Black Country Vascular Centre

Operational Policies

Document control

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Version	**Date of revision**	**Summary of revisions changes**
24	23.07.12	Logo and title amended Section 2.1 Clarification of phase 1 activity to be transferred Section 3.2 Clarification of management arrangements for AAA screening surveillance patients Section 5.1.1 Significant rewording Section 5.1.5 Significant rewording Section 5.1.7 Minor rewording Section 5.1.13 Minor rewording Section 5.5 Added – Reinforcing policy that all patients will be admitted on the day of surgery unless clear clinical indications requiring earlier admission Section 5.6.4 Added sentence re. review of all patients by on-call vascular surgeon Section 5.7.3 Minor rewording Section 5.8.4 Added – criteria for repatriation Section 5.8.6 Updated contact details and repatriation criteria Section 8.1.2 Clarification of responsibilities for ward rounds Section 8.1.4 Change of contact details for daytime on-call vascular surgeon Section 8.1.9 Change of Friday handover time and clarification about who has responsibility for emergency admissions on Friday afternoon Section 8.2.3 Clarification of responsibility for patients admitted overnight Section 17.1.10 Operational Manager contact details updated Section 20.4 Clarification of registrar input to emergencies at RWHT. Key contact details added. Section 21.7 requirement for weekend optimisation of renal patients prior to transfer

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1. INTRODUCTION

1.1 Operational context

It is widely reported that the morbidity and mortality for patients undergoing elective and emergency vascular procedures in the UK remains unacceptably high when compared with other countries. The recommendation of the Vascular Society of Great Britain and Ireland (VSGBI) is that patient outcomes can be improved by focusing arterial surgery at high volume centres, where care is delivered by specialist vascular multi-disciplinary teams through network arrangements between a number of hospitals.

Based on these findings, within the Black Country, Commissioners have specified that existing services provided at New Cross Hospital in Wolverhampton, Russells Hall Hospital in Dudley and The Walsall Manor Hospital should be reconfigured in a network based around a hub and spoke arrangement. Dudley Group NHS Foundation Trust has been designated as the hub site at which specialist services will be centralised. Spoke site services such as outpatient clinics and day case surgery will be delivered at all three trusts.

The aim of this service reconfiguration is to deliver a specialist vascular service for people with vascular disease, which utilises the best current clinical evidence and expert clinical recommendations to ensure the best clinical and patient reported outcomes within the resources available to the NHS at the time.

This portfolio of operational protocols sets out the process by which these outcomes will be delivered within the reconfigured service.

1.2 Purpose of this document

The purpose of this document is to define the operational arrangements in place to support the delivery of the Black Country Vascular Centre, phase 1 of which commences 16th July 2012. This document also details how the clinical governance arrangements set out in the BCVC Clinical Governance Framework will be embedded in the daily delivery of services.

1.3 Links to other network documents

This document is intended to provide the operational framework to support the delivery of the clinical pathways agreed within the Black Country Vascular Centre. These are included in Appendix 1 for reference.

This document is also closely aligned with the Black Country Vascular Centre Clinical Governance Framework. The centralisation of specialist vascular services for the Black Country at Russells Hall Hospital represents a significant change to way that services are delivered. It is essential that all parties involved in this new model of care have clear guidance on how the new processes will work to minimise clinical risk and ensure that the patient experience is positive. This will be supported through the development and communication of robust operational protocols. The Black Country Vascular Centre Clinical Governance Framework is included in Appendix 2 for reference.

PART A: ELECTIVE PATHWAYS

2. Planned transfer of elective workload

2.1 High risk procedures will be undertaken at the Hub. The contract for these procedures transfers to Russells Hall Hospital (RHH) and the activity will be transferred from Walsall and Wolverhampton in two phases:

Phase 1: From July 16 2012
• Abdominal aortic procedures (Elective open and endovascular abdominal aortic aneurysm repair) • Complex vascular procedures, e.g. aorto bi-femoral bypass for aorto iliac aneurysms
Phase 2: From 1st April 2013
• Carotid endarterectomy • Arterial bypass procedures • Other therapeutic endovascular procedures e.g. complicated lower leg angioplasty with stent.

3. Referral processes

3.1 The prime source of referral for a majority of patients requiring elective surgery will be the GP. There will be no change to current referral processes. Outpatient services will continue to be provided by the three Trusts, and GPs should continue to refer patients to their local entre unless referral elsewhere is requested by the patient.

3.2 Another source of referral for patients with a diagnosed Abdominal Aortic Aneurysm (AAA) will be through the AAA Screening Programme. Where an aneurysm is detected through the programme, the patient will be referred to a Consultant Vascular Surgeon at their local hospital, or provider of choice, for their outpatient appointment and any subsequent diagnostic testing. However, if surgery is appropriate any subsequent procedure will take place at the Vascular Hub Site. Patients who needs to be kept under surveillance (as determined by their ultrasound scan) will be managed by the screening programme. The AAA sizing guide is summarised in Appendix 3

3.3 Non-urgent vascular referrals from other specialties will be managed as outpatients through their local hospital.

4. Outpatient assessment and investigation

4.1 Outpatient attendances and diagnostic investigations will be undertaken at the local spoke sites or the patients' choice of provider.

4.2 A Risk Stratification Checklist will be completed by the medic in the outpatient clinic for all network vascular patients who require a surgical intervention. Appropriate action will be taken in accordance with the pre-operative assessment pathway. The checklist will form

part of the pre-operative assessment care pathway documentation. These documents are based around the VSGBI Elective AAA Pre-operative Care Bundle, and have been modified to make them applicable for all elective aortic procedures. The Risk Stratification Checklist and Pre-operative Assessment Pathway can be found in Appendix 4.

4.3 The Risk Stratification Checklist will highlight patients who require optimisation or a referral to a specialist, e.g. cardiology, before they are discussed at an MDT meeting and scheduled for surgery. Such referrals and optimisation should be undertaken at the local spoke site.

4.4 A supply of the Risk Stratification Checklists will be made available to the outpatient clinics at the spoke sites. In time, this information will be stored on the BCVC website for download as required.

4.5 Where the consultant discusses the need for surgery with a patient during an outpatient consultation, the patient will be issued with a patient information wallet, which will contain the BCVC network logo and the network information leaflet "Changes to Vascular Surgery in the Black Country". Any procedure specific information and admission information issued will be included in the wallet. The patient should be advised to bring this with them to all appointments, as further information will be provided.

5. Surgical intervention

5.1 **Multi-disciplinary Team Meetings (MDT)**

5.1.1 Where the consultant responsible for the care of a patient decides that an intervention (surgical or endovascular) may be required, the case will be reviewed at the weekly BCVC MDT meeting following risk stratification and appropriate investigation. In Phase 1 local MDTs at spoke sites will continue for patients who are to be treated there, in accordance with VSGBI guidance.

5.1.2 It is universally accepted that vascular disease is best managed by a multi-disciplinary team which includes vascular surgeons, interventional radiologists, vascular anaesthetists, vascular scientists and specialist nurses, supported by Stroke Physicians and Cardiologists. The purpose of the MDT meeting is to ensure that individual patients are discussed, risks stratified, treatments planned and any variation from best-practice pathways is explained and critically, agreed. The treatment options must then be discussed and agreed between the surgeon and the patient.

5.1.3 From a clinical governance perspective, the role of the BCVC MDT is pivotal, as the patients' episode of care may be split between service provider sites and between clinical teams, therefore communication and transfer of all relevant clinical information will be accurate, timely, documented and clear with no room for ambiguity or misconstruction. This will ensure the standardisation of clinical pathways and practices, and provide a forum for discussing any variation in practice.

5.1.4 Two MDT Co-ordinators have been appointed to provide administrative support to the clinical team by providing case notes and investigation reports, recording decisions at the

meetings, and monitoring patients on their clinical pathways to ensure key interventions are completed. The MDT Co-ordinators for the Black Country Vascular Centre are:

[redacted]	Tel: 01384 456111 ext 1235	Email: [redacted]
[redacted]	Tel: 01384 456111 ext 1235	Email: [redacted]

5.1.5 An MDT meeting proforma has been developed to record and communicate all of the relevant information required for the MDT meeting. This is included in Appendix 5. This should be completed by the referring surgeon for each patient to be included in the MDT meeting, and sent electronically to the MDT Co-ordinators. In order to ensure that that the meeting can be effectively co-ordinated, the cut off time for including patients in the MDT meeting will be 12:00 on Thursday each week. However, in exceptional cases, patients may be added after this time following discussion with the MDT co-ordinators.

5.1.6 Any paper based documentation that the Consultant wishes to present at the MDT meeting should be forwarded electronically to the MDT Co-ordinators by the relevant Medical Secretary using the secure email addresses provided above. When sending information electronically the information should be sent from and received by a secure email address (i.e. nhs net account not Trust account). Alternatively, they can be sent by fax to the MDT Co-ordinator [fax number 01384 244072 ensuring that you follow the Safe Haven Best Practice Guidelines:

- include a front sheet, which contains suitable confidentiality clauses;
- ensure you mark the fax header 'Private and Confidential';
- double check the fax number is correct;
- double check the correct person will receive it;
- notify the recipient when you are sending the fax;
- take care when dialling the fax number;
- ask the recipient to confirm receipt of the fax;
- ensure personal details (e.g. name and address) are faxed separately from clinical details, which must be accompanied by NHS number.

5.1.7 All images to be discussed at the BCVC MDT meetings from Walsall and Wolverhampton must be transferred via the Image Exchange Portal (IEP). When transferring images for the BCVC MDT, it is important to differentiate which MDT they are for as the Radiology Department receives numerous electronic transfers. To ensure this differentiation, it is important that the "MESSAGE BOX" field within the IEP system is completed with the following i.e. 'images for Vascular MDT'. Any difficulties encountered in sending images, should be escalated to [redacted], Clerical Assistant in the Radiology Department at Russells Hall Hospital , on 01384 456111 ext 2402. The Consultant or Medical Secretary is required to notify the MDT Co-ordinator of any images that have been requested to be sent via the IEP. The MDT Co-ordinator will register patients onto the Oasis system (patient administration system) and raise a set of DGFT case notes where the patient is new to the Trust.

5.1.8 The MDT meetings will be held at the Vascular Hub every Friday at 14:30. It is preferable for all parties to be present at the Hub, but video conferencing facilities can be arranged if necessary through either of the vascular MDT Coordinators.

5.1.9 Membership of MDT:

Name	Role	Local site
[redacted]	Consultant Anaesthetist	Dudley
[redacted]	Medical Service Head for BCVC and Vascular Surgeon	Dudley
[redacted]	Consultant Vascular Surgeon	Dudley
[redacted]	Consultant Vascular Surgeon	Dudley
[redacted]	Consultant Vascular Surgeon	Dudley
[redacted]	Consultant Vascular Surgeon	Walsall
[redacted]	Consultant Vascular Surgeon	Walsall
[redacted]	Consultant Vascular Surgeon	Wolverhampton
[redacted]	Consultant Vascular Surgeon	Wolverhampton
[redacted]	Consultant Vascular Surgeon	Wolverhampton
[redacted]	Consultant Vascular Surgeon	Wolverhampton
[redacted]	Interventional Radiologist	Dudley
[redacted]	Interventional Radiologist	Dudley
[redacted]	Interventional Radiologist	Wolverhampton
[redacted]	Interventional Radiologist	Wolverhampton
[redacted]	Consultant Anaesthetist	Dudley
[redacted]	Consultant Anaesthetist	Dudley
[redacted]	Consultant Anaesthetist	Dudley
[redacted]	Consultant Anaesthetist	Wolverhampton
[redacted]	Consultant Anaesthetist	Wolverhampton
[redacted]	Superintendent Radiographer	Dudley
[redacted]	Vascular Nurse Specialist	Dudley
[redacted]	Vascular Nurse Specialist	Walsall
[redacted]	Vascular Nurse Specialist	Wolverhampton
[redacted]	Vascular Nurse Specialist	Wolverhampton
[redacted]	Vascular Scientist	Dudley
[redacted]	Vascular Scientist	Wolverhampton
[redacted]	Stroke Coordinator	Dudley
[redacted]	Vascular MDT Coordinator	Dudley
[redacted]	Vascular MDT Coordinator	Dudley

5.1.10 The MDT will be chaired by [redacted], Consultant Anaesthetist, or a nominated deputy in her absence.

5.1.11 An MDT will be quorate when the following staff are present:

- Chair or nominated deputy
- At least one vascular surgeon from each site

- At least one Interventional Radiologist
- At least one vascular anaesthetist
- MDT Co-ordinator

5.1.12 If the meeting is not quorate cases will be deferred to the next meeting. See 5.1.13 if an urgent decision is required.

5.1.13 Outside of the formal MDT process, if an urgent decision is required, the referring surgeon should contact the MDT Co-ordinator who will ensure that an MDT discussion takes place, this should include at least one Vascular Surgeon, one Interventional Radiologist, and one Vascular Anaesthetist.

5.1.14 Cases will not be presented unless the referring surgeon is present at the meeting, or a nominated presenter is advised in advance of the meeting. Where a case is scheduled for discussion and neither the referring surgeon nor the nominated presenter are available to attend, the case will be deferred until the next meeting.

5.1.15 The MDT Co-ordinators will populate the MDT patient list and record the outcomes of the discussions. The MDT minutes will be circulated to all members within 1 working day of the meeting. This will include medical secretaries. The Consultant is responsible for completing a separate MDT outcome sheet which is then filed in the patient case notes.

5.2 **Access to Medical Records**

5.2.1 There are currently no reciprocal arrangements for sharing case-notes between the three Trusts. This process is in development, but until this time, full copies of the medical records will be provided by Wolverhampton and Walsall. For patients requiring surgery at the hub the process described in 5.2.2 and 5.2.3 will be followed.

5.2.2 <u>Process for Walsall patients:</u>
At Walsall there is a health records process for requesting copies of medical records. The Vascular Clinical Nurse Specialist will complete the necessary form following the MDT meeting to request copies of notes. These will be generated by the Health Records Department at Walsall and sent by post to the MDT Co-ordinator at DGFT.

5.2.3 <u>Process for Wolverhampton patients:</u>
On receipt of the MDT minutes, the relevant medical secretary at Wolverhampton will instigate the internal process for obtaining a copy of the case notes. These will be sent to the MDT co-ordinator by post.

5.2.4 Access to the complete copies will be important as many of these patients will have complex co-morbidities which will be relevant to the treatment of their vascular condition.

5.3 **Scheduling of patients**

5.3.1 All patients requiring elective surgery at the hub site must be discussed at the BCVC MDT Meeting before being scheduled.

5.3.2 The MDT minutes will be shared with the medical secretaries for the Vascular Surgeons. Where a patient is to be transferred from Walsall or Wolverhampton, the secretary will be responsible for producing and sending an inter-provider transfer form. [redacted] This information will be required before a patient can be scheduled and added to a waiting list at the Hub.

5.3.3 Following receipt of the inter-provider transfer form the MDT Co-ordinator will register the patient pathway (RTT) details onto [redacted] (Patient Administration System).

5.3.4 Where the vascular anaesthetic assessment is to be undertaken at Russells Hall Hospital, the risk stratification checklist should also be forwarded to [redacted] at the time of scheduling for inclusion in the case-notes.

5.3.5 **Main theatre schedules** for the Hub will be maintained by [redacted], Assistant General Manager. Following the MDT decision and subsequent agreement of the treatment plan with the patient, the operating surgeon, or their secretary, should contact [redacted] on 01384 456111 extension 2587 to schedule the patient.

5.3.6 Patients requiring an EVAR procedure in the **Endovascular Suite** will be scheduled by [redacted], Assistant General Manager in conjunction with [redacted], Senior Radiographer. Following the MDT decision and subsequent agreement of the treatment plan with the patient, the operating surgeon, or their secretary, should contact [redacted]n on 01384 456111 ext 2587 to schedule the patient. The consultant needs to confirm the priority and timescale/waiting period in which the procedure needs to be scheduled. At the time of scheduling, the type of graft is to be confirmed so that this can be ordered. Following completion of the procedure, the specific details of the graft items used, including lot numbers of items, to be confirmed to [redacted] (by graft company representative and DGFT Radiology Department) to enable a DGFT requisition to be raised and authorised.

5.3.7 For standard EVARs, a minimum of two weeks' notice is required. Complex cases such as fenestrated EVARs require a minimum of four weeks' notice is required in order to plan for a double session in the endovascular suite.

5.3.8 The team at DGFT will add the patient to the waiting list and book appointments for a nurse led pre-operative assessment and a vascular anaesthetic assessment where required (see section 5.4 for further details).

5.3.9 A pack of information will be sent to all patients from Dudley, Wolverhampton and Walsall which will include:

- Pre-operative assessment letter (with appointments for standard nursing pre-operative assessment and for vascular anaesthetic assessment if required), including contact details for organising a site visit
- Admission letter
- Site map, parking arrangements and a list of useful contacts
- Information leaflet on booking non-emergency patient transport

5.3.10 All correspondence and patient information will contain the BCVC logo.

5.3.11 It is expected that the Wolverhampton consultants will inform their secretarial teams of patients requiring vascular anaesthetic assessment at the spoke site following the MDT meeting, and this will be arranged as per current practices.

5.3.12 Where Wolverhampton Anaesthetists and Interventional Radiologists are to support the Vascular Surgeons for main theatre or EVAR cases, this will be organised by the consultant and notified to [redacted] at the time of scheduling.

5.3.13 At the time of scheduling the patient, a critical care bed (either ITU or the Vascular Specialist Care Unit) will be booked by the DGFT team as determined by the consultant vascular surgeon and anaesthetist. This will be indicated on the theatre lists for planning purposes.

5.4 **Pre-operative assessment**

5.4.1 A standard pre-operative assessment pathway based on VSGBI best practice will be adopted across the network. This pathway can be found in Appendix 4 .

5.4.2 All patients from Dudley and Walsall will undergo pre-operative assessment at RHH, which will include a vascular anaesthetic assessment in accordance with the pathway described above. This will also include the standard nurse led pre-operative assessment using the Trust approved documentation. The nurse-led pre-operative assessment and vascular anaesthetic assessment will be scheduled on the same day for patients attending from Walsall and Wolverhampton.

5.4.3 All Wolverhampton patients will receive their standard nurse-led pre-operative assessment at RHH. [redacted] and [redacted] will be supported at the Hub by consultant anaesthetists from RWHT. Therefore, **for these consultants only**, the vascular anaesthetic review will be undertaken at RWHT. Vascular anaesthetic assessments for [redacted] and [redacted] patients will be undertaken at RHH.

5.4.4 Where the vascular anaesthetic assessment is undertaken at RWHT, confirmation will be required at the Hub that the assessment is complete and the patient is fit for surgery. The risk stratification checklist, and anaesthetic assessment paperwork should be sent to the MDT Co-ordinator using the following secure email address [[redacted]@nhs.net or [redacted]@nhs.net], along with the results of all investigations undertaken. This will be filed in the DGFT case-notes. [redacted]

ensuring you follow the Safe Haven Best Practice Guidelines as described above. This will be co-ordinated by the surgeons' medical secretary.

5.4.5 Patients from Walsall and Wolverhampton who have their pre-operative assessment at RHH will be given the opportunity of a familiarisation visit to the vascular ward. This will be explained in the admission letters.

5.5 **Admission processes**

5.5.1 The elective admission lists detail the outline of the planned lists, and are circulated one to two weeks ahead of the theatre session to Health Records, Wards, Theatres, Radiology, Critical Care and the Vascular Nurse Specialist. This supports internal planning processes such as theatre equipment planning and critical care capacity planning.

5.5.2 The theatre list is circulated the day before the scheduled list and the distribution list includes the operating surgeon.

5.5.3 Patients will be advised of the details of their admission by letter. This will include the date and time of the admission, where they should report to on arrival and the relevant starving instructions.

5.5.4 In accordance with the policies of DGFT, all patients will be admitted on the day of surgery unless there are clear clinical indications to admit earlier. These indications need to be made clear at the time of scheduling for audit purposes.

5.5.5 On arrival, all patients will be admitted to the Admissions Lounge on Ward B4 in accordance with the policies and procedures of DGFT. Following surgery patients will be cared for on the Vascular Ward (B3) which includes a vascular specialist care unit located on station 4 immediately adjacent to the Surgical High Dependency Unit. Ward B3 is located on the 1st floor adjacent to ITU.

Ward B3	External calls: 01384 456111 extension 2723 Internal calls: 2723
Admissions Lounge (Ward B4)	External calls: 01384 456111 extension 3020 or 2126 Internal calls: 3020 or 2126

5.5.6 In the event that the patient has their operation cancelled, either at pre-operative assessment, or on the day of surgery, the relevant consultant and medical secretary will be notified by email. [redacted], Assistant General Manager will then liaise with the consultant to re-arrange the date for surgery.

5.6 **Post-operative care**

5.6.1 Clear post-operative instructions will be documented in the patients' case-notes by the operating surgeon and anaesthetist, and will include any complications arising from the surgery or anaesthetic which may have a bearing on the patients' immediate post-operative

care. An operation note will be dictated for the patients' case-notes, and the post-operative plan needs to be clearly written in the case-notes by the Operating Surgeon.

5.6.2 The decision to step patients down from ITU or HDU care will be made jointly by the on-call Consultant for ITU and the vascular surgeon responsible for the patients' care or on-call vascular surgeon.

5.6.3 Provision has been made within contracts for all elective patients to be reviewed by their surgeon on the day after their surgery. After this point, ongoing care should be agreed between the operating surgeon and the on-call vascular surgeon for the hub site. If care is to be transferred to the on-call surgeon agreement to this should be clearly documented in the patient's medical records. A treatment plan should also be recorded, which will include details of follow-up required. However, the on-call consultant will review all patients on their daily ward round, and update the responsible surgeon on any change in condition.

5.6.4 The on-call consultant vascular surgeon will be responsible for ensuring that the operating consultant is notified of any patient experiencing complications after surgery. A management plan will be jointly agreed. Any complications arising out of hours should be handed over to the day-time on-call surgeon for discussion with the operating surgeon the following day.

5.7 **Discharge processes**

5.7.1 The process of discharge planning will commence at pre-operative assessment. On admission, the ward staff, including the discharge facilitator, will meet daily to pro-actively progress the white board discharge planning process through regular liaison with the relevant therapy services, social services and community services to ensure a safe discharge or transfer to the appropriate destination.

5.7.2 After discharge, follow up arrangements will be confirmed by the ward to the relevant Medical Secretary by email copying the MDT Co-ordinators into the email.

5.7.3 On discharge, the Consultant responsible for the care of the patient at the time of discharge is also responsible for ensuring that the electronic discharge summary is completed (although the task may be delegated to a junior doctor). This will be sent to the patients' GP within 2 working days of discharge. The consultant will inform the ward if copies of the discharge summaries are to be sent to other departments or services. Where patients are discharged to a nursing home, the ward will always send a copy of the discharge summary with the patient for their information.

5.7.4 Where the patient has been referred from a spoke site, the ward will photocopy all admission paperwork, and send this to the relevant medical secretary for inclusion in the spoke site case-notes prior to any follow-up appointments.

5.8 **Repatriation**

5.8.1 Once the patient is medically fit for discharge, this should be recorded in the patients' medical records.

5.8.2 In a majority of cases, it is expected that elective patients will be discharged back to their usual place of residence. Where a patient is usually resident in a residential or nursing home, the ward will maintain contact with the facility regarding the discharge planning process and facilitate a smooth transfer back where possible.

5.8.3 When a patient is deemed to be medically fit for discharge and cannot, for any reason, be discharged back to their usual residence, it is the expectation of the commissioners that these patients will be repatriated back to the spoke site or a suitable rehabilitation facility. This will ensure that ongoing care is provided closer to home, reducing the need for carers to travel, and ensuring that beds are available on the hub site for acute elective and emergency admissions.

5.8.4 The criteria for repatriation have been developed by NHS Walsall, and are set out in their Policy on Patient Repatriation Transfer. These have been adopted by the Vascular Centre. These state that:

"Patients who are admitted to a hospital outside of their local authority catchment area, should be repatriated to their local hospital or service of choice when all the following applies:

- The local hospital can provide the level of clinical care which they require
- The condition is stable in respect of the specialism which required their admission to the receiving hospital and there is a clear ongoing management plan
- The acute episode of care has been managed and the patient requires access to rehabilitation or re-ablement services in order to maximise their independence and enable when possible, their repatriation home
- They are clinically fit to travel"

5.8.5 <u>Repatriation process for Wolverhampton</u>

When a patient is deemed clinically fit and ready for repatriation, the ward will contact the Surgical Discharge Manager [redacted]) at Wolverhampton on 01902 307999 extension 6119, who will advise on the current bed state and make arrangements for the transfer. The Surgical Flow Co-ordinator will provide regular progress updates to Ward B3.

5.8.6 <u>Repatriation process for Walsall</u>

Repatriation at Walsall will be managed through the site bed manager, who can be contacted via the switchboard at Walsall on 01922 721172.

5.9 **Follow up arrangements**

5.9.1 Follow up appointments for these patients should be undertaken locally to the patient. On discharge or repatriation, the ward will send an email to the operating surgeons' medical secretary requesting an appointment be arranged within the specified timescales.

5.9.2 All patients will be discharged with comprehensive discharge advice, and will be given the details for a helpline should they have any concerns prior to their follow-up outpatient appointment. This helpline will be managed by the Vascular Clinical Nurse Specialist at RHH. Any relevant information obtained through the helpline will be made available for the follow-up appointment.

5.10 **National Vascular Database (NVD) data entry**

All BCVC vascular surgeons are responsible for entering data onto the NVD for all patients who they operate on. As mandated by the VSGBI, 100% contribution is expected with this standard. The entry of follow up data into the database will be facilitated by the MDT Co-ordinators with support from the surgical data analysts who will ensure that data entry is maintained at an acceptable level as dictated by the Vascular Society.

PART B: EMERGENCY PATHWAYS AT THE HUB

6. Planned transfer of emergency workload

6.1 All emergency vascular surgery will be transferred to the Hub in phase 1:

Phase 1: From July 16 2012
• All emergency vascular surgery

7. Definition of a vascular emergency

7.1 The national data definition of an emergency is:
"When an admission is unpredictable and at short notice because of clinical need".

7.2 This definition is applicable to emergency vascular cases managed within the network. It is accepted that there are three main vascular emergencies. These are:

(a) Ruptured AAA
(b) Acute bloodless limbs
(c) Vascular trauma e.g. stab injuries or gunshot wounds

8. Provision of emergency vascular cover at the hub

8.1 **Day time vascular surgical cover**

8.1.1 A rota for the provision of a daytime on-call Vascular Consultant Surgeon at the Hub has been produced, which includes all participating surgeons from across the network. This cover is provided from 08:00 to 18:00, Monday to Friday. To ensure continuity of care, each network surgeon will participate in the daytime on-call rota in blocks of one week.

8.1.2 During this time the vascular day-time on-call surgeon will be available on site at the Hub, and released from all elective duties. The day-time on-call consultant will be responsible for overseeing the management of all emergency vascular patients admitted to the site, and also undertaking a daily ward round to ensure regular review of all elective and emergency vascular patients at the Hub. However, it is important to note that operating surgeons will retain responsibility for their elective patients, and will continue to undertake ward rounds. The on-call consultant ward round is supplementary to this.

8.1.3 The on-call surgeon will be responsible for notifying the operating surgeon of any patient experiencing complications after surgery. A management plan will be jointly agreed. Any complications arising out of hours should be handed over to the day-time on-call surgeon for discussion with the operating surgeon the following day.

8.1.4 The daytime on-call consultant should be contacted on the on-call consultant vascular surgeon bleep through the hospital switchboards.

8.1.5 The rota will be maintained by the BCVC Medical Service Head. The rota will be circulated to all network vascular surgeons at the switchboards at all three sites by [redacted], Assistant General Manager. Changes to the rota after circulation should be notified to [redacted], who will update the three switchboards of any changes.

8.1.6 Each BCVC surgeon is responsible for ensuring that each switchboard has their correct telephone numbers. Any changes should initially be notified to [redacted] Assistant General Manager (01384 456111 extension 2587), who will update the switchboards on the consultants behalf.

8.1.7 The day-time on-call consultant for vascular surgery will be supported by the surgical on-call team. However, one of the junior vascular doctors will be allocated to support the daily ward round.

8.1.8 The on-call consultants will have an office base within the surgical offices on the 1st floor. This is centrally located for access to theatres, Ward B3 (Vascular Ward), SAU and ITU. Secretarial support will be provided for spoke site surgeons providing on-call cover at the Hub.

8.1.9 At the end of the on-call week, all emergency patients will be handed over to the weekend on-call surgeon, who will ensure that the patients are reviewed and that the treatment plans are progressed. As the weekend on-call starts at 13:00 on Friday, there is half a day overlap for the handover process. The weekday on-call consultant vascular surgeon should produce a written handover for the weekend on-call consultant vascular surgeon. The MDT Co-ordinator will provide support for this. The weekday on-call consultant vascular surgeon will retain responsibility for vascular emergencies until 18:00 on Friday.

8.1.10 There is no overlap period built into contracts for weekend to weekday handover. The weekend consultant on-call will provide a comprehensive telephone handover at 08:00 on Monday.

8.2 **Out of hours vascular surgical cover**

8.2.1 Out of hours vascular surgical cover at the consultant level has been provided on a network basis for a number of years. However, historically this has meant that the patient has been transferred to the hospital site of the surgeon where clinically appropriate. Under the new arrangements, all emergency patients will be brought to the hub and the on-call consultant for vascular surgery will travel to the patient at the Hub.

8.2.2 An out of hours on-call rota has been published and will be updated and maintained by the BCVC Medical Service Head. The arrangements for communicating changes to the rota and changes to contact telephone numbers are as detailed above in section 8.1.5 and 8.1.6

8.2.3 Between 18:00 and 08:00, all vascular emergencies will be notified to the on-call surgical registrar at the Hub, who will communicate directly with the on-call consultant. The detailed processes for this are set out below in sections 12 and 13. Responsibility for any patient

who requires surgery overnight will remain under the operating consultant. Where the on-call consultant simply offers advice to the junior staff on the management of a patient, this patient will be handed over the daytime consultant on-call the following day.

8.2.4 It is expected that the on-call consultant will attend the Hub for a daily ward round during the weekend. However, other than to fulfil this commitment, it is not expected that the on-call vascular surgeon will be available on site at the hub during the weekend, but will travel to the hub as necessary in the event of an emergency requiring consultant level support.

8.2.5 The vascular surgery weekend ward rounds will be supported by the SHO for general surgery. The registrar and FY1 doctor will continue to support the general surgery ward round.

8.2.6 From 18:00 on Friday evening to 08:00 on Monday morning the rota includes a second on-call vascular surgeon. In the situation that two emergencies occur simultaneously, the first on-call surgeon would call in the second on-call surgeon for support. This process is recorded in section 8.2.7.

8.2.7 In the event of an emergency requiring a second on-call consultant vascular surgeon, the on-call surgical registrar at RHH will be instructed by the first on-call consultant vascular surgeon to contact his consultant colleagues by telephone. Friday to Sunday, they will contact the designated second on-call surgeon via switchboard in accordance with the rota. From Monday to Thursday the Registrar will first contact the 'partner' according to the schedule below, and work down the list from this point until cover is identified. This will minimise the impact of the informal arrangements on any specific surgeon:

On-call consultant vascular surgeon	**Partner for 2nd on-call out of hours (Monday to Thursday)**
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

The contact list will be held centrally by switchboard and on the Surgical Assessment Unit.

9. Referral pathways

9.1 **GP Referrals**

Some emergency patients will be referred directly by their GP, either directly to ED or the Surgical Assessment Unit (SAU), following discussion with the on-call surgical team or via ambulance. All GPs serving the catchment population have been informed of the service reconfiguration and the need to refer all suspected vascular emergencies to RHH. Patient

information leaflets have been provided to all practices, and it has been requested that these are given to patients who are referred into the network services as either an elective or emergency patient.

9.2 **Emergency ambulance**

A large proportion of patients will be brought into ED by ambulance. West Midlands Ambulance Service (WMAS) have developed and communicated clear protocols to ensure any suspected vascular emergencies are conveyed directly to the Hub from the 'go-live' date. Further detail regarding these protocols can be found in section 11.

9.3 **Self-referral to ED at Hub**

A number of patients will present directly to the ED at the Hub site. These patients may present with a wide range of symptoms, which will initially be investigated by the ED team. Upon suspicion of an emergency vascular condition a specialist review will be requested as per the protocols set out below.

9.4 **Transfer from spoke ED**

Patients may self-refer to either of the spoke site ED's, or be inadvertently conveyed there by ambulance. Upon suspicion or confirmation of diagnosis of an emergency vascular condition transfer will be arranged immediately to the Hub via WMAS.

9.5 **Transfer from spoke wards**

Patients may be admitted to wards on spoke sites, who are later diagnosed with an emergency vascular condition. Patients admitted for other conditions, such as renal problems, diabetes, stroke or cardio-thoracic conditions may require the input of a vascular surgeon as part of their care. Wherever possible, any patient requiring emergency vascular surgery should be transferred to the Hub for this element of their care. Transfer will be arranged through WMAS.

10. Clinical Pathways

10.1 A number of clinical pathways describing the process for managing a range of emergency vascular conditions can be found in Appendix 1. These include:

- Leaking AAA – Spoke site ED
- Acutely ischaemic leg – spoke site ED
- Acutely ischaemic arm – spoke site
- Diabetic ischaemic leg – spoke site ED
- Polytrauma/ Vascular Injury – Spoke site ED
- Ilio-femoral DVT – Spoke site ED or ward
- Swollen upper limb - ?DVT – Spoke site ED
- Diabetic foot – spoke site
- Critically ischaemic foot/black toe – spoke site
- Emergency amputations
- Carotid disease requiring emergency intervention

10.1.1 These pathways describe the group of patients which should be transferred to the Hub for surgery. These pathways are for guidance only, and are not intended to replace clinical judgement.

10.1.2 The pathways set out the basic communication and transfer processes, which are discussed in more detail within this document.

10.1.3 All emergency cases will be discussed at the MDT meeting. This will be co-ordinated by the MDT Co-ordinator. Emergency surgery should not be delayed awaiting an MDT decision, but these cases should be discussed as soon as possible after the surgery.

11.0 Ambulance transfer protocols

11.1 Detailed ambulance transfer and referral protocols to support the implementation of the hub and spoke reconfiguration have been developed by WMAS, and communicated to all WMAS staff. The protocols can be found in Appendix 6.

11.2 All 999 emergency vascular patients (including suspected ruptured AAA or vascular compromise to a limb) from the Walsall, Wolverhampton and Dudley areas will be conveyed directly to ED at RHH. On arrival the patient will be registered and have an identification wrist band applied. The nurse in charge of ED will be informed of the destination of the patient by the on-call surgical registrar e.g. the patient may be transferred straight to theatre or to the Surgical Assessment Unit as directed by the on-call surgical registrar following discussion with the on-call consultant vascular surgeon.

11.3 The appropriate transfer arrangements for emergency vascular trauma cases through the 999 route will be directed by the Trauma Desk at WMAS.

11.4 If a patient with an acute vascular condition self refers to ED on a spoke site, or is inadvertently conveyed there by ambulance, transfer will be arranged to the hub site at RHH. In these circumstances, the patient must have been accepted by a consultant vascular surgeon at the Hub. Both in hours and out of hours the on-call surgical registrar will receive these calls and discuss with the on-call consultant as appropriate. The on-call surgical registrar and on-call consultant for vascular surgery will be contacted via RHH switchboard.

RHH Main Switchboard	01384 456111

11.5 Where the patient is diagnosed with an acute vascular problem, but their condition is stable, patients may be transferred by ambulance directly to the Surgical Assessment Unit at RHH. This should be in accordance with the agreed clinical pathways. The appropriateness of such a transfer should be agreed with the on-call surgical registrar at the Hub. The registrar will liaise with SAU to ensure that they are prepared to receive the patient and that a trolley is available.

RHH Surgical Assessment Unit	01384 244124

11.6 WMAS have provided assurance that the whole process from the initial request for transfer to the patient arriving at the Hub will take no longer than 1 hour. This standard will be monitored. All patients will be conveyed with the appropriate level of alert.

11.7 WMAS do not expect that there will be any need for a medical escort for any of the patients to be transferred.

12.0 Protocol for direct admissions to the Hub

12.1 Patients without a clear diagnosis may present at ED as self-referrals or via an emergency ambulance. In these circumstances they will be initially assessed and investigations commenced by the ED staff. Upon suspicion or confirmation of diagnosis of a vascular emergency a specialist vascular opinion will be sought.

12.2 In hours and out of hours, the ED team should initially discuss the patient with the on-call surgical registrar, who will assess the patient and ensure that any relevant investigations are requested. The registrar will then inform the on-call consultant vascular surgeon. In the event that the registrar is not available, the on-call consultant for vascular surgery should be notified directly.

12.3 If the patient is stable, and in accordance with the agreed clinical pathways, the patient may be transferred to SAU or Ward B3 for further assessment and treatment planning.

12.4 Where the GP or WMAS contact the on-call consultant vascular surgeon or surgical on-call registrar in advance of the patient arriving, they may be admitted directly to SAU. In this case the patient will be registered by SAU.

12.5 On confirmation of a diagnosis, if emergency surgery is required the on-call surgical registrar should notify the following departments:

In hours:

Anaesthetic Trainee for Theatres	Bleep [redacted]
On-call Consultant Anaesthetist	Via switchboard (01384 456111)
Theatres	[redacted]
Blood Bank	[redacted]
ITU	[redacted]

Out of hours:

On-call Vascular Surgeon	Via switchboard (01384 456111)
Anaesthetic Trainee for Theatres (to be advised to request presence of Consultant Anaesthetist as directed by on-call surgeon)	[redacted]
Theatres	[redacted]
Blood Bank	After 20:00 bleep on-call haematology technician
ITU	[redacted]

12.6 In hours, it may also be necessary to discuss the case with an Interventional Radiologist:

[redacted]	Extension 2333
[redacted]	Extension 3019

12.7 The process in theatres for managing vascular emergencies is detailed below in section 14.

12.8 It is the responsibility of each on-call consultant surgeon to ensure that any complications arising from surgery are notified to the operating surgeon, as this will be required for completion of the NVD.

12.9 The ongoing discharge planning and discharge processes will follow the same pathway as for elective patients as described in Part A. Again, follow-up will be provided locally to the patient unless the patient requests otherwise. Emergency patients will receive their follow up at their local hospital. Where the operating surgeon does not provide outpatient clinics at the patients local hospital, patients will be followed up in accordance with the following schedule:

	Consultant responsible for local follow-up		
Operating Surgeon	**Dudley patients**	**Walsall Patients**	**Wolverhampton patients**
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

13. Emergency transfer protocols

13.1. As described above in section 9, there will be occasions where patients in ED or the wards on a spoke site require transfer to the Hub for vascular surgery. In hours and out of hours, the consultant or registrar responsible for the patient should contact the on-call registrar for surgery at RHH, who will obtain all of the relevant information and discuss this with the on-call consultant vascular surgeon for the Hub. The Registrar will then confirm with the referring doctor that the transfer has been approved and discuss any further actions requested by the consultant.

13.2. A BCVC patient transfer document has been developed, which should be completed by the referring doctor and transferred with every patient. This provides a mechanism for formal

handover of a patient and acts an aide memoir for the referring doctor to ensure that all necessary actions have been completed. This document can be found in Appendix 7.

13.3. A second checklist has been developed for the receiving doctor to ensure that all necessary information has been received for discussion with the on-call consultant, and all appropriate actions have been undertaken in preparation for receiving the patient. This document can be found in Appendix 8.

13.4. Although calls requesting transfer will initially be received by the on-call surgical registrar, no patient should be transferred to the Hub without the knowledge and consent of the on-call vascular surgeon.

13.5. When a transfer is accepted, it is the responsibility of the referring team to liaise with WMAS to book the ambulance transfer. The Booking Officer will require confirmation that the transfer has been agreed with the on-call vascular surgeon for the Hub, and the name of the accepting consultant.

13.6. The telephone number for requesting an emergency transfer is provided below. The operator should be informed:

"I require a Paramedic crew to undertake an emergency transfer from (state the unit/ward you require the ambulance to come to) to Russells Hall Hospital due to a vascular emergency."

The operator will then take the caller through a list of questions. These questions will not delay the response of a vehicle.

Ambulance Emergency Operations Centre - Healthcare Professional Transfer Line	[redacted]

13.7. **Pre-transfer requirements**

13.7.1. Investigations to be undertaken

The surgical on-call registrar will request details of the investigations already undertaken at the spoke site. Any additional investigations required prior to transfer will be agreed and documented at this point. If the diagnosis is clear, no imaging of these patients needs to be undertaken at the spoke site. If the diagnosis is not clear, then further imaging would be undertaken at the spoke site e.g. CT scan. These are defined in the clinical pathways in Appendix 1.

13.7.2. Documentation

When transferring a patient, the referring doctor should complete the BCVC Patient Transfer Document. A copy of the Transfer Document can be found in Appendix 7. This must be accompanied by all documentation relating to the patient's episode of care. This should include copies of all investigation reports, and details of images taken.

13.7.3. Image transfer

All images which are relevant to the patients' condition should be transferred via the Image Exchange Portal. This will include all images taken during the recent episode of care, as well as any older images, which will be useful in assessing the progression of the patients' condition, for example, in the management of an ischaemic leg. Out of hours, there is always a Radiographer or Radiographic Assistant available to upload the images onto PACS. In the event of difficulties the on-site radiographer can be contacted on extension [redacted] They also carry a bleep, which can be accessed via the switchboard.

Out of hours on-call Radiographer	01384 456111 extension [redacted]
[redacted]	01384 456111

13.7.4 Preparation of patient

The necessary preparation of the patient will be discussed and agreed between the on-call surgical registrars on the referring and receiving sites. The guiding principles are included in the clinical pathways, which can be found in Appendix 1. This will include consideration of:

- Venflon insertion
- Catheter insertion
- The need for antibiotic administration prior to transfer
- The need for IV heparin

13.7.5 Transfer of blood products

Standard operating procedures are already well established within the network for the transfer and receipt of blood components with a patient. In the event, this procedure would be led by the blood bank staff on each site, who are trained in these procedures and would generate the relevant documentation to transfer with the blood products.

The contact details for the blood banks at each hospital site are:

Blood Bank (RHH)	[redacted]
Blood Bank (RWHT)	[redacted]
Blood Bank (WMH)	[redacted]

As a general principle, it is agreed that the transfer should not be delayed while awaiting blood products. The priority is to transfer the patient to the Hub.

13.8 Communication of transfer

Where there is a clear diagnosis and the patient requires emergency surgery, the on-call consultant vascular surgeon or on-call surgical registrar should notify the following departments:

In hours:

Trainee Anaesthetist for Theatres (to inform On-call consultant anaesthetist)	Bleep [redacted]

Theatres	[redacted]
Blood Bank	Ext [redacted]
ITU	Ext [redacted]
Nurse in charge of ED	Bleep [redacted]

Out of hours:

On-call Vascular Surgeon	Mobile via switchboard (01384 456111)
Anaesthetic Trainee for Theatres (to be advised to request presence of Consultant Anaesthetist as directed by on-call surgeon)	Bleep [redacted]
Theatres	Bleep [redacted]
Blood Bank	After 20:00 bleep on-call Haematology Technician via switchboard
ITU	Ext [redacted]
Nurse in charge of ED	Bleep [redacted]

13.9 Formal nursing handover should take place between the transferring team and the receiving team. This may be between ED, SAU or Ward staff depending on the agreement made with the on-call surgeon for the hub. **This must include details of any infections that the patient has, which may require isolation or other infection control mechanisms.** Contact details for all relevant departments at RHH can be found in the directory in Appendix 9.

13.10 It is the responsibility of the referring department to ensure that the patients' next of kin are notified of the transfer and the reasons for this.

13.11 It is the responsibility of the receiving team to notify the relevant receiving department of the transfer and keep them informed of the estimated time of arrival, any changes to the patient condition and the onward plan. For example, patients with a confirmed AAA rupture would be transferred straight to theatre. However, ED staff would need to be kept informed of the availability of the theatre and the plan for immediate transfer. Guidance on communication of transfers has been included in the Receiving Doctors Checklist (see Appendix 8).

13.12 Patients arriving in ED will be registered in the department and be given an identification wrist band prior to transfer out to the relevant department. If initial assessment is required in ED prior to transfer, this will be agreed between the registrar and on-call consultant and wherever possible the surgeon will be available in ED when the patient arrives. Patients received in SAU will be registered and admitted here.

13.13 Transfer will occur regardless of the bed state.

13.14 Where suspected vascular emergencies are transferred, and subsequently found not to have a vascular condition, these patients will receive their ongoing management at RHH. It would not be in the patients' best interest to be transferred back to the referring hospital. However, such cases will be monitored and feedback will be given to the referring team where appropriate.

14.0 Vascular Emergency Cases – Theatres Process

14.1 Introduction

Emergency vascular cases may come through a number of routes: spoke sites; direct from the community via WMAS; the Hub's Emergency Department, outpatient clinics, surgical assessment unit or inpatients. It is therefore important that everyone knows and understands the processes to ensure that the time to treatment for patients is minimised.

Emergency EVAR procedures will become standard practice but will not commence until appropriately sanctioned by the Trust's New Interventions Group to ensure the best outcome for all patients.

Emergency vascular procedures can be carried out in the following theatre environments

- Main NCEPOD Theatre
- Main Vascular Theatre (Theatre 3)
- Endovascular Suite

14.2 In Hours (08:00 – 18:00 Monday to Friday)

In the event of an emergency, the on call vascular surgeon will inform the emergency theatre team by either bleeping the nurse-in-charge of the emergency theatre on [redacted] or phoning extension [redacted]. Whoever takes the call will then inform the Theatre's Duty Manager of the current situation in the emergency theatre.

In the event that all these theatres are engaged, an elective procedure in an alternative theatre will be postponed to accommodate the vascular emergency. The Theatre's Duty Manager will be responsible for making the decision about which elective list to postpone, and on redeployment of the correct staff with the appropriate skills to the vascular emergency case.

The Theatre's Duty Manager will also inform the Theatre List Co-ordinator on which list has been postponed and will evaluate and plan for the potential for the list to overrun.

Should the patient require an emergency EVAR and once the emergency EVAR intervention protocols have been approved, the on call vascular surgeon will contact the Theatre's Duty Manager on bleep [redacted] who will assemble a vascular theatre team to attend the Angio suite in Radiology. The on-call vascular surgeon will be responsible for liaising with and arranging support from a vascular anaesthetist and Interventional Radiologist.

14.3 Out of Hours (18:00 – 08:00 Monday to Friday, Weekends and Bank Holidays)

In the event of an emergency, the on call surgeon will inform the emergency theatre team by bleeping [redacted].

All emergency vascular cases will be considered for operation in the main NCEPOD theatre in the first instance.

If the vascular emergency is being transferred from the spoke sites, Wolverhampton or Walsall, and there is a procedure being undertaken in the NCEPOD theatre at the Hub, which will be completed within 30 minutes, the emergency will be treated in the NCEPOD theatre on arrival at the Hub.

However, if the NCEPOD theatre is not available to receive a vascular emergency then the vascular theatre (Theatre 3) will be opened. In this event, the nurse-in-charge will inform switchboard to call in the on call vascular theatre team.

15.0 Major Incident

15.1 In the event that a Major Incident is called that involves the Hub, the Trust's Major Incident Policy will be invoked. This policy is available on the Trust's intranet and theatres have a local policy, action cards and processes that compliment the whole hospital policy. The staff are trained to respond to a major incident call.

PART C: MANAGEMENT OF VASCULAR EMERGENCIES AT A SPOKE SITE

16.0 Examples of where emergency surgery at a spoke site may be necessary

16.1 The aim of the service reconfiguration is to ensure that all complex vascular surgery is centralised at one hospital site with the dedicated specialist facilities and support to ensure the best outcome for the patient. The primary objective should always be to stabilise the patient for transfer to the Hub.

16.2 However, it is acknowledged that in certain circumstances this is not possible, and out of hours the Hub surgeon may need to travel to the patient at the spoke site. For example:

- On-table emergencies – vascular disasters in anaesthetised patients in the operating theatre, e.g. an uncontrolled haemorrhage from a major blood vessel
- In life threatening emergencies where the patient's condition cannot be stabilised sufficiently to permit a safe transfer.

17.0 Provision of a vascular surgeon for a patient requiring emergency surgery at a spoke site

17.1 In hours (08:00 – 18:00)

17.1.1 In hours, leave will be co-ordinated to ensure that, wherever possible, a local surgeon is available at the spoke sites. For RWHT, it has been agreed that the Vascular Centre will provide cover to fill any notified gaps in the rota. These sessions will be funded by RWHT through the BCVC service level agreement. WMH may commission this service from the BCVC, again, subject to separate funding through the service level agreement.

17.1.2 The spoke site daytime on-call rota will be produced and circulated by the Clinical Lead for each site, i.e.

Walsall – [redacted]

Wolverhampton – [redacted]

17.1.3 The daytime spoke site rota's will be circulated to:

- Switchboards at DGFT, RWHT and WMH
- All surgical specialties on site (this may be through intranet links)

17.1.4 The responsibilities of the day-time spoke site surgeon are defined in the relevant clinical pathway, which can be found in Appendix 1:

- Co-dependency – Daytime (8am to 6pm) Vascular Cover

17.1.5 This pathway describes three areas of responsibility for the spoke site daytime vascular surgeon:

(a) Wards – Routine ward referrals and vascular opinions, and diabetic foot issues

(b) Theatres – Unexpected vascular injury causing haemorrhage in any theatre (on-table emergencies)

(c) Haemorrhage outside of theatres – on wards, stab injuries, gunshot wounds

17.1.6 The daytime vascular surgeon for the spoke site should be contacted via the relevant switchboard.

17.1.7 Where an inpatient requires an urgent vascular opinion, they will be referred to either the spoke site vascular surgeon or the on-call surgical registrar. If the patient is deemed to need surgery, discussions will be held with the Hub vascular surgeon or on-call surgical registrar. Where the patient is safe for transfer, and this is agreed with the Hub vascular surgeon, the patient will be transferred by emergency ambulance. It has been agreed with WMAS that transfers will not be supported by a medical escort.

17.1.8 Where an inpatient requires emergency surgery at a spoke site, this will be arranged by the On-call surgical registrar at the spoke site – please refer to theatre processes below in section 18.

17.1.9 In the event that the daytime spoke site vascular surgeon is unable to attend an emergency, e.g. if they are already involved in an emergency in theatre, the Hub Consultant Vascular Surgeon should be contacted directly for cases of intra-operative haemorrhage. In other cases, the on-call registrar for surgery should be involved if available. WMAS have agreed that, where necessary, the Hub surgeon will be conveyed to the spoke site by blue light to ensure a prompt response.

17.1.10 In the event of the Hub surgeon being required to travel to a spoke site in hours, the Medical Service Head (or nominated deputy in his absence), will be responsible for identifying an alternative surgeon within the network to provide cover at the Hub. In the first instance the MSH should be contacted on his mobile via switchboard. If the MSH is unavailable, please contact [redacted], BCVC Operational Manager, on her mobile via switchboard or on the following number:

[redacted] BCVC Operational Manager	01384 456111 extension 4662

17.1.11 The daytime spoke site vascular surgeon will continue with their elective duties whilst undertaking this role.

17.1.12 All surgical specialties at RWHT have been advised of the changes to vascular surgery provision on site and requested to give advance notification of any procedures that they anticipate may need vascular surgery input. Notification will be sent to [redacted] (Secretary to [redacted]) by email at [redacted] or by telephoning [redacted]

17.1.13 Where the clinical pathways specify that ED should arrange an urgent outpatient appointment with a Vascular Surgeon (e.g. critically ischaemic foot – black toe) ED will complete a referral form, [redacted]. This referral will be reviewed by the Vascular Surgeon rostered to provide cover for the site that day. If accepted, the medical secretary team will book the relevant appointment. If it is rejected, a plan will be made to manage the patient appropriately.

17.2 Out of hours

17.2.1 Out of hours, any inpatient requiring an urgent vascular opinion urgent vascular opinion should be referred to the spoke site on-call surgical registrar. If the patient is deemed to need surgery, discussions will be held with the Hub on-call surgical registrar who will inform the on-call consultant vascular surgeon. Where the patient is safe for transfer, and this is agreed with the on-call consultant vascular surgeon, the patient will be transferred by emergency ambulance. It has been agreed with WMAS that transfers will not be supported by a medical escort.

17.2.2 Where a patient is not fit for transfer, and urgent surgery is required and agreed with the consultant vascular surgeon, the vascular surgeon will travel to the spoke site

17.2.3 Monday to Thursday nights, in the event of a second emergency occurring at the Hub, where the on-call surgeon is at a spoke site emergency, it has been agreed by the surgeons that informal arrangements will be made between surgeons to provide second on-call consultant cover (see section 8.2.6).

17.2.4 Friday to Sunday nights, a second on-call rota has been published. The first on-call consultant vascular surgeon will arrange for the second on-call consultant to be contacted as required.

18 Spoke site theatre processes

18.1 RWHT – emergency theatre

18.1.1 Where it is agreed by the consultant vascular surgeon for the Hub that emergency surgery must be undertaken at New Cross Hospital, the on-call surgical registrar will discuss this with the theatre team responsible for Nucleus Theatre 4 (emergency theatre) and the on-call general anaesthetist. If the emergency theatre is not free, then the next theatre to come available will be used.

18.1.2 The Theatres Co-ordinator will discuss the urgency of the surgery with the registrar, and make arrangements for a theatre and a theatre team to be made available within the agreed timescales. The registrar will confirm the arrangements with the spoke site daytime vascular surgeon.

18.1.3 Out of hours, the surgical registrar on-call at RWHT will make the arrangements to transfer a patient to theatre. Out of hours, the contact for main theatres is [redacted]

Main theatres (out of hours contact)	01902 307999 Extension [redacted]

18.2 WMH – emergency theatre

18.2.1 In accordance with the clinical pathways all AAA patients will be transferred to the hub. In hours, in the event that elective surgery requires vascular assistance the nurse in charge of the theatre will contact the spoke site daytime Vascular Surgeon via switchboard.

18.2.2 Patients who require transfer to the hub will be discussed with the on-call Vascular Consultant to determine the urgency of the surgery with the registrar.

18.2.3 Out of hours, the surgical registrar on-call at the spoke sites will make the arrangements to transfer a patient to theatre.

19.0 Major Incident at spoke site

In the event of a major incident where a spoke site is designated as a receiving centre, the Hub will arrange for Vascular Surgeon presence at the spoke site. This should be arranged through either the day-time vascular surgeon on-call or the out-of-hours on-call vascular surgeon. The on-call surgeons can be contacted via RHH switchboard on 01384 456111.

PART D: PATHWAYS FOR SUPPORTING CO-DEPENDENT SPECIALTIES

20.0 Cardio-thoracic patients in the Heart and Lung Centre at RWHT

20.1 In hours (08:00 – 18:00), the spoke site daytime vascular surgeon will be available to provide a vascular opinion on patients referred by the cardio-thoracic team. Where ongoing monitoring by the vascular team is agreed, the day-time spoke site surgeon will provide a telephone handover to the night-time on-call consultant for the Hub. Where the night-time on-call consultant vascular surgeon is involved in the care of these patients, they will provide a handover for the spoke site vascular surgeon the following day.

20.2 In hours, any patient requiring immediate vascular surgery, who cannot be safely transferred to the Hub will be treated by the spoke site daytime surgeon. Again, a full telephone handover will be given to the on-call vascular surgeon for the night to ensure continuity of care.

20.3 Out of hours, the Hub consultant vascular surgeon on-call will travel to the patient where immediate surgery is required. It has been agreed that these patients will be managed through the nucleus theatres, with the support of the on-call general anaesthetist. However, if a problem arises during a cardiac procedure, the anaesthetist involved in that case will continue.

20.4 In hours, where it is agreed with the spoke site daytime Vascular Surgeon that a patient is not suitable for transfer to the Hub, and immediate surgery is required, the on-call registrar for general surgery at the spoke site will make arrangements for the patient to be transferred to theatre. They will notify the following departments:

Nucleus Theatres Co-ordinator	Main reception: ext 6280 Emergency theatre: ext 5550 *
Anaesthetic Trainee for Nucleus Theatres	Bleep 3995
ITU	**External**: 01902 307999 extension 4260 **Internal**: 4260
Blood bank	**External**: 01902 307999 extension 8242 **Internal:** 8242

* Out of hours there is not always a member of staff available to take an emergency call. It is usual practice for the registrar to attend theatres in person to make the arrangements.

20.5 The Theatres Co-ordinator will discuss the urgency of the surgery with the registrar, and make arrangements for a theatre and a theatre team to be made available within the agreed timescales. The registrar will confirm the arrangements with the spoke site daytime vascular surgeon.

20.6 **TAVI procedures**

The Vascular Centre will ensure that a consultant vascular surgeon will be available to support the TAVI procedures undertaken in the Heart and Lung Centre on Tuesdays (or other days as notified). Hub rotas have been developed to ensure wherever possible that a spoke site surgeon, who is familiar with these procedures is present. The Cardiology Team will develop a familiarisation process for other network surgeons who may be required to provide. support.

20.7 Specific clinical pathways for the following emergencies in the Heart and Lung Centre have been developed with the support of the clinicians in the unit:

- Post-coronary angioplasty
- Complications during of following TAVI procedures
- Other vascular emergencies at the Heart and Lung Centre

These can be found in Appendix 1.

21.0 Renal patients at RWHT

21.1 The Commissioners have been clear that the rationale for the service reconfiguration was to centralise services which would benefit from this in terms of improved outcomes, whilst retaining services in the spoke sites which need to be there for the access and convenience of patients. It is within this context that discussions regarding the management of renal patients in the renal unit at RWHT.

21.2 The two conditions that have been specifically considered in terms of ongoing support from Vascular Surgeons are:

(a) Bleeding Fistula

(b) Thrombosed fistula

21.3 The clinical pathways for the management of these conditions can be found in Appendix 1:

- Thrombosed / Bleeding AV Fistula – Spoke Site

21.4 A **bleeding fistula** is a time-critical emergency, and although uncommon, most of these would occur at home. In this situation, the ambulance crew will apply a tourniquet and bring the patient to DGFT. If the condition occurs on a ward at the spoke site, similarly, a tourniquet would be applied and an emergency transfer would be arranged to the Hub. From the 'go-live' date, there will be an on-call consultant vascular surgeon available at the Hub between 08:00 and 18:00, who will be freed of all elective duties. This will potentially improve the timeliness of the response to such an emergency.

21.5 In the event of a **thrombosed graft**, RWHT already have very clear pathways for the medical management of this condition. This includes radiological support and the use of angiojet. This pathway will not be affected by the changes to the vascular service.

21.6 Where medical and endovascular treatment is not successful, a Vascular Surgeon will be available at RWHT between 08:00 and 18:00, and will be able to provide initial assessment

and advice on the management of the patient. Where surgical intervention is required, this will be discussed with the on-call surgeon at the Hub, who will agree the transfer of the patient. The patient will be transferred in accordance with the ambulance transfer protocols in Appendix 6 (See also section 11.0).

21.7 The patient would be prepared as now by the renal team, transferred to the Hub for surgical intervention, and transferred back as soon as appropriate and as agreed between the Vascular Surgeon and the Renal Physician. Renal replacement therapy will be provided at the Hub as required. The arrangement will also be in place for transfers occurring at the weekend.

21.8 Any other complicated endovascular emergency procedure required for renal access can be discussed with the Hub consultant vascular surgeon and transferred as appropriate for further management.