

**CSVS**

THE COLLEGE AND SOCIETY  
FOR CLINICAL VASCULAR SCIENCE  
Great Britain and Ireland

# Education

## The Accreditation Document

Attaining and maintaining registration as an  
Accredited Vascular Scientist (AVS)

**Version 5.0**

**August 2025**

**Doc Ref ED-001**



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Version Number	Change	Author	Date
5.0	Content-addition of mandatory research module; new carotid grading criteria; formatting changes	Author: Education Committee Approval: CSVS Exec Committee	August 2025

### Purpose

The purpose of this document is to provide a comprehensive guide for individuals seeking to attain and maintain accredited vascular scientist status with the CSVS.

# **Attaining and Maintaining Registration as an Accredited Vascular Scientist (AVS)**

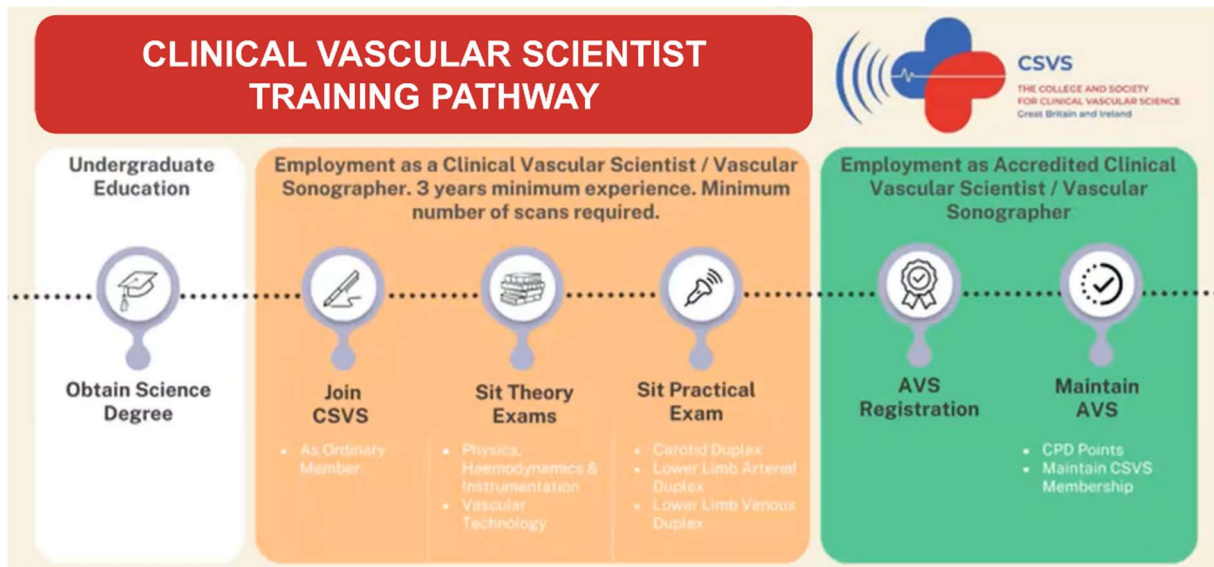
## **Contents**

1. Introduction
2. Academic requirements
3. Training and support
4. Theory exams
5. Research module
6. Practical exam
7. Continuing Professional Development (CPD) and maintaining AVS status

Appendices

## 1. Introduction

The aim of the CSVS Accreditation process is to ensure the achievement and maintenance of high standards of diagnostic vascular investigations for the benefit and safety of patients. Gaining accreditation as a clinical vascular scientist is recommended for all individuals practicing vascular ultrasound in the UK or Ireland and is aimed at the advanced scientist with **a minimum of three years** full-time postgraduate experience (or part-time equivalent) **in a range of key diagnostic vascular investigations**. The accreditation process can be summarised as follows:



## 2. Academic requirements

- Applicants for AVS will be expected to hold a relevant science degree prior to accreditation training
- The College will consider equivalent professional qualifications or experience (e.g. radiography)

## 3. Training and support

The CSVS recognises that clinical vascular scientists work in a variety of clinical settings. They may be employed as lone scientists, as part of a large team, in dedicated vascular units or in general radiology departments. They may be specifically employed as a supernumerary trainee experiencing a broad range of academic and clinical training support or otherwise with less education support and unfocused training.

It is the responsibility of the applicant to ensure that they have the appropriate support and guidance (preferably from an experienced AVS) and be able to gain sufficient clinical experience in all the core modalities before embarking on the route to AVS. Supplementary academic support may be obtained from a higher education establishment (e.g. by studying for an MSc Medical Ultrasound, MSc Clinical Sciences: Vascular Science).

It is also the responsibility of the applicant to ensure there is a suitable record of each type of diagnostic vascular investigation carried out. This record may be part of a relevant IT system (e.g. PACS), a department database or an individual's logbook but it must be in a format that contains enough information to breakdown the clinical activity into the compulsory and optional elements of the **Core Modalities** (the elements and numbers required are detailed in appendix 1).

#### 4. Theory exams

To become accredited through CSVS and earn the AVS title, candidates must pass two theory examinations and a practical examination (from 1st September 2026, candidates will also be required to complete a mandatory research module).

- Applicants for the theory exams must be a member of the CSVS.
- There are two theory exams:
  - Vascular Physics, Haemodynamics and Instrumentation
  - Vascular Technology
- Candidates may choose to sit the exams in any order but only one can be attempted per exam date.

Applications to sit the theory exams can be made through the CSVS website education page. Cost and dates of upcoming exams and registration deadlines can also be found here along with a detailed syllabus and reading list for each exam.

The exams are taken electronically on a computer (at home/work) via an online proctoring system preventing the need to travel to a test centre.

Each theory exam lasts 2 hours 30 minutes and consists of 100 Multiple Choice Questions (MCQs). Any candidate requiring extra time for a qualifying medical condition should contact the theory exam officer ([technology.exam@csvs.org.uk](mailto:technology.exam@csvs.org.uk) or [physics.exam@csvs.org.uk](mailto:physics.exam@csvs.org.uk)) with evidence before registering for the exam.

You need a percentage score of 70% or more to PASS the exam.

There is no limit on the number of times a candidate may apply to re-sit a failed theory exam. However, to retake the failed exam there must be a minimum of 3 calendar months after the failed exam before sitting the next exam.

The practical exam must be passed within 5 years of the first theory exam passed. Any expired theory exam(s) must be retaken before the practical exam can be attempted.

The 5-year validity of the theory exams may be extended due to extenuating circumstances. For example, maternity leave may be added onto the 5-year period up to a maximum of 1 year. Evidence would need to be provided. An email must be sent to the practical exam officer to discuss any allowances.

The CSVS runs a fundamentals study day each year to support those in training. This study day covers basic physics and technology, and practical scanning techniques. The CSVS also runs a two-day exam revision course aimed at helping candidates in their theory exam preparation.

**Who is eligible to take the theory exams?** The theory exams are aimed at individuals who have been practicing diagnostic vascular investigations for 2 years, however, this length of experience is not mandatory. Candidates with well-structured academic support may find they have confidence to sit the theory exams earlier.

The theory exams are aimed at clinical vascular scientists aspiring to AVS. However, they are open to any CSVS member to sit at any time e.g. vascular researchers, nurses or surgeons wishing to test their theoretical knowledge.

## 5. Research Module

**From 1<sup>st</sup> September 2026**, to become accredited through CSVS and earn the AVS title, candidates must also complete the mandatory research module before being able to sit their practical exam.

The research module will involve:

1. Successful passing of the CSVS Technology Theory Exam, which includes research related questions. Please see the Technology Exam syllabus on the CSVS website education pages
2. Undertake a small research project or service evaluation and submit an abstract to a vascular related conference (e.g. the Vascular Societies ASM, Charing Cross Symposium, BMUS) or the final manuscript to a relevant journal (e.g., Journal of the Vascular Societies of GB&I)
3. Provide evidence (e.g., email) of abstract or manuscript submission (not publication or acceptance) to the CSVS Practical Exam team upon application for the AVS practical exam

The mandatory research module will be supported by an optional research study day/online element which is aimed to support those unfamiliar with getting started with research and is open to any member irrespective of whether they are completing AVS or not, i.e., those wishing to learn more about research. However, the optional study day/online element is not necessary for the AVS accreditation or the HCPC equivalence process and is supportive in nature only.

## 6. Practical Exam

Applicants for the practical exam:

- a. Must be a member of the CSVS (see website for details of membership types).
- b. Be **currently employed in the UK or Ireland** to perform vascular diagnostic investigations.
- c. Have been employed in the UK or Ireland to perform vascular diagnostic investigations for **at least 6 months** prior to applying to sit the practical exam.
- d. Meet the academic requirements specified in **Section 2**.
- e. Have passed both theory exams in the last 5 years, counting from the date of the first theory exam.

- f. *From 1st September 2026, have completed the mandatory research module.*
- g. Have performed **at least 600 scans in each of the 3 core duplex modalities** (including a minimum number of compulsory elements) and **200 ABPIs** (see Appendix 1).
- h. Have at least 3 years full-time diagnostic vascular scanning experience (or part-time equivalent) in each core modality (see Appendix 2).
- i. Have carried out at least 25 scans from each of core modalities 1-3 in the preceding three months prior to applying to sit the practical exam.
- j. Must provide a reference from their current line manager, any previous line manager, internal examiner and a consultant vascular surgeon/radiologist.

**How do I apply for the practical examination?** The application form for the practical exam is available on the College website at all times of the year.

To apply for the practical examination all of the above criteria must be met. Included with the application the following documents must be ready to upload:

- For each modality (1-3): a copy of your local protocols and 25 anonymised reports from the preceding 3 months (performed by the applicant). The documents must be uploaded as one zip file for each modality.
- References from your internal examiner, current line manager, any previous line manager (during your training) and a vascular consultant surgeon/radiologist. Reference forms can be found on the CSVS website. The contact details for each referee must be legible and current.
- *From 1<sup>st</sup> September 2026, it will also be mandatory to include evidence (e.g. email) of submission (not publication or acceptance) of a small research project or service evaluation to a vascular related conference (e.g. the Vascular Societies ASM, Charing Cross Symposium, BMUS) or the final manuscript to a relevant journal (e.g. Journal of the Vascular Societies of GB&I).*

The practical exam consists of three patient examinations and a *viva voce*:

1. A bilateral carotid and vertebral artery duplex (from Core Modality 1 – Carotid duplex)
  2. A single full-leg (aorta-ankle) arterial duplex (from Core Modality 2 – Peripheral arterial duplex)
  3. A single full-leg (groin-ankle) venous duplex (from Core Modality 3 – Peripheral venous duplex)
- *Viva Voce* – covering clinical pathways, clinical protocols, ultrasound machine knowledge and understanding of service development

**For the purpose of a standardised accreditation process the minimum scope for each scan is defined by the CSVS, irrespective of local protocols. Details of the minimum scope for each of the core modality scans can be found in appendices 3, 4, 5 & 6.**

The practical exam may be taken at any time of the year. It is expected to last 3-5 hours and is taken in the candidate's place of work.

There will be two examiners (both current AVS)

- one internal examiner appointed by the candidate (>1 year post

- accreditation experience)
- one external examiner appointed by the CSVS (>3 years post accreditation experience).

Two external AVS registered examiners may be appointed if there is not a suitably qualified or experienced internal examiner.

There is no limit on the number of times a candidate may apply to re-sit the practical exam however it must be taken within 5 years of passing both the theory exams and at least 6 months after a previously failed practical exam.

**Successful completion of the practical exam entitles the candidate to be registered and use the term: Accredited Vascular Scientist (AVS)**

The candidate will be placed on the mandatory AVS register. This register will contain the candidate's name and membership number and will be searchable to the public and other professionals. Any questions, please contact the CSVS membership secretary at [membership@csvs.org.uk](mailto:membership@csvs.org.uk).

## **7. Continued Professional Development (CPD) and maintaining AVS status**

For full information please see the CPD document available on the education page of the CSVS website.

The AVS award only remains valid under specific conditions. The AVS must:

- **Condition 1** - be a current paid-up Fellow of the CSVS. Fees are renewed annually.
- **Condition 2** - maintain clinical competency in each of the core duplex modalities and keep appropriate records
  - Core Modality 1 – Carotid duplex
  - Core Modality 2 – Peripheral arterial duplex
  - Core Modality 3 – Peripheral venous duplex
  - Core Modality 4 – ABPIs

Clinical competency includes practical elements and individuals may maintain their skills by a combination of various activities, including regularly performing and/or supervising scans or carrying out alternative CPD activity.

- **Condition 3** - complete CPD activities and accrue a total of 30 CSVS CPD points summed from the previous 3 membership years (i.e. average 10 points per year) and register points with the CSVS by 31<sup>st</sup> August every year. The CPD year runs from 1<sup>st</sup> September to 31<sup>st</sup> August each year.
- **Condition 4** – mandatory inclusion on the public AVS register.



## How do I register my CPD points?

Access to your personal CPD record is available on the CSVS website for updating throughout the year. Data entry requires use of drop-down menus with the relevant points for each activity given. The total year's points should be entered by 31<sup>st</sup> August each year. Any queries regarding qualifying activities should be addressed to the CPD Officer ([cpd@csvs.org.uk](mailto:cpd@csvs.org.uk))

Exceptions and exemptions in the form of allocated points may apply due to career breaks, sabbaticals, parental leave, extenuating circumstances or long-term sickness for up to 1 year. Applications will be considered on an individual basis. Other exemptions may be considered based on individual merit. Please contact the CPD Officer for advice.

Newly registered AVS must start collecting CPD points immediately and submit data before 31<sup>st</sup> August following their practical exam.

Newly registered AVS will be awarded 10 points for each of the last 3 years, pro rata, to ensure their 3-year rolling average is not disadvantaged at the start. All CPD points must be earned post accreditation date.

## CPD Audit

Each year the CSVS Education Committee will randomly select 10% of AVS for a detailed inspection of CPD and clinical activity. It is the personal responsibility of each registered AVS to keep records of their CPD activity (e.g. certificates, programmes, course notes) and their clinical activity (e.g. using PACS, departmental database or personal logbook).

Fellows must ensure their CSVS locker is kept up to date with appropriate evidence for and a reflection of CPD points claimed. Failure to do so will result in non-evidenced points being removed from your on-line CPD record.

**Failure to satisfy the 10% audit will result in lapse of AVS status. Reinstatement will be dependent on an individual remedial CPD programme which will be designed to ensure that conditions 1 to 3 have been satisfied.**

## Lapsed AVS

- If conditions 1 to 3 are not met before 30<sup>th</sup> September, then AVS status will be changed to "lapsed"
- If conditions 1 to 3 are then subsequently met between 1<sup>st</sup> of October and the 31<sup>st</sup> of December AVS status will be reinstated following payment of a £100 reinstatement fee which will be donated to The Circulation Foundation
- If conditions 1 to 3 are still not met by 31<sup>st</sup> December, then AVS status will remain lapsed until Conditions 1 to 3 are met and an individually designed CPD remedial programme is successfully completed. This tailored programme will require evidence of professional development and clinical skills and will be at the discretion of the Education and Executive Committees. Reinstatement at this late stage will incur a fee of £250 which

will be donated to The Circulation Foundation.

**Lapse of AVS will result in removal from the publicly available register of AVS; the term AVS cannot be used during this time. Reinstatement on the register will follow once the conditions for re-instatement are met.**

If AVS status remains lapsed for 5 years or more, both the theory and practical exams will have to be retaken (offered at a reduced cost) and all conditions met before AVS can be reinstated. Advice should be sought from the Education Committee.

For further details on CPD and re-instatement please read The CPD document available on the website.

## Appendix 1: The core modalities and required numbers

A minimum number of diagnostic vascular investigations are required and must be achieved by direct hands-on experience of **appropriate patient referrals**. At least 3 years' full-time experience (or part-time equivalent) **in each of the compulsory elements** of the core modalities is required (even if the minimum number is reached sooner).

The Core Modalities required for eligibility for AVS registration are:

- **Core Modality 1** – Carotid duplex **MINIMUM 600**
  - Compulsory element – Carotid/vertebral duplex MINIMUM 500
- **Core Modality 2** - Peripheral arterial duplex **MINIMUM 600**
  - Compulsory element – aorto/iliac/femoral/calf arterial duplex MINIMUM 300
- **Core Modality 3** - Peripheral venous duplex **MINIMUM 600**
  - Compulsory element – lower limb varicose vein and deep venous duplex MINIMUM 400
- **Core Modality 4** – ABPIs (including exercise testing) **MINIMUM 200**

The CSVS strives to be as flexible and inclusive as possible and take into account the variety of clinical settings and changing workload of candidates aspiring to AVS. As such each Core Modality is split into **compulsory** and **optional** elements. The optional elements can be used to boost the numbers in each core modality up to the limits outlined in the table below. The general expectation would be for the number of scans to increase during the training period. For example: 100 scans in year 1, 200 in year 2 and 300 in year 3, in each modality. The majority of the scans must demonstrate pathology rather than be “normal”.

The three compulsory elements of Core Modalities 1, 2 & 3 will be assessed in the practical examination.

	Core Modality 1		Core Modality 2		Core Modality 3		Core Modality 4	
	Carotid duplex	Required numbers	Peripheral arterial duplex	Required numbers	Peripheral venous duplex	Required numbers	ABPIs	Required numbers
Compulsory Elements	Bilateral Carotid Duplex (ex. t/up scan)	Min 500	Single leg arterial (aorta-TPT)	Min 250	Single leg VV scan (Must include: Primary vv, Recurrent vv)	Min 400 Min 50 Min 100	ABPIs - bilat (Must include: ABPI pre+post, Exercise - bilat)	Min 150 Min 50
			Full single leg arterial (aorta-ankle)	Min 50				
Optional Elements	Intraoperative carotid duplex	Max 50	Single leg segment duplex (iliac only/ femoral only/ calf only)	Max 300	Vein map (pre bypass)	Max 50	Toe pressures - single	Max 50
	Follow-up carotid	Max 50	Graft scans	Max 150	DVT arm	Max 50		
	TCD imaging	Max 50	Upper limb arterial	Max 100	DVT Above knee	Max 50		
			Thoracic outlet duplex	Max 50	DVT calf	Max 50		
			EVAR surveillance	Max 50	Pre-op vv mark	Max 50		
			Renal artery	Max 50	Intra-op vv scan	Max 50		
			True aneurysm scan	Max 50				
			False aneurysm scan	Max 50				
			Fistula surveillance	Max 50				
Total	Minimum	600	Minimum	600	Minimum	600	Minimum	200

## Appendix 2: Calculating the number of years of experience

A minimum of 3 years' clinical experience and responsibility in diagnostic vascular investigations is required before the practical examination can be taken.

The **minimum of 3 years** clinical experience is based on **37.5hrs per week** employed as a clinical vascular scientist or vascular sonographer. Within these full-time hours there is the expectation that this will involve scanning patients on average 8 out of 10 sessions per week. It is expected that the remainder of the time will be spent doing structured reading, attending training courses, attending university etc.

Hours must be pro-rata if part-time working e.g. an individual working **22.5hrs per week in vascular ultrasound will take 5 years** before eligibility for the AVS practical examination even if they acquire the requisite number of scans in the core modalities sooner.

$$Years = \frac{37.5}{A} \times 3$$

where A = number of hours worked in diagnostic vascular ultrasound

The CSVS recognises that some of the skills required for an AVS can be obtained by non-vascular ultrasound scanning. Skills such as ultrasound technology, knowledge of the ultrasound machine, scanning techniques, artefacts, image interpretation, hand-eye coordination, patient care and reporting. Sonographers working part-time in vascular ultrasound and part-time in another ultrasound specialty may have their non-vascular ultrasound experience credited towards their qualifying years at a value of 75% - **providing they are fully responsible for reporting the scans**. E.g. a sonographer who works 10 hours per week in general ultrasound can have this counted as 7.5hrs for the purpose of calculating qualifying years.

$$Years = \left( \frac{37.5}{A + 0.75B} \right) \times 3$$

where B = number of hours worked in non-vascular diagnostic ultrasound

Example jobs	Example Weekly Hours	Minimum qualifying years before eligible
Clinical Vascular Scientist or vascular sonographer	37.5hrs vascular	<b>3yrs</b>
Clinical Vascular Scientist <i>part-time</i>	20 hrs vascular	$(37.5/20) \times 3 = \mathbf{5.6yrs}$
Clinical Scientist <i>Part-time vascular / part-time radiotherapy</i>	18.75hrs vascular 18.75hrs radiotherapy	Only vascular ultrasound counts 18.75hrs $(37.5/18.75) \times 3 = \mathbf{6yrs}$
Sonographer <i>part-time vascular / part-time general ultrasound</i>	15hrs vascular 22.5hrs general ultrasound	General ultrasound counts at 75% $37.5 / (15 + (0.75 \times 22.5)) \times 3 = \mathbf{3.5yrs}$
Radiographer <i>part-time vascular / part-time ultrasound / part-time X-ray</i>	15hrs vascular 7.5hrs general ultrasound 15 hrs X-ray	Ultrasound hours count i.e. 22.5hrs $(37.5 / (15 + (0.75 \times 7.5))) \times 3 = \mathbf{5.5yrs}$

Other types of ultrasound, physics or physiological measurement work may be

credited towards the qualifying years at the discretion of the Education Committee. If you are unsure how your experience or hours may count please contact the Chair of the Education Committee for clarification ([education@csvs.org.uk](mailto:education@csvs.org.uk)).

### Appendix 3: The minimum scope of the scans

With significant changes to scientific careers in the NHS it is important for the CSVS to demonstrate that it has a robust and standard process of assessing the skills and clinical competencies of members. Candidates will not be able to choose what they are examined in.

The practical exam consists of three patient examinations and a *viva voce*

1. A bilateral carotid and vertebral artery duplex examination (from Core Modality 1 – Carotid duplex)
2. A single full-leg (aorta-ankle) arterial duplex (from Core Modality 2 – Peripheral arterial duplex)
3. A single full-leg (groin-ankle) venous duplex (from Core Modality 3 – Peripheral venous duplex)
- *Viva voce* – covering clinical pathways, clinical protocols, ultrasound machine knowledge and understanding of service development

The minimum scope for each of the core modality scans is outlined in Appendices 4, 5 & 6 and sets out the basis upon which the candidate will be assessed. It is recognised that they may differ from the local protocols normally followed in any particular department. They are given in order to ensure that a uniform standard of assessment is performed for each candidate, no matter which department they are in, and are designed to include all the features of scan performance that a candidate achieving accreditation should be able to perform if required to do so.

#### Patient Selection

The 3 scans must be clinically appropriate referrals.

A patient's consent to be part of the examination process must be acquired in advance. During all scans it is important to remember the privacy and dignity of the patient, particularly in light of the additional people present in the room.

The patients should be positioned appropriately for each scan being performed.

#### Equipment

A duplex ultrasound scanner with the appropriate range of probes for the examinations. Minimum requirements: Linear array 5-10MHz and Curvilinear array 2-5MHz

#### Image Recording

In order for the assessors to be able to fully discuss the examination and report with the candidate after the patient has left the room, it is necessary to have images of the examination available. Therefore, whilst it may not be the usual practice of a department to routinely record images and waveforms **for the purposes of this exam a recording of the images and waveforms should be available** for discussion with the final report. This may be in the form of hard copy or as a set of stored images available for viewing on the ultrasound machine. If you do not normally record images, you may find it helpful to practice doing so before the assessment takes place, so you do not forget on the day.

#### Reporting

Using the in-house reporting system a full written report (with diagrammatic representation when used) will be expected.

## Appendix 4: A bilateral carotid and vertebral artery duplex

- The scan must be a diagnostic referral for a carotid duplex investigation.
- The patient must be >50yrs with appropriate carotid territory symptoms.
- The patient must be a new referral with no previous carotid duplex.

The examination should cover the arterial supply to the head from the common carotid artery (CCA) to the distal internal carotid artery (ICA) and include the proximal external carotid artery (ECA), vertebral artery, proximal subclavian artery and the brachiocephalic artery on the right.

- The CCA, bifurcation, ICA origin and ECA origin should be identified in B Mode using the transverse and longitudinal plane. The presence of any disease should be identified.
- Colour and spectral Doppler should be used appropriately to assess flow in the brachiocephalic, proximal subclavian, CCA, ICA, proximal ECA and vertebral.
- Identification and differentiation of the ECA and ICA should be clearly demonstrated with spectral Doppler.
- Peak systolic velocities and end diastolic velocities must be measured and documented in the distal CCA and proximal ICA and at any areas of flow disturbance.
- Direction of flow must be identified in the vertebral artery.
- The anatomical location of any haemodynamically significant lesion should be documented.
- Basic plaque characteristics and the length of any lesion should also be documented.
- The quality and patency of the ICA lumen distal to any disease should be documented.
- Any limitations of the scan must be documented.

Whilst stenoses may be graded and reported using local criteria, if this differs from the recommended criteria below you will be expected to justify your local protocol and understand and explain the implications of the differences.

### Recommended carotid grading criteria

Percentage Stenosis (NASCET)	Internal carotid peak systolic velocity cm/sec	Peak systolic velocity ratio ICA <sub>psv</sub> / CCA <sub>psv</sub>	St Mary's Ratio ICA psv / CCA EDV
<50	<125	<2	<8
50-59	>125	2-4	8-10
60-69			11-13
70-79	>230	>4	14-21
80-89			22-29
>90 but less than near occlusion	>400	>5	>30
Near occlusion	High, low-string flow	Variable	Variable
Occlusion	No flow	Not applicable	Not applicable

Oates CP et al., Joint Recommendations for Reporting Carotid Ultrasound Investigations in the United. <https://pubmed.ncbi.nlm.nih.gov/19046904/>

## **Appendix 5: A single full-leg (aorto-ankle) arterial duplex**

- The scan must be a diagnostic referral for a full-leg lower limb arterial duplex. If the referral is just for a limited duplex (e.g. femoro-popliteal duplex) then the referrers and patient's approval must be sought to extend examination to full leg for purposes of the exam.
- The patient must have suspected significant arterial disease. For the purposes of the examination this could include relevant symptoms with non-palpable pulses, monophasic signals on handheld Doppler, a resting ABPI  $\leq 0.8$  or a post-exercise ABPI of  $\leq 0.6$  which must be established prior to booking the patient for the exam.
- The patient must be a new duplex referral with no previous lower limb arterial duplex.

The examination should cover the arterial supply in the leg from the abdominal aorta to the ankle including the common iliac, external iliac, internal iliac origin, common femoral artery, profunda artery origin, superficial artery, popliteal artery, tibio-peroneal trunk, anterior tibial artery, posterior tibial artery and peroneal artery.

- The aorta should be identified in B Mode using the transverse and longitudinal plane. Anterior posterior diameter measurements should be taken. The presence of any disease should be identified.
- Colour and spectral Doppler should be used appropriately to assess flow in all of the lower limb arteries.
- Peak systolic velocities must be measured and documented at appropriate intervals particularly near a stenosis.
- The anatomical location of any haemodynamically significant lesion should be documented.
- The degree of narrowing and/or length of occlusion should be documented.
- Any limitations of the scan must be documented.



## **Appendix 6: A single full-leg (groin-ankle) venous duplex**

- The scan must be a diagnostic referral for a varicose vein duplex.
- The patient must have significant visible varicosities.
- The patient must be a new duplex referral with no previous lower limb venous duplex.

The examination should cover the deep and superficial venous supply in the leg from the groin to the ankle including the common femoral vein, the profunda vein origin, superficial femoral vein, popliteal vein, tibio-peroneal trunk, anterior tibial veins, posterior tibial veins, peroneal veins, gastrocnemius veins, soleal veins, great/long saphenous vein, small/short saphenous vein, relevant perforators and branches.

- All the deep veins (including calf veins) should be assessed for deep venous thrombosis using transverse B Mode compression.
- The femoral and popliteal deep veins should be assessed for reflux using colour and spectral Doppler at appropriate intervals.
- The superficial veins should be assessed for superficial thrombophlebitis.
- The superficial veins and varicosities should be assessed for reflux with the source of reflux identified.
- Any limitations of the scan must be documented.