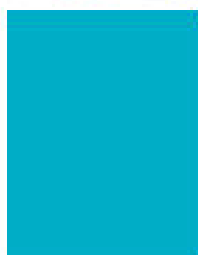
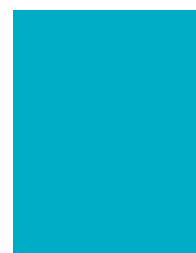
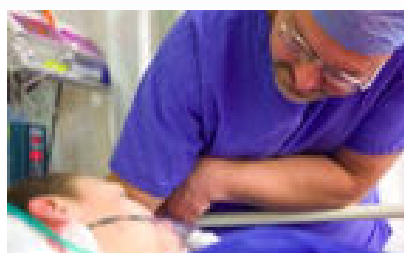


Options for the Provision of Vascular Surgery for Southern Hampshire

Update for Health and Scrutiny Committee



Options for the provision of Vascular Surgery for Southern Hampshire

Update for Health and Scrutiny Committee

BACKGROUND

1. 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.
2. 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.
3. Complex vascular surgery covers:
 - **People with abdominal aortic aneurysms (AAA):** This is a condition in which the main artery in the abdomen becomes stretched and prone to bursting. Timely detection and treatment of abdominal aortic aneurysms prevents later problems with rupture and bleeding, and can be life-saving. Treatment for AAA can be either by open surgery or by a much less invasive approach through the major blood vessels which is called endovascular surgery (EVAR).
 - **Screening people for abdominal aortic aneurysms (AAA):** People with aneurysms are unlikely to notice any symptoms prior to a rupture so a national population-based screening programme is being rolled out, offering screening via an ultrasound to men in their 65th year. Men aged over 65 are not invited but can self-refer.
 - **People with strokes or transient ischaemic attacks (TIAs or mini-strokes):** Sometimes, these problems with the blood supply to the brain occur because of a narrowing in a blood vessel in the neck called the carotid artery. This can be treated with an operation to improve the flow of blood and reduce the risk of future strokes.
 - **People with poor blood supply to the feet and legs:** Some people, particularly those who smoke or have diabetes, can develop narrowing in the blood supply to the legs and feet. This can cause pain on walking, ulceration and infection. Surgical or interventional radiological treatment can improve the blood supply, make walking easier and prevent the serious complications of inadequate blood supply. When limbs cannot be saved vascular surgeons are also needed to undertake major amputations.
4. There are also roles for vascular surgery supporting other major specialities such as:
 - **People with other conditions needing vascular services:** Vascular surgeons and interventional radiologists support a number of other services including as trauma, neurosurgery, cardiac surgery, dermatology, clinical laboratory services, nephrology, plastic surgery, and other surgical disciplines.

5. There is a great deal of change underway within the vascular specialty, at both a national and international level, and this is having a big impact on services locally. Advances in medical treatments, a greater focus on prevention of vascular disease and the screening programme for abdominal aortic aneurysms (AAA) mean that treatments for vascular conditions are improving. The number of 'open' surgical procedures performed is already decreasing, and this trend is expected to continue as more people are screened and the number of 'key hole' style procedures increase. This means that the future arrangements for vascular services must be both robust enough and dynamic enough to keep up with these advances.
6. In Southern Hampshire and the Isle of Wight, about 640 people require complex vascular surgery each year from a population of 1, 497,000. This represents about 0.04% of the population.
7. Vascular specialists in the UK and Ireland have set out how vascular services should be organised. The Vascular Society of Great Britain and Ireland (VSGBI) and The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) have both published recommendations around vascular provision. The recommendations state that the best outcomes are achieved in specialist vascular units with dedicated vascular teams available 24 hours a day, seven days a week, and using new technologies that improve clinical outcomes.
8. Following national reorganisation of NHS Services introduced in April 2013, all specialised services across England have been subject to national review, vascular surgery being one of these specialised services. Each service has been reviewed by a Clinical Reference Group (CRG) and national service specifications have been developed for each programme based on delivering safe, consistent and sustainable networked services. In February 2013 the national service specification for specialised vascular services was published, for adoption from October 2013. This specification identifies the key requirements for hospitals delivering vascular services so that patients get the best possible results.
9. The national service specification for specialised vascular surgery identifies key requirements that all Trusts that provide a vascular service must meet. These are:
 - **Vascular services must be organised into a network model** of care following the principles and governance set out in the national guidance on Operational Delivery Networks with all elective and emergency arterial care carried out in an arterial centre.
 - **There are at least 6 vascular surgeons** employed in each arterial centre. (N.B. The Royal College of Surgeons has designated vascular surgery as a speciality which means that general surgeons can no longer treat vascular patients)
 - All vascular consultants working in vascular networks must routinely **enter data** regarding index procedures should be entered **into the National Vascular Registry (NVR.)**
10. The national service specification also describes how the vascular network needs to be organised to allow for sufficient procedures to be undertaken. It states that **the network must:**
 - **Cover a population of at least 800,000 people in order that each surgeon is able to perform at least 10 AAA procedures per year.** This will mean that each centre will be undertaking

the recommended minimum of 60 AAA operations a year. Medical evidence shows that patients have a better chance of a successful recovery if they have their operations at centres which perform higher numbers of specialised vascular operations. Currently the catchment area for University Hospital Southampton is 900,000 and for Portsmouth Hospitals NHS Trust 650,000.

- **Have at least six vascular surgeons and vascular interventional radiologists to make sure that there is sufficient out-of-hours emergency cover.** Up to 40% of vascular patients are emergencies or urgent referrals. Consultants are directly involved in the care of most of these patients and the out-of-hours workload is more onerous than many other surgical specialties. Having surgeons on call 24/7 means no delays in treatment and a 1 in 6 rota ensures that these surgeons are properly rested. The National Vascular Registry currently reports that Southampton has 6 vascular surgeons and Portsmouth has 3 undertaking more than five cases annually.
- **Invest in specialist interventional radiology to carry more key hole than open surgery.** These new treatments are less invasive than open surgery and increasingly favoured by patients. Some highly-specialist thoracic EVAR currently goes to London. Costs, and patient inconvenience, are reduced with a local service. Both Southampton and Portsmouth currently undertake surgery using EVAR.
- **Delivers the advances in screening for aortic aneurysm.** Planned operations have better outcomes than emergency operations. Screening identifies aortic aneurysms so more operations can be planned. Networks enable better co-ordination and monitoring of the screening programme and quality is scrutinised at network meetings. The Hampshire AAA screening programme covers Southampton and surrounding areas, Portsmouth and the Isle of Wight and the south of the county.

11. In order to provide sustainable vascular services for Southern Hampshire the key requirements for vascular services have been reviewed and a number of proposals have been considered. The purpose of this document is to present these proposals and to clarify the reasoning behind the preferred option.

THE CASE FOR CHANGE

12. Medical evidence shows that the UK could do so much better for patients in comparison to other European countries for some vascular procedures. The UK has the highest death rates in Western Europe following elective abdominal aortic aneurysm surgery and is among the slowest nations for uptake of new endovascular technology, which allows some procedures to be undertaken by 'keyhole' style interventions which avoid the need for open surgery. Patients in the UK are not always treated by a vascular specialist and stay longer in hospital following their surgery than the rest of Europe.

13. Vascular specialists in the UK and Ireland have set out how vascular services should be organised. The Vascular Society of Great Britain and Ireland (VSGBI) and The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) have both published recommendations around emergency vascular provision. 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%.

14. The national service specification for specialised vascular services is written in the light of these recommendations and published evidence of the Department of Health (DH), the Royal College of Radiologists (RCR), and all relevant NICE Guidance. 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.
15. In addition the vascular specialty is changing with more operations being performed by Interventional Radiologists using a less invasive approach through the major blood vessels which is called endovascular surgery (EVAR). There is also a new screening programme for AAA. This means that less and less 'open' vascular operations are being performed; this will have a big impact on services locally.
16. Locally vascular services are good, with outcomes for patients in Queen Alexandra Hospital Portsmouth and University Hospital Southampton comparable with European levels. In some hospitals though there are not enough consultants to provide high quality 24 hour care for patients with vascular diseases. This means that not all patients are treated by a specialist consultant, particularly those needing treatment out of hours.
17. Another issue is the availability of interventional radiologists. Skilled interventional radiology consultants can use specialist techniques to save limbs and organs that might otherwise have to be removed. Changing the service so that round-the-clock interventional radiology rotas become possible will ensure that no-one misses out on these benefits because of where and when they become ill.
18. At the moment, not all patients in Southern Hampshire are able to access the latest treatments and techniques. For example, a type of treatment for blood clots which are blocking important arteries is not at present available at all times in every hospital in our region.
19. In order that local centres perform enough operations in the future to maintain the skills of surgeons, and therefore maintain good outcomes for our patients, the current arrangements need to change. Our proposal is to change the current arrangement so that services are provided through a Vascular Network where major complex surgical procedures are undertaken in a major arterial centre, rather than provided in a lot of stand-alone centres only carrying out a few procedures each year. Concentrating major complex surgical procedures into a major arterial centre will ensure that patients are taken to the hospital promptly, ensuring everyone gets the treatment they need, when they need it. This may mean that some patients have to travel further for their surgery but the Vascular Society of Great Britain and Ireland states that the longer travel time will be more than outweighed by the better outcomes for all local patients.

20. As previously described the national service specification for specialised vascular services was published in October 2013. This specification identifies the key requirements for hospitals delivering vascular services so that patients get the best possible results. We are determined to improve our local NHS so that these standards are met in full and this can only achieve this by changing the way that vascular services are provided.

21. Any new plans for vascular services must be sustainable.

PROGRESS TO DATE

22. Since December 2008 we have carried out a thorough process to determine what we believe is the best solution for providing vascular services across Southern Hampshire.

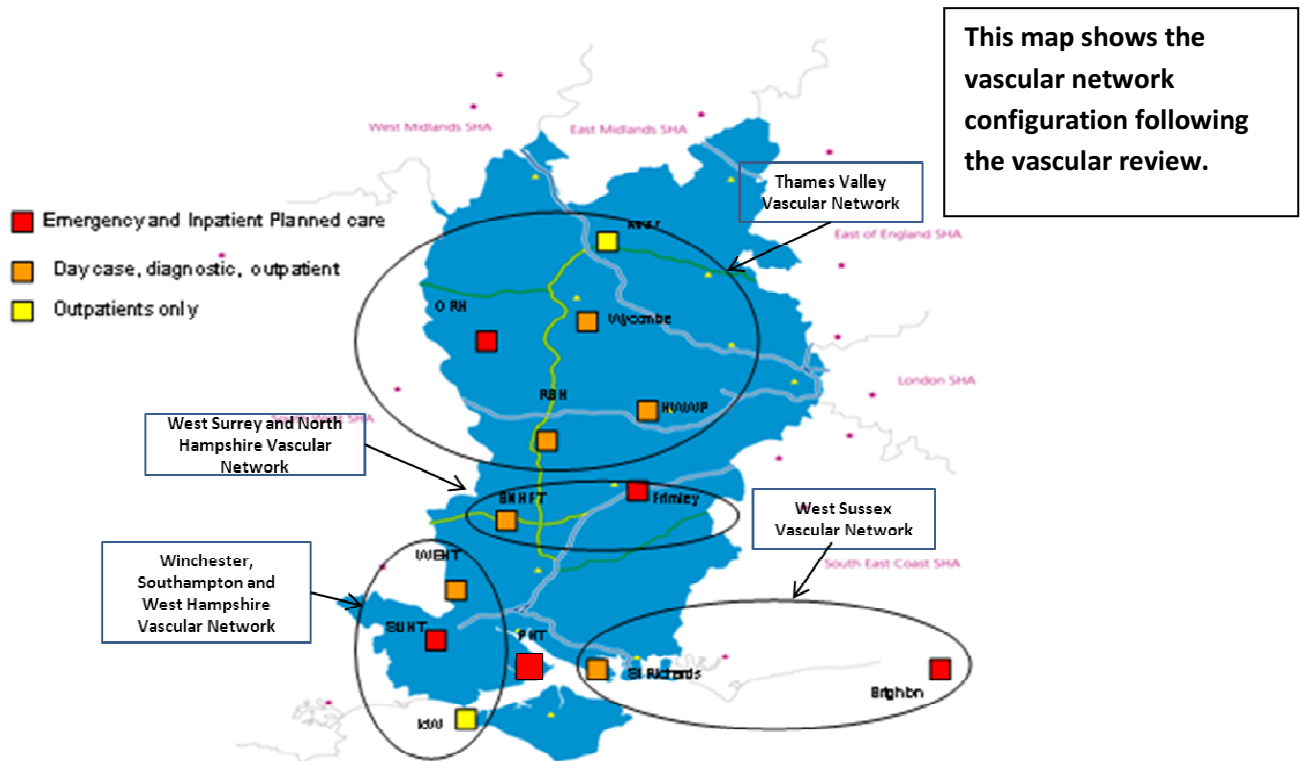
23. Throughout this process we have been mindful of the Secretary of States four tests for service reconfiguration:

- support from GP commissioners;
- strengthened public and patient engagement;
- clarity on the clinical evidence base; and
- consistency with current and prospective patient choice

Time line of how the proposals for vascular services have been identified.	
December 2008	The South Central Cardiovascular Network produced a report into the provision of emergency vascular surgery for people living within the NHS South Central area.
October 2009	An external report was commissioned on the future development of vascular surgery provision across the South Central region of England. The report concluded that the current arrangements for service provision were not sustainable and therefore units covering larger areas were needed.
April 2010	Prompted by the 2009 report, NHS South Central asked the South Central Cardiovascular Network to develop a detailed service specification for vascular services. The aim of this specification was to improve outcomes for local patients by ensuring that local services complied with national standards and Vascular Society guidelines. A local Vascular Surgery Service Specification was developed with local vascular surgeons and interventional radiologists and agreed, and an Options Appraisal document, which included a 'Case for Change', was produced.
Oct 2010	Local hospital Trusts were asked to submit proposals for achieving the quality standards set out in the service specification.
Dec 2010	Proposals were received from University Hospital Southampton NHS Foundation Trust, Portsmouth Hospitals NHS Trust and Frimley Park NHS Foundation Trust. In December 2010 an assessing panel received presentations from interested trusts. Following these presentations the panel recommendations were that: 52. A network was established between Southampton and Portsmouth vascular services, with all emergency and planned complex vascular surgery being carried out at Southampton. 53. The longstanding relationship between Basingstoke and North Hampshire NHS Trust and Frimley Park Hospitals

	<p>NHS Trust vascular services should continue, with all emergency and planned complex vascular surgery being carried out at Frimley Park Hospital.</p> <p>54. Day case, diagnostic and outpatient vascular services should be supported in local hospitals.</p>
April 2011	To ensure that lay representatives, clinical experts and GP commissioners were in agreement with the service specification the Cardiovascular Network involved GP commissioners, LINk representatives, the Vascular Surgery Strategic Group, South Central PCTs, South Central Strategic Health Authority, South Central acute Trusts and clinical advisors in a review of the service specification.
June 2011	Portsmouth Health Overview and Scrutiny Panel members expressed concern about a model which involved moving complex vascular surgery from Queen Alexandra Hospital.
August to Sept 2011	NHS South Central undertook a six week engagement exercise with the public and key stakeholders on proposals for three clinical areas; major trauma, stroke and vascular surgery. Details of the engagement exercise were also shared with key stakeholders in the South East Coast SHA area. During September 2011 Portsmouth submitted a further proposal suggesting that vascular surgery should be retained at Queen Alexandra Hospital in Portsmouth and that this provided emergency and planned care for the Portsmouth population and the population of Chichester, utilising clinicians from Chichester. However, the bid was not supported by the Lead Clinicians at St Richard's Hospital, Chichester, who identified that they would be developing a network with Brighton. Following this NHS Sussex engaged with residents in Sussex about vascular services in the area. They have now established a hub and spoke arrangement with Chichester and more services have been centralised in Brighton.
Oct 2011	<p>Feedback from the engagement exercise revealed:</p> <ul style="list-style-type: none"> • Concern about the implications for other services at Queen Alexandra Hospital, Portsmouth if the option to provide emergency and elective complex inpatient vascular surgery from Southampton General Hospital were to go ahead • Interest in exploring the option for surgeons at Queen Alexandra Hospital to work with surgeons at St Richards Hospital, Chichester to provide a service to people living in the Portsmouth, south east Hampshire and Chichester areas. <p>A second expert panel was held on 20 October, 2011 to consider a new proposal from Portsmouth Hospital Trust and the output of discussions between clinicians at Southampton General Hospital and Queen Alexandra Hospital to work as part of a network across the two hospital sites. It concluded that:</p> <ul style="list-style-type: none"> • The proposal of a vascular service across the St Richards and Queen Alexandra Hospital sites would be clinically viable for the present time but was not the ideal solution for patients in the long term. The panel's main concerns were the lack of involvement from St Richard's clinicians and management which meant that the proposal could not be delivered. • The option of a single vascular service offered from the two hospital sites would provide the best chance for long term sustainable vascular services for local people. <p>The National Clinical Assessment Team, led by Professor Matt Thompson, Professor of Vascular Surgery, St George's Vascular Institute concluded that</p>

	there should be one vascular centre for the Southampton, Hampshire, Portsmouth and Isle of Wight area based at Southampton.
Nov 2011	<p>An engagement report was considered at a meeting of the SHIP PCT Cluster Board on November 1</p> <p>Portsmouth Hospitals NHS Trust said that it believed it could make the necessary changes to meet the standards laid down within the Service Specification in its own right, rather than in a network model with University Hospitals Southampton NHS Foundation Trust or with St Richards Hospital, Chichester. The SHIP PCT Cluster asked Portsmouth Hospitals NHS Trust to provide a detailed case for how it will meet the service specification as a standalone centre.</p> <p>On November 23, the SHIP PCT Cluster received a proposal from Portsmouth Hospital NHS Trust for a standalone centre at Queen Alexandra Hospital. Local commissioners and GPs reviewed the proposal and asked for further detail from the Trust which resulted in a revised proposal submitted on December 14, 2011.</p>
January 2012	This proposal was reviewed by the panel of clinical experts on January 5, 2012 and they concluded that it was clinically viable in the short term. However the panel felt that the proposal posed a number of challenges in the longer term particularly around recruiting sufficient staffing, ensuring that a rota of surgeons was fully occupied and offering the right level of development and training to ensure that clinical best practice was maintained.



This map shows the vascular network configuration following the vascular review.

February 2012	The former SHIP PCT Cluster advised stakeholders that it was not possible to publically consult on a network model as providers could not agree on this collaboration.
June 2012	Hampshire Health Overview and Scrutiny Committee hosted a meeting involving Portsmouth Hospitals NHS Trust, University Southampton NHS Foundation Trust, commissioners and a national independent clinical expert Professor Jonathan Earnshaw. The meeting encouraged both Trusts to work collaboratively and for Professor Earnshaw to facilitate further discussions between clinicians.
February 2013	National specification for vascular services published and the former SHIP PCT Cluster and shadow CCGs restated their intention to commission in line with the specification.
September 2013	The Wessex Clinical Senate, an independent group of experts who assist commissioners to put patient outcomes and quality at the heart of the commissioning system, considered proposals on how vascular services should be set up in Southern Hampshire. The Senate made a number of recommendations on Vascular Surgery in South East Hampshire. Details of this can be found at: South of England » Publications and reports

OPTIONS FOR CHANGE

24. As a result of the earlier engagement about the future organisational arrangements for vascular services in Southern Hampshire, we developed a long list of options.

Option 1: do nothing

25. Option 1 would maintain services as they are with Southampton continuing as the arterial centre for the Southampton, Winchester and West Hampshire Vascular Network, and Portsmouth remaining as a stand-alone vascular centre for Portsmouth.

Option 2: establish two vascular networks

26. Option 2 would create two vascular networks with Southampton continuing as the arterial centre for the Southampton, Winchester and West Hampshire Network, and creating another Network in Portsmouth, utilising surgeons from St Richard's Hospital Chichester, and the Queen Alexandra Portsmouth, to serve Portsmouth, south east Hampshire and the Chichester area.

Option 3: establish a Southern Hampshire Vascular Network and move ALL major complex arterial vascular surgical procedures to Southampton

27. Option3 would mean that a network would be established between Southampton and Portsmouth vascular services. The network would have one major arterial centre which would be located in Southampton. The arterial centre would undertake all emergency and planned major complex arterial procedures with minor procedures being undertaken as close to the patients home as possible. Following surgery in Southampton all patients would be able to transfer home or back to their local hospital for their post-operative stay if this was needed.

Option 3 would include:

- Establishing a single rota for emergency seven day vascular assessment and interventions and support for the major trauma and renal centres.
- All Emergency and non-emergency AAA patients being operated on in Southampton.

- All Infra-inguinal by-pass surgery being undertaken in Southampton
- All Surgery following a transient ischaemic attack (TIA) or stroke (such as carotid endarterectomy) taking place in Southampton.
- All Major amputations being undertaken in Southampton.
- Patients requiring minor procedures would continue to be cared for in hospitals as close to their home as possible.

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.)

27. 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 .
28. 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.
29. 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"
30. 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.
31. 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.
32. 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:

33. **Phase 1** would include:

- Establishing a single rota for emergency seven day vascular assessment and interventions and support for the major trauma and renal centres.
- All 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.
- Ensuring that out-patient clinics, initial investigations, surgery for venous disease, re-ablement 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.
- Establishing regular MDTs and joint training opportunities.
- Considering 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.

34. 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.

35. **Phase 2** would include:

- All 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.
- Considering the options for phase 3.

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

Phase 3

37. 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.

38. The options and timescales for patients who need an 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.

39. 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.

40. 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.

OPTIONS APPRAISAL

Option 1: do nothing

40. It is not possible to leave services as they are now because the existing service at the Queen Alexandra Hospital Portsmouth does not meet the minimum standard identified in the NHS National Service Specification for Specialised Vascular Services.

Option 2: establish two vascular networks

41. This option has not been considered as St. Richards Hospital in Chichester has now formed a Vascular Network with Brighton.

Option 3: establish a Southern Hampshire Vascular Network and move all major complex arterial vascular surgery to Southampton

42. This option would provide long term sustainable vascular services for local people and it meets all of the service specification requirements. However, this option has been discounted on the basis that as a consensus could not be reached between Southampton and Portsmouth as to how this should be implemented. It has been concluded that this model would not be the preferred option, as without agreement from the trusts, commissioning such a large scale change could create risks to the safe transition of services for patients.

Option 4: establish a Southern Hampshire Vascular Network and move a specified group of major complex arterial vascular surgical procedures to Southampton

43. The proposal to establish a Southern Hampshire Vascular Network and move all major complex arterial vascular surgery to Southampton has been assessed by all key stakeholders including an expert clinical panel, the National Clinical Assessment Team and the Wessex Clinical Senate, and it is broadly recognised that this provides the best chance for long term sustainable vascular services for local people. It meets all of the service specification requirements and therefore provides the best option for improving outcomes for local people. However, delivering this on a phased basis reduces the impact of the change on Portsmouth Hospitals NHS Trust in terms of loss of income, and allows both Trusts more time to plan for the changes and work together in implementing them. This will ensure that this change can be implemented successfully, in a safe and sustainable way.

44. The option enables as many vascular procedures as possible to be undertaken close to the patients' home whilst concentrating highly specialist skills for the most complex surgery. Our preferred option will establish a Southern Hampshire Vascular Network with major complex vascular surgery carried out in the future in Southampton with local services remaining as they are currently. This option would bring all of the vascular expertise, vascular surgeons, interventional radiologists and other key staff, into a single service.

45. Option 4 ensures that patients will receive the best level of care, at the right time and in the right place, with services consistently provided by a consultant-led team 24/7. Developments in technology mean that for emergency patients, open surgical procedures will be minimised, leading to improved outcomes, reduction in risk, reduction in post-operative complications, and a reduction in the length of time spent in hospital as an in-patient, services will be more planned and robust, and will always be provided by a consultant led team 24/7. Non-emergency patients will benefit by having services tailored to their needs. This level of service will be more structured, and patients will not be affected by the need to cancel planned interventions due to emergency admissions. This represents a more efficient use of resources, and the consequence will lead to more patients being treated at the right time and in the right place. This will result in greater efficiencies and effectiveness.

46. The risks and benefits of all of the options have been assessed and take account of the changes in technology and best practice.
47. The impact of the proposal on other service providers, including the NHS, local authorities and the voluntary sector and also the wider community has been considered in the development of this proposal.
48. The workforce implications have been considered and the option proposed provides a long term sustainable workforce for the provision of vascular services for local people.
49. Once the preferred option has been agreed the Wessex Area Team will work in collaboration with the trusts to ensure that the appropriate project support and mechanisms are in place to safeguard implementation within the agreed timescales.
50. If the HOSC agree that this proposal constitutes major service reconfiguration we will be going out for public consultation on 26 May 2014. The public consultation will close at the end of August 2014. The agreed proposal will be implemented commencing 1 November 2014. If agreement from the Trusts is reached sooner, the implementation date will be brought forward in line with their plans.

It should be noted that the Wessex Clinical Senate recommended that:

- 55. 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**

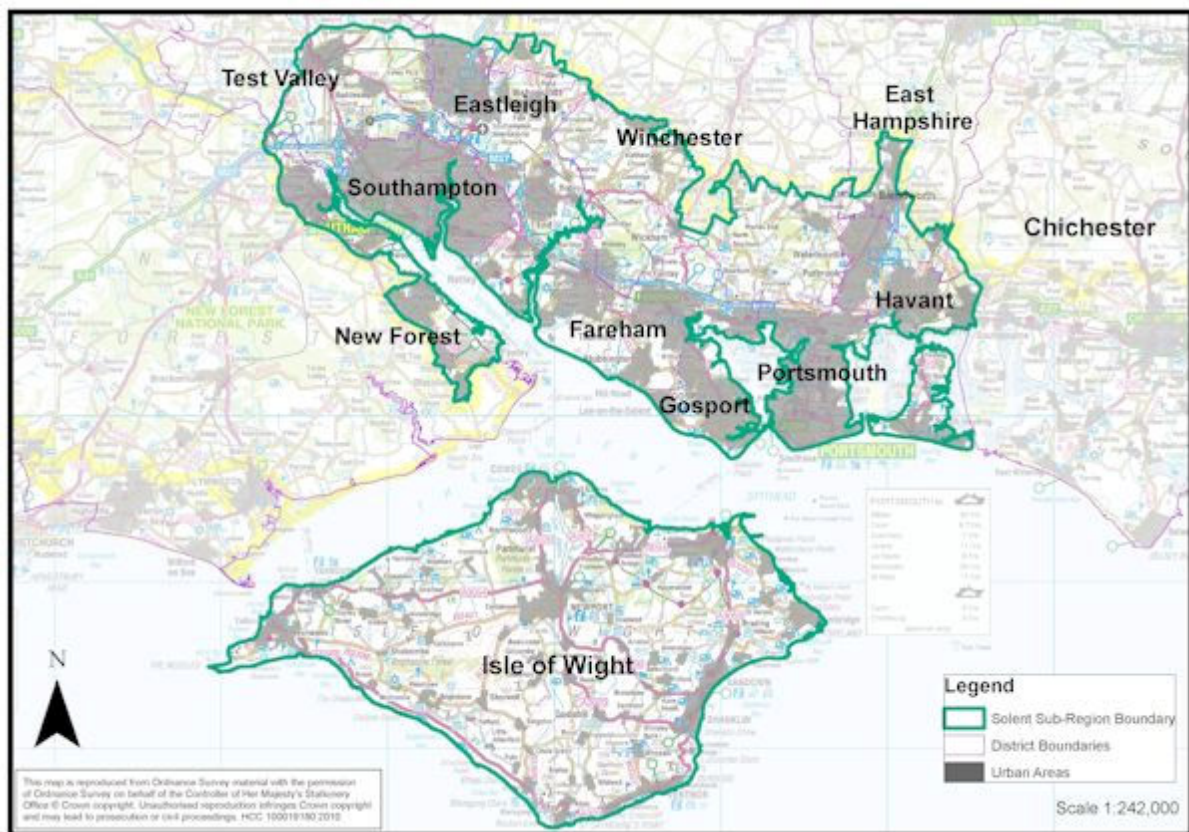
STAKEHOLDER ENGAGEMENT

51. There has been ongoing dialogue with stakeholders from across Southern Hampshire in the development of these options. This includes:
 - Heath and Scrutiny Committees
 - NHS England, Medical Directorate
 - Specialised Commissioning
 - Wessex Clinical Senate (Chair: Prof William Roche - The Senate's role is to provide high quality, independent, non-biased clinical advice). The senate reviewed all options in September 2013 and the proposal was supported.
 - NHS England Wessex Area Team
 - NHS Fareham and Gosport CCG, NHS South Eastern Hampshire CCG, NHS Portsmouth CCG, NHS Southampton CCG, NHS Isle of Wight CCG, NHS West Hampshire CCGs
 - Trusts vascular surgeons.
 - There are several Healthwatch groups who will have an interest in the development including:
 - Hampshire
 - Isle of Wight
 - Portsmouth
 - Southampton

56. Between August and September 2011 an engagement exercise took place to as part of the Safe and Sustainable Acute Services: Stroke, Major Trauma and Vascular Surgery review. The engagement exercise identified a number of concerns about the proposals put forward at that time. Local people told us that they wished to see a collaborative vascular network model developed, with surgeons and interventional radiologists working across both sites. The current proposal takes account of the wishes of local people. In addition a Vascular Patient Reference Group was formed in 2012 to discuss the implications of the proposal.
57. During the autumn of 2010 a review of vascular services in South Central (which included South Hampshire) was undertaken. As a result of this review a local Vascular Surgery Service Specification was drafted and agreed, and an Options Appraisal document, which included a 'Case for Change', was produced. Across the region service provider were invited to submit proposals for the provision of vascular services in line with the service specification and national guidance. In December 2010 an assessing panel received presentations from interested trusts.
58. Following these presentations the panel recommendations were that:
- A network was established between Southampton and Portsmouth vascular services, with all emergency and planned complex vascular surgery being carried out at Southampton.
 - The longstanding relationship between Basingstoke and North Hampshire NHS Trust and Frimley Park Hospitals NHS Trust vascular services should continue, with all emergency and planned complex vascular surgery being carried out at Frimley Park Hospital.
 - Day case, diagnostic and outpatient vascular services should be supported in local hospitals.
59. There are four patients/carers on the national Clinical Reference Group for vascular services which developed the national specification which informed the local proposal.
60. In addition a local Patient Reference Group was formed in 2012 which provided an opportunity to discuss the improved quality being sought for patients and the practical considerations such as travel and patient information for patients accessing vascular interventions.
61. There is a group of people including members of the public, hospital staff and politicians that do not wish to see any change to vascular services in Portsmouth. Every effort has been made to share the evidence base and the benefits for patients as a consequence of this change, and this work will be on-going.
62. Individual vascular surgeons have different views as to how services should be delivered, with some having more regard to the new national standards than others, and some being more open to collaborative working than others. Discussions are on-going.

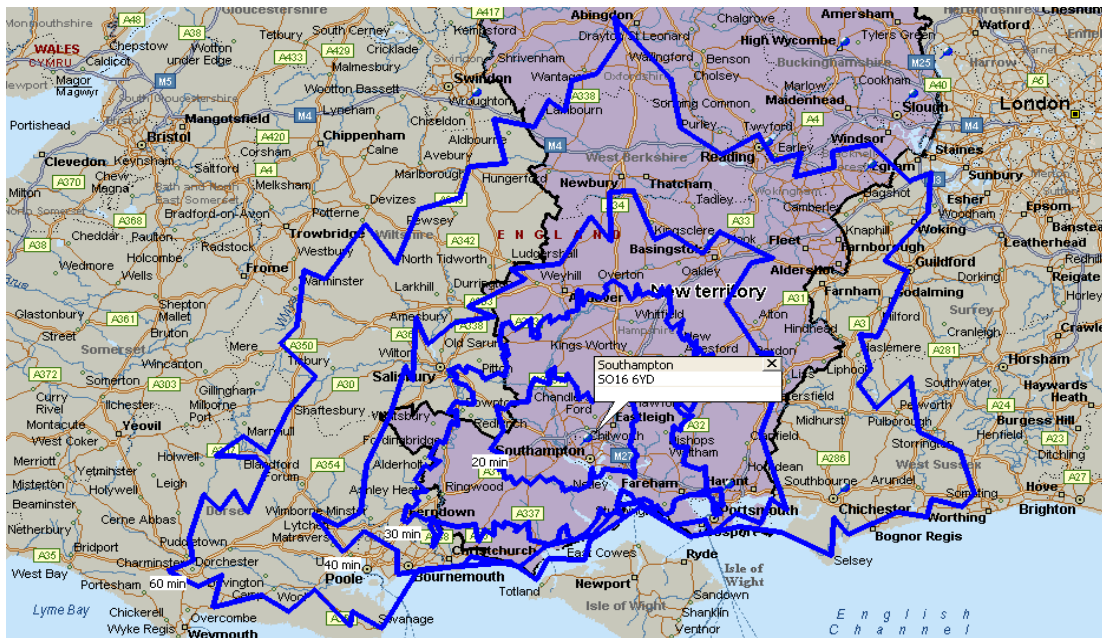
IMPACT ASSESSMENT

63. In July 2011 a South Central Vascular Surgery Review, Strategic Equality Impact assessment was undertaken. The impact assessment takes consideration of the demographic profile of the area and the impact on vulnerable people and health equality.
64. The impact assessment is currently in the process of being refreshed.
65. It is important to note that Specialised Services by their nature, deal with low volumes of patient numbers, therefore the number of patients that will be affected by this change are relatively small.
66. Under the terms of this proposal, patients requiring complex vascular surgery will be required to travel to Southampton for their operation. Those being admitted as an emergency will be taken directly to Southampton by ambulance, rather than to Portsmouth. Most patients will be discharged directly home once medically fit following surgery, which means that it should not be necessary for patients to be repatriated to Portsmouth. All outpatient appointments will remain in the hospital nearest to their own home.
67. This proposal will affect the population of Southern Hampshire. The map below shows the area covered by Southern Hampshire.



68. This proposal will change access to services for patients from across Southern Hampshire as they will be taken to Southampton in an emergency situation and over time, will need to travel to Southampton for complex elective surgery.
69. The impact on service users has been assessed in terms of:

- **Waiting Times** –waiting times are defined by the NHS Constitution and when the agreed proposal is implemented, providers will be monitored against these definitions through the NHS Standard Contractual Arrangements.
- **Transport (public and private)** – Phase 1 of the proposal is in relation to emergency situations and therefore transportation would be via ambulance. Phase 2 will mean that a small number of patients, family/carers may be required to travel a slightly longer distance, as a result of these changes. However, the service they are travelling for will be an improved service.
- **Travel Time** – Isochrone data provided by South Central Ambulance Service has identified that all hospitals are within the 60 minute travel distance for safe transfer of vascular patients across Southern Hampshire in an emergency. Some patients have to travel further for their surgery but the Vascular Society of Great Britain and Ireland states that the longer travel time will be more than outweighed by the better outcomes for all local patients. 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.



70. This map above shows 20, 30, 40 and 60 minute Isochrones (Ambulance travel times under blue light conditions).

71. In 2009 the NHS AAA screening programme for men aged 65 was introduced with full implementation in 2013. The aim of this programme is to identifying apparently healthy people who may have an AAA. This programme will therefore mean an increased number of patients requiring vascular surgery for AAA. This surgery will however be undertaken as a planned procedure rather than undertaken in an emergency situation.

72. The impact on staff has been assessed. The affected staff includes a small number of doctors, nurses and therapists at Portsmouth Hospitals NHS Trust and University Southampton Hospital NHS Foundation Trust. The change will involve closer multi-disciplinary working across the two organisations and some potential additional travel for doctors in line with the proposed joint rota.

COMPARATIVE PERFORMANCE ACROSS LOCAL PROVIDERS

Volume of Elective AAA repairs and in-hospital mortality by Trust, Jan 2008 to Dec 2012					
	Trust	Number of AAA performed	Number of Open procedures	Number of EVAR procedures	In-hospital Mortality (unadjusted)
PHT	Portsmouth Hospitals NHS Trust	216	105	111	4.20%
UHS	University Hospital Southampton NHS Foundation Trust	377	201	176	0.80%
BHT	Buckinghamshire Healthcare NHS Trust	166	90	76	1.80%
HWPT	Heatherwood and Wexham Park Hospitals NHS Foundation Trust	72	18	54	1.40%
OUH	Oxford University Hospitals NHS Trust	271	125	146	1.10%
BST	Brighton and Sussex University Hospitals NHS Trust	250	75	175	1.20%
FPH	Frimley Park Hospital NHS Foundation Trust	309	125	184	1.00%
WSH	Western Sussex Hospitals NHS Trust	130	130	0	1.50%
DCH	Dorset County Hospital NHS Foundation Trust	73	73	0	6.90%
RBCH	Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	333	109	224	1.80%
SFT	Salisbury NHS Foundation Trust	82	68	14	1.20%
	Data Source: National Vascular Registry - 2013 Report on Surgical Outcomes, Consultant Level Statistics				

Volume and outcomes of carotid endarterectomies, October 2009 to September 2012					
	Trust	Number of CEAs performed	Number of CEAs with outcome data	% stroke and/or death within 30 days (unadjusted)	Median (IQR) delay between symptom and surgery
PHT	Portsmouth Hospitals NHS Trust	215	215	1.90%	22(12,65)
UHS	University Hospital Southampton NHS Foundation Trust	299	299	1.70%	16(11,26)
BHT	Buckinghamshire Healthcare NHS Trust	244	239	2.10%	11(8,16)
OUH	Oxford University Hospitals NHS Trust	244	234	3.00%	19(8,41)
BST	Brighton and Sussex University Hospitals NHS Trust	120	120	1.70%	9(7,14)
FPH	Frimley Park Hospital NHS Foundation Trust	200	199	2.50%	9(5,20)
WSH	Western Sussex Hospitals NHS	83	81	3.70%	16(12,24)

Volume and outcomes of carotid endarterectomies, October 2009 to September 2012					
	Trust	Number of CEAs performed	Number of CEAs with outcome data	% stroke and/or death within 30 days (unadjusted)	Median (IQR) delay between symptom and surgery
	Trust				
DCH	Dorset County Hospital NHS Foundation Trust	88	88	5.70%	10(5,29)
RBCH	Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	160	111	9.00%	18(8,40)
SFT	Salisbury NHS Foundation Trust	71	71	0.00%	10(5,33)
Data Source: National Vascular Registry - 2013 Report on Surgical Outcomes, Consultant Level Statistics					
Please note that the outcome information was derived from three years of data, on patients who underwent surgery between 1 October 2009 and 30 September 2012. The median delay was based on one year of data, and relates to patients treated between 1 October 2011 and 30 September 2012.					

Appendix A. Evidence base

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. 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

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. 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)

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