with relevant legislation and national guidance.

9 Human Resource Considerations

9.1 Baytrees staff are all employed by Solent NHS Trust. There are no HR implications for the Council arising as a result of this closure.

10 Financial Impact

10.1 The detoxification budget was devolved to Inclusion as part of the Council's contract for specialist substance misuse services. There are, therefore, no direct financial consequences for the Council within the three year term of the contract.

10.2 Inclusion will monitor cost variances resulting from the change in provision over the next six months. However, it is anticipated that pressures will be limited to some increased travel costs paid to service users and carers resident in South East Hampshire and will be mitigated by the opportunity to purchase care at more competitive rates.

11 Conclusions

11.1 It is considered that the closure of Baytrees will have minimal impact in respect to access to specialist inpatient detoxification for Hampshire residents and minimal net cost impact to the Council. The HASC is asked to note the report and the mitigating actions that have been taken.

Appendix 1

Hampshire Medically Assisted Withdrawal and Detoxification Model
(Extract from HIASMRS Service Specification - Para 4.5.5)

Following stabilisation, all individuals misusing alcohol at dependent levels and/or misusing opiates will be offered medically assisted withdrawal/detoxification (MAWD) in accordance with relevant national clinical guidelines (see NICE CG52 &115).

THE SERVICE will have a comprehensive MAWD programme in place. This will be delivered as an integral phase of the individual's managed Recovery pathway will appropriate preparatory and post-detoxification support in place.

Subject to those exceptions specifically identified in NICE CG52 & 115, all individuals will access MAWD in a community setting directly delivered by THE SERVICE or by a GP commissioned as part of the Shared Care programme.

Individuals requiring a residential or in-patient based MAWD intervention (other than where delivered in an acute medical or acute psychiatric setting) will be offered a choice of placements that take full account of the individual's personal circumstances. This will, for example, include the option to access parent and child facilities and consideration of geographical proximity.

THE SERVICE will retain overall care management responsibility for the individual whilst accessing in-patient MAWD, even where this is not directly delivered by the IASMRS service.

Baytrees Detoxification Unit
Report for Hampshire Health and Adult Social Care Select Committee (HASC)

Solent NHS Trust, 12 February 2016

1 Purpose of this report

1.1 This report provides an update regarding the viability of the Baytrees detoxification unit in Portsmouth.

2 Introduction and background

2.1 The Baytrees inpatient unit in Portsmouth provides residential detoxification programmes for people with drug and/or alcohol issues. The unit, provided by Solent NHS Trust, comprises 23 beds and was historically funded through two block contracts: one with Portsmouth City Council (PCC) for 11 beds, the second with Hampshire County Council (HCC) for 11 beds. The remaining (accessible) bed was historically used flexibly.

2.2 PCC cancelled their block contract arrangement in April 2013 and entered into a framework agreement. Bed occupancy reduced further from July 2015, after the contract for Hampshire substance misuse services was transferred from Solent to a new provider, following a competitive tender process. The change in contracts and change in demand for inpatient detoxification services has resulted in the unit not receiving referrals to the levels previously experienced.

2.3 Over the past 6 months the Trust has been exploring a range of opportunities to secure the future viability of the Baytrees Detoxification Unit in Portsmouth, including:

- Increasing our marketing activity
- Adapting our offer
- Working with new partners
- Exploring the private market
- Seeking block booking/risk share agreements with existing commissioners

3 Summary outcome of increased commercial activity

3.1 Unfortunately the effort the Trust has invested in increased marketing and exploration of other opportunities has not had a sustained positive affect on occupancy rates. To a large extent this is because the drive from public sector commissioners has been away from inpatient detox and towards community-based programmes.

3.2 In order for Baytrees to be viable, 17 of the 23 beds need to be occupied consistently every day. During Q2 2015/16, the busiest quarter to date this year, 11 beds were occupied on average each day. Baytrees is forecast to be £450k in deficit by the end of this financial year.

4 Trust Board consideration

4.1 In January 2016, following careful consideration, Solent NHS Trust's Board reluctantly concluded that the Baytrees service does not have a sustainable future. The Trust cannot sustain the current position whereby other services need to make savings in order to cover a loss-making service.

5 Staff engagement

5.1 On 26 January, the day after Trust Board, Solent's Chief Operating Officer, Operations Director and Operations Manager met with the staffing team at Baytrees to inform them that sadly, despite all our efforts, the Trust is no longer in a position to continue to run the Baytrees service.

5.2 Staff were informed that the Trust intended to talk to commissioners about ceasing provision of the service and the team discussed next steps with regard to the impact of this decision for staff members, commissioners and our service users. A written summary of the meeting and consultation papers were subsequently circulated. All staff have now entered a formal consultation process regarding the closure of the unit, in line with the Trust's Organisational Change policy.

5.3 This consultation process began with a staff consultation event during the week of 08 February and will last for 30 days. During this time, each staff member will have a 1:1 session with either their line manager or another manager and, where possible, HR. The purpose of this session is to discuss the formal consultation process, discuss skills and qualifications, clarify staff members' views and preferences and confirm that every effort will be made to find suitable alternative employment for staff within the Trust or wider NHS services.

6 Commissioner engagement

6.1 On 27 January, the Trust wrote to local commissioners and providers who hold budgets for residential detoxification, including Hampshire City Council, Portsmouth City Council, Southampton City Council, Inclusion the Isle of Wight Recovery Integrated Services and CRI as well as commissioners from neighbouring counties who have purchased beds at the unit. The letter summarised the current position and asked commissioners to work in partnership with the Trust to carefully and safely decommission the service and agree a joint approach to manage the process, reduce the impact on clients and ensure full engagement with Overview and Scrutiny committees. This was followed up with a conference call with the main commissioners on 10 February. A further call is scheduled for 17 February.

6.2 The Trust will work with commissioners – as well as the Hampshire provider, Inclusion – to look at alternative ways in which we may be able to support people with drug and/or alcohol issues who require detoxification in the future.

7 Service user engagement

7.1 The Trust is working with commissioners and provider services in the community to identify the best way of communicating the proposed closure of the unit. This may involve posters, written information and visits from the senior manager team for our most frequent/local referrers.

7.2 Service users will begin to be informed once the decision has been discussed at Overview and Scrutiny Committees.

8 Next steps

8.1 The Trust has established a project team who will work with commissioners and other partners to safely decommission the service, ensuring full engagement with all stakeholders and service users.

8.2 The Trust has made a commitment not to close the unit prior to the end of the financial year 2015/16; however whilst the unit continues to operate at a loss, other Trust services are impacted. In addition, the value of the therapeutic environment and efficacy of group programmes is reduced while only a few of the 23 beds are in use. It is therefore the Trust's preferred position to close the unit from the beginning of the financial year 2016/17, whilst engaging with commissioners and ensuring all processes meet the requirements of local Overview and Scrutiny Committees.