Vascular Services Review
University Hospitals of Morecambe Bay Hospitals NHS Foundation Trust
Trust Board (25 July 2012)
## Supporting Information

| Background papers/  
supporting agenda items  
(if applicable): |  |
|--------------------|---|
| Previously considered by  
(if applicable): |  |

### Link to UHMB’s objectives  
(select those objectives this paper supports): Continuously improve the patient experience - becoming the provider of choice for excellence with safe and effective patient care

| Yes |
| Support and develop all staff to take responsibility for what they do and help them to do their best - getting staff truly engaged in how the trust works |
| Yes |
| Encourage staff to be innovative when delivering and planning high quality and sustainable services - achieving long term financial sustainability |
| Yes |
| Work with our partners to provide an integrated health service that meets the needs of the local population – providing local access, including to specialist services wherever that is feasible |
| Yes |
| Positively contribute to the well-being of the local community |
| Yes |

### Link to UHMB’s business plan:

- Surgery & Critical Care Business Plan

### Link to UHMB’s Assurance Framework:

### Link to a Care Quality Commission standard(s):

- Patient access

### Identification of any statutory / regulatory implications for UHMB:

### Public and patient engagement:

### Equality Impact Assessed  
(if applicable):

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST

Vascular Services; an Assessment of the Impact of Centralising In-Patient and Emergency Services in Lancashire and Cumbria

BACKGROUND

1. Network and Commissioner Vision

In 2011 the Vascular Clinical Advisory Group of the Lancashire and Cumbria Cardiac and Stroke Network recommended that the resident population of Lancashire and Cumbria (to include the populations of Wigan, Bolton and Dumfries and Galloway) should be provided with three vascular intervention centres. These centres will provide all scheduled and unscheduled major vascular interventions on site, together with outreach out-patient and day surgery services at other sites within their agreed catchment area. The maximum recommended travel time for patients to any intervention centre is 90 minutes, anticipating that for the majority of the population this will be considerably shorter. Evaluation of travelling times to existing vascular units has demonstrated that for the populations of West Cumbria (Barrow, Whitehaven and Workington) provision of service within these parameters will be challenging. Out of the current vascular units, only Lancaster can provide for Barrow, and only Carlisle can provide for North West Cumbria. The remaining population may be served by a variety of three centre permutations and meet travel time recommendations.

In November 2011 five Trusts submitted bids to provide a vascular service for defined resident populations in Lancashire and Cumbria. The submission from UHMBFT proposed a provision of service for a population of 760,000, to include Blackpool Fylde and Wyre, North Lancashire, South Cumbria and a small population in North Yorkshire. 4 Trusts (one was rejected in the first round) progressed to interview in December.

On 5th July 2012 UHMBFT received notification from the Medical Director of NHS Lancashire that following evaluation of responses, the PCTs were entering into contract variations with East Lancashire, Lancashire Teaching Hospitals and North Cumbria University Hospitals Trusts to provide Vascular Intervention Centres. Although UHMBFT scored comparatively or better than North Cumbria University Hospitals in most fields, UHMBFT had scored least well on the parameter of risk assessment, the components of which were financial, legal, potential failure of service transition and mobilisation and potential failure of full service delivery. This resulted in UHMBFT achieving the lowest overall score.

It remains unclear how the contract variations will be implemented. The following issues are at present unclear;

a) The impact of a formal appeal to the PCTs from UHMBFT.

b) Which Vascular Intervention Centre(s) will provide a service to the populations of North Lancashire and South Cumbria. It is thought that no submission
other than that from UHMBFT contained a proposal to provide a vascular service to this population.

c) How the Intervention Centres will provide day surgery, out-patient and consultation services in other Hospitals and Trusts. There is an expectation from the PCTs that all Trusts will work together to implement a centralised service and to continue the provision of the above aspects at existing sites.

d) What level of vascular specialist input, if any, will be required from UHMBFT staff.

e) How Intervention Centres will recruit any required increase in vascular specialist staff.

NHS Lancashire and NHS Cumbria have both agreed these variations with their respective Cluster Commissioning Groups and the proposal is to be discussed at a combined meeting of the Cumbria and Lancashire Overview and Scrutiny Committees on 24th July 2012.

2. UHMBFT Vascular Unit

Over 40 years the UHMBFT Vascular Unit has evolved under the strong influence of its consultant staff. It has developed a regional and national reputation, based on excellence of speciality training, and has played its part in national and international research and development. The Unit has published its clinical outcomes widely in peer-reviewed journals and the National Vascular Database (NVD). Most recent clinical outcomes are favourable when compared with other Units nationally and within the Network (NVD Abdominal Aortic Aneurysm (AAA) Audit March 2012).

2006-2011 Unit Outcome Data; Vascular Unit UHMBFT

Source; North West Vascular Governance and National Vascular Database November 2011

<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>UHMBFT</th>
<th>NATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA Operative mortality</td>
<td>4.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td>(Elective open)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAA Operative mortality</td>
<td>1.3%</td>
<td>3.4%</td>
</tr>
<tr>
<td>(Elective EVAR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carotid endarterectomy</td>
<td>2.9%</td>
<td>3%</td>
</tr>
<tr>
<td>Stroke at 30 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operative mortality</td>
<td>1.3%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Stroke/death</td>
<td>3.4%</td>
<td>3%</td>
</tr>
</tbody>
</table>
The document “Outcomes after Elective Repair of Infrarenal Abdominal Aortic Aneurysm”, March 2012 published by the Vascular Society, quoted data on aortic repair collected on the National Vascular Database (1/10/2008 – 30/09/2010) and demonstrated an overall national mortality rate of 2.4% for those two years. The following are the published results from the same document for the Vascular Units in Cumbria and Lancashire:

a) University Hospitals of Morecambe Bay NHS Trust;
    78.7% of all cases submitted, mortality 3.7%

b) Lancashire Teaching Hospitals NHS FT;
    58.5% all cases submitted, mortality 4.0%

c) East Lancashire Hospitals NHS Trust
    38.7% all cases submitted, mortality 0%

d) Royal Bolton Hospital NHS FT
    100% all cases submitted, mortality 7.0%

e) Blackpool Fylde and Wyre Hospitals NHS FT
    59.4% all cases submitted, mortality 2.8%

f) Wrightington, Wigan and Leigh NHS FT
    82.5% all cases submitted, mortality 9.4%

g) North Cumbria University Hospital NHS Trust
    77.9% all cases submitted, mortality 2.0%

Only two Units, Lancaster and Carlisle, submitted > 75% of all cases and achieved <4% mortality.

The UHMBFT Vascular Unit’s staffing policy has been to employ greater numbers of generalists with special interest in vascular surgery, rather than small numbers of pure specialists. This allowed the Unit to deliver a comprehensive 24/7 vascular service “in-house” for many years whilst other Units were unable to do so. Following Trust merger, the Vascular Unit based at the RLI was able to absorb delivery of service to Barrow, and to consistently support multiple aspects of vascular service at Blackpool, including provision of approx. 50% (1:2 out-of-hours) of unscheduled care to the population of Blackpool Fylde and Wyre.

The UHMBFT Vascular Unit has extensive experience in delivery of a centralised service at the RLI with outreach Out Patient and Day Surgery at Barrow, Kendal Morecambe and Ulverston) and centralised emergency service at the RLI for 500,000 population of Blackpool Fylde and Wyre.

UHMBFT has the only Vascular Unit in the Network able to provide for the 70,000 population of the Furness peninsula within a maximum 90 minute travel time.
3. Integration of Vascular Services at UHMBFT

Vascular services provide treatment for diseases of all arterial and venous systems with the exception of the heart and intracranial cerebral vessels. This includes the treatment of haemorrhage as a result of trauma, both as a primary presentation or created accidentally during other medical interventions or during childbirth. Vascular services are responsible for providing assessment and treatment in the specialist areas of lymphatic disease, haemodialysis and vascular malformations. In diseases where pathology is closely approximated to major vessels, vascular services frequently deliver the surgical service, or provide hands-on support to other surgical and gynaecological specialties.

Vascular services provide support, advice and treatment to patients treated within the services of diabetes, rheumatology, cardiology, gastroenterology, dermatology, acute medicine, trauma and orthopaedics, general surgery, ENT surgery and urology and gynaecology.

At UHMBFT there are 5 vascular surgeons who deliver 2.5 whole time equivalents (WTE) of vascular surgery, and 2.5 WTE of general surgery within both the elective and emergency service. There are 2 interventional radiologists who deliver approximately 1WTE of general radiology and 1 WTE of vascular radiology. There are 2 full time vascular nurse specialists.

Withdrawal from UHMBFT of In-patient and Emergency Vascular Services

i. Support for other specialties

Although provision may be made for the appropriate specialist vascular support during scheduled patient care, the absence of vascular emergency services within UHMBFT may create difficulties for those specialties who have come to rely on in-house vascular services. This will be most pronounced during orthopaedic and gynaecological surgery when urgent treatment of unexpected haemorrhage is sometimes necessary. It is probable that the expectation to resolve haemorrhagic complications will fall upon general surgeons who may not be recently experienced or trained in appropriate techniques. This may be compounded by the removal of the vascular interventional radiology service which contributes to the control of major haemorrhage. There is a risk that this will impact upon clinical outcomes.

Support for the trauma service in the emergency and operating departments will diminish and may put designation of UHMBFT Trauma Units at risk, particularly at Furness General Hospital.

The impact upon in-patient consultation services to the medical specialties is uncertain and will depend upon the approach taken by the Commissioners and the Intervention Centres. It is expected that the Intervention Centres will provide a specialist presence at all major hospitals within their out-reach area.

In-patients who require vascular interventions whilst under the care of medical specialties at UHMBFT, will require transfer to the Intervention Centre.
ii. **Staffing Implications**

It remains unclear whether UHMBFT staff will be asked to participate in the reconfigured service. Specialist consultant surgeons and interventional radiologists may relocate to work at the Intervention Centres, or they may opt to remain at UHMBFT providing general surgery and non-vascular radiology, together with subspecialty services as described later. There may be the opportunity for staff to provide vascular specialist day surgery and out-patient services within UHMBFT and to in-reach to the Intervention Centres by contributing to in-patient care and emergency services at these locations. The attitude of the designated Intervention Centres to these issues is at present unknown.

**Medical Staffing Scenario 1**

If all 7 vascular surgeons and radiologists relocate to other Trusts, this will create pressures in the specialties of general surgery, paediatric surgery, endocrine surgery, laparoscopic surgery, breast surgery, general radiology, breast radiology and cross-sectional imaging. The extent of these pressures is unpredictable. Consultant recruitment in the fields of paediatric surgery, breast surgery and breast radiology in particular, is difficult.

Emergency general surgery rotas at the RLI will be destabilised by the loss of 5 vascular and general surgeons who provide 50% of the emergency general surgery capacity in addition to their vascular commitments.

Scheduled paediatric surgery (30%), endocrine surgery (50%) and breast surgery (10%) capacity would be decreased if all 5 surgeons relocated.

**Medical Staffing Scenario 2**

If all 7 vascular specialist consultants continue at UHMBFT the above pressures are mitigated. Recent work on capacity and demand in general surgery suggests that all five surgeons and radiologists could be redeployed within general surgery and its subspecialties, and into general radiology and its subspecialties. This would address the current gaps in capacity in these specialties and contribute to delivery of quality standards.

**Medical Staffing Scenario 3**

It is probable that some specialists will choose to relocate to the Intervention Centres, whilst others choose to remain at UHMBFT within general surgery and radiology.

**Specialist Nursing Staff**

The two specialist nurses will probably be required to continue provision of local services at UHMBFT.
Staff morale and motivation will be affected by the perceived loss of the Vascular Unit. The recommendations around vascular services from the PCTs have raised concerns amongst staff about their long term commissioning intentions in North Lancashire and South Cumbria.

iii. Facilities

Annual operative caseload at UHMBFT is approximately 660 vascular procedures, 260 in-patient and 332 day surgery procedures. Assuming retention of vascular day surgery at UHMBFT the loss of 260 in-patient procedures will release approximately 200 operating lists for redeployment. 40 of these lists are in the endovascular suite and 160 in Centenary theatres at the RLI.

The vascular ward (ward 37) at the RLI uses approximately 20 beds for vascular in-patients. There will be a requirement for repatriation from the Intervention Centres of patients rehabilitating after major interventions or amputation. A net gain of 10-15 beds in the Centenary Building at the RLI is predicted.

The use of Out-patient facilities is predicted to remain constant, but may contract if the Intervention Centres fail to provide out-reach on all current sites.

iv. Income Loss

<table>
<thead>
<tr>
<th></th>
<th>11/12 Activity Plan</th>
<th>11/12 Activity Actual</th>
<th>11/12 Activity Variance</th>
<th>11/12 Income Plan</th>
<th>11/12 Income Actual</th>
<th>11/12 Income Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daycase and elective</td>
<td>483</td>
<td>563</td>
<td>80</td>
<td>685,593</td>
<td>817,800</td>
<td>132,207</td>
</tr>
<tr>
<td>Non Elective</td>
<td>121</td>
<td>166</td>
<td>49</td>
<td>440,174</td>
<td>727,443</td>
<td>287,269</td>
</tr>
<tr>
<td>Out-patient First</td>
<td>1,391</td>
<td>1,444</td>
<td>53</td>
<td>352,221</td>
<td>365,641</td>
<td>13,420</td>
</tr>
<tr>
<td>Out-patient follow-up</td>
<td>1,118</td>
<td>1,506</td>
<td>388</td>
<td>131,190</td>
<td>176,719</td>
<td>45,529</td>
</tr>
<tr>
<td>Outpatient procedures</td>
<td>57</td>
<td>67</td>
<td>10</td>
<td>8,216</td>
<td>9,752</td>
<td>1,536</td>
</tr>
<tr>
<td>Grand total</td>
<td>3,166</td>
<td>3,746</td>
<td>580</td>
<td>1,617,393</td>
<td>2,097,354</td>
<td>479,961</td>
</tr>
</tbody>
</table>

The vascular unit currently over performs according to planned income by £479,961. Potential loss of income if in-patient services and emergencies are lost and out-patient and day surgery is maintained is approximately £1.3 million and projected to be over £2 million if Out-Patients and day surgery is removed.
v. Impact upon post-graduate and undergraduate training

UHMBFT Vascular Unit has a favourable reputation within the North Western Region as an excellent specialist training unit and benefits from senior higher surgical trainees who ask to come to UHMBFT each year. These trainees bring experience and expertise into the Trust and many have gone on to perform consultant posts within UHMBFT. The North Western School of Surgery will stop this rotation.

Anaesthetic trainees similarly come to UHMBFT to complete their vascular module training. The view of the School of Anaesthesia is unclear and there is a potential loss of these trainees.

UHMBFT Vascular Unit is active within undergraduate education for the University of Lancaster. A reduction in the case mix of patients may lead to the University seeking undergraduate clinical education at other Trusts with potential loss to the Trust of education funding.

vi. Reputation

A referral has already been made to the Regional and National reputation of the Vascular Unit. Loss of a Surgical Unit with a reputation for excellence in clinical outcomes and training is potentially harmful to UHMBFT as a whole.

The impact of this loss of reputation may affect recruitment and retention of highly motivated and ambitious medical staff.

vii. Strategic Ambition

At a time when the Clinical Strategy for UHMBFT is under Development it is particularly disappointing to present a paper which potentially limits the strategic ambition of the Trust.