All trainees seeking certification in Neurosurgery must:

a) be fully registered with the GMC and have a licence to practise (UK trainees) or be registered with the IMC (Republic of Ireland trainees).
b) have completed a recognised higher surgical training programme in the UK or Republic of Ireland.
c) have successfully passed the Intercollegiate Specialty Board examination.
d) have been awarded an outcome 6 at a final ARCP (gained all required competencies).
e) be able to demonstrate the acquisition of the appropriate Generic Professional Capabilities (GPCs) as described in the GMC framework (UK trainees only).

In order to achieve this, the SAC would expect that the following should be achieved by the penultimate ARCP. If these standards are not reached, a period of targeted or extended training may be recommended to help trainees achieve certification-level competence.

<table>
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<tr>
<th>Clinical experience - evidence of the breadth of clinical experience defined in the specialty syllabus</th>
<th>Guidelines for Neurosurgery</th>
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<tbody>
<tr>
<td>Trainees should have completed the majority of an approved training programme in the neurosciences, incorporating neurosurgery, together with exposure to neurology, intensive care, accident &amp; emergency medicine and an allied surgical specialty.</td>
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<td>Trainees should have had a broad exposure to emergency and scheduled components of the subspecialties (current and potentially emerging) recognised in neurosurgery, including, but not necessarily limited to:</td>
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<td>• Trauma (both brain and spine, including evidence of current trauma competency e.g. an ATLS/PALS or equivalent course)</td>
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<td>• Spinal (including intradural tumours)</td>
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<td>• Paediatric (a minimum of 6 months at the point of certification)</td>
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<td>• Vascular</td>
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<td>• Functional</td>
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<td>• Skull base / pituitary</td>
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<td>• Neuro-oncology</td>
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| Operative experience - consolidated logbook evidence of the breadth of operative experience defined in the specialty syllabus | Trainees should be able to demonstrate an aggregate of no fewer than 1000 approved cases in the surgical skills section of the SAC Indicative Report consolidated logbook that have been performed in approved training posts with appropriate assessment, with a satisfactory spread of |

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1 This will include out of programme training

2 At the end of the penultimate training year, trainees will usually have spent 7 years in the training programme with at least 5 years in neurosurgery training.
cases between assisting and operating as primary surgeon. Trainees should be on track to achieve the required 1200 cases (including 70 paediatric) by the time of certification. The full range of neurosurgery should be represented, and microsurgical operating should include the subcategory of index procedures, in which a subtotal of 25, but no fewer than 20, cases performed as primary surgeon (‘P, ST-S, ST-U’) must be represented across the range, encompassing the base of the brain, the cerebello-pontine angle, vascular procedures, and pituitary and endoscopic neurosurgery. Experience will also be expected of spinal internal fixation.

**Operative competence** - evidence of competence in indicative operative procedures to level 3 or 4 (evidenced by PBAs defined by the specialty)

Primary surgeon experience as indicated in ‘Operative experience’ above.

**Research** - evidence of having met the relevant requirements for research and scholarship. For UK trainees, this can be found in the GMC’s Generic Professional Capabilities framework. Broadly, this includes:

1. The demonstration of evidence based practice.
2. Understanding how to critically appraise literature and conduct literature searches and reviews.
3. Understanding and applying basic research principles.
4. Understanding the basic principles of research governance and how to apply relevant ethical guidelines to research activities.

Trainees must be able to demonstrate the acceptance for publication of at least one peer-reviewed paper as first author, excluding case reports.

Trainees must also be able to demonstrate the following at the point of certification:

- A case series or systematic review that has either been published or accepted for publication in a peer reviewed journal
- Two verbal presentations (on different topics) given to a national or international conference
- Completion of a Good Clinical Practice course in Research Governance, which should be current at the point of certification
- Evidence of understanding of research methodologies.

Trainees might also take part in other research activities, for example evidence confirming that they have recruited patients to clinical studies or evidence of other laboratory or clinical research activity.

**Quality Improvement** - evidence of an understanding of, and participation in, audit or service improvement as defined by the specialty

Trainees should provide evidence of at least commencement of re-audit to complete one full audit cycle as the principal auditor during training.

**Medical Education and training** - evidence of an understanding of, and participation in, medical education and training as defined by the specialty

Trainees should have attended a ‘Training the Trainers’ or equivalent course during training, or have been accepted with a date confirmed.

**Management and leadership** - evidence of an understanding of management structures and challenges of the NHS in the training jurisdiction

Trainees should have attended a course on health service management during training, or have been accepted with a date confirmed.

**Additional courses / qualifications** - evidence of having attended specific courses/gained specific qualifications as defined by the specialty

Trainees should have completed an ATLS® or PALS course during training, or have been accepted with a date confirmed.
| **Educational conferences** - evidence of having attended appropriate educational conferences and meetings as defined by the specialty | Trainees should have attended no fewer than three national or international neurosurgical conferences during training, with firm plans to attend a fourth. |