South East Wales Network Non Arterial Centres (Spoke) Models of Care

CTMUHB Spoke Model of Care

Hospital Configuration

The Emergency Department at the patient's local hospital will assess and manage patients presenting with a vascular emergency, with advice sought from the vascular consultant of the week in respect of transfer to the UHW hub. The Royal Glamorgan and Prince Charles Hospital will be the spoke hospitals which will receive inpatients with ongoing medical needs admitted under Diabetes or COTE.

Where a rehabilitation bed is required, the patient should be stepped down to a rehabilitation bed in a community hospital.

Existing Inpatient Referrals

- A robust MDT ward round with Vascular Surgery Consultant presence will take place twice a week.
- There will also be routine clinics three times a week with hot slots.
- Patients presenting with symptoms that require urgent intervention, contact will be made with on call consultant to determine if transfer to the Hub is required or if could be seen through a hot slot in a clinic.
- Patients presenting with symptoms that require intervention within 48 hours will be seen by the MDT Ward Round and referred to Hub/Hot Slot Clinic as appropriate.
- Patients with low risk presentation of symptoms will be seen by MDT Ward Round and referred to Routine Clinic/Community Podiatry as appropriate.

Emergency Department admissions

- Reviewed by Medicine SpR post to be categorised as high/medium/low risk.
- High risk patients (patients presenting with symptoms that require urgent intervention) contact will be made with on call consultant to determine if transfer to the Hub is required or if could be seen through a hot slot in a clinic.
- For true emergencies i.e. ruptured abdominal aortic aneurysm or acute limb threatening ischaemia, immediate transfer to the MAC by blue light ambulance should be arranged.
- Medium risk patients (Patients presenting with symptoms that require intervention within 48 hours) will be seen by MDT Ward Round and referred to Hub/Hot Slot Clinic as appropriate.
- Low risk patients will be referred to Routine Clinic/Community Podiatry as appropriate.

Primary Care referrals

- Urgent patients – the consultant of the week can be contacted e.g. via direct phone call or Consultant Connect to the Consultant of the Week or on-call SpR / service co-ordinator
- A hot clinic slot can be arranged at the spoke or at the Major Arterial Centre (MAC). Use of technology will be encouraged to facilitate timely assessments where appropriate.

- Non-urgent referrals managed as current. (using the e-referral template to vascular surgery or emailing the vascular co-ordinator directly)

Urgent Elective Referrals

- Referral may be made to the consultant of the week /Vascular SpR/Network Coordinator with transfer coordinated according to theatre capacity. Procedures will be booked/organised by the Vascular Coordinator in liaison with the MAC. Bookings will be managed according to the Network Service Specification for Vascular Surgery and locally agreed outcome measures.

Interventional Radiology Access

- EVAR, TEVAR and COWER and all inpatient vascular IR procedures will be performed at the MAC. Day case angioplasty will also be performed at the MAC due to the lack of Vascular Interventional Radiology Consultant in CTMUHB. If there is future successful recruitment the provision of day case in Royal Glamorgan Hospital will be reviewed.

Repatriation from the MAC / Hub

- Recovery and rehabilitation following major vascular surgery, including lower limb amputation, delivered close to where patients live is key for the success of this network model. Successful recovery and rehabilitation requires the early involvement of local therapists for patients likely to require long-term support (i.e. amputees or patients with pre-existing disabilities). This will be delivered through the network and local MDT.
- Patients remain as inpatients on the vascular unit at the MAC until they no longer require inpatient vascular surgery care.
- Rehabilitation following major lower limb amputation commences in the MAC, rehabilitation then continues closer to the patient's home, under the care of COTE or rehab physicians. Pathways have been agreed to enable effective repatriation of patients closer to home for extended recovery or rehabilitation following surgery. These pathways include transfer from the MAC to networked hospitals and to both primary care and community services.
- To summarise the pathways will ensure that;
- Patients who do not have medical problems requiring ongoing investigation/treatment will be considered for a community hospital placement in the first instance.
- Patients with significant pre-morbid conditions potentially limiting rehabilitation capability and /or complex discharge planning will be repatriated to their local hospital.
- Patients who require specialist rehabilitation; Amputation, Stroke or behavioural challenges will go to Royal Glamorgan Hospital.
- Patients who require highly specialist rehabilitation due to high physical dependency needs (very rare) will go to Royal Glamorgan Hospital.
- Prehabilitation and an enhanced recovery programme minimises the time that patients need stay in the MAC. The therapy and rehabilitation workforce implications of this are currently being reviewed within the programme and a regional repatriation workshop is to be held to finalise the details of this and the other practical pathway issues described above. A pre-operative optimisation pathway exists in CTMUHB for those with diabetes undergoing elective surgery with Hba1c > 69 mmol/mol, and this

should be utilised to reduce the length of stay for patients with diabetes. This may be actioned via referral to the consultant diabetologist.

- Vascular Surgeon activity on spoke sites will be primarily through the following:-
- Regular on site Vascular Surgeon at Royal Glamorgan and Prince Charles Hospital.
- Regular Vascular Surgical outpatient clinics at Royal Glamorgan and Prince Charles Hospital.
- The consultant vascular team will attend any ward referral where this is in the clinical interest of the patient. In addition there will also be two ward rounds will be undertaken a week
- Virtual consultation and clinical photography will be available for remote assessment.
- In addition there will be a vascular specialist nurse presence Monday to Friday.

Interdependent Services

- Vascular support to other specialties will be as follows:-
- Unexpected haemorrhage in theatre (1 or 2 per year) – *"press and call for help".*
- Planned complex surgery near large vessels (1 or 2 per year) – Vascular Surgeon presence can be arranged.
- Others (e.g. cardiology) – rare and not usually urgent. -
- Diabetes – as per diabetic foot pathway
- Stroke Medicine – as per stroke/TIA pathway
- Inpatient assessment – Virtual consultation or specialist Vascular Nurse assessment.
- Wound reviews (frequent) - undertaken by Vascular Nurse Specialists and Podiatry.

ABUHB Spoke Model of Care

Hospital Configuration

The Emergency Department and General Surgery Teams at the Grange University Hospital (GUH) will assess and manage patients presenting with a vascular emergency, with advice sought from the vascular consultant of the week in respect of transfer to the UHW hub. The Royal Gwent Hospital (RGH) and Ysbyty Ystrad Fawr (YYF) will be the spoke hospitals which will receive inpatients with ongoing medical needs admitted under Diabetes or COTE.

Where a rehabilitation bed is required, the patient should be stepped down to a rehabilitation bed in a community hospital.

Medically fit patients should not be transferred to RGH or YYF.

Primary Care referrals:

Urgent patients – the consultant of the week can be contacted e.g. via direct phone call or Consultant Connect to the Consultant of the Week or on-call SpR / service co-ordinator

A hot clinic slot can be arranged at the spoke or at the Major Arterial Centre (MAC). Use of technology will be encouraged to facilitate timely assessments where appropriate
Non-urgent referrals managed as current (using the e-referral template to vascular surgery or emailing the vascular co-ordinator directly)

A&E admissions:

These will be assessed by an Emergency Department doctor. For true emergencies i.e. ruptured abdominal aortic aneurysm or acute limb threatening ischaemia, immediate transfer to the MAC by blue light ambulance should be arranged. Protocols should be established for such cases attended by WAST to by-pass the spoke emergency department and be taken directly to the MAC, following appropriate screening.

All other conditions should be discussed with the consultant of the week / Vascular SpR on call.

Existing Inpatient Referrals

Referral may be made to Vascular Surgery using the e-referral template, for triage by consultant and service co-ordinator. It is envisaged that these referrals will go to the service coordinator in the MAC – details to be confirmed.

Royal Gwent Hospital (RGH) – ward review by Vascular Nurse Specialists or Consultant in Gwent Vascular Institute (GVI)

Nevill Hall Hospital (NHH) – for review in Vascular Surgical Clinic or ward review by Vascular Nurse Specialists.

Ysbyty Ystrad Fawr (YYF) - for review in Vascular Surgical Clinic or ward review by Vascular Nurse Specialists.

Urgent Elective Referrals

Referral may be made to the consultant of the week /Vascular SpR/Network Coordinator with transfer coordinated according to theatre capacity. Procedures will be booked/organised by the ABUHB Vascular Coordinator in liaison with the MAC. Bookings will be managed according to the Network Service Specification for Vascular Surgery and locally agreed outcome measures.

Interventional Radiology Access

EVAR, TEVAR and COWER and all inpatient vascular IR procedures will be performed at the MAC. Day case angioplasty is planned to remain at GUH, subject to governance arrangements agreed between the vascular and interventional radiology teams, including transfer to the MAC in the event of an arterial problem. In the event of a medical problem following day case angioplasty, the medical SpR in GUH should be contacted.

Repatriation from the MAC / Hub

Patients will be repatriated to the closest hospital to home that is able to provide high quality care appropriate to their needs.

For patients with diabetes, ongoing infection requiring medical management or needing stabilisation and monitoring of diabetes, they may be admitted to their local spoke hospital under the care of a Diabetes consultant.

If the patient is not diabetic and requires medical management of infection, blood monitoring; they can be admitted to their local Spoke hospital (YYF/RGH or NHH) under COTE. Where the patient is medically fit (with or without Diabetes) but is unable to be discharged home e.g. if they need a package of care or physio/ rehab they should be discharged to their local community hospital (Chepstow/ YYF/ YAB/SWH/ County Hospital, Pontypool/ Monovale).

To ensure optimal discharge efficiency and communication, a discharge co-ordinator familiar with the bed base at ABUHB could be employed in the MAC and ideally a medical review / clinical assessment should take place by a physician based in the hub.

Recovery and rehabilitation following major vascular surgery, including lower limb amputation, delivered close to where patients live is key for the success of this network model. The importance of recovery and rehabilitation to the network, and to patients, has been recognised by:

a. Daily ongoing multi-specialty discharge planning at the MAC, to include ABUHB Vascular Nurses and Vascular Surgical Co-ordinator as required. Details of hub Vascular Nurses job plans and liaison arrangements to be confirmed.

b. Engagement of rehabilitation/COTE Consultants, based on Physician review at the HUB and liaison with discharge co-ordinator (if medically fit) and teams to allow immediate “step down” of patients from the MAC to rehabilitation when vascular surgical input to their care is no longer essential.

c. Engagement of Diabetes Consultants and teams to allow immediate "step down" from the MAC (once clinically appropriate) for patients with diabetes who have ongoing medical needs.

d. Agreement between providers over the repatriation of patients who no longer require specialist vascular care to local community hospitals.

e. Development of a network recovery, rehabilitation and reablement (3 Rs) policy.

f. Therapy led rehabilitation team

g. Handover documentation will include details of named consultant performing surgery, surgical follow up arrangements, wound care and patient management e.g. weight bearing status. It is important to have a discharge document outlining vascular procedure performed, medical problems, wound management plan e.g. frequency and type of dressings, weight bearing status and follow up arrangements, supported by effective and timely data access and transfer across sites. IT infrastructure should support electronic document transfer between hub and spokes.

h. Any queries regarding ongoing care can be made to the vascular consultant team / consultant of the week at the MAC, or via a referral sent to the vascular co-ordinator to arrange ward follow up

Successful recovery and rehabilitation requires the early involvement of local therapists for patients likely to require long-term support (i.e. amputees or patients with pre-existing disabilities). This will be delivered through the network and local MDT.

Patients remain as inpatients on the vascular unit at the MAC until they no longer require inpatient vascular surgery care.

Rehabilitation following major lower limb amputation commences in the MAC, rehabilitation then continues closer to the patient's home, under the care of COTE or rehab physicians. Pathways have been agreed to enable effective repatriation of patients closer to home for extended recovery or rehabilitation following surgery. These pathways include transfer from the MAC to networked hospitals and to both primary care and community services.

Prehabilitation and an enhanced recovery programme minimises the time that patients need stay in the MAC. The therapy and rehabilitation workforce implications of this are currently being reviewed within the programme and a regional repatriation workshop is to be held to finalise the details of this and the other practical pathway issues described above. A pre-operative optimisation pathway exists in ABUHB for those with diabetes undergoing elective surgery with Hba1c > 69 mmol/mol, and this should be utilised to reduce the length of stay for patients with diabetes. This may be actioned via referral to the consultant diabetologist at RGH or NHH.

Vascular Surgeon activity on spoke sites will be primarily through the following:-

- Regular on site Vascular Surgeon at Royal Gwent Hospital.
- Regular Vascular Surgical outpatient clinics at Nevill Hall Hospital.
- The consultant vascular team will attend any ward referral where this is in the clinical interest of the patient, but will not undertake formal job planned vascular surgical ward rounds at the ABUHB spoke hospital sites.
- 'Attend Anywhere' virtual consultation and clinical photography for remote assessment (as per clinical pathways). It would always be clinically appropriate for other medical teams to contact the consultant of the week, local Vascular Surgical Consultant or local Vascular Surgery Coordinator to initiate patient review process. Urgent clinic slots will be made available for review if / as appropriate

In addition there will be a vascular specialist nurse presence across ABUHB Monday to Friday. The weekly timetables for the vascular nurses across the ABUHB Vascular Network will be published and held by the ABUHB Vascular Surgical Coordinator.

<u>Interdependent Services</u>

Interventional Radiology arrangements within the spoke will be as follows:-

- No inpatient vascular IR work.
- Outpatient work in accordance with agreed and published governance structure as mentioned above.
- Day case angioplasty is planned to remain at the Grange University Hospital, subject to the governance arrangements agreed between the vascular and interventional radiology clinical teams. Estimated activity will be 60-70 cases per annum.

Vascular support to other specialties will be as follows:-

- Unexpected haemorrhage in theatre (1 or 2 per year) – *"press and call for help"*
- Planned complex surgery near large vessels (1 or 2 per year) – Vascular Surgeon presence can be arranged through the ABUHB Vascular Surgical Coordinator.
- *Others (e.g. cardiology) – rare and not usually urgent.*
- *Diabetes – as per diabetic foot pathway*
- *Stroke Medicine – as per stroke/TIA pathway*
- *Inpatient assessment - 'Attend Anywhere' or specialist Vascular Nurse assessment.*
- *Wound reviews (frequent) - undertaken by Vascular Nurse Specialists and Podiatry.*

Cardiff and Vale Spoke model of care

As an interim solution for the first six to twelve months the spoke will be incorporated within the lakeside wing (LSW) on the UHW site led by the care of the elderly (COTE) team with the relevant clinical support from the vascular team. There will be a plan subsequently developed to create an appropriate rehab service in Llandough Hospital over this time. This model has been agreed by the Clinical Board Director for Medicine, the Clinical Board Director for Surgery and the UHB MTC Rehab Lead.

The process for managing inpatients, referrals will be:

Inpatients:

- An MDT ward round with Vascular Surgery Consultant and rehab consultant presence will take place once per week.
- High risk patients – the vascular Consultant of the Week (COW) will be contactable to assess, review and treat patient if required. If patient deteriorates the SOP for transfer back to the acute ward will be instigated.
- A vascular hot clinic will run and have capacity to review patients from the spoke if required.
- The COW will be free from all elective duties and therefore be available to see patients needing emergency care. This will run between 08:00 – 17:00 Monday to Friday.
- The COW is supported by a vascular senior trainee and band 7 vascular nurse.
- All contact information is available on rota watch (CAVUHB contact system – accessed via clinical portal).
- Consultant connect – digital communication will be utilised for direct phone access to the team.
- Out of hour cover will be via the vascular surgeon and senior trainee on for the region contactable via UHW switchboard.
- Medium risk patients – will be seen on the ward round or referred to Hub/Hot Clinic as appropriate.
- Low risk patients - will be seen on the ward round and / or referred to routine clinic/community podiatry as appropriate.

Surgical Input to the Spoke

Proposed service

- One ward round per week by a vascular surgeon
- One half day clinic per week
- Phone call consultation as and when required
- The Vascular Consultant of the Week team is available to provide cover for emergencies and will go to the patient.
- Dedicated surgical vascular clinical nurse specialist support when required
- The current unfunded resource on Lakeside Wing is as follows (it should also be noted that these patients also receive out of hours care by on call ward teams)