

## VASCULAR SURGERY PROFORMA

Domain: O - Objective / K - Knowledge / CS - Clinical skills / TS - Technical skills

### CURRICULUM

Section	Page	Change	Reason
	1	Cover page updated with version details	Editorial
	2	Acknowledgements updated with current authorship	Editorial
2.1	4	Addition of the words 'and Ireland'	Previous omission
3.5.1	13-14	Addition of generic paragraphs on genomics, clinical informatics and sustainability. Footnotes to further references added.	These paragraphs have been included in surgical curricula to emphasise the importance of emerging areas in healthcare, ensuring that trainees remain adaptable and informed as surgical practice evolves.
5.4		In the Management and leadership section – addition of 'across relevant health services and the variations between nations.	In response to lay/patient feedback, there is a recognised need to strengthen trainees' understanding of the structure and functioning of health systems across the UK. Knowledge limited to the trainee's immediate training jurisdiction may not sufficiently prepare them for the realities of working within or alongside other devolved health systems.
5.4		In the Clinical experience section – added wording – 'To ensure opportunities to acquire the breadth of curricular competencies in a variety of learning environments and cultures, trainees should, where geographically possible, complete a training programme that includes rotation through multiple units or sites. This recognises the importance of an ability to constructively compare different approaches to delivering surgical patient care and work-based cultures'.	To ensure optimal exposure and learning from different training cultures and environments, as well as clarifying the need for full curricula coverage. This is consistent with other curricula, namely Urology, Plastic Surgery and Otolaryngology
Throughout curriculum document		<ul style="list-style-type: none"> <li>Health Education England (HEE) replaced with NHS England (update)</li> <li>HEE local offices removed (update)</li> <li>Corrected hyperlinks (updates)</li> </ul>	Editorial updates

## SYLLABUS

Syllabus topic	Domain (O / K / CS / TS)	Describe the change	Reason for change
<b>Vascular Surgery Generic Topics</b>			
VASCULAR ANATOMY			
VASCULAR PHYSIOLOGY			
VASCULAR PATHOLOGY			
VASCULAR EPIDEMIOLOGY			
SCREENING AND SURVEILLANCE			
RISK FACTOR MODIFICATION			
VASCULAR CONDITIONS OF CHILDHOOD			
NUTRITION			
CARDIO-RESPIRATORY DISEASE			
HAEMATOLOGY			
CLINICAL AUDIT, RESEARCH & HEALTH ECONOMICS			
OUTPATIENT, WARD and MDT MEETINGS			
<b>Vascular Surgery Imaging</b>			
PRINCIPLES OF VASCULAR IMAGING			
VASCULAR ULTRASOUND			
COMPUTED TOMOGRAPHIC IMAGING			
MAGNETIC RESONANCE IMAGING			
CATHETER ANGIOGRAPHY			
<b>VASCULAR SURGERY Generic Procedures 1</b>			
OPEN VASCULAR SURGERY			
<b>VASCULAR SURGERY Generic Procedures 2</b>			
ENDOVASCULAR PROCEDURES			
<b>Vascular Surgery Disease Specific Topics</b>			

VASCULAR TRAUMA	O	Added: 'To be able to recognise and manage vascular injuries caused by laparoscopic or robotic surgery'	New addition to acknowledge the increased use of robotic surgery and associated injuries
		Moved from Acute intestinal obstruction section and wording changed 'To have <u>an understanding and be able to initiate OR undertake</u> both small and large bowel resections (with stoma formation) in collaboration with General Surgery'.	Appreciation that vascular surgical practice and therefore achievement of competencies does not include bowel resection BUT this may be required in a trauma setting or in complications relating to ruptured AAA
CHRONIC LOWER LIMB ISCHAEMIA			
VASCULAR COMPLICATIONS OF DIABETES			
VASCULAR DISEASE OF THE UPPER LIMB			
HYPERHIDROSIS			
VASOSPASTIC DISORDERS AND VASCULITIS			
CAROTID ARTERY DISEASE			
ANEURYSM - ELECTIVE			
ANEURYSM - EMERGENCY			
VASCULAR ACCESS (VA)	O	Simulation added: 'To be able to undertake surgical AV fistula at radiocephalic and brachiocephalic levels <u>in real terms or simulation</u> '	Simulation option added for achievement of competencies
		Simulation added: To be able to undertake basilic vein transposition AV fistula <u>in real terms or simulation</u>	Simulation option added for achievement of competencies
		Simulation added: To be able to undertake graft salvage and revision surgery including: Graft thrombectomy, revision, ligation or excision <u>in real terms or simulation</u>	Simulation option added for achievement of competencies
		Change from performing to understanding: To have <u>understanding</u> of DRIL and more complex fistula salvage and revision procedures	Unachievable competencies therefore changed to allow knowledge of procedures but not essential for CCT

		Wording change ' <u>To have an understanding of and</u> be able to insert dialysis access inclusive of central venous dialysis catheters and peritoneal dialysis catheters'	This is not widely practiced by vascular surgeons, therefore exposure to this is limited and competencies not achieved
RENOVASCULAR DISEASE AND TRANSPLANTATION	O	Remove 'To understand and ideally have been supervised through the laparoscopic approach to the kidney'	The majority of vascular surgeons are not involved in either laparoscopic surgery or mobilisation of the kidney meaning achieving competencies would be difficult
		Remove 'To be able, with colleague assistance/dual consultant operating, to undertake renal artery endarterectomy/bypass and where required open surgical nephrectomy (inclusive of trauma)'	This forms part of complex practice and is not expected as a day 1 consultant. Nephrectomy, even in trauma, would be performed by Urologists and not vascular surgeons. Achievement of competencies for this will be impossible
		Remove 'If undertaking a transplant placement, within vascular training, plan to be able, under supervision, to undertake: Living kidney donor nephrectomy open/laparoscopic, renal auto transplant, renal allotransplant, and a transplant nephrectomy'	These operations are key for transplant surgery and will never be offered by current vascular surgical practice. If in transplant rota, vascular trainees should focus on organ harvest, access and standard renal transplantation
MESENTERIC VASCULAR DISEASE			
SUPERFICIAL VENOUS DISEASE	O	Wording added ' <u>To appreciate and where required,</u> undertake open surgical management of lower limb superficial venous disease (multiple phlebectomies, SFJ ligation, SPJ ligation, LSV strip).'	Acknowledges a change in trend from open to endovenous surgery. Change in wording to reflect that exposure to this in training may be limited.
DEEP VENOUS THROMBOSIS	O	Wording change from performing to understanding ' <u>To understand the principles and procedures of</u> venous thrombectomy and recognise any subsequent complication'	Acknowledges that this is a subspecialist procedure and may not be seen by every trainee before the end of training. Therefore progression to competence will be limited.
DEEP VENOUS INSUFFICIENCY	O	Wording change to include understanding and wider mentoring ' <u>To understand the</u>	Appreciation that this is a subspecialty topic and exposure to all vascular trainees may be

		<u>principles and procedures of deep venous reconstruction or venous bypass and perform such with appropriate mentoring</u> '.	limited meaning that achieving competence will be difficult
LYMPHOEDEMA			
VASCULAR SURGERY ABDOMINAL AND GENERAL SURGERY TOPICS			
SUPERFICIAL SEPSIS INCLUDING NECROTISING INFECTIONS			
ABDOMINAL WALL			
LAPAROSCOPIC SURGERY	O	Remove 'To be able to insert laparoscopic ports by both the open and closed techniques and be able to deal with all the complications'.	Does not form part of current vascular surgical practice meaning this will not form part of a day 1 consultant role and achievement of competencies will be impossible
		Remove 'To be able to undertake a diagnostic laparoscopy and ask for General Surgical assistance where required'.	Does not form part of current vascular surgical practice meaning this will not form part of a day 1 consultant role and achievement of competencies will be impossible
		Remove 'To be able to undertake the laparoscopic skills of suturing and knotting and be able to control bleeding, to the level of requiring General Surgical assistance to deal with some complications'	Does not form part of current vascular surgical practice meaning this will not form part of a day 1 consultant role and achievement of competencies will be impossible
ELECTIVE HERNIA	O	Remove 'To be able to undertake abdominal wall hernia repairs, (femoral, inguinal and incisional) and be able to recognise complications requiring assistance.'	Does not form part of current vascular surgical practice meaning this will not form part of a day 1 consultant role and achievement of competencies will be impossible
		Remove 'To be able to undertake laparoscopic hernia repairs (TEPS and TAPS) under General Surgery consultant supervision / direction'.	Does not form part of current vascular surgical practice meaning this will not form part of a day 1 consultant role and achievement of competencies will be impossible
ACUTE ABDOMEN	O	Remove 'To be able to undertake both open and laparoscopic appendicectomies'.	Does not form part of current vascular surgical practice meaning this will not form part of a day 1 consultant role and achievement of

			<b>competencies will be impossible</b>
ACUTE INTESTINAL OBSTRUCTION	<b>O</b>	<b>Section moved to trauma section and edited from 'To be able to undertake both small and large bowel resections (with stoma formation) in collaboration with General Surgery'.</b>	
GASTROINTESTINAL BLEEDING	<b>O</b>	<b>Moved 'To be able to undertake a Sigmoid colectomy in conjunction with the colorectal surgeons'</b>	<b>Section removed as covered in trauma section</b>
ABDOMINAL INJURIES	<b>O</b>	<b>Remove 'At trauma laparotomy be able to recognise the requirement for liver debridement or distal pancreatectomy and undertake these in collaboration with trauma surgeons. In collaboration with general surgery to be able to undertake a sigmoid colectomy'.</b>	<b>Vascular surgical trainees do not have enough exposure to trauma laparotomies to achieve competence. These assessments and operations will always be performed by General Surgeons.</b>
GASTRIC STASIS, PARALYTIC ILEUS AND CONSTIPATION			
ISCHAEMIC AND INFECTIOUS COLITIS			
RETICULO-ENDOTHELIAL SYSTEM			
CRITICAL CONDITIONS		<b>Added 4<sup>th</sup> critical condition 'Femoral false aneurysms'</b>	<b>To reflect a sustained rise in the incidence of false aneurysms of the common femoral artery (CFA). Currently there is no specific assessment for the complexity surrounding emergency operations on false aneurysms in the CFA. It is now a common vascular surgical procedure needed as a day 1 consultant. A Procedure Based Assessment (PBA) has been constructed to reflect this.</b>

**APPENDICES – Please refer to updated/clean version**

Appendix	Page	Change	Reason
Appendix 1 – Capabilities in practice			
Appendix 3 – Critical conditions	72	Additional Critical Condition – Femoral false aneurysms	<p>A common vascular surgical procedure needed as a day 1 consultant.</p> <p>To reflect a sustained rise in the incidence of false aneurysms of the common femoral artery (CFA) for a variety of factors, critical conditions are assessed via CEX and CBD assessments and will help assess the complexity surrounding emergency operations on false aneurysms in the CFA.</p>
Appendix 4a – Index Procedures			
Appendix 4b – Indicative numbers			
Appendix 5 – Courses and other learning opportunities away from the workplace			
Appendix 6 – Roles and responsibilities for supervision			
Appendix 7 – Quality management of the curriculum			
Appendix 8 – Glossary			
Appendix 9 – Assessment blueprint			