

Proposal for Provision of a Vascular Service for North Central London

“National guidance on the organisation of vascular services identifies that clinical outcomes will be improved if patients are cared for by an appropriately staffed and equipped specialist vascular service.”

*(North Central London Arterial Vascular Services
Commissioning Intentions – May 2011)*

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1. Declaration of Institutional Commitment

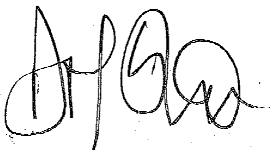
In collaboration with our partners in North Central London (NCL), The Royal Free Hampstead NHS Trust is committed to leading the development of a world-class North Central London Vascular Care Service for the benefit of the population and patients of North London, Essex and Hertfordshire.

This is a seminal opportunity for North Central London to deliver world class vascular care, with a specialised treatment centre based at the Royal Free site and vascular assessment and treatment units at each of the partner sites. Our proposal is to provide the sector with a truly integrated managed service, and this proposal is fully endorsed by our partners University College Hospitals NHS Foundation Trust, Barnet and Chase farm Hospitals NHS Trust, North Middlesex University Hospital NHS Trust and Whittington Health NHS Trust.

The Royal Free facilities have benefitted from over £13 million investment in the last two years to build state of the art facilities and equipment which are fit for purpose for delivering complex surgical and interventional care. The Royal Free has the infrastructure, capacity and capabilities as the central unit to deliver all complex vascular surgery on site whilst maintaining specialist interventional support at the HASU and Heart Hospital and supporting network partners to maintain local services as appropriate.

This proposal to establish the NCL Vascular Care Service under the leadership of The Royal Free Hampstead NHS Trust which embraces the principles of inclusivity and has been developed with and has the support of the clinical vascular community across North Central London and the medical directors and chief executives of UCLH Foundation Trust, Barnet and Chase Farm NHS Trust, the North Middlesex University Hospital NHS Trust and Whittington Health. It also has the support of University College London Partners.

Undersigned by:



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2. Introduction

The *Cardiovascular Project: The case for change* the Vascular Society, and NCEPOD all identified a need to redesign the way that vascular surgery is delivered in London and concluded that the best outcomes are delivered in specialist units with dedicated teams available 24 hours a day, seven days a week. All parties advocated the coming together of hospitals to provide higher volume units and emphasised the importance of equal access to care for patients.

3. Summary of Proposal

Building on the lessons learned from the existing vascular service, and the wider vascular group discussions our value proposition is to provide a North London vascular managed service which fully incorporates UCLH and BCF.

Complex vascular surgery will be centralised at The Royal Free providing a centre of excellence for complex vascular treatment and vascular assessment with the principle of inclusivity central to service delivery.

Carotid artery surgery associated with the Hyper Acute Stroke Unit (HASU)¹⁾ will continue to be provided at the UCLH site. All interventions will be performed by designated carotid specialists jointly appointed by UCLH and RFH working to common governance, audit and MDT. The Royal Free will provide vascular support to the Heart Hospital (see co-dependency section below). In addition, networked support will also be provided to the locally based Vascular Assessment and Treatment units (VATUs) at our four partner Trusts.

This proposed service will be underpinned by a single governance structure that will assure quality of service, ensure compliance with the service standards, and deliver equality of access for all North London residents. Adherence to quality standards will be monitored by the NCL Cardiovascular and Stroke network on behalf of the NCL commissioners.

4. The Current Service

The Royal Free

Currently serves a population of 1.3 million within the M25 and provides tertiary vascular care to Hertfordshire and parts of Essex. Since 1999 The Royal Free Hampstead NHS Trust (RFH) has delivered a well established vascular care service to North London incorporating the Whittington Health NHS Trust (WHT) and The North Middlesex University Hospital NHS Trust (NMUH). The service provides a networked on call arrangement for vascular emergencies that extends across NCL as well as an on-call interventional radiology service that serves NCL and beyond for complex interventional treatment. In addition to providing complex tertiary treatments and an emergency vascular service, RFH is also home to the North London aneurysm screening service and has a well established vascular research programme with core projects looking at vascular tissue regeneration, biomaterials and skeletal muscle ischaemia.

The service is currently delivered by seven Consultant vascular specialists, three of whom are joint appointees with NMUH (2 consultants) and WHT (1 currently with a 2nd proposed in next 6 months). The surgical team is supported by six consultant interventional radiologists providing specialist vascular treatments and cross-sectional radiology, in addition to supporting the regional liver and kidney centres and the multi-unit gastrointestinal bleeding service based at RFH.

The local hospitals provide patient-centred care with inpatient vascular review. RFH and NMUH have two joint consultant vascular surgeon appointments and complex vascular surgery is performed at RFH. The consultant vascular surgeon at WHT has one operating session per week at RFH and currently delivers arterial vascular surgery locally.

University College London Hospitals

UCLH currently provides a fully comprehensive regional and national vascular service including a range of specialist tertiary services with a strong emphasis on minimally invasive endovascular treatments. The service provides approx 400 elective and 175 non elective inpatient episodes per annum as well as day case and outpatient care. The Trust currently serves as a national centre for complex aortic aneurysm repair and in conjunction with the Heart Hospital provides vascular support to complex thoracic aortic treatments. The vascular service is also colocated with the Hyper Acute Stroke Unit on the UCH site providing carotid endarterectomy surgery and thus contributing to the excellent results of this acclaimed unit. A growing diabetic foot service provides specialist care integrated with podiatry community services. In addition vascular clinicians provide critical support to codependent services including trauma, GI bleed, women's health and oncology

The service is currently staffed by four dedicated specialist vascular surgical consultants and five vascular interventional radiologists. These staff work in a multidisciplinary team with colleagues in vascular anaesthesia, neurology, cardiology and cardiac surgery. The consultant surgical oncall arrangements are delivered jointly with The Royal Free.

Barnet and Chase Farm

BCF currently has 4 Vascular Surgeons supported by 5 Interventional Radiologists. There are clinics, day surgery, main theatre and angio suites on both sites. A full range of procedures including endovascular aneurysm repair (EVAR), carotid endarterectomy and peripheral vascular surgery are carried out within The Trust. These activities are supported by a functioning vascular lab at Barnet General Hospital (BGH).

The above services are in the process of consolidation onto the BGH site. The Vascular Unit is supported by 3 Registrars, 2 SHO's, a Staff Grade and 5 FY1's. The unit also provides elective and emergency vascular cover for complex orthopaedic procedures at RNOH Stanmore.

5. The Proposed Service

The proposal in this document is for a 'Hub and Spoke' model which fully incorporates the services currently delivered at UCLH and BCF. Complex vascular surgery will be centralised at The Royal Free Hospital. This will be referred to in this paper as the Centre for Complex Vascular Treatment (the CCVT).

Carotid artery surgery associated with the Hyper Acute Stroke Unit (HASU)¹⁾ will continue to be provided at the UCLH site. All interventions will be performed by designated carotid specialists jointly appointed by UCLH and RFH working to common governance, audit and MDT. The Royal Free will provide vascular support to The Heart Hospital (see co-dependency section below). In addition, networked support will also be provided to the locally based Vascular Assessment and Treatment units (VATUs) at our four partner Trusts.

This proposed service will be underpinned by a single governance structure that will assure quality of service, ensure compliance with the service standards, and deliver equality of access for all North London residents. Adherence to quality standards will be monitored by the NCL Cardiovascular and Stroke network on behalf of the NCL commissioners.

6. Proposed Service Design for the Centre for Complex Vascular Treatment

The proposal is for a hub site – the Centre for Complex Vascular Treatment based at the Royal Free site, to provide the following services:

Service Delivered	Description
Complex inpatient arterial vascular activity	<ul style="list-style-type: none"> Abdominal and thoracic aortic surgery *Complex Peripheral Vascular Disease (see definition below) Other complex vascular cases i.e vascular malformations, Lymphodema surgery, ischaemic upper limb) Non-HASU carotid endarterectomy Emergency (out of hours) vascular surgery
Single specialty vascular care ward with rapid access tertiary service for network partners	<ul style="list-style-type: none"> 32-bedded ward staffed by nursing team with competencies in vascular care Emergency transfer bed available 24/7 Designated vascular high dependency beds
Vascular critical care	<ul style="list-style-type: none"> ITU staffed by Consultants with expertise in caring for complex vascular patients “elective” high dependency beds for major surgery in the Overnight Intensive Recovery Unit
24/7 vascular surgery on call	<ul style="list-style-type: none"> 24/7 consultant and registrar grade cover will be provided at the hub
24/7 specialist vascular interventional on call	<ul style="list-style-type: none"> On call for emergency vascular intervention at RFH staffed by designated vascular interventionalists Separate from general interventional on call at BCF and RFH UCLH to retain its own Interventional on call arrangements staffed by UCLH consultants
Specialist complex vascular outpatient clinics	<ul style="list-style-type: none"> Vascular malformation clinics** Specialist vascular anaesthetic assessment clinics Thoraco-abdominal assessment service Joint radiology/surgery clinics
Renovascular centre	<ul style="list-style-type: none"> Acute kidney injury unit Hub site for vascular access surgery Acute dialysis beds
Out of hours vascular studies	<ul style="list-style-type: none"> Vascular studies available at evenings and weekends as well as Mon-Fri
Specialist vascular rehabilitation programme	<ul style="list-style-type: none"> Specialist amputee rehabilitation hub Vascular rehabilitation unit
Host to regional specialist vascular MDT	<ul style="list-style-type: none"> Provided on site with video-linked access for remote participation
Host to pathway co-ordination and database team	<ul style="list-style-type: none"> Team based on site but working across NCL to support patient pathways and collection of required data.
Host to specialist nurses	<ul style="list-style-type: none"> Home site for specialist nursing team working across NCL

** Vascular Malformation : On the basis that there is a spectrum of Vascular malformations not all of which are considered ‘complex’ it is proposed that all cases must be subject to MDT review, common audit and governance processes. Where the expertise exists and with prior MDT agreement, non-complex vascular malformations can be treated at a spoke but all complex cases must be treated at the hub.

***Definition of complex PVD for transfer from spoke to hub hospital**

The differentiation of peripheral vascular cases into simple and complex depends on local factors and co-morbidities. These risk factors may summate to warrant a definition of “complex” and treatment in the hub.

Patients shall be deemed as complex for a particular spoke hospital and meriting transfer to the vascular hub if the former institution does not possess the requisite specialised skill set or services to safely and successfully manage the patients’ primary presentation and or associated co-morbidities. This definition may therefore vary with hospitals, local resources and individual patients.

Co- morbid risk factors include:

1. Age
2. Co-morbidities such as severe renal impairment requiring dialysis, severe cardiac and or respiratory compromise, liver failure
3. Facilities e.g. CO2 contrast angiography, hybrid operating facility for concomitant extensive endovascular and open procedures
4. Co-dependent services e.g. cardiology, cardio-vascular anaesthesia, neurological & neurosurgical services.
5. Increasing complexity of intervention.

The decision to deem a patient complex rests with the local MDT and will be documented following their discussions.

7. The Vision for Interventional Radiology

The Royal Free will provide specialist vascular interventional radiology services for work being carried out at the CCVT. The proposal is to develop a network specialist vascular interventional radiology out of hours on call service. It is also envisaged that there will be joint specialist interventional clinics at the centre. It is important to note that we propose to deliver this without compromising existing vascular and general interventional services supporting each of the partner Trusts which will continue to be managed by the partner Trusts. This will need to be developed further through the Interventional Radiology implementation group.

8. Proposed Service Design for Vascular Assessment and Treatment Units.

These will be based at Barnet & Chase Farm, UCLH, the Whittington and the North Middlesex. These units will provide the following services:

Service Delivered	Description
Ambulatory assessment, diagnostics and ongoing care service	<ul style="list-style-type: none"> • Outpatients services for new referrals • Post-op care for all patients treated at the VATU and for complex patients that have been referred to the CCVT and repatriated back to the VATU as appropriate. • Post-discharge follow-up for all patients treated at the VATU and for complex patients that have been referred to CCVT in accordance with agreed protocols. • Cross-sectional imaging • Vascular studies with GP direct access • Protocol-delivered vascular pre-op assessment for patients having their procedure at the VATU • Outpatient-based diabetes service • Foot and wound care service • Outpatient rehabilitation, PT, OT and dietetics. • Vascular malformation clinics
Day case and short-stay elective treatment	<ul style="list-style-type: none"> • Varicose vein • Non complex PVD (see definition in section 6 of complex PVD.) • Non-complex vascular surgery as defined by MDT
On-site Vascular Surgeon Mon-Fri 9-5	<ul style="list-style-type: none"> • Designated vascular surgeon available on-site • For inpatient referrals and on site assessment • Undertakes elective operating and sees outpatients
Access to well-being services	<ul style="list-style-type: none"> • Smoking cessation • Lifestyle guidance • Welfare guidance
Integrated “virtually” with Centre	<ul style="list-style-type: none"> • Networked via N3 server • Videoconferencing facilities • Remote access to IT systems at centre (details and timescales to be agreed) • Image transfer via IEP
Key-workers and specific administration on site	<ul style="list-style-type: none"> • CNS available on-site to see patients • Service supported by local admin support • Designated pathway co-ordinator

** ** Vascular Malformation : On the basis that there is a spectrum of Vascular malformations not all of which are considered 'complex' it is proposed that all cases must be subject to MDT review, common audit and governance processes. Where the expertise exists and with prior MDT agreement, non-complex vascular malformations can be treated at a spoke but all complex cases must be treated at the hub.

8. Local implementation of the Case for Change – NCL specific changes:

8a. Hyper Acute Stroke Unit

The excellent outcomes achieved by the HASU at UCLH are recognised and must be preserved. By its nature there will be a group of patients whom are higher risk in whom better outcomes for carotid endarterectomies would be expected from surgery at the HASU itself. This relates to the fact that these high risk patients may benefit from the hyperacute stroke support provided at the HASU. Carotid artery surgery associated with the Hyper Acute Stroke Unit (HASU)¹ will continue to be provided at the UCLH site. All interventions will be performed by designated carotid specialists jointly appointed by UCLH and RFH working to common governance, audit and MDT. All other patients will have their interventions at the hub. Specialists performing carotid endarterectomies will be fully accredited vascular surgeons with a special interest in carotid surgery and will be core members of the network vascular MDT. The service will undergo rigorous audit and will further strengthen the potential for clinical research across the two disciplines to ensure better outcomes for stroke patients.

Activity projections indicate there are in the region of 76 HASU high risk patients requiring carotid endarterectomy in 2012/13 and 50 low risk patients. Whilst this will be a deviation from the case for change, it is compliant with the specified activity levels and will be subject to continuous review. In addition to this, we propose a single, evidence-based NCL protocol for operating on asymptomatic patients.

Ongoing audit and review of this service will be necessary to assure the best model of care.

8b. Cardiothoracic Surgery

Cardiothoracic surgery in NCL will continue to be provided within the UCL Partners academic health science centre by the Heart Hospital. The centre at RFH will support the Heart Hospital 24/7 for acute aortic dissections, vascular complications arising at the Heart Hospital and with general vascular support and will have joint clinics at the Heart Hospital where indicated. All thoracic surgery will be undertaken at the Heart Hospital. The centre at RFH will make special arrangements for those very rare cases needing open thoraco-abdominal surgery without impacting upon services at the Heart Hospital. Procedures requiring heart Lung bypass will only take place at The Heart Hospital.

9. Codependencies

Our proposal addresses the co-dependency framework in the following ways:

Co-dependency	How it is delivered
Cardiothoracic medicine	<ul style="list-style-type: none"> 24/7 cardiac intervention available on RFH site PCI beds available on RFH site Specialist cardiothoracic diagnostic service on RFH site
Cardiothoracic Surgery	<ul style="list-style-type: none"> Aortic dissection and joint cardiovascular cases to be performed at the Heart Hospital (within UCL Partners) Vascular support for Heart Hospital provided by CCVT
Hyper Acute Stroke Unit	<ul style="list-style-type: none"> High risk HASU TIA or stroke patients requiring immediate carotid surgery will have their operation at HASU at the UCLH site. All interventions will be performed by designated carotid specialists jointly appointed by UCLH and RFH working to common governance, audit and MDT All other carotid activity will be undertaken at the CCVT
General Surgery	<ul style="list-style-type: none"> Acute general surgical cover and acute surgical beds available on RFH site Trusts will collaborate on job planning to ensure adequate support for these services continue
Renal Services	<ul style="list-style-type: none"> RFH is hub site for renal medicine and surgery

	<ul style="list-style-type: none"> • Acute dialysis beds on site at RFH • RFH is hub site for vascular access surgery
Plastic Surgery	<ul style="list-style-type: none"> • RFH is hub site for plastic surgery for NCL and Mount Vernon networks • Acute plastic surgery beds and 24/7 cover available on site at RFH
Vascular Anaesthetics	<ul style="list-style-type: none"> • All complex vascular anaesthesia undertaken by Consultant staff with expertise in vascular anaesthetics • CCVT with work with CVS Network and partner Trusts to integrate pan-NCL expertise
Gastrointestinal Bleed Service	<ul style="list-style-type: none"> • 24/7 Consultant-delivered GI bleed rota based at RFH supported by 24/7 acute interventional radiology service • GI Bleed rotas at UCLH and BCF will continue to be provided and managed by those Trusts.
Diabetes Medicine	<ul style="list-style-type: none"> • On site diabetes service at RFH • Linked to community diabetes services • On site multidisciplinary diabetic foot team
Microbiology	<ul style="list-style-type: none"> • Full-spectrum diagnostic labs on site at RFH
Neurology	<ul style="list-style-type: none"> • Neurology is based at RFH with 24/7 cover on site

10. Working with clinical support services

Clinical support services (diagnostics, radiology, etc) will continue to be provided locally to the levels required to support the agreed pathways for in-scope activity.

11. Repatriating post-operative patients to their local site

Draft protocols have been developed and are under discussion with network sites to ensure efficient transfer of patients between hospital sites at the earliest clinically appropriate opportunity where necessary and in the best interests of patients. RFH currently has protocols in place for the treatment and return of tertiary patients functioning for a variety of tertiary surgical specialties such as complex vascular surgery. Availability of beds at the VATUs and double charging commissioners are the biggest risks associated with repatriation. Options to split the tariff are being considered which will assist in expediting necessary repatriations and prevent double charging. The agreed repatriation model will be underpinned by on-site vascular consultant cover Monday to Friday and fully integrated local multi-disciplinary vascular and rehabilitation teams working with NCL partners to improve patient flow and ensure timely, safe discharge. Key workers at both the CCVT and at the VATUs will be allocated to all patients to act as 'patient concierge', enhancing the patient experience, whilst ensuring excellent communication with partner organisations and relatives, further assisting the seamless transfer between sites.

Each VATU will be subject to the same quality standards as the CCVT. The compliance of the service will be monitored by the Cardiovascular and Stroke Network. In terms of ensuring equity of service of access, service delivery, rehabilitation and quality of care. Throughout the implementation process analysis will need to be conducted on current levels of service and provision mapped against the standards in collaboration with our partner Trusts and the Cardiovascular and Stroke Network.

12. Delivering a community service and the Wellbeing Suite

The RFH vision is to support and expand upon how care is currently delivered in the community. The central site will provide the base for community outreach services including vascular nurse specialists, social work support and rehabilitation support. There will be close working with local end of life and TIA services. The local sites will form the base for community outreach services linked with diabetes and renal services.

RFH has a strategy for the development of integrated care and a proven track record for delivery of innovative service models in this area with five integrated pathways already managing patients under care and a further 14 under development. These pathways are built on mature and productive relationships with partners. We will apply the lessons learned to date to ensure every opportunity is taken both at the central and local sites to deliver seamless, integrated pathways of care across primary, secondary, community and social care, in partnership with the third sector wherever possible.

The proposed service will build and develop relationships with Clinical Commissioning Groups, GPs and third party providers with scheduled meetings to develop services and monitor performance.

In order to facilitate and deliver an enhanced community-facing service RFH is developing a public health lifestyle services intervention and Prehabilitation¹ model to serve the needs of vascular patients their families and the wider community. Plans are underway to establish a Wellbeing Suite at the RFH site. This seeks to develop a sustainable evidence-based opportunistic health promotion and improvement offer for patients and their families. Vascular patients will be referred to the service by clinicians initially from outpatient clinics. Interventions will include integrated care referrals into community services (using a community-facing Health and Wellbeing Passport) and a holistic multi-disciplinary approach to condition-specific management and prevention e.g. smoking cessation, psychological assessment. This development will be cost neutral to commissioners.

13. Research and Development

The establishment of this NCL-wide vascular service will permit potential access to a higher volume of patients (subject to consent) for translational research programmes. Furthermore, by delivering a fully-integrated service, more patients can be offered the opportunity to participate in these clinical trials.

Research is currently based at individual hospitals under the UCL umbrella and will continue to be so. UCL based research will remain under the auspices of UCL and full support will be given to research projects based at all network Trusts. Should a research team wish all their research to be based from the hub the Royal Free is committed to provide full support to the research projects and project teams.

14. Clinical Structure

In the proposed model, the clinical structure will be changed to manage the provider network alliance vascular service and the delivery of a new governance framework. This structure will assure appropriate governance of the service and professional leadership for the multidisciplinary team as well as providing clear lines of accountability for quality, safety and service delivery.

Best practice learning from previous service integrations is being applied and this structure will be appointed to by competitive process to underpin each leadership role with the legitimacy and mandate of a formal appointment and will be open for any team member eligible according to the essential requirements of each role (which will be specified during the implementation process). Furthermore, each lead will be supported with formal leadership training as part of the UCL Partners clinical lead programme.

The role of the NCL Cardiac and Stroke Network appointed clinical lead for vascular will remain unchanged for its duration. This valuable role will maintain its quality assurance requirement, will remain a spokesperson for the collected vascular team and represent the service at a Cardiovascular and Stroke network / NCL level and sit on the vascular management group. The NCL Cardiac and Stroke Network vascular lead is distinct from but complementary to the provider network alliance vascular clinical lead role. The latter, appointed by the RFH hub, will be the lead

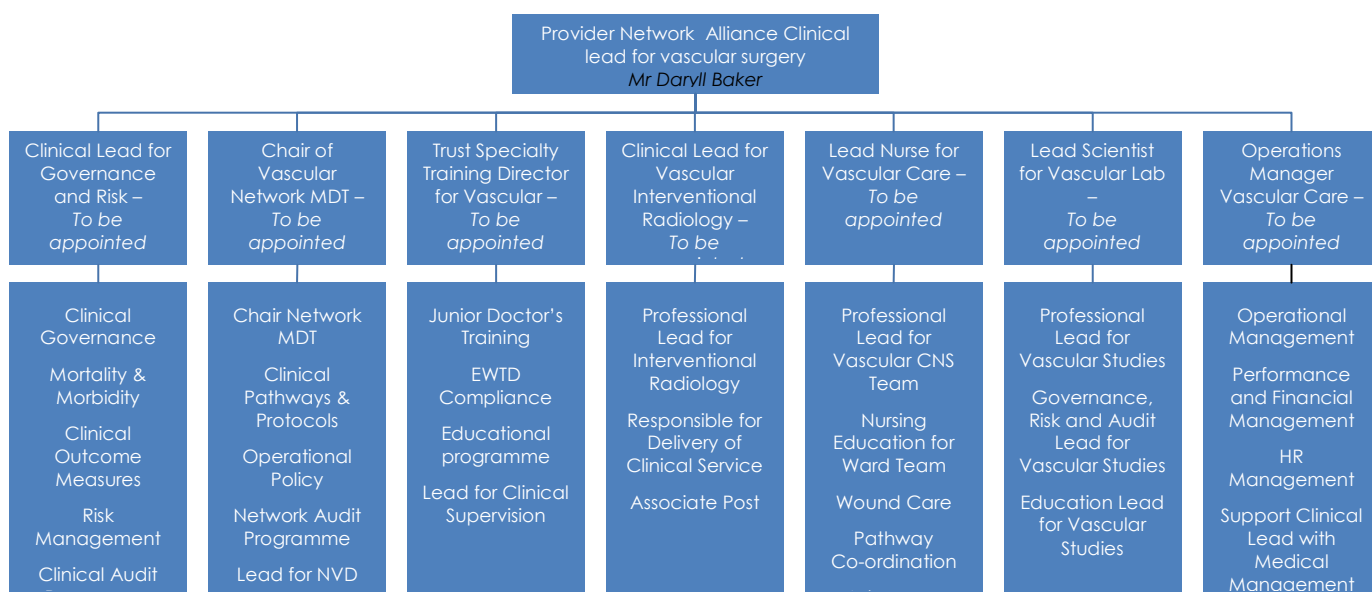
¹ Prehabilitation is the delivery of exercise and other lifestyle regimes with a view to limiting the impact of surgical or medical procedures. Examples include tendon strengthening prior to knee surgery, core strength and fitness sessions prior to chemotherapy, smoking cessation and weight loss prior to anaesthesia and surgery.

medical manager and will clinically lead the implementation, chair the management group, and be accountable to the Trust for the delivery of the service.

The NCL Cardiovascular and Stroke Network will provide oversight on the implementation of the new model of care and will advise the commissioners and NHS London on progress.

15. Governance Framework

The existing governance framework at RFH provides a robust structure for risk management, clinical governance and measuring performance against quality outcome measures. The proposed provider network vascular service will incorporate five specific entities to assure quality, safety and clinical performance – these are outlined below.



Proposed Clinical Structure of Vascular Care. Each lead is given a clear, designated role in the delivery of networked services.

The clinical structure will be updated to manage the expanded network and the delivery of a new governance framework. The proposed structure detailed above will allow the network model to be compliant with the NCL service specifications, appropriate governance of the provider network and professional leadership for the multidisciplinary team as well as providing NCL commissioners, the provider network and the Trust with clear lines of accountability for quality, safety and service delivery.

It is proposed that this structure is appointed to by competitive process to underpin each leadership role with the legitimacy and mandate of a formal appointment and will be open for any team member eligible according to the essential requirements of each role (which will be specified during the implementation process). Furthermore, each lead will be supported with formal leadership training as part of the UCLPartners clinical lead programme.

16. Pathways

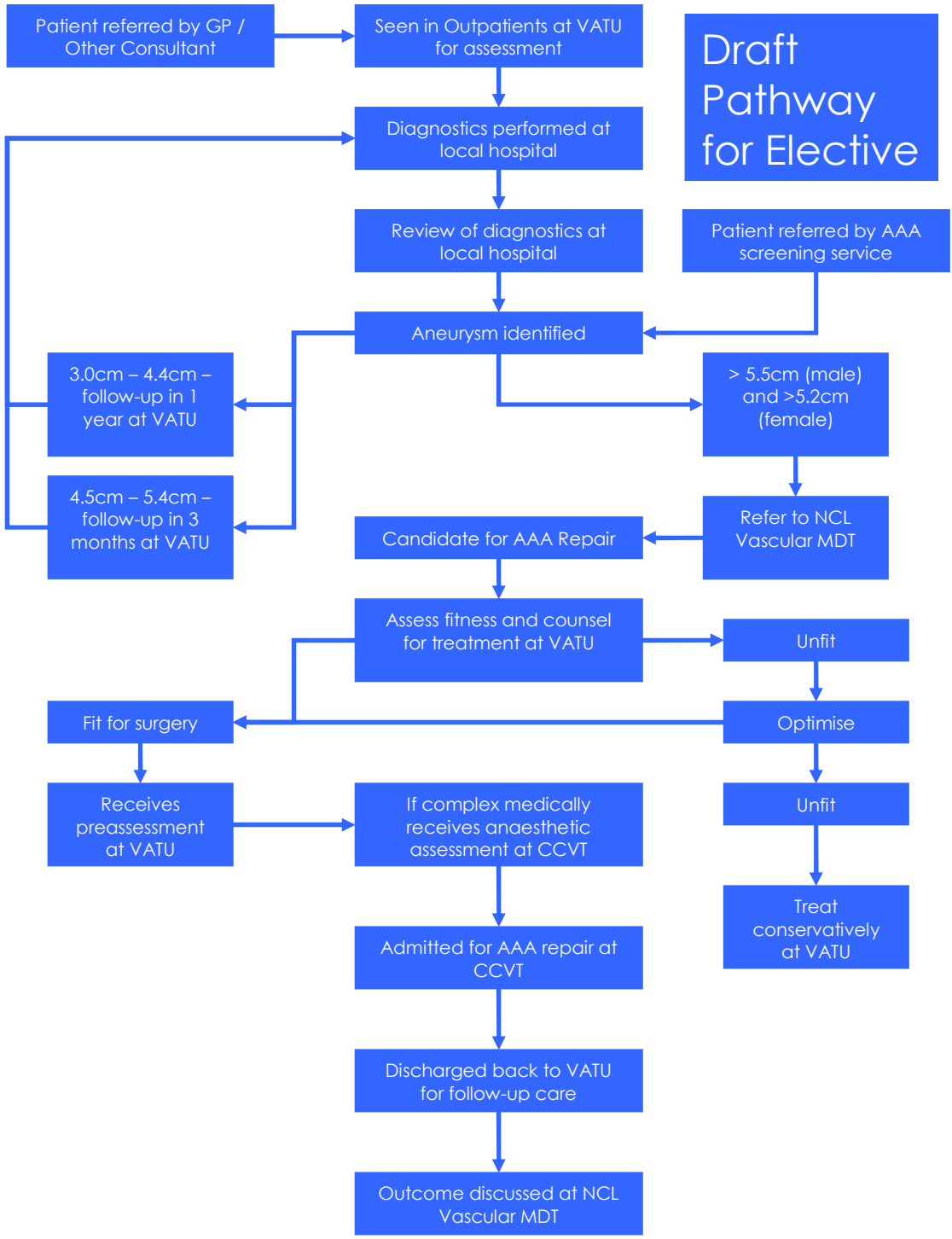
Below are the three main clinical pathways for complex vascular activity. These illustrate that diagnostics, assessment and consultation and non complex procedures and intervention will be provided at local hospitals, whereas complex intervention will be provided at the centre for complex vascular treatment.

These pathways are aspirational at this stage, and will require working through in detail with the clinical teams. In essence, they provide for specialist care at the centre and outpatient, diagnostic and clinically appropriate inpatient

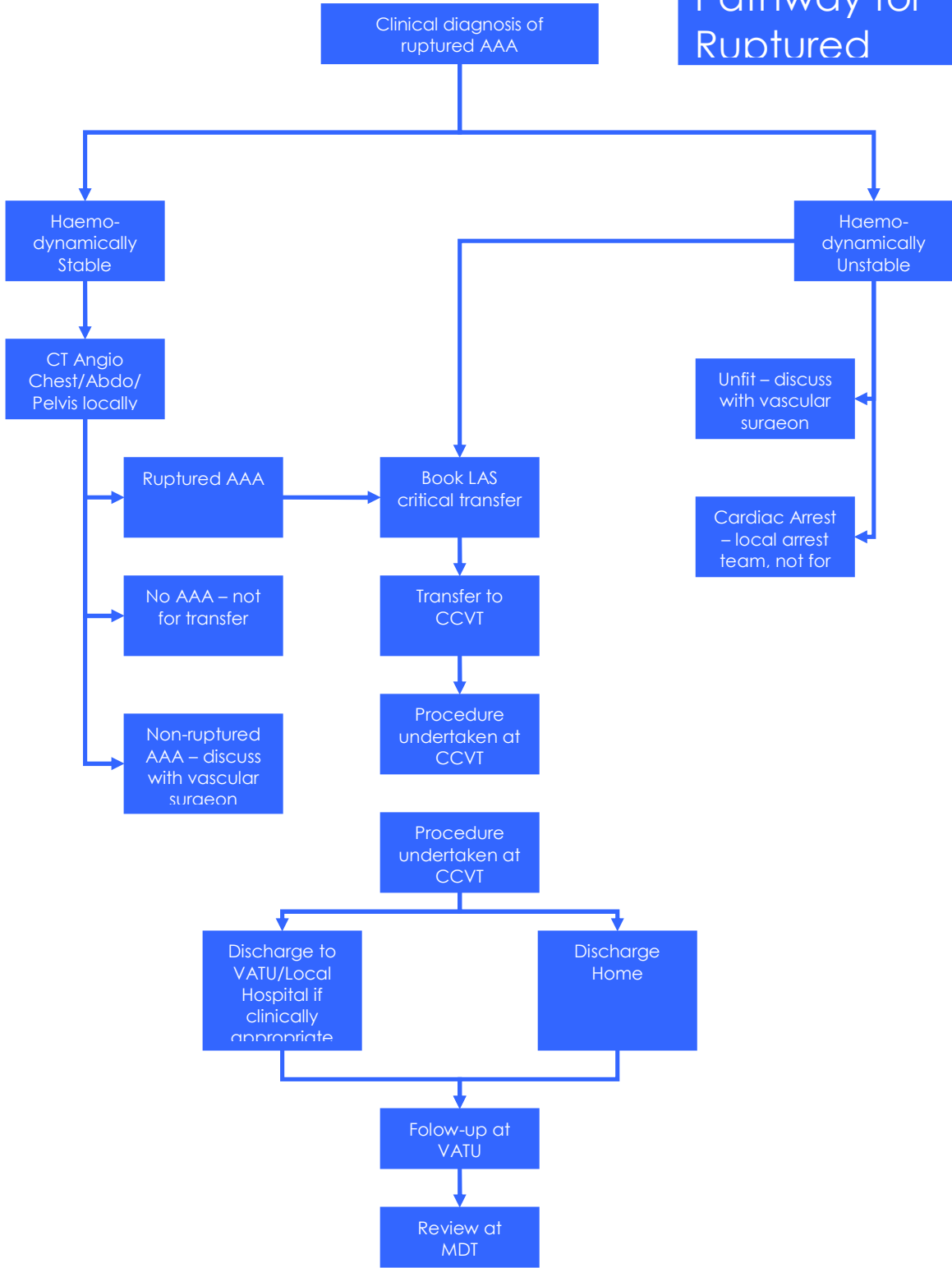
care at local hospitals. These pathways will reduce duplication of services, maintain as much activity as is appropriate locally and allow scope for increasing co-ordinated care across the sector.

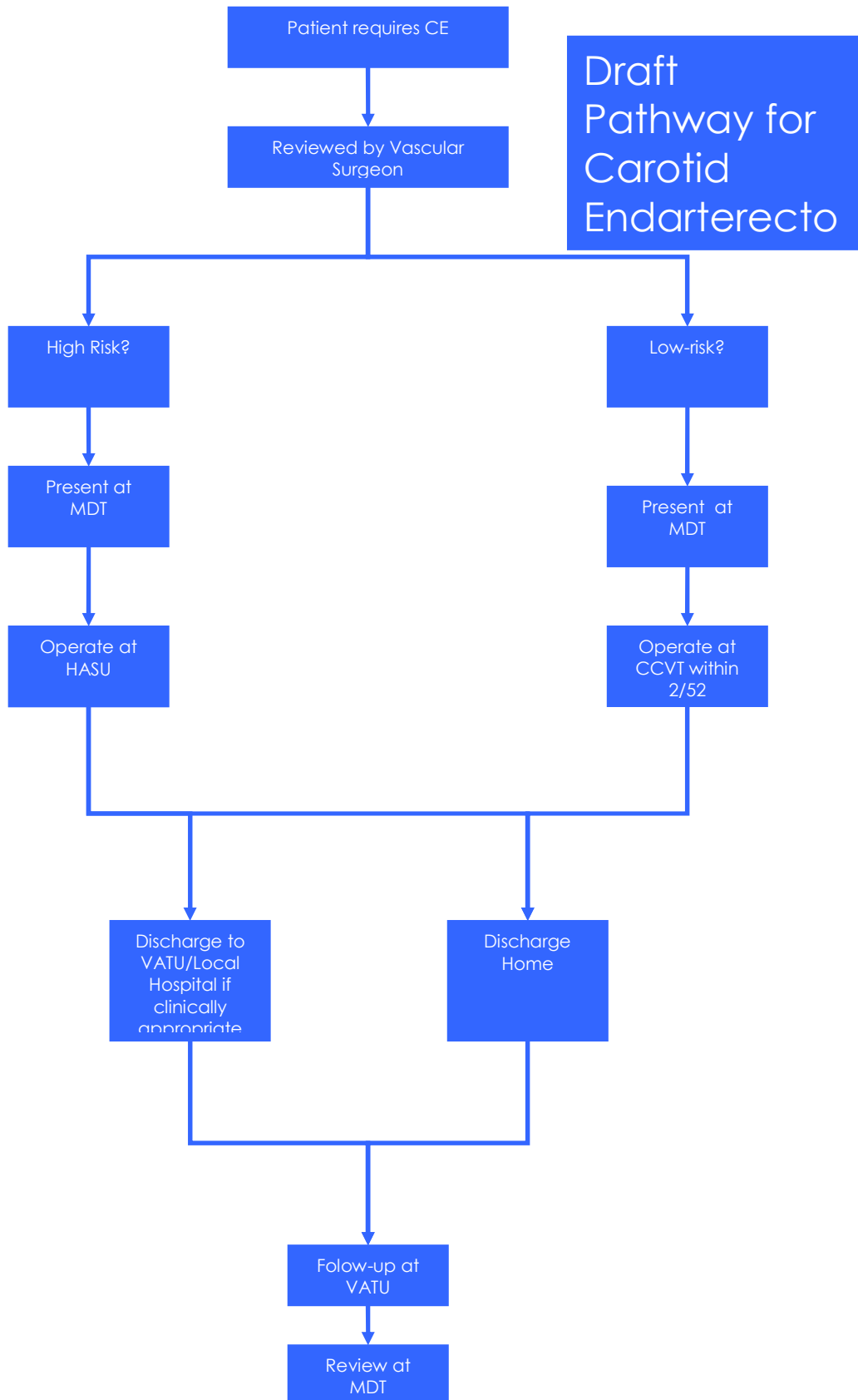
The opportunities here are manifold: at present, the sole specialist amputation rehabilitation service resides at the Royal Free. With the acceptance of this proposal, we will be enabled to adopt a sector-wide aspect to our service planning and look to provide protocol-driven specialist rehabilitation across NCL. This will be delivered through enhanced professional training and analysis of service models.

By providing a co-ordinated model of care, we will be able to reduce duplication and improve efficiency across the pathways. By standardising protocols of care and having a single governance structure we can ensure and measure equality of service across the sector.



Draft Pathway for Ruptured





17. Capacity Plan

Activity in scope (calculated from projected outturn for 2011-12, this is total activity at all centres in NCL and includes both NCL and non-NCL patients):

17a. Complex Activity Delivered at the Centre (CCAT)

Procedure to be carried out at the CCAT	Complex activity to be carried out at the CCAT (per year based on 2011/12 activity)				Endovascular Theatre Sessions Required (Per Week)	Endovascular Interventional Suite Sessions Required (Per week)	Inpatient Beds Required (Per week) [based on 85% utilisation]
	RFH	BCF	UCLH	Total			
Aortic aneurysm repairs	53	43	88	184	6.6	0	8
Lower Limb Interventions	154	17	20	191	3.2	0.7 – 0.9*	9
Carotid endarterectomy	7	27	10	44	1.2	0	2
TOTAL					11	0.7 – 0.9*	19

* Data illustrated as a range to ensure capacity at the CCAT is adequate.

17b. Resources Required at the CCAT

Resource	Current weekly vascular requirement at RFH	Additional weekly <u>complex</u> vascular Requirement	Total
Endovascular theatre sessions per week	9	11	20
Endovascular Interventional Suite sessions per week	2	0.7 – 0.9	2.7 – 2.9
Inpatient Beds	11 beds (including 8.1 complex beds)	10	21

17c. Activity Delivered at the HASU

Activity	Projected Outturn	Endovascular Theatre Sessions Required (Per Week)	Endovascular Interventional Suite Sessions Required (per week)	Open vascular theatre sessions required	Inpatient Beds Required
Carotid endarterectomy	55	0.8	0	0	1.21

18. Financial & Staffing Model

Vascular is a loss making service, currently losing over £2m at the Royal Free alone. The greater the service consolidation, the greater the opportunity for service synergy efficiency savings, which will assist in reducing the deficit. This loss will increase by an estimated £0.5m as complex work transfers over. We have estimated that, if the whole service transferred in line with the model of care, the overall loss could be mitigated to around £1m by making cost savings across the whole service. Clearly, we would need commissioner support to give this practical effect.

It is acknowledged that the Commissioners expect the implementation of the integrated vascular service model to be cost neutral in terms of not costing more than current services that are commissioned. It is also recognised that repatriations must be managed without incurring additional costs to the commissioners. Further discussion with commissioners and providers regarding commissioning arrangements and transitional funding agreements are underway to ensure the financial viability of the new service.

19. Activity Forecasting

Based on the actual activity data submitted by RFH, BCF and UCLH for Q1, Q2 and Q3 for 2011/12, the activity forecast (NCL and non NCL) is as follows:

Financial Year	FY2012/13	FY2013/14	FY2014/15
Aortic Activity	200	220	225
Lower Limb Interventions	200	220	240
Carotid	50	50	50
Carotid (HASU)	55	55	55

Growth is anticipated in aortic activity and lower limb through non-NCL referral, through increased activity via AAA screening programme and improved access to services for PVD. This activity is distinct from commissioner-derived activity as it includes non-NCL activity and activity from spells where a vascular procedure was not the dominant code.

20. Timescales

Our proposal is to consolidate vascular services across North London to create a genuine North London provider network from **April 2012**. A detailed implementation plan of how the service shifts and develops from April 2012 is currently being prepared.

21. Implementation

We envisage that the implementation will be undertaken from 1st April 2012 when the complex services will transfer. There is a significant level of detailed work that needs to be undertaken and a dedicated project manager has been appointed to deliver this.

It is proposed that the NCL Core Vascular group would transition into the implementation project board which will be chaired by the Provider network vascular lead alongside the RFH Executive Director of Operations working in collaboration with the NCL commissioner vascular lead and supported by the project manager. This board will have Vascular and Interventional Radiology consultant representation from partner trusts, and representation from NCL, the CVS network to provide NCL with assurance.

22. Gap analysis and Risk mitigation

In terms of challenges facing the Trust within scope, these can be summarised as follows:

1. Length of stay reduction for vascular patients: this is the key challenge across the network as lengths of stay are high. Simply ensuring patients get transferred out of the CCVT in a timely fashion to ensure throughput is not enough.
2. Access to Specialist Amputation Rehabilitation: this is currently limited to the services available at RFH, which will be expanded to meet the additional demand presented by the consolidation of services.
3. Bringing in scaled service improvement: if this RFH bid is successful, there will be a need for focused work implementing pathways between sites, improving efficiency and monitoring success against the agreed performance indicators.
4. The lack of cardiothoracic surgery on site is one area where we are challenged. However, the guidance from Commissioning Support for London is clear that this is a) not an absolute requirement for complex vascular surgery² and b) can be provided within the same Academic Health Science Centre, which it is at the Heart Hospital within UCL Partners. As noted above we will continue to provide vascular surgical support for the Heart Hospital.
5. Agreeing a financial model which supports innovation, productivity and cost reductions.

23. Conclusion

We have proposed a solution for delivering centralised complex vascular services that is acceptable to all partners, is cost-neutral to commissioners and requires minimum infrastructure investment to enable as the capacity to provide the complex centre exists already at RFH. The pathways included in this document seek to ensure there is no service duplication and patients will receive as much of their care as is clinically appropriate close to home.

² Cardiovascular Project Co-dependency Framework, Commissioning Support for London, 2010, Appendix 4