

Strategic Statement of Intent

"NHS England has received a report from the VS following the review in August. The VS reviewers 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 POVS¹ recommendations. The reviewers considered that a single hub at UHS would be the best way of assuring the long term quality and resilience of these services.

NHS England's strategic intention is to commission services which are compliant with our specialised service specification, which is based on the POVS recommendations for safe, high quality care for patients requiring vascular (arterial) surgery.

We are minded to further explore the strategic objective of developing a single vascular surgical hub for Southern Hampshire, based at UHS (adding to the current network arrangements for Hampshire and IOW) and including PHT as another spoke. These arrangements maximise the benefits of other networking arrangements such as that for major trauma.

NHS England is engaging with partners and stakeholders to further develop the clinical network for vascular surgery in Southern Hampshire. It is this group, led by senior surgeons in Hampshire, which will develop the detailed plans to provide these vital services for the whole of Hampshire."

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 (VSGBI) produced a POVS 2012 report² detailing recommendations for developing vascular services. The Executive Summary states:

¹ The Provision of Services for patients with Vascular disease 2012: The Vascular Society of Great Britain & Ireland

² VSGBI "The Provision of Services for Patients with Vascular Disease 2012"

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

A modern clinical network exists when two or more adjacent hospitals collaborate to provide patient care. Such networks should decide upon a single hospital which will provide both elective and emergency arterial vascular surgical care. Networks might be based on a local aortic aneurysm screening programme or aligned to a major trauma centre, but it is required that all major arterial intervention is performed on the designated arterial site. All vascular consultants involved in a modern clinical network should be timetabled to provide outpatient and ward specialist vascular care to patients within the non-arterial network hospitals. This may include a service to amputees and to patients with chronic venous insufficiency and diabetic feet...."

In summary, the Vascular Society believes that every patient has the right to consult with a vascular specialist at their local hospital, but they may have to travel to obtain access to 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."

The VSGBI 2013 report³ on surgical outcomes identified that during the AAA Quality Improvement Programme, collaboration with the Health Foundation, which ran from 2008 until 2013, the mortality rate for elective AAA repair fell from 7% to 2.4%.

In March 2013, the national service specification (NSS)⁴ for Specialised Vascular Services was issued for adoption from October 2013. 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". It goes on to say that "there is evidence that similar relationships affect the performance of other vascular procedures including lower limb arterial reconstruction and carotid endarterectomy".

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.

³ VSGBI National Vascular Registry "2013 Report on Surgical Outcomes: Consultant-level statistics"

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

- 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.

History

Reviews of the reconfiguration of vascular services in Southern Hampshire began in 2008 and there have been various reports and recommendations since that date. The current configuration is that UHS acts as a hub in a network with Royal Hampshire County Hospital (RHCH) Winchester and Isle of Wight NHS Trust (IOW) as spokes, and that PHT operates as an arterial centre in its own right with the provision of some services to St Richards, Chichester.

The latest 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 the proposal was presented to Portsmouth Health and Oversight Committee (HOSC) they identified it as a 'significant change' which would require full public consultation.

A strategic review undertaken following the HOSC 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 having a population in excess of 2 million to allow sub-specialisation, and so the optimum solution would be to centralise 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 Contract⁵, must provide vascular services; this obviates the consideration of PHT as the sole vascular hub of the network.

A Business case was developed to consider in detail to consider two key options:

- **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 collaborate to maximise efficiencies and resource utilisation

⁵ D15/S/a NHS Standard Contract for Major Trauma Service (All ages)

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 and have established joint Multi-Disciplinary Teams (MDTs) to consider complex cases across the two sites. Both Trusts agree that there is a strategic vision of one vascular 'network'.

The impact analysis identified several key issues which informed the recommendation of strategic direction

- **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%. There is no longer a clinical evidence base that supports any urgent transfer of procedures, either emergency or elective, from PHT to UHS in terms of patient outcomes.
- **UHS Capacity:** UHS identify 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:** Both sites have services highly interdependent upon vascular services. 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, not least PHT.

Following the second draft of the Business Case at the end of March 2015, UHS responded that a capacity re-modelling exercise had been undertaken and that certain services would be out-sourced, freeing up 170 beds over a 24 month period. UHS believe that this would provide capacity for a phased transfer of arterial services from PHT to UHS.

This effectively left a major clinical question to answer - did the interdependent services at PHT dictate that 24/7 emergency vascular services were required on site or could these be provided by UHS as a network hub with PHT as a spoke? The Trusts had differing views on the question and so NHS England asked the Vascular Society to undertake a review and provide recommendations.

Vascular Society (VS) Review: a summary

Paul Blair (President) and Rob Sayers (Vice President (elect)) of the VS undertook a review of Southern Hampshire on 19th and 20th August 2015, with a site visit to Portsmouth Hospital NHS Trust (PHT) on 19th and to University Hospital Southampton NHS Foundation Trust (UHS) on 20th. Consideration of vascular service provision at Chichester was included in scope, although time constraints precluded a site visit or discussions with Brighton and Sussex University Hospitals Trust or St Richards during this review.

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 is

due in November 2015. POVS is the document upon which the National Service Specification⁶ (NSS) for Vascular Services is based.

The VS review found that neither Portsmouth nor Southampton were POVS compliant, the main issues being the on call surgical rota at PHT and the lack of Vascular Radiology at UHS. This review is included as appendix (i).

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.

Neither site have been able to provide 24/7 emergency interventional radiologist cover with 4 vascular interventional radiologists (although PHT have recently appointed a fifth), which means 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.

Taken as whole these shortfalls against national standards mean that the local NHS is not in a position to provide consistently the quality of care that patients should be entitled to expect. 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 national standards.

A longer term sustainable high class vascular facility would be centralisation at Southampton, but would require capacity and resource issues to be addressed. It is recommended that a staggered merger should be avoided, and concurrent transfer of arterial services should be adopted.

The report suggests that it would be possible to make both sites POVS compliant and standalone. This would involve Portsmouth providing vascular services for Chichester and both units would require substantial investment with consultant appointments and development of facilities. The option of aligning Chichester in a network with Portsmouth has not been formally considered in the review and could have implications for the viability of services in West Sussex. In the longer term, however, this may not prove sustainable as both units may have difficulties recruiting consultants and trainees and 7 day working would require a minimum 1:8 rota.

In terms of the NSS for Renal Dialysis, dialysis patients could be hospitalised at the vascular hub if there were vascular complications, as long as the hub established a small dedicated unit for haemodialysis. On that basis, whilst PHT has busy and successful co-dependencies (diabetic foot services, nephrology and urology) which would require significant support, this could be provided by UHS as a hub, were PHT to become a spoke hospital.

⁶ A04/S/a 2013/14 NHS Standard contract for Specialised Vascular Services (Adults)

Best advice would be to develop the infrastructure and capacity at UHS to accelerate implementation of a strategic solution with arterial services centralised at UHS and PHT as a spoke hospital within the network.

NHS England Response

The findings and recommendations of the report are being disseminated to stakeholders through a series of meetings and telephone conferences, and will be discussed at the Vascular Steering Group (VSG) scheduled for 16th October 2015, together with recommendations on next steps. VSG recommendations will, in turn, be presented to the Wessex Clinical Senate, to Regional Assurance and to stakeholders, including HASC and HOSPs.

NHS England will want these discussions to inform the development of a preferred option for vascular services for Hampshire. These discussions will take place over the next four weeks. Once a preferred option has been confirmed it will be subject to formal consultation.

Of the key issues which have to date proven a stumbling block for the strategic centralisation of services at UHS

- UHS have now identified a potential capability to provide capacity in a 24 month period
- The VS review has identified that, whilst PHT has busy and successful co-dependencies, these could be provided from a hub with PHT as a spoke
- Workforce resilience and sustainability is already an issue at both sites and future trends indicate that both remaining as vascular hubs is unlikely to prove sustainable.

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), together with infrastructure investment, are likely to prove prohibitive for smaller networks to provide a world class service and remain financially viable. Other strategic considerations include the development of trauma networks and the need for the major trauma centres to have a full range of vascular specialist services.

Current trends show reductions in ruptured aneurysms through 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.

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.

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 will experience increasing difficulties in staff recruitment.

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 which takes these challenges into account. In terms of options, 'do nothing' has already been ruled out as current services are not compliant. 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.

We recognise that stakeholders will find it helpful to understand NHS England's initial response to the VS report. We find the VS case for moving to a sustainable long term solution of a single hub with a strong network integrating clinical pathways across Hampshire to be persuasive.

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), together with infrastructure investment, will prove prohibitive for smaller networks to provide a world class service and remain financially viable.

In addition, trends suggest that there will be insufficient procedures to maintain the currency of skills for the larger numbers of vascular surgeons and vascular interventional radiologists if services are not centralised to a smaller number of units .

Other strategic considerations include the development of trauma networks and the need for the major trauma centres to have a full range of vascular specialist services.

- We are minded to support the VS recommendation that a strategic solution would involve UHS as the hub and PHT joining the network as a spoke. This would involve UHS investing where necessary to become POVS compliant for existing vascular services provision, particularly as UHS is a Major Trauma Centre.
- We would support UHS developing a strategic proposal and a detailed infrastructure, capacity and transfer plan identifying the minimum timescale to transfer all PHT arterial services. The capacity plan should include consideration of the potential to release capacity by maximising the use of Hampshire health economy capacity as a whole.
- Consideration will be given to a 'prime contractor model' being developed with UHS for network vascular services

For an integrated network to succeed, all stakeholders (clinical and management) from all providers must engage to develop a shared vision. The existing Vascular Network should be further supported to develop plans, (including care pathways) for the detailed implementation of the preferred option. NHS England, as commissioner, will act in partnership to assure the process.

Immediate issues

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 Interventional Radiologist (IR) rota. Whilst advanced discussions are understood to have taken place with Siemens, UHS has no immediate plan to fund the build of a hybrid theatre. UHS has also acknowledged capacity issues, and has identified a two year plan to outsource services to free up capacity; this is believed to be seen to facilitate a phased transfer of procedures from PHT. The VS have strongly advised against this approach, and recommend a concurrent transfer of all procedures.

There would also be a need for UHS to develop a small dedicated haemodialysis unit to cater for renal patients who are hospitalised with vascular complications.

UHS, as a matter of urgency, must commit to address these shortcomings, and develop a realistic capacity and transfer plan. This may result in further remodelling of services to prioritising vascular in order to minimise timescales.

In terms of outsourcing services, every consideration should be given to working with network partners.

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 and should address this issue in the short term. This should be facilitated by the network identifying the optimum solution and recruiting resource with the understanding that the strategic solution will be a UHS-based hub.

While the VS team did not visit Chichester, which is covered by the vascular service provided by BSUH, it did note concerns that had been raised with it about the service. The NHS England South East team are looking into these concerns. NHS England does not believe that vascular services for Chichester have a bearing on long-term sustainable solutions for vascular services for Hampshire.

APPENDIX (i) 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 the part-time military consultant (TW) has resigned. 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 (part time military) 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-

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