



Clinical Standards for Neurosurgical Services in Scotland

Review of National Standard 5:
Access to Care - staffing
Criteria 5.1 & 5.5

October 2018

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Introduction

The Managed Service Network for Neurosurgery (MSN) published Clinical Standards for Neurosurgical Services in Scotland in 2010¹. The Standards Development Group devised 12 standards to provide neurosurgical units with a national framework for the level of service provision that should be achieved within the specialty of neurosurgery in the four regional centres.

It is the remit of the MSN to audit these standards to ensure that service provision meets or exceeds the standard. In the event that standards are not met, the MSN liaises with the provider board in question and requests that appropriate action is taken at a local level. The MSN selects given standards to audit each year; this year, Standard 5: *Access to Care – Staffing* has been audited. The results of a snapshot audit of the nurse establishment in wards (criterion 5.1) and nurse-to-patient staffing ratios for patients requiring high dependency or critical care (criterion 5.5) are provided in this report.

The specific criteria audited were:

Criterion 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.

Criterion 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.

The 12 Clinical Standards were audited in full over the course of 2010 to 2012 and the results were published in 2013². In relation to nurse establishment standards the findings *at that time* were:

- Criterion 5.1 - there were concerns over the skill mix of the nursing team, and/or the availability of formal neurosurgical training for nurses.
- Criterion 5.5 – the ratio of nursing staff to patients in all critical care units was adequate.

Methods

A single day 'snapshot' of nurse staffing in wards was recorded in each of the four centres in April 2018.

Criterion 5.1

In each unit the MSN Audit Facilitator liaised with the relevant senior team member and a Neurosurgical National Standard proforma (appendix 1) was completed.

Criterion 5.5

In each unit the MSN Audit Facilitator liaised with the relevant senior team member and a Neurosurgical National Standard proforma (appendix 2) was completed.

Following completion of the relevant proforma, information from each of the four centres was collated and national performance against these standards was measured.

Each centre retained their own data, therefore should any member of the neurosurgical team wish to review any of the data, this can be carried out at a local level with their Audit Facilitator.

Results

Criterion 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.

1.1. What is the agreed nurse establishment and how many staff are currently in post?

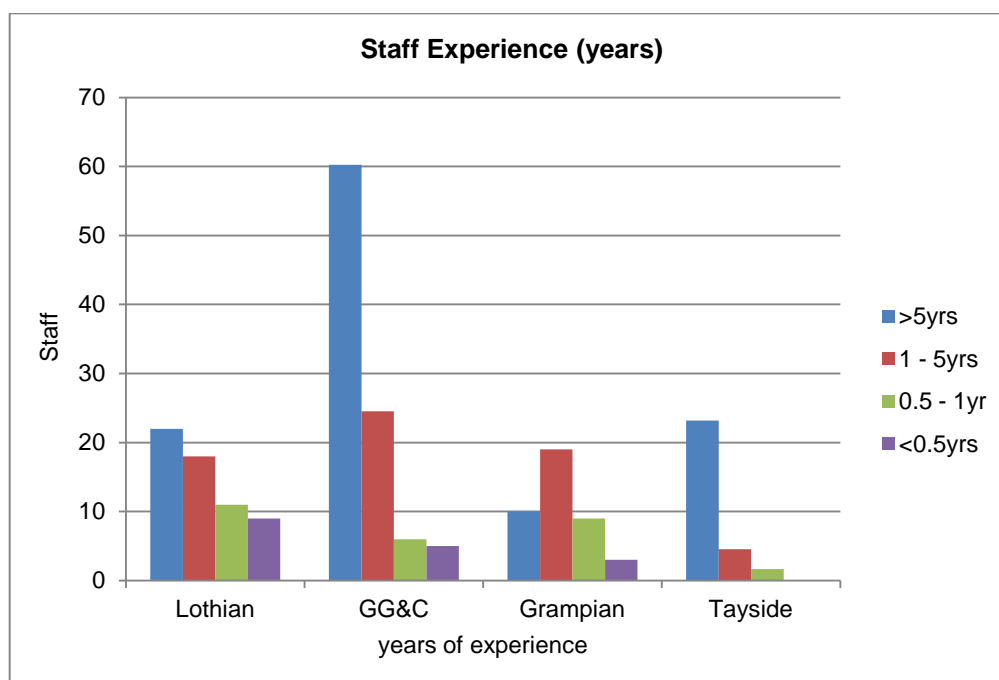
Overall, the nurse vacancy factor across Bands 2 to 7 in the four centres was as follows: Grampian 16% (39.8/47.3); Tayside 0 (29.4/29.4); Lothian 9% (53.2/58.5); and Greater Glasgow & Clyde 9% (95.8/105.7). In order to enable comparison between the units, the dedicated neuro-intensive care and pre-assessment units in Greater Glasgow and Clyde (GG&C) have not been included in the establishment analysis.

In Grampian and GG&C there was a considerable shortfall in the Band 5 trained nurse establishment but in Lothian there were fewer vacancies (two Band 5 and two Band 2 posts). Only Tayside had a full complement of nurses.

- **Grampian Band 5 Nurses:**
Establishment: 27.2 whole time equivalent (WTE) nurses – in post: 19.7 WTE
- **Lothian Band 5 Nurses**
Establishment: 32.8 WTE – in post: 30.8 WTE
- **Band 2 Care Support Workers:**
Establishment: 16.3 WTE – in post: 13.9 WTE
- **GG&C Band 5 Nurses:**
Establishment: 62.3 WTE nurses – in post: 52.3 WTE

1.2 For the staff currently in post on the ward, how many years of experience of working within neurosurgery do they have?

The chart below shows the range of experience of staff in the four centres.



1.3 How many members of staff are new in post?

It is important to note that the term 'new in post' refers to nurses who are within their first six months of appointment and/or who have not completed all of their core competencies. This definition, however, varied slightly across the four centres.

- **Grampian**
Of the 40 staff in post, 12 (30%) were considered to be new in post.
- **Tayside**
Of the 29 staff in post, 2 (7%) were considered to be new in post.
- **Lothian**
Of the 53 staff in post, 18 (34%) were considered to be new in post.
- **GG&C**
Of the 96 staff in post, 5 (5%) were considered to be new in post.

A dual challenge of a shortfall in the number of nurses and level of experience is most marked in Grampian.

Criterion 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.

Four questions were asked to determine if criterion 5.5 was met:

1. *How many level 3 ICU beds do you have for neurosurgery?*
2. *Can you provide 1:1 nursing care for these level 3 beds?*
3. *How many level 2 beds do you have on the neurosurgical ward?*
4. *Can you provide a 1:2 nurse to patient ratio for level 2 beds?*

Questions	Grampian	Tayside	Lothian	GGC
How many level 3 ICU beds do you have for neurosurgery?	0	0	0	6
Can you provide 1:1 nursing care for these ICU level 3 beds?	N/A	N/A	N/A	yes
How many level 2 beds do you have on the neurosurgical ward(s)?	0	4	4	10
Can you provide 1:2 nurse to patient ratio for these level 2 beds?	N/A	yes	yes	yes

Only the Institute of Neurological Sciences in Glasgow has a dedicated neurosurgical intensive care unit (ICU). The other three centres have access to level 3/2 beds within the intensive care units in their respective hospitals: Grampian: 11 funded beds, Tayside: 8 funded beds, Lothian (WGH): 10 funded beds³.

Conclusions

In Standard 5, criterion 5.1 states: *Neuroscience wards will have a nursing skill mix which reflects an appropriate balance of neuroscience trained nurses, as defined by recognised workforce planning tools.*

Before considering the extent of nurses who have undergone neurosurgical training, it is important to ascertain whether the agreed nurse establishment is met within each of the four centres.

In three of the four centres, gaps in nurse establishment in ward areas were identified. The most significant shortfalls were of Band 5 nurses in Grampian with a shortfall of 26% and GG&C with a shortfall of 16%. Nurse recruitment in the UK is recognised to be an issue and is multi-factorial in nature⁴. This national problem is reflected in the results of this audit.

When considering the level of neurosurgical experience of the ward nurses, Grampian had a relatively high proportion of nurses who were new in post (30%). GG&C had very few nurses across all four wards who were considered to be new in post (5%) and had a substantial proportion of nursing staff with over five years neurosurgical experience (62%). Lothian had a high proportion of nurses who were new in post (30%) although they also had a reasonable number of nurses with over five years neurosurgical experience (37%). Tayside had only two nurses new in post with a substantial proportion of nurses having over five years neurosurgical experience (79%).

Similar to findings in the 2013 audit of criterion 5.1², there remains concern over the skill mix of the neurosurgical nursing establishment in some centres. Grampian in particular had a higher number of staff considered to be new in post coupled with a considerable number of vacancies. It should be noted that Grampian has now augmented their nurse establishment with additional agency staff as part of a Grampian-wide initiative. The proportion of staff considered to be new in post in Lothian is concerning, however the service has developed an accredited neuroscience nurse education course which was available to all nurses at an appropriate stage in their professional development. The number of vacancies at Band 5 level in GG&C is of concern, however the MSN understands that the service has moved away from generic recruitment in an attempt to address the establishment shortfall.

Criterion 5.5 states that *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 units.*

All four boards confirmed that they could provide 1:1 nursing care for their level 3 ICU beds, therefore meeting the criteria of the standard. Only GG&C has a dedicated neuro-intensive care unit; the other three units access general ICU units within their hospitals.

It was reported that GGC, Lothian and Tayside could provide 1:2 nursing care for their level 2 neurosurgical beds. Grampian has a 'close observation unit' that flexes a staff-to-patient ratio according to clinical need but cannot be described as meeting the level 2 standard nurse-to-patient of 1:2.

This audit of criterion 5.5 highlights that GGC, Lothian and Tayside continue to meet the criteria outlined in the standard. The service in Grampian neurosurgery unit presented a challenge in determining what was regarded as a level 2 bed.

Additional Information

Although criterion 5.1 relates to ward staff, concerns were raised over theatre staffing levels therefore an audit was conducted of theatre staffing levels in all four centres. While the audit showed a slight shortfall of Band 5 theatre nurses in both GGC and Tayside it is important to note this was a snapshot audit on a single day. Significant problems have been identified in relation to considerable shortages of theatre staff in Grampian, Tayside and GGC over the last two years as documented in the MSN Board minutes⁵.

References

1. *Clinical Standards for Neurosurgical Services in Scotland*. September 2010.
<http://www.msn-neuro.scot.nhs.uk/Improving-Care/MSN-Standards/>
2. *MSN Annual Report 2013*
<https://www.msn-neuro.com/projects/past-national-audit-of-adult-standards/docs/Neurosurgery-Managed-Services-Network-Report-2013-web.pdf>
3. *Audit of Critical Care in Scotland 2018*. Scottish Intensive Care Society Audit Group.
http://www.sicsag.scot.nhs.uk/publications/_docs/2018/SICSAG-report-2018-2609-final.pdf
4. *Nurse shortages among key challenges facing NHS in Scotland*. Nursing Times 2018
<https://www.nursingtimes.net/news/workforce/nurse-shortages-among-key-challenges-facing-nhs-in-scotland/7026489.article>
5. *Minutes of the MSN Board Meetings*
<https://www.msn-neuro.com/events-and-meetings/#msn-meetings-2018>

Appendix 1: Standard 5 - Criterion 5.1 Proforma

Neurosurgical National Standard 5 - Criterion 5.1: Nursing Skill Mix

Neuroscience wards will have a nursing skill mix which reflects an appropriate balance of neuroscience trained nurses, as defined by recognised workforce planning tools.

Centre:					
1a	Ward:		1b	Date:	
1.1	What is the agreed nurse establishment and how many staff are currently in post?				
		Nurse Establishment (WTE)	In post (WTE)		
	Band 7				
	Band 6				
	Band 5				
	Band 3				
	Band 2				
	Band 2 Clerk				
<i>Any other staff (band and WTE):</i>					
1.2	For the staff currently in post on the ward, how many years experience of working within neurosurgery do they have?				
		>5 yrs experience	1 -5 yrs experience	1yr – 6mths experience	<6mths experience
	Band 7				
	Band 6				
	Band 5				
	Band 3				
	Band 2				
	Band 2 Clerk				
<i>Any other staff (band and experience):</i>					
1.3	How many members of staff are new in post?				
		New in Post			
	Band 7				
	Band 6				
	Band 5				
	Band 3				
	Band 2				
	Band 2 Clerk				
<i>Any other staff (band and number):</i>					

Appendix 2: Standard 5 – Criterion 5.5 Proforma

Neurosurgical National Standard 5 – Criterion 5.5: Nurse to patient ratio

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.

Centre:		Date:
1	How many level 3 ICU beds do you have for neurosurgery?	
2	Can you provide 1:1 nursing care for these ICU level 3 beds?	
3	How many level 2 beds do you have on the neurosurgical ward?	
4	Can you provide a 1:2 nurse to patient ratio for these level 2 beds?	
Comments:		