The Colleges and Surgical Specialty Associations believe that data on surgical outcomes is an important element of demonstrating that a surgeon meets the required standards of professionalism and practice. This framework provides guidance to surgeons working in vascular surgery to help them produce relevant outcomes data for appraisal and revalidation.

Any queries relating to this framework should be addressed to revalidation@rcseng.ac.uk.

Section 1: Introduction and Explanation

Background

Revalidation is the new approach to the regulation of doctors, it commenced in December 2012. The process is centred on local annual appraisal. All doctors will need to be revalidated every 5 years in order to retain their licence to practise.

The Surgical Specialty Associations and Surgical Royal Colleges have developed the standards for surgical revalidation and specified the supporting information that vascular surgeons will need to provide to their appraiser to facilitate a positive assurance of their fitness to practice and, at the end of the 5 year cycle, a recommendation for revalidation to the GMC. An important component of the supporting information required for revalidation is that relating to outcomes.

An important landmark in relation to transparency and openness in the NHS was achieved in 2013 with the publication of surgeon-level data from nine surgical audits. We see national clinical audit as the “gold standard” in relation to collection of data and measurement of outcome. We fully support the continuation and expansion of NHS England’s programme of data transparency.

The Vascular Society has defined the following measures for surgeons working within the specialty. Surgeons will only need to demonstrate their outcomes in their area(s) of practice. There is no requirement for vascular surgeons to undertake common ‘index procedures’.

You should note the following points:

National Clinical Audit

- Where there are identified national clinical audit(s) that cover your area(s) of practice, it is essential that you participate. This will be mandatory for revalidation.
- If there is a national clinical audit that falls within NHS England’s programme of consultant-level outcomes publication, your results will be made available publically.
- Your employer will need to facilitate the submission of data to the audit(s).
- It will be your responsibility to gather the relevant information from the audit (eg. reports/downloads) to present at appraisal.
Routinely Collected Data (HES, PEDW, HIS, ISD)

- These data are already collected by your NHS organisation and brought together on a national basis.
- We have identified key procedures in each sub-specialty area which should cover the majority of surgeons’ practice.
- We have identified what should be measured and how.
- We expect that analyses of these data will be provided by your employer.
- Wherever possible your individual outcomes should be presented alongside all other surgeons in the country performing that procedure(s) (eg. in a funnel plot).
- We have identified the process of further investigation if it appears from these analyses that your outcomes are outside accepted norms (see below).

Local Audit

- Where your area of practice is not appropriately covered by a national audit or where routinely collected data will not assist in measuring outcomes, we recommend some form of local audit.
- This may be conducted by you personally, or form part of a wider unit/region-based audit.
- It will be your responsibility to conduct/participate in the audit and present the results at appraisal.
- Where you are obliged to undertake local audit, you are advised to audit a practice or procedure that is representative of your practice both in the NHS and in the private sector. The subject should be something that you undertake on a routine basis.

Structured Peer Review (of outcomes)

- For some highly specialised/low volume areas of practice which cannot be appropriately measured using the above methods, it may be necessary to have some form of structured peer review. Where this is identified as necessary, we will work with the relevant specialties to identify the methodology required so that the peer review process is fit for purpose for revalidation.

Managing Outliers

- Analysis of your outcomes provides one piece of the supporting information required for revalidation.
- If it appears that your outcomes are outside of the accepted norm, this should trigger a local investigation that closely examines the data for anomalies, looks at the environment and structure of the team/unit and your case mix before considering you as an individual (see diagram 1).
- We will be able to assist in the early stages of such an investigation.
Diagram 1

- Individual
- Case mix
- Environment / process / team issues
- Problems with the data
Section 2: Measuring Outcomes

Notes:

For measuring outcomes via routinely collected data (HES, PEDW, ISD, HIS), most specialties have selected the following common measures:

- Length of Stay
- 28 day Unplanned readmission
- 30 day mortality
- 28 day reoperation/ re-intervention

It is recognised that the results from analysing length of stay will vary according to the type of treatment and other factors including the availability of intermediate care facilities for patients. These local variations must be taken into account when discussing the results of analysis at appraisal.

Similarly, 28-day unplanned readmissions will need to be examined carefully. Readmissions can occur for a number of reasons (possibly unrelated to the surgical intervention) or may be recorded as unplanned activity when in fact a 2-stage elective procedure has occurred. These variations will need to be taken into account during the appraisal discussion.
Vascular Surgery

1. For all surgeons undertaking vascular surgery, the primary method of measuring outcomes will be via the National Vascular Database, soon to be replaced by the national Vascular registry. Participation will be mandatory for revalidation. Results should be available annually and can be used as supporting information for revalidation. All individual surgeon data should be interpreted alongside unit data. The outcomes for the unit are a more reliable method of assessing overall best clinical practice. Adverse events, in particular following aneurysm repair and carotid endarterectomy, are now relatively uncommon and individual surgeon outcomes may therefore be misleading and should be interpreted accordingly.

2. Additionally, outcomes will be measured annually using routinely collected data (HES, PEDW, ISD, HIS). At appraisal we would expect that a surgeon’s unit outcomes to be presented in a funnel plot showing comparison of their practice to all other vascular units in the country performing the same procedure(s) against the criteria listed below. These should be interpreted alongside each individual surgeon’s workload as derived from the National Vascular Database/Registry.

<table>
<thead>
<tr>
<th>Key Procedures</th>
<th>OPCS Codes</th>
<th>Measurement Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carotid (CEA)</td>
<td>L29-L31</td>
<td>• Length of Stay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 28 day unplanned readmission</td>
</tr>
<tr>
<td>AAA</td>
<td>L18-L28</td>
<td>• 30 day mortality</td>
</tr>
<tr>
<td>Lower limb revascularisation</td>
<td>L58-62</td>
<td>• For CEA, time from referral to surgery and peri-operative stroke rates</td>
</tr>
<tr>
<td>Lower limb (leg) amputation</td>
<td>X09.1 – X09.9</td>
<td>• Length of Stay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 30 day mortality</td>
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<td></td>
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<td>• 28 day reoperation/ reintervention</td>
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