



# Clinical Standards Neurosurgical Services in Scotland

Updated: 2023



## Introduction

In 2010, a set of generic service standards for neurosurgical units in Scotland were developed, culminating in the creation of the Clinical Standards for Neurological Services in Scotland. They were not designed to set standards for the treatment of individual conditions.

The standards aim to provide a framework of auditable measures which will ensure that wherever a patient is treated in Scotland, their access to care and calibre of service will be similar and of the best possible quality. These standards were evidence-based and referenced where possible; from the Society of British Neurological Surgeons and other specialty organisations as they apply to Scotland.

The Managed Service Network (MSN) Neurosurgery completed a review and update of the 2010 Clinical Standards for Neurological Services in Scotland in April 2023.

Throughout the development process careful attention was given to ensure that each of the revised standards are as measurable as possible, that the audit is meaningful, and provides the opportunity for quality improvement methodologies to be applied. In recognition for the need to balance necessary audit against time consuming data collection, the MSN provides each of the neurosurgical units with an audit facilitator. One of the key roles of these posts is to ensure that audit of the neurosurgical standards takes place regularly and with as little disruption to the units as possible.

A rolling programme of audits will be designed, which will be undertaken in each unit in a standardised way over the course of the year, coordinated and supported by the audit facilitators. This ongoing data collection will form part of a complete audit report every second year, which will include an annual update on progress, provided to each provider Health Board.

Finally, a thank you to the members of the Standards working group, who have offered comments and suggestions for improvement during the review process of these standards.



# Standards

- Standard 1 – Patient Information and Communication
- Standard 2 – Information Transfer
- Standard 3 – Access to Care – Timely Access, Transfers and Referrals
- Standard 4 – Access to Care – Facilities
- Standard 5 – Access to Care – Staffing
- Standard 6 – Access to Care – Outpatient Clinics
- Standard 7 – Access to Care – Rehabilitation
- Standard 8 – Quality of Care – Team Delivered
- Standard 9 – Quality of Care – Network Approaches
- Standard 10 – Quality of Care – Evidence Based
- Standard 11 – Training and Development
- Standard 12 – Specific to Children and Young People

Audit caveat feasibility ranking description	RAG status
The Network is unlikely to achieve the audit function, due to insufficient available data or recording methods.	
A risk the Network will not achieve the audit function without addressing the caveats for data collection and reporting.	
The Network has sufficient access to the data required, and will be able to perform the audit function.	



## Standard 1 – Patient Information and Communication

### Standard statement and rationale

#### The patient and/or family or carers are part of the decision making process.

In line with General Medical Council guidance [‘Decision making and consent’ \(2020\)](#) partnership with the patient is at the core of good clinical practice. Patients and their families are better able to make good decisions with good information, given in such a way as to minimise anxiety and foster an understanding of the consequences – risks and benefits – of treatment options. Time should always be made available for staff to address patient and family information and communication needs. Good practice also requires that a record is kept of information given. Staff should be aware of the range of particular communication needs a patient may have and make information available in a format which suits the patient’s needs wherever possible.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
1.1 Decision making in partnership with the patient commences at first assessment and is an educative process leading to treatment of the specific condition.	What methods do you use to communicate information to the patient and their family about the patient’s condition, treatment options and care plan?	Record of information communicated to patient/family/carer.  Case note audit results.	Audit of patient notes.		Section in new guidelines about recording video consultations etc. This could cause a few issues for audit.



## Standard 1 – Patient Information and Communication

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
1.2 Comprehensive and comprehensible patient information is available at all stages of the patient's journey; diagnosis, treatment, follow-up and recovery/rehabilitation.	<p>Please provide example information leaflets.</p> <p>How do you ensure this information is up to date?</p>	Evidence of available patient information. Results of survey(s).	Audit of available patient literature and patient information leaflets. (PILs)		PILs are produced and made available from a wide variety of sources outside of the Network. A future review would have to be designed to collate and review these third party documents.
1.3 Patients are aware of other sources of information and help such as charitable/voluntary/third sector organisations dealing with their specific condition.	Please provide details, for your NHS Board, of the methods of informing patients about these services and organisations.	Evidence of availability of such information on ward/in clinic. Results of survey(s).	Audit of available patient information leaflets.		As above.



## Standard 1 – Patient Information and Communication

<p>1.4 Preparation for surgery includes the provision of written information about the condition, the treatment options, the role and nature of surgery, its potential benefits, limitations, consequences and risks.</p>	<p>How do you ensure that there is a record of this communication with the patient?</p> <p>Do you have written information for patients?</p> <p>How do you record pre-operative discussion?</p>	<p>Evidence of available patient information. Written record of discussion with patient.</p>	<p>Audit of patient notes</p> <p>Audit of available patient information leaflets.</p>		<p>As above.</p>
<p>1.5 Preparation for surgery or radiological procedure requiring consent will include the completion of a signed consent form or incapacity form, according to the Royal College of Surgeons of England guidance '<a href="#">Good Surgical Practice</a>' (2019)</p>		<p>Results of retrospective case note audit to show presence of pre-operative consent form or incapacity form.</p>	<p>Audit of patient notes.</p>		



## Standard 1 – Patient Information and Communication

<p>1.6 Information will be provided in the patient's preferred language/format wherever possible.</p>	<p>How do you ensure that information is available in the patient's preferred format? How do you involve patients and the public in the development of your information? How do staff in your unit provide the necessary information to patients with special communication needs?</p>	<p>Evidence that translation/ interpreter services are available and known to staff. Results of patient/ relative experience survey(s).</p> <p>Evidence that people trained in providing information to patients with special Communication needs are available and are known to staff.</p>	<p>Audit of policies and training records.</p>		<p>NHS Scotland has existing policies on providing access to interpreter services and improving accesses to documentation in many languages. The Network could consider requesting a specific focus on supports for neurosurgical conditions.</p>
<p>1.7 Patients/families will have the opportunity to provide feedback on quality of care.</p>	<p>Please describe how your unit provides opportunities for patients and families to comment on the quality of care. What steps do you take to act on feedback received?</p>	<p>Results of patient/ family experience survey.</p> <p>Record of issues raised and action taken.</p>	<p>Audit of patient feedback.</p>		<p>A wide variety of NHS patient satisfaction surveys are undertaken by other Networks or teams such as Care Opinion</p>
<b>Regional Centre Update</b>					
<b>NHS Grampian</b>	<b>NHS Greater Glasgow and Clyde</b>	<b>NHS Lothian</b>	<b>NHS Tayside</b>		
<p>Referring Boards: NHS Grampian; NHS Highland; NHS Orkney; NHS Shetland</p>	<p>Referring Boards: NHS GGC, NHS Lanarkshire, NHS Ayrshire and Arran, NHS Highland, NHS Western Isles</p>	<p>Referring Boards: NHS Lothian, NHS Forth Valley, NHS Dumfries and Galloway, NHS Borders</p>	<p>Referring Boards: NHS Tayside, NHS Fife</p>		
<b>Related Standards/Recommendations</b>					



## Standard 2 – Information Transfer

### Standard statement and rationale

**Patients transferring between healthcare facilities should be accompanied by high quality information, including a health record summary, a management or follow-up plan and radiological information when appropriate. General practitioners or other primary care practitioners should receive comprehensive information on the patient's discharge and follow-up arrangements, and the patient should as far as possible experience a seamless interface between care providers.**

Information transfer between health professionals relating to the patient's care is essential for good quality, safe medical practice. The information required to ensure continuity of care should travel with the patient. Continuity of care relies on information about the patient's condition, treatment and follow-up flowing with the patient to the appropriate individuals or agencies involved in the patient's ongoing care.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
2.1 Interim discharge summary is completed at time of discharge and formal discharge summary within 2 weeks, and sent to the patient's GP.	What percentage of interim discharge summaries are completed at the time of discharge? What percentage of final discharge summaries are completed within 2 weeks?	Results of retrospective case note audit to demonstrate copy of interim discharge summary in patient notes dated on day of discharge. Results of retrospective case note audit to demonstrate copy of discharge summary in patient notes dated within 2 weeks of patient's discharge.	Extract of TRAK discharges and discharge letters.		Immediate discharge summary may be sufficient with no further discharge summary required in some cases.
2.2 The patient's GP is informed by phone within one working day of any inpatient death.	How does your unit ensure that this standard is met?	Description of policy/procedure.	Review of policy		Documentation in patient record may not be available.





## Standard 2 – Information Transfer

<p>2.3 Discharge summaries should include a basic dataset: consultant, ward, diagnosis, treatment, date of operation where one has been carried out, future plans and follow-up details, drugs on discharge and contact details in case of emergency.</p>	<p>For patients transferring out, please describe how you ensure this information is provided.</p>	<p>Audit of completeness of information sent about patient's diagnosis and management at transfer.</p>	<p>Review of discharge letters.</p>		
<p>2.4 The formal discharge summary will be sent to the referring consultant and all clinical teams currently involved in the patient's episode of care.</p>	<p>How do you ensure that the patient's discharge summary is sent to all appropriate individuals/ teams?</p>	<p>c.c. recipients specified on copy discharge summaries held in case notes.</p>	<p>Review of discharge letters.</p>		
<p>2.5 Information on transfer into the unit should include: referring consultant and hospital ward, contact details of the referring team, history and examination, results of any investigations done.</p>	<p>Do you have a required dataset for transfer into your unit? How do you ensure that referring units are aware of your information requirements?</p>	<p>Evidence of a required dataset which meets the specified standard. Evidence of communication with referring units to ensure that information requirements on transfer are understood.</p>	<p>Review of patient notes, and e-referral where appropriate.</p>		<p>Referrals to on-call neurosurgery over phone would not be auditable.</p>



## Standard 2 – Information Transfer

2.6 All relevant clinical case records will be available in clinic.	What percentage of clinical case records are available in clinic?	Results of audit.	Review of current working.		<p>Query which clinical records this refers to, and how a % would be calculated.</p> <p>Information may be limited if patient from another NHS Board.</p>
2.7 IT facilities (eventually linked to EPR systems) will be in out-patient clinics.	Please describe the availability of IT facilities in outpatient clinics.	Description of IT facilities.	Review of current working – feedback from clinical teams.		<p>Standard would need review to define systems.</p> <p>Provision of services for video consultations</p>
2.8 Results of laboratory tests will be available at clinic.	What percentage of laboratory tests are available at clinic?	Results of audit.	Review of current working – feedback from clinical teams.		Standard to be reviewed to identify tests to be audited.
2.9 Imaging with consultant radiologist's report will be available at clinic.	What percentage of radiology reports are available at clinic?	Results of regular analysis of performance against standards.	Review of current working – feedback from clinical teams.		



## Standard 2 – Information Transfer

2.10 All neurosurgical units and referring hospitals will be linked by national PACS.	Does your unit have access to national PACS? Is your unit linked through PACS to the other three neurosurgical centres? Is your unit linked to all of your referring hospitals?	Describe links and their usage. Describe any problems experienced.	Review of current working – feedback from clinical teams.		
<b>Regional Centre Update</b>					
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Referring Boards: NHS Grampian; NHS Highland; NHS Orkney; NHS Shetland	Referring Boards: NHS GGC, NHS Lanarkshire, NHS Ayrshire and Arran, NHS Highland, NHS Western Isles	Referring Boards: NHS Lothian, NHS Forth Valley, NHS Fife NHS Dumfries and Galloway, NHS Borders	Referring Boards: NHS Tayside, NHS Fife		
<b>Related Standards/Recommendations</b>					
<b>Focusing on discharge</b> Address delayed transfers of care and discharge by increasing the rate of discharge to home for non-elective neurosurgery procedures, ensuring a timely transfer to rehabilitation centres for major procedures, and timely repatriation to referring hospitals. <sup>1</sup>					
<b>Improving the effectiveness of referral pathways and outpatient services</b> Make electronic referral management tools and related processes available in all neurosurgery providers and referring Boards. <sup>1</sup>					

<sup>1</sup> Phillips, N. (2018). *Cranial Neurosurgery: GIRFT Programme National Speciality Report*. <https://gettingitrightfirsttime.co.uk/>



## Standard 3 – Access to Care – Timely Access, Transfers and Referrals

### Standard statement and rationale

**Whether the patient requires emergency treatment or more routine or planned care, they will be treated within an appropriate time and by the appropriate professionals. NHS Boards must also ensure that their local arrangements enable access targets/waiting times targets to be met.**

There are many reasons why access to neurosurgical care should be timely. Timely access to care and treatment also reduces anxiety for the patient and their family/ carers and minimises the additional effects of delay (time off work, etc.).

All patients who require neurosurgical care should reach a neurosurgical unit in a safe and timely way. Current specific guidance relating to referrals and transfers should be followed:

‘Recommendations for the Safe Transfer of Patients with Brain Injury’ Association of Anaesthetists of Great Britain and Ireland, 2006.

[‘NICE CG176 \(updated 2019\)’](#)

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit Feasibility RAG	Audit Caveats
3.1 Referring clinicians will have access to consultant and registrar level neurosurgical advice by telephone 24 hours a day, seven days a week.	Is neurosurgical advice available at all times?	On call rota with defined contracts. Description of local arrangements.	Review of on-call rota.		Review separating into adult/paediatric or spinal/trauma?  Is this a holistic approach, i.e. would an MRI be available out of hours (OOH)?
3.2 In conditions such as SAH, acute spinal compression, blocked shunt or severe head injury, a decision on transfer will be communicated by the neurosurgical unit immediately when necessary, and within two hours at most.	Please describe how emergency referrals are managed within your unit.	Results of prospective audit.	Review referral pathways.  Extract of patients with emergency diagnosis.		



## Standard 3 – Access to Care – Timely Access, Transfers and Referrals

<p>3.3 Neurosurgical opinion about less urgent cases referred to the unit, such as sciatica, back pain or stable brain tumours, will be provided within one working day.</p>	<p>Please describe how these referrals are managed within your unit.</p>	<p>Results of prospective audit.</p>	<p>Review of current working / e-referral figures.</p>	<p style="background-color: yellow;"></p>	<p>Difficult to quantify timings of any advice without entry into the EPR.</p> <p>Referral policy will be held by Health Board.</p>
<p>3.4 Staff who are involved in making decisions on transfer will follow the guidance contained in <a href="#">NICE CG176 (updated 2019)</a> on the admission of patients with severe traumatic brain injury.</p>	<p>How do you ensure all staff are aware of the admission criteria defined in NICE CG176?</p>	<p>Admission policy with regard to patients with severe traumatic brain injury.</p>	<p>Review of policy.</p>		<p>Admission policy will be held by local Health Boards.</p>
<p>3.5 Units will have in place clear and workable arrangements for handover to ensure continuity of information between referring hospital and neurosurgical unit.</p>	<p>Please describe arrangements for handover in your unit. How do you ensure all staff in the unit are aware of handover procedures?</p>	<p>Evidence of established handover arrangements.</p>	<p>Review of handover agreements.</p>	<p style="background-color: yellow;"></p>	<p>Handover arrangements are in place with governance at local Board level, the MSN could collate these data as a topic for future review</p>



## Standard 3 – Access to Care – Timely Access, Transfers and Referrals

<p>3.6 For emergency referrals, If the unit of first choice is unavailable, the patient must be transferred to another neurosurgical unit. This should be arranged by the duty neurosurgeon who takes the initial referral.</p>	<p>Does your unit have a protocol for transfers to another neurosurgical unit in the event that the emergency referral cannot be accepted? How do you ensure all staff are aware of transfer protocol and responsibilities?</p>	<p>Description of protocol. Local audit of patients not accepted due to lack of space.</p>	<p>Review of transfer documentation .</p>		<p>Difficult to report on transfers out of units due to lack of space / bed pressure – is a record of this maintained? Would this be documented in the EPR?</p>
<p>3.7 Transfers of critically ill patients to neurosurgical care will be conducted according to the published guidelines</p>	<p>How do you monitor the quality of transfers to your unit? What efforts do you make to ensure that referring units are aware of, and follow published guidelines?</p>	<p>Evidence of monitoring quality of transfer and responding to any issues found; evidence of contact with / education of clinicians in referring hospitals to improve quality.</p>	<p>Review of current working with clinical team / M&amp;M.</p>		<p>Difficult to report on feedback to referring hospitals, as this is likely not evidenced outside of the communications themselves.</p>
<p>3.8 Non-accepted referrals to the centre should be documented and records held for 6 years.</p>	<p>How do you ensure that all referrals and decisions are recorded?</p>	<p>Please demonstrate that these records are held.</p>	<p>Review of current working.</p>		<p>Health Boards will hold local policies on non-accepted referrals.</p>
<p>3.9 For outpatients, clinical letters will be sent to GP and/or referring doctors within 2 weeks of clinic episode.</p>	<p>Please describe how this is managed in your unit.</p>	<p>Results of retrospective case note audit to demonstrate copy of GP letter in patient notes dated within 2 weeks of clinic attendance.</p>	<p>Review of outpatient clinic notes.</p>		



## Standard 3 – Access to Care – Timely Access, Transfers and Referrals

Development Standards					
3.10 Patients will be seen within 15 minutes of their appointment time in 75% of cases.	What percentage of outpatients are seen within 15 minutes of their appointment time?	Results of audit demonstrating performance against this standard.	Review of outpatient timings.		<p>Query how well this is depicted in the EPR.</p> <p>Query how this is auditable and what is gained from it.</p>
Regional Centre Update					
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Related Standards/Recommendations					
<p><b>Improving the effectiveness of referral pathways and outpatient services</b> Accelerate the referral to treatment time for ALL patients identified as in need of neurosurgery, whether identified via a screening programme or any other route. Improve outpatient efficiency through greater use of non-consultant and non-face-to-face outpatient appointments.<sup>2</sup></p>					
<p><b>Enabling procedures to take place on schedule</b> Implement the NCEPOD recommendations relating to access to acute theatres, through designating one or more of their existing elective neurosurgical theatres as an acute theatre with a robust plan for specialty specific staffing. Improve patient flow between critical care and wards.<sup>2</sup></p>					
<p><b>Optimising resources to provide time-critical procedures promptly<sup>2</sup></b></p>					
<p><b>The use of day surgery</b> Increase the proportion of procedures undertaken in the day-case setting, and increase the rate of short-stay admissions.<sup>2</sup></p>					

<sup>2</sup> Phillips, N. (2018). *Cranial Neurosurgery: GIRFT Programme National Speciality Report*. <https://gettingitrightfirsttime.co.uk/>



## Standard 4 – Access to Care – Facilities

### Standard statement and rationale

**Sufficient resource will be in place to avoid unnecessary transfers for all patients requiring neurosurgery and associated specialities and to minimise the need for non-emergency out of hours work.**

Neurosurgery is a specialised field requiring dedicated resources. Patients should only be in neurosurgical units when they require the specialised skills and facilities available in these units. This is dependent on effective links between the neurosurgical unit and the referring hospital or secondary site, and on adequate resources and facilities being available on these sites to provide safe and appropriate pre-admission and post-discharge care.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
4.1 Resources are in place to ensure that treatment is available in the neurosurgical unit where and when needed.	Is the unit resourced according to the standards set out in SBNS guidance 'Safe Neurosurgery 2000'?	Assessment against 'Safe Neurosurgery 2000' standards.	Review of unit resources via Service Management.		These data currently held and managed at local level.
4.2 Operative neurosurgery will be performed in theatres specially and specifically equipped for neurosurgery and staffed by personnel experienced in its techniques.	Does your unit have dedicated neurosurgical theatre(s) or theatre lists?  Are these staffed by neurosurgically trained personnel?	Description of theatre provision and staffing.	Review of current operating practice via Service / Clinical Management.		Detailed staffing information held at local NHS Board management level.
4.3 There will be a dedicated unit or area for the intensive care of neurosurgical patients in close proximity to neurosurgical theatres.	Does your unit have facilities which meet this standard?	Description of facilities available for patients in need of intensive care and detail of consultant neurointensivist sessions.	Review of current facilities via Service / Clinical Management.		





## Standard 4 – Access to Care – Facilities

4.4 The neuroscience unit will have access to dedicated neuro HDU beds.	How many dedicated HDU beds does your unit have?	Documentation of designated areas/ units.	Review of current facilities via Service / Clinical Management.		
4.5 Local secondary care facilities for the care of patients not needing neurosurgery (e.g. minor and many moderate head injuries) should meet the standards specified by the national MCN for acquired brain injury. <sup>3</sup>	Do your referring hospitals have these facilities?	Description of available facilities.	Review of available facilities in referring hospitals.		No current links with referring hospital facilities.
<b>Development Standards</b>					
4.6 Co-located on the same campus with the neurosurgical department will be specialist facilities and staff such as; neurology, neuroradiology/ intervention, neuroanaesthesia, neurocritical care, neuropathology, spinal surgery. Access will be available to; neurophysiology, neuropsychology, neuroophthalmology, neurootology, neurooncology, neurorehabilitation, maxillofacial surgery, endocrinology.	Please describe current services available on site.	Full complement of neuroservices on or close to campus.	Review of current facilities via Service / Clinical Management.		
4.7 Admissions to the neurosurgical unit should not be delayed as a result of bed occupancy by patients not requiring neurosurgical care, who should be transferred within 48 hours of a request for transfer being made.	What percentage of bed days are taken up by patients no longer requiring neurosurgical care?	Locally collected data.	Report of delayed discharges.		How are transfer delays captured? How are delayed discharges captured within the EPR? Can this be reported on?



## Standard 4 – Access to Care – Facilities

4.8 Direct IT access will be possible to laboratory/radiology results in all clinical areas, and to requests including electronic prescribing.	What systems are used in clinical areas and how accessible are they?	IT system in place and in use.	Review of current facilities via Service / Clinical Management.	
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<b>Related Standards/Recommendations</b>				
<p><b>Enabling procedures to take place on schedule</b>            Implement the NCEPOD recommendations relating to access to acute theatres, through designating one or more of their existing elective neurosurgical theatres as an acute theatre with robust plan for specialty specific staffing.            Improve patient flow between critical care and wards.<sup>4</sup></p>				

<sup>3</sup> National Managed Clinical Network for Acquired Brain Injury 'Traumatic Brain Injury in Adults – Service Mapping Report, 2019-20' available from <https://www.sabin.scot.nhs.uk/wp-content/uploads/2020/07/Service-Mapping-Report-Traumatic-Brain-Injury-in-Adults.pdf>

<sup>4</sup> Phillips, N. (2018). *Cranial Neurosurgery: GIRFT Programme National Speciality Report*. <https://gettingitrightfirsttime.co.uk/>



## Standard 5 – Access to Care – Staffing

### Standard statement and rationale

**The neurosurgical team needs to be of a sufficient size, and must have the appropriate mix of skills, to ensure that staff time and experience is available to deliver the best possible experience and outcome for the patient.**

All neurosurgery is delivered by a specialist multi-disciplinary team and all members of that team have a part to play. An appropriate mix of individual levels of skill and experience will ensure the provision of training and educational opportunities. With particular consideration for patient safety, staff in training will always have access to consultant advice and supervision.

Local NHS Boards must also observe the legal requirements in relation to Working Time Directives compliance.

<p>5.1 Neuroscience wards will have a nursing skill mix which reflects an appropriate balance of neuroscience trained nurses, as defined by recognised workforce planning tools.</p>	<p>What is the extent of postgraduate nurse training and the percentage of nurses in your unit who have undergone neurosurgical training?</p> <p>What is your skilled: unskilled nurse ratio?</p>	<p>Comparison of nursing staff levels against triangulated analysis of workforce requirements using workforce planning tools.<sup>5</sup></p>	<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Staffing levels organised at Board level.</p>
<p>5.2 The neurosurgery unit will have sufficient accredited neurosurgery, neurology, radiology, neurophysiology and anaesthetic consultants according to professional guidelines where these exist.</p>			<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Staffing levels organised at Board level.</p>

<sup>5</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2017/07/nursing-2030-vision-9781788511001/documents/00522376-pdf/00522376-pdf/govscot%3Adocument/00522376.pdf>



## Standard 5 – Access to Care – Staffing

<p>5.3 Consultant neurosurgeons will always be supported by intermediate grade cover.</p>	<p>How often is intermediate grade cover available?</p>	<p>Records of rotas.</p>	<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Staffing policy and data will be held at Board level.</p>
<p>5.4 Each centre will have continuous availability of anaesthetists with neuroanaesthetic experience.</p>	<p>Does your unit have appropriately experienced anaesthetists available 24/7?</p>	<p>Accordance with specific guidelines for rota prepared by the Royal College of Anaesthetists and related reports from the Association of Anaesthetists of Great Britain and Ireland.</p>	<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Record of anaesthetic cover will be held at Board level.</p>
<p>5.5 Nursing staff numbers will be sufficient to allow one nurse to one bed for level 3 patients and one nurse to two beds for level 2 high dependency patients.</p>	<p>How many nurses do you have relative to the number of level 2/3 beds?  What is your nurse: bed ratio?</p>	<p>Record of nurse staffing relative to number and level of beds.</p>	<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Nursing ratio policy and staff level data will be held at Board level.</p>
<p>5.6 Operating theatre personnel experienced in neurosurgery theatre techniques will be available 24 hours a day.</p>	<p>Does unit have dedicated neurosurgical theatre teams?  Are these teams available 24/7?</p>	<p>Description of teams and experience.  On-call rotas.</p>	<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Operational theatre staffing levels will be held at Board level.</p>



## Standard 5 – Access to Care – Staffing

<p>5.7 The neurosurgical unit will have physiotherapists experienced in the specialist care needed by neurosurgery patients available as required, and emergency physiotherapy will be available 24 hours, seven days a week.</p>	<p>Does your unit have access to appropriately experienced physiotherapists?</p> <p>How is emergency care covered?</p>	<p>Posts in place, named individuals.</p> <p>Description of arrangements for ensuring access to specialist and emergency physiotherapy.</p>	<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Data held at Board level.</p>
<p>5.8 Administrative support (including personal secretaries/ assistants to consultants) will be available for the clinical staff working in the wards, clinic, theatre and therapy areas</p>	<p>Does your unit have adequate administrative support?</p>	<p>List of administrative support available by type of post and contracted hours.</p>	<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Data held at Board level.</p>



## Standard 5 – Access to Care – Staffing

<p>5.9 The neurosurgical unit will have local access to clinical specialties, including:</p> <ul style="list-style-type: none"><li>• Infection control nurses experienced in the needs of neurosurgery patients</li><li>• neuropathology</li><li>• radiographers</li><li>• physiotherapy</li><li>• speech and language therapy</li><li>• occupational therapy</li><li>• pain control nurse</li><li>• pharmacist</li><li>• clinical neuropsychologist</li><li>• neuro-psychiatric advice or liaison psychiatry</li><li>• link nurses for oncology, spinal, vascular, movement disorder, epilepsy and other disorders</li><li>• dietetic advice</li><li>• social work.</li></ul> <p>Those that are required on a regular basis: physiotherapists, occupational therapists, speech and language therapists and pharmacy, should have dedicated time and skills and experience specific to neurosurgery. It is not a complete list of all disciplines that may be involved in the care of a patient receiving neurosurgery.</p>	<p>Does your unit have access to these specialties?</p>	<p>Posts in place, named individuals.</p>	<p>Review of current staff levels and training via Service / Clinical Management.</p>		<p>Information about locally available specialist staff will be held at Board level.</p>
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## Standard 5 – Access to Care – Staffing

Regional Centre Update			
NHS Grampian	NHS Greater Glasgow and Clyde	NHS Lothian	NHS Tayside
Referring Boards: NHS Grampian; NHS Highland; NHS Orkney; NHS Shetland	Referring Boards: NHS GGC, NHS Lanarkshire, NHS Ayrshire and Arran, NHS Highland, NHS Western Isles	Referring Boards: NHS Lothian, NHS Forth Valley, NHS Fife, NHS Dumfries and Galloway, NHS Borders	Referring Boards: NHS Tayside, NHS Fife
Related Standards/Recommendations			



## Standard 6 – Access to Care – Outpatient Clinics

### Standard statement and rationale

**Outpatient clinics should provide quality follow up and audit and continuity of care and should ensure that the patient has contact with the appropriate professional(s) for his or her particular needs.**

Clinics, and the facilities available, should reflect the needs of the patient/condition, understanding that some conditions require specialist and/or multidisciplinary follow-up. The facilities in the clinic must be sufficient and appropriate for patients including those who may have specific physical needs. Clinic attendance should be as easy and comfortable for the patient as possible.

Consultant led outpatient clinics have the potential to provide excellent training opportunities for neurosurgery and other specialities at all levels of training and this should be used wherever possible/practical. The requirement for sufficient resource and time to maximise this potential should be recognised.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
6.1 Clinic rooms must be Disability Discrimination Act (DDA) compliant.	Do your clinic rooms conform to DDA standards?	Yes or no.	Review of facilities with service management.		
6.2 Neurosurgery clinic bookings will not exceed the number of patients present on the clinic template unless agreed by the consultant.	How often are clinics overbooked?	Results of audit demonstrating number of patients booked, against clinic templates.	Extract of clinic bookings.		These data held and managed locally in access teams at each NHS Board.
6.3 Neurosurgery clinic bookings will be in line with the Society of British Neurological Surgeons (SBNS) guidance of 30 minutes per new patient and 15 minutes per return.	How do you perform against this guidance?	Clinic templates. Evidence of audit.	Extract of clinic bookings.		These data held and managed locally in access teams at each NHS Board.





## Standard 6 – Access to Care – Outpatient Clinics

6.4 Outpatient clinics requiring a neurosurgeon will be consultant led.	How often is a consultant available at outpatient clinics?	Consultant job plans.  List of consultant attendances at clinic.	Review of attendance and job plans via Clinical Management.		Clinic staffing is managed locally by NHS Board. Future audit would require to collate and review local data.
6.5 Consultant sessions will be provided to allow for regular and timely follow-up of patients, where appropriate	How long is the average wait for a routine post-operative follow-up appointment to see a consultant in outpatients?	Consultant job plans.  Waiting times audit for return patients.	Snapshot of outpatient clinic dates following operation dates.		Job plans held at management level of NHS Boards.
6.6 Systems should be in place to monitor numbers of DNAs (according to HEAT targets) and to reduce rates where possible.	What is your unit's clinic DNA rate?  How has this changed in the last year?  What measures have you put in place to reduce DNAs?	Record of DNAs and trends over time.  Description of measures aimed at reducing rate.	Extract of DNA data.		Is this captured in service management dashboard figures/Discovery Dashboard?
6.7 Outpatient services will be resourced and planned to provide a balance between service delivery and training.	Do junior medical staff attend outpatient clinics?  What training opportunities are there for non-medical staff?	Description of training opportunities for both junior medical staff and non-medical staff.	Review of training by Service/Clinical management.		Clinic staffing is managed locally by NHS Board. Future audit would require to collate and review local data.



## Standard 6 – Access to Care – Outpatient Clinics

6.8 Mechanisms for auditing patient satisfaction should be in place.	How is this done and what steps do you take to act on feedback?	Record of patient satisfaction audit.	Review of patient feedback.		A scoping exercise is required to identify feedback mechanisms.
<b>Developmental Standards</b>					
6.9 Consideration should be given, wherever possible, to the development of joint clinics or other opportunities for providing a 'one stop shop' for patients to reduce the number of necessary attendances.	Please describe initiatives in your unit to encourage the development of one-stop or multidisciplinary clinics.	Audit of patient attendance and activity at clinic appointment.  Description of initiatives under development.	Review of service planning.		Initiatives in service delivery will be Unit specific and locally developed.
<b>Regional Centre Update</b>					
<b>NHS Grampian</b>	<b>NHS Greater Glasgow and Clyde</b>	<b>NHS Lothian</b>		<b>NHS Tayside</b>	
Referring Boards: NHS Grampian; NHS Highland; NHS Orkney; NHS Shetland	Referring Boards: NHS GGC, NHS Lanarkshire, NHS Ayrshire and Arran, NHS Highland, NHS Western Isles	Referring Boards: NHS Lothian, NHS Forth Valley, NHS Fife, NHS Dumfries and Galloway, NHS Borders		Referring Boards: NHS Tayside, NHS Fife	
<b>Related Standards/Recommendations</b>					
<b>Improving the effectiveness of referral pathways and outpatient services</b>					
Improve outpatient efficiency through greater use of non-consultant and non face-to-face outpatient appointments. <sup>6</sup>					

<sup>6</sup> Phillips, N. (2018). *Cranial Neurosurgery: GIRFT Programme National Speciality Report*. <https://gettingitrightfirsttime.co.uk/>



## Standard 7 – Access to Care – Rehabilitation

### Standard statement and rationale

**Rehabilitation services are provided to ensure that patients are helped to maximise their potential following injury/illness and to return to as normal a life as possible.**

After many neurosurgical conditions or procedures, rehabilitation is vital in maximising the patient's recovery. How and where rehabilitation happens and what features it has will have an effect on the patient's outcome. Rehabilitation should start as early as possible in critical care and the neurosurgical wards. Independence and quality of life can be significantly affected after neurological illness or injury and the patient, and their family/ carers, may require the help of an expert multidisciplinary team.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
<p>7.1 A multi-professional neurological rehabilitation team is available to each neurosurgical unit, to include clinical neuropsychology, occupational therapy, dietetics, speech and language therapy and physiotherapy, plus readily available social work and other input where required.</p> <p>(Added 2023 – AHP Group) Recommendations on the level of staffing and therapeutic input appropriate for neurosurgical patients can be found within:</p> <p><b>Guidelines for the Provision of Intensive Care Services</b> <a href="#">Intensive Care Society   GPICS</a></p>	Describe services available to the neuroscience unit during the patient's acute care.	Numbers of rehabilitation specialists and associated allied health professionals (AHPs).	<p>Numbers of rehabilitation specialist workforce.</p> <p>Percentage of patients with rehabilitation input within agreed timeframe.</p>		Workforce data will be held at Health Board level.



## Standard 7 – Access to Care – Rehabilitation

<p><b>7.1 Continued</b></p> <p><b>National Clinical Guideline for Stroke 2023</b> <a href="https://www.strokeaudit.org/ssnap-full-2023-guideline">SSNAP - Full 2023 guideline (strokeaudit.org)</a></p> <p><b>British society of rehabilitation medicine (BSRM):</b></p> <ul style="list-style-type: none"><li>• Rehabilitation for patients in the acute care pathway following severe disabling illness or injury: BSRM core standards for specialist rehabilitation</li></ul> <p>Specialist neuro-rehabilitation services: providing for patients with complex rehabilitation needs</p>					
<p>7.2 The rehabilitation needs of patients are assessed by the rehabilitation team and a treatment plan for each patient is agreed by the team and the patient/family.</p>	<p>How are rehabilitation needs assessed in your unit?</p> <p>Who is involved in these assessments?</p>	<p>Example treatment plans showing that there has been multidisciplinary involvement in assessing rehabilitation needs.</p>	<p>Review of sample of patient notes.</p>		



## Standard 7 – Access to Care – Rehabilitation

<p>7.3 Each neurosurgical unit will have close links with at least one consultant in neurorehabilitation who, if not located at the neuroscience centre, will visit to assess patients and coordinate access to rehabilitation services.</p>	<p>Who are your rehabilitation consultants?</p> <p>What is the referral mechanism in your unit?</p> <p>When/how often do they visit?</p>	<p>Referral criteria to neuro-rehabilitation availability in the unit.</p>	<p>Review of documentation available in the unit.</p>		<p>Record of pathways to neuro-rehabilitation should be held at Unit level.</p>
<p>7.4 The regional neuroscience centre will have active links with agencies in the voluntary sector that provide rehabilitation or support facilities for those patients with neurological disability.</p>	<p>What links do you have to such organisations?</p>	<p>Documented evidence of linkages and joint working.</p>	<p>Review of referral documentation</p> <p>Review of literature available to patients and carers.</p>		<p>Evidence of connections with third sector organisations should be held locally.</p>
<p>7.5 For patients whose acute neurosurgical needs have passed but who still have neurological disability, there will be access without delay either to neuro-rehabilitation or to appropriate institutional or community care</p>	<p>Do you experience delays in accessing rehabilitation or appropriate long-term care for patients?</p>	<p>Evidence of satisfactory access or of delayed discharges.</p>	<p>Review of length of stay data.</p>		<p>Data is available through TRAK once referred to the patient discharge team. Although data may not be available for all patients, especially for cross Board.</p>



## Standard 7 – Access to Care – Rehabilitation

Regional Centre Update			
NHS Grampian	NHS Greater Glasgow and Clyde	NHS Lothian	NHS Tayside
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Related Standards/Recommendations			
<p><b>Focusing on discharge</b> Address delayed transfers of care and discharge by increasing the rate of discharge to home for non-elective neurosurgery procedures, ensuring a timely transfer to rehabilitation centres for major procedures, and timely repatriation to referring hospitals.<sup>7</sup></p> <p><b>Stroke Guidelines</b> People with a stroke should accumulate at least 45 minutes of each appropriate therapy every day, at a frequency that enables them to reach their rehabilitation goals, and for as long as they are willing or capable of participating and showing measurable benefit from treatment.<sup>8</sup></p>			

<sup>7</sup> Phillips, N. (2018). *Cranial Neurosurgery: GIRFT Programme National Speciality Report*. <https://gettingitrightfirsttime.co.uk/>

<sup>8</sup> SSNAP - Full 2023 guideline ([strokeaudit.org](https://strokeaudit.org))



## Standard 8 – Quality of Care – Team Delivered

### Standard statement and rationale

The patient's experience of being treated should be as seamless as possible. All modern clinical teams are multi-professional – as part of the team approach, individual responsibility and accountability must be clearly defined.

This relies on effective communication between team members and with other individuals or agencies providing care to the patient.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
8.1 For complex conditions which require a multi specialty approach to care, there will be structured and managed multidisciplinary teams (MDTs), e.g.: <ul style="list-style-type: none"><li>• neurocritical care</li><li>• neurovascular</li><li>• neuro-oncology</li><li>• epilepsy</li><li>• pediatric neurosurgery</li></ul>	What MDTs are in place?	List of MDTs, their remit and membership.	List of MDTs, extract of patients in cohorts which would go through MDT process.		



## Standard 8 – Quality of Care – Team Delivered

<p>8.2 Specific MDTs should have identified leads who are responsible for ensuring that:</p> <ul style="list-style-type: none"> <li>• all appropriate patients are referred to the MDT</li> <li>• regular MDT meetings are held</li> <li>• MDT decisions are documented</li> <li>• agreed actions are followed up</li> <li>• regular audit of the work of the team takes place</li> <li>• it complies with guidelines/care pathways where available</li> <li>• any potential improvements to practice are identified.</li> </ul>	<p>Who are the leads for each team in your centre? How do you ensure that all appropriate patients are referred to the relevant MDT? How are MDT meetings organised? How is the MDT decision documented?</p>	<p>Description of organisation of MDT meetings and evidence of recorded decisions. Description of referral mechanism to relevant MDT. Evidence of clear referral policy to the relevant MDT and its consistent application. Audit of process and effectiveness.</p>	<p>Extract and review of appropriate patient documentation</p>		<p>Some review of MDT structure will require buy in from attendees – as multi-disciplinary not all will be under neurosurgical remit.</p>
<p>8.3 Named MDT leads will have allocated time in their job plans to fulfil these defined responsibilities.</p>	<p>Do your MDT leads have time allocated to the management of the MDT?</p>	<p>Job plans.</p>	<p>Review of job plans via clinical management.</p>		<p>Job plans held at management level of NHS Boards.</p>
<p>8.4 The medical members of the MDT will each have regular sessional commitments defined for the care of patients with these specific conditions, including time for audit, teaching, administration and other non-clinical duties.</p>	<p>Do the medical members of your unit's MDTs have regular sessional commitments for the care of patients with these specific conditions?</p>	<p>Job plans containing sessions dedicated to the management of specific conditions.</p>	<p>Review of job plans via clinical management.</p>		<p>Details of medical time allocations within job plans will be held locally by Board management.</p>





## Standard 8 – Quality of Care – Team Delivered

<b>Regional Centre Update</b>			
<b>NHS Grampian</b>	<b>NHS Greater Glasgow and Clyde</b>	<b>NHS Lothian</b>	<b>NHS Tayside</b>
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<b>Related Standards/Recommendations</b>			



## Standard 9 – Quality of Care – Network Approaches

### Standard statement and rationale

**Network approaches must have commitment to helping patients and their families/carers to contribute to the development of services. In particular, patients and carers should be involved in the design and development of patient pathways through neurosurgery. Equity of access, compliance with nationally agreed service standards, and consistent participation in national audit should be achieved.**

Neurosurgical units do not work in isolation. They need clear, cross-specialty lines of communication, both within and between centres. For all professional groups, the sharing of good practice between centres should promote comparable, high quality care no matter where the patient lives. Effective pathways should allow the local delivery of care wherever possible and clear guidance for referral to a specialist centre where necessary. A network approach should also promote managed sub-specialisation for the national service.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
9.1 All nationally agreed policies and referral criteria for complex low volume conditions which are not managed at all centres are followed.	How does your unit ensure that these policies and referral criteria are followed?		Review of documentation and patient transfers.		A wide range of distinct policies and referral criteria exist for low volume conditions seen at neurosurgical centres.
9.2 Neurosurgical units will have agreed policies and referral criteria for primary and secondary care providers.	What are your policies and referral criteria for admission/referral to the neurosurgical unit?	Written policies.	Review of documentation		
9.3 Arrangements for follow-up care will involve local secondary care, voluntary/third sector and community and social services where appropriate.	Are there formal processes in place for discharge planning in your unit which ensure that these services are involved where appropriate?	Evidence of inclusive discharge planning processes.	Review of discharge process.		Query if documented in patient notes



## Standard 9 – Quality of Care – Network Approaches

9.4 The neurosurgical team will be available for advice to other professionals.	How do other professionals access advice from the neurosurgical unit? Is this audited?	Results of annual 360 appraisal of accessibility			Difficult to quantify advice given from Neurosurgery.
<b>Developmental Standards</b>					
9.5 There will be an outreach team of staff with specialist training, to give advice to community-based professionals, the patient and their family, specific to the illness, injury or treatment.	Do you have an outreach team? In what specialties?	List of team members and duties.	Review of service provision.		Further definition needed.
<b>Regional Centre Update</b>					
<b>NHS Grampian</b>	<b>NHS Greater Glasgow and Clyde</b>	<b>NHS Lothian</b>	<b>NHS Tayside</b>		
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<b>Related Standards/Recommendations</b>					
<p><b>Improving the effectiveness of referral pathways and outpatient services</b>            Make electronic referral management tools and related processes available in all neurosurgery providers and referring Boards.            Accelerate the referral to treatment time for ALL patients identified as in need of neurosurgery, whether identified via screening programme or any other route.<sup>9</sup></p>					

<sup>9</sup> Phillips, N. (2018). *Cranial Neurosurgery: GIRFT Programme National Speciality Report*. <https://gettingitrightfirsttime.co.uk/>



## Standard 10 – Quality of Care – Evidence Based

### Standard statement and rationale

**Modern clinical practice should be based on the best available evidence and should adapt and improve over time as new evidence emerges.**

Neurosurgical units should be able to demonstrate commitment to ongoing evidence-based improvements and should actively participate in developing the body of evidence available. The introduction of new treatments and techniques into the neurosurgical centres will be nationally approved by the MSN Board.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
10.1 Nationally agreed protocols and treatment plans for the management of neurosurgical conditions will be followed.	What treatment plans and protocols does your unit use?	Use of up-to-date guidelines and treatment plans, integrated care pathways where they exist, pathways and pathway audits.	Review of documentation		
10.2 Regular mortality and morbidity (M&M) meetings will take place and clinical staff will have sufficient time to prepare for and attend these meetings.	Does your unit have regular M&M meetings?	Register of attendance and lessons learned/ changes in practice and/or processes.	Review of M&M documentation		
10.3 Where there are national programmes for audit, all centres will participate.	Which national audits does your unit participate in?	Details of annual audit programme.	Review of annual audits		
10.4 Units will follow good practice in order to reduce rates of healthcare associated infection (HAI).	Does your unit participate in hand hygiene audit? Is HAI rate monitored?	Evidence and results of audit.	Review of unit audits		



## Standard 10 – Quality of Care – Evidence Based

10.5 Research programmes will comply with national policies for research governance.	Does the unit have access to an Ethics Committee? Do current projects have the required consents and approval?	List of approved projects and research active personnel. Evidence of local compliance with appropriate guidance and approvals, evidence of annual research assessment.	Review of research procedure		All units contribute to national research, whom ensure Good Clinical Practice is followed - GCP certificates awarded for those involved, with local research approval.
10.6 Consultant neurosurgeon job plans will contain sessional commitments to research and development, where the consultant wishes.	Do consultant job plans recognise research and development commitments?	Evidence of annual consultant job planning to include SPA time for research and development.	Review of consultant job plans		Job plans are currently negotiated and held locally in systems at NHS Board level.
<b>Regional Centre Update</b>					
<b>NHS Grampian</b>	<b>NHS Greater Glasgow and Clyde</b>	<b>NHS Lothian</b>		<b>NHS Tayside</b>	
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<b>Related Standards/Recommendations</b>					
<b>Enabling continual quality improvement</b> Improve data collection in neurosurgery, with particular reference to increasing accuracy in coding, and improving audit data quality to enable its use for quality improvement. <sup>10</sup>					
<b>Use of appropriate registries</b> Ensure there is a consistency of approach in the use of registries across Scottish Neurosurgical Centres.					

<sup>10</sup> Phillips, N. (2018). *Cranial Neurosurgery: GIRFT Programme National Speciality Report*. <https://gettingitrightfirsttime.co.uk/>



## Standard 11 – Training and Development

### Standard statement and rationale

**Skills and knowledge need to be maintained and improved, and best practice shared, to provide the best quality of care and outcomes to the patient.**

The time, investment and other resources necessary to support this development must be formally recognised for all professional groups involved in the care of the neurosurgical patient. For consultants this will be part of an agreed job plan.

2.5 SPAs being standard for a full time consultant. For other professional groups, this will be recognised through the appraisal system and governance pathways.

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
11.1 Training and development for professional staff groups will be organised by named individuals.	<p>Does your unit have named individuals responsible for CPD programmes for:</p> <ul style="list-style-type: none"> <li>consultants</li> <li>non-consultant career doctors</li> <li>doctors in the training grades</li> <li>nurses</li> <li>allied health professionals?</li> </ul> <p>Does your unit have regular continuing professional development (CPD) sessions for these staff groups?</p>	<p>Lists of nominated individuals who are clearly identified and recognised by management, and who have written defined responsibilities. A published programme of continuing education and training for all levels and grades of staff, and attendance records for the components of the programme.</p>	<p>Review of arrangements / attendance records / training module compliance.</p>		<p>The Network will need access to data.</p>



## Standard 11 – Training and Development

11.2 Training and development for all professional staff groups will be funded from a ring-fenced budget which is managed by a named individual.	Do you have a ring-fenced budget for training and development in your unit? Who is responsible for allocation from this budget?	Ring-fenced budget is available. Clear mechanism of application and decision making.	Review of training provision.		Training and development budgets will be Unit specific and held locally, with named responsible individuals in each Board.
11.3 All professional staff will take part in continuing professional development relevant to neurosurgery.	Do all members of staff take part in CPD? Do local appraisal criteria consider participation in CPD?	CPD programmes/ attendance logs. Description of local appraisal criteria.	Review of CPD figures.		The Network will need access to data.
11.4 Access to courses provided by individual units will be available to staff in other units.	Do you run any educational courses and are they advertised out with your unit?	Evidence of communication with other neurosurgical units.			Evidence of cross-unit communication should be available locally at management level.
11.5 There will be a recognised allocation of time for consultants as trainers to undertake their educational duties.	Who undertakes teaching and training in your department? How many recognised sessions?	Consultant job plans.	Review of job plans.		Consultant job plans will be held locally by the Unit.
11.6 For doctors in training, the unit will comply with the appropriate defined requirements for training.	Who is your programme training director? Do you have training contracts? Is there regular appraisal of trainees? Has your unit been assessed by PMETB or SAB in the last 5 years?	Evidence of compliance with requirements for training.	Review of job plans.		Evidence of training requirements being met will be held within each Unit.
11.7 For all medical staff there will be opportunity and funding for study leave as defined in terms and conditions of service.	Do you have a study leave budget in your unit?	Evidence of study leave applications/approvals.	Review of job plans.		Terms and conditions of service will be held locally by each Unit.



## Standard 11 – Training and Development

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Related Standards/Recommendations			





## Standard 12 – Specific to Children and Young People

### Standard statement and rationale

Children should be managed in a paediatric environment appropriate to their age. They should be cared for by fully trained paediatric nurses, paediatric surgeons and paediatric anaesthetists as part of a multidisciplinary team. They should have access to the full range of paediatric support specialties, including the professions allied to medicine.

The standards of neurosurgical care set out in this document should apply equally to children and adults. However, the care of children and young people in neurosurgical units must also take into account their specific needs and requirements as laid out in:

- Children (Scotland) Act 1995
- Health for All Children, Fifth Edition, 2019
- United Nations Convention on the Rights of the Child
- Welfare of Children and Young People in Hospital 1991
- The Recommendations of the Bristol Report

Criteria (core)	Self-assessment questions	Example evidence	Audit Measurement	Audit feasibility ranking	Audit Caveats
12.1 Children should be cared for in facilities designed for children, except in emergency situations. Paediatric areas should be identified in adult units where this may happen.	Do you treat children in the adult unit at any time? How many times, over the past year? What facilities are there for children who may need to be treated in an adult environment?	Audit of times when children have been managed in an adult facility. Description of facilities available for children in the adult units.	TRAK Extract of paediatric patients in adult ward		Definition is patients <16, can also include >16yr in certain cases; to ensure continuity of active care, appropriate surgical expertise, and ward environment.
12.2 Paediatric anaesthetists are available on site where major elective paediatric neurosurgery is taking place.	Are paediatric anaesthetists available to manage children?	Lists of paediatric anaesthetists.	Review of current staffing		The availability of paediatric anaesthetists will be recorded at Board level in each Unit.



## Standard 12 – Specific to Children and Young People

<p>12.3 All children considered likely to require Paediatric Intensive Care Unit (PICU) level care after surgery will be discussed pre-operatively with paediatric intensivists at the appropriate PICU and the appropriate on call paediatric neurosurgeon.</p>	<p>How do you manage children likely to require PICU post-operatively?</p>	<p>Evidence of linkage and discussion with PICU.</p>	<p>Review of patient notes and discussion with paediatric neurosurgeons</p>		<p>Evidence of PICU linkage will be held at Board level, and should be available in cross-Board agreements where needed nationally.</p>
<p>12.4 All units performing emergency or elective paediatric neurosurgery will have procedures in place to ensure that any child requiring unplanned post-operative admission to a PICU is transferred without delay.</p>	<p>How is unplanned transfer to PICU managed in your unit?</p>	<p>Evidence of procedures/protocols in place.</p>	<p>Review of protocols</p>		<p>Protocols will be available at Board level, with national working contingencies evidenced.</p>
<p>12.5 Neurosurgery units which care for children will have nurses and AHPs with paediatric training.</p>	<p>Do the nursing and AHP staff in your unit have paediatric experience?</p>	<p>Evidence of paediatric nursing and AHP qualifications.</p>	<p>Review of staffing records</p>		<p>Evidence of appropriate paediatric training for nurses and AHPs will be held at Board level.</p>
<p>12.6 Children treated for neurosurgical disorders that may impinge on their development will be assessed and managed in conjunction with a paediatric neurologist or developmental paediatrician.</p>	<p>Do you have access to paediatric neurologists or developmental paediatricians in your unit?</p>	<p>Lists of consultants in paediatric neurology or developmental paediatrics.</p>	<p>Review of staffing</p>		<p>Pathways and availability of appropriate multidisciplinary specialists will be held in each Unit.</p>



## Standard 12 – Specific to Children and Young People

12.7 Formal arrangements will be in place for transfer of children to adult neurosurgical services when they reach the age of 16 years, e.g. transition clinics.	How do you manage the transition process in your unit?	Evidence of transition planning and facilities available. Numbers and types of transition clinics. Description of process.	Review of protocols		Protocols for transfer to Adult services should be held locally, or evidenced in cross-Board agreements where appropriate.
12.8 Separate facilities will be available for adolescent patients.	What facilities are available within your units for inpatients and outpatients?	Description of adolescent facilities.	Review of facilities		Evidence of appropriate facilities will be held at Board level.
12.9 Facilities will be available for parents to stay in hospital with their children.	Do you have facilities for parents to stay with their children?	Description of facilities available.	Review of facilities		Evidence of appropriate facilities will be held at Board level.
12.10 There will be separate outpatient clinics available for the review of children under 16 years of age.	What arrangements are in place for paediatric outpatients?	Record of children's clinic facilities.	Review of facilities		Outpatient clinic information will be available at Board level.
<b>Regional Centre Update</b>					
<b>NHS Grampian</b>	<b>NHS Greater Glasgow and Clyde</b>	<b>NHS Lothian</b>		<b>NHS Tayside</b>	
Referring Boards: NHS Grampian; NHS Highland; NHS Orkney; NHS Shetland	Referring Boards: Receive referrals from all health boards	Referring Boards: Receive referrals from all health boards		Referring Boards: NHS Tayside, NHS Fife	
<b>Related Standards/Recommendations</b>					



## Standards Working Group

Sean Berryman - Chair - Unit Operational Manager (NHS Grampian)

Craig Broadfoot – Former Chair – General Manager (NHS Greater Glasgow & Clyde)

David Bennett – Consultant Neurosurgeon ( NHS Tayside)

Alison Cassidy – AHP Lead (NHS Greater Glasgow & Clyde)

Anthony Amato-Watkins – Paediatric Consultant Neurosurgeon (NHS Greater Glasgow & Clyde)

Jennifer Brown – Consultant Neurosurgeon (NHS Greater Glasgow & Clyde)

Jothy Kandasamy – Consultant Neurosurgeon (NHS Lothian)

Wendy Croll – Clinical Care Group Manager (NHS Tayside)

Vaughan Statham – MSN National Network Manager (NHS Lothian)

Denise Pentland – MSN Clinical Co-ordinator (NHS Greater Glasgow & Clyde)

Matthew Beven – MSN Audit Facilitator (NHS Lothian)

Nicola Boyd – MSN Audit Facilitator (NHS Tayside)

Neeta Patel – MSN Audit Facilitator (NHS Grampian)

Ashley Strickland – MSN Audit Facilitator (NHS Greater Glasgow & Clyde)

Niko Triantafillou – MSN Project Support Officer (NHS Lothian)