

Neuroscience Safe Staffing Benchmark Statements

Foreword by the Executive Board of British Association of Neuroscience Nurses

In 2004, the British Association of Neuroscience Nurses (BANN) set out standards of minimal full time equivalent per standard neuroscience bed in their strategy document. Since then the British Association of Neuroscience Nurses has revised its strategy (2009-2014). At the centre of this strategy is the principle that nursing care will always be delivered by competent neuroscience nurses. Appropriate nurse staffing is critical to patient safety and well-being, patient outcomes and experience, and quality of care. BANN recognises the importance of providing position benchmark statements for neuroscience safe staffing. Furthermore Robert Francis' final report not only made clear that inadequate staffing levels contributed to the failings in care at Mid Staffordshire, it also recommended stronger guidance for setting safe staffing levels. Establishing these benchmark statements marks an important step towards meeting safe staffing levels and aims to provide comprehensive benchmark statements which underpin the aspirations of British Neuroscience Nurses.

A central principle towards building safe neuroscience nursing practice is appropriate qualified and experienced staff in safe environments. This document is just one measure that encourages the development of a confident, safe, high quality service that is culturally sensitive to neuroscience patients and their families in the UK. It is imperative that neuroscience units utilise these statements as a resource to ensure that appropriate education, training, resources and effective staffing plans are provided to ensure the provision of safe quality patient and family care.

Anne Preece

President British Association of Neuroscience Nurses

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Potential audiences for Neuroscience Benchmark Statements

This benchmark document will be useful for the following people:

Those managing and developing neurosciences services.

Members of other professions who may have an involvement in neuroscience services.

• Those involved in designing, approving, neuroscience education and staff development.

• Those who are responsible for delivering continuing professional development.

The Purpose of the Neuroscience Benchmark Statements

The benchmarks' main purpose is to provide a framework for safe neuroscience staffing in the

UK.

These benchmarks aim to ensure that there is a consistent approach to neuroscience staffing in the UK. In addition these benchmarks aim to ensure that those caring for neuroscience patients

will be equipped with skills, knowledge and understanding to:

Provide evidenced-based efficient high-quality neuroscience care in the UK.

• Engage in a shared vision that ensures the continuation of effective practice in

neuroscience care.

Due to the level of complexity and multiple variables involved in determining the staffing

numbers required per clinical area this will not be stipulated in these benchmarks.

The Development of the Benchmark Statements

The benchmark statements have been developed following consultations with BANN members

and The Society of British Neurological Surgeons (SBNS).

Endorsement was gained with minor conditions, which have been taken into account when

preparing this document. Many people have been involved in the development of this document

and we would like to take this opportunity to thank them for their continuing commitment to this

important area of work.

This document has been endorsed by:

The Royal College of Nursing.

The Society of British Neurological Surgeons.

Supporting Statement for BANN Standards for Neurological Nurse Staffing June 6th 2013

The RCN welcomes the document Neuroscience Safe Staffing Benchmark Statements, we have constantly highlighted the need for appropriate staffing levels and skill mix in all areas of care and in particular in specialist services. The education and training of nurses who are working in neurosciences is vital to ensure that patients receive appropriate clinical support. The role of specialist nurses in supporting both patients and their colleagues is also fundamental to improved patient outcomes. The National Service Framework for Long Term Conditions made recommendations in 2010 which have still not been achieved and these standards provide clear guidance to the Commissioners of services for people with neurological conditions.

Steve Jamieson

Head of Nursing

Royal College of Nursing





Neuroscience Safe Benchmarking Statements

The delivery of high quality, safe neurosurgical services depends significantly on the expertise of specialist neuroscience nurses. Recent events in the NHS have highlighted the importance of maintaining appropriate staffing levels in our acute hospitals. The SBNS is pleased to endorse this important benchmark statement and urges all Hospital Trusts in the UK and Eire to assess their specialist neuroscience and neurosurgical nursing work force against the benchmarks.

Signed

Richard Nelson

Lick Nelson

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Total Full Time Equivalents (FTE)

Staffing levels need to be flexible to reflect changing needs of patients, environment and other influencing factors.

Staffing levels need to be set according to the following factors:

- Case mix and patient dependency.
- Changing nature of the patient's severity of illness /disease, acuity levels such as ICP monitoring, number of tracheotomised patients and number of patients with external ventricular drains/ lumbar drains.
- Patient numbers, occupancy rates and through put (unit turnover).
- Qualified nurses' skills and experience.
- Availability of administrative and clerical staff.
- Available resources and technology current and projected.
- Satisfaction levels of patients and nursing staff, which is assessed at regular intervals.
- The unit/ward location, facilities and physical environment, equipment accessibility and placement of the patient's rooms, treatment areas, nurses station.
- Staffing levels that enable staff to attend appropriate training and education programmes.

Safeguarding the public and delivering high quality patient care is essential (NMC, 2008, Francis, 2013).

Demonstrating sufficient staffing is one of the six essential standards that all health care providers must meet, to comply with CQC regulation and become licensed to deliver care (Care Quality Commission, 2010 Item 22 Francis 2013).

Changes in staffing levels need to be evidenced based according to patient dependency and service delivery with the ultimate objective of delivering optimum patient care (INMO, 2012).

Lack of suitably trained/ skilled staff is a patient safety issue (National Reporting and Learning System, 2009, Francis, 2013).

Administrative and clerical support should be adequate for the number of beds and the level of care provided (Paediatric Intensive Care Society, 2010 Ref 171).

The correct skill mix cannot be determined centrally by relying on statistical measure but has to be tailored to the local situation. There is a need to combine the professional judgement of experienced professionals with objective workload information (NHS Modernisation Agency, 2006).

High staff retention rates are important in maintaining a well educated and experienced workforce while reducing the need for agency staff.

The layout of beds and use of side wards in a critical care unit must be taken into account when setting staffing levels wards (BACCN, 2009).

Understaffing will put quality patient care at risk (Ball and Catton, 2011, Francis, 2013).

Statement	Rationale	
Total Full Time Equivalents (FTE)		
Staffing levels must be considered in achieving the expectations of the National Service Framework for Long-Term Conditions (DH, 2005), Critical illness Rehabilitation Guidelines (NICE, 2010).	People are kept safe, and their health and welfare needs are met, because there are sufficient numbers of the right staff. (Regulation 22 The Health and Social Care Act 2008 (Regulated Activities) Regulations, 2010: CQC, 2010).	
Ongoing reviews are required to ensure staffing is not static and reflects local conditions.	Staffing should not be decreased at night in the expectation that the ward or unit is quieter and less acute.	
Nurse: Patient Ratio		
General Neuroscience bed 1.25 WTE Registered Nurses per bed High Dependency bed 3.5 WTE Registered Nurses per bed Intensive Care bed 7.5 WTE Registered Nurses per bed (NHS Modernization Agency, 2006)	There is currently no consensus view nor evidence on the correct number of nurses required to maintain 1:1 nursing ratios for level 3 patients and 1:2 ratios for level 2 patients (DH, 2000).	
Every neuroscience patient has a right to be nursed in an appropriate environment by nursing staff and care support staff with the appropriate level/competency/skills to meet their needs.	The higher the nurse: patient ratio the better the quality of care and the fewer the number of hospital acquired infections (Aiken et al, 2010).	
Staffing levels also need to be considered in achieving the expectations of National Service Framework for Long-Term Conditions (DH, 2005), Critical illness Rehabilitation Guidelines (NICE, 2010).	"People are kept safe, and their health and welfare needs are met, because there are sufficient numbers of the right staff" (Regulation 22 Health and Social Care Act (Regulated Activities) Regulations 2010: CQC, 2010).	
Skill Mix		
A minimum 70 / 30 skill mix of registered to un-registered staff.	The RCN's 'guidance on safe nurse staffing levels in the UK' recommend an overall 70 / 30 skill mix of registered to un-registered staff (RCN, 2010).	
	Higher registered nurse staffing is associated with less hospital- relates mortality and reduced length of stay (Kane et al, 2007).	
Neuroscience Safe Staffing Benchmark Statemen	Lower patient to staff ratios has consistently better patient outcomes and high patient to staff ratio increases mortality rates by up to 25% (Rafferty et al, 2007).	

Statement	Rationale	
Indicators of Quality of Nursing Care		
Tools to assign safe staffing and plan future workforce requirements ideally should be based on a acuity and dependency tool for example: - The Safer Nursing Care Tool (SNCT) (NHS Institute for Innovation and Improvement). - Nursing Workforce Planning Tool (Skills for Health healthcare work force portal).	The Safer Nursing Care Tool (2013) can enable nursing teams to work out safe staffing for hospital wards by putting in information about patients' conditions. Safer Nursing Care Tool can provide information on the impact of actual staffing levels on the quality and care delivered to the monitoring of nurse sensitive indicators (NSIs). Skills for health workforce planning portal can provide work force planning for neurology wards.	
Clinical managers should be able to proactively manage and use expert knowledge/experience to reflect the needs of their patients.	To demonstrate the implementation and monitoring of evidence-based practice, benchmarked standards and a proactive approach to quality driven care (Skills for Health NHS Benchmarking Database).	
Quality indicators should be used to benchmark/evidence a centre/unit's level of performance, and to provide a time-specific action plan with measures to inform quality-improvement initiatives.	Quality indicators provide evidence of staff needed to care for patients safely and effectively. Nurse sensitive indicators (Mass, Johnson and Morehead, 1996) can be used for quality improvement, support informed policy and monitor safe practices. Nurse-sensitive outcomes indicators reflect patient outcomes that are affected by nursing practice i.e. Nosocomial Infections (e.g. Urinary tract infections, central line catheter associated blood stream infections), patient falls, longer hospital stay, hospital-acquired pressure ulcer prevalence, safe medication administration and nursing care hours per patient. Analysis of nurse staffing levels in relation to nurse-sensitive outcomes tend to decline or increase in relation to the quality of nursing care (Kane et al, 2007; Hart et al, 2006).	

Statement Rationale

Specialling one-to-one care

The aim of specialling is to increase the level of supervision and observation of a particular patient to:

- Observe their behaviour.
- Protect the patient and others from harm.

The patients' behaviour is assessed and deemed that they are at:

- Risk of compromised treatment.
- High risk of unpredictable behaviour.
- Risk of self harm.
- risk of harm to other patients/property and/or staff.

Specialling is undertaken by staff who are familiar with the patient and who have the requisite knowledge and skills to meet the patients specific needs.

Security and safety of the staff providing specialling duties needs to be considered e.g. bleep/walkie-talkie system, further backup arrangements and appropriate training.

Staff engaged in specialling should be replaced by another member of staff to maintain the numbers and not deplete the staffing ratio.

Specialist Commissioning Guidelines for the rehabilitation of patients with brain injury (definition 7) (DH, 2001).

Specialling aims to maximize patient safety and minimize risk.

Specialling aims to provide a therapeutic approach/exchange in all interactions with the patient. This is especially important when the ward has a number of patients whose behaviour is deemed as challenging.

Nursing Skills

The provision of adequate measures that enable the measures for assessment observation and safe care is available.

Neuroscience patients should only be cared for by those with the requisite knowledge, skills and experience within a neuroscience care setting.

Staff turnover and the use of agency staff who may not have the requisite skills must be factored into the skill mix.

Centres must ensure that they plan sufficient capacity (resources and bed capacity) to accommodate expected and unpredictable peaks in demand.

Both adult and paediatric neurosurgical patients must not be "lodged" on wards that are staffed by nurses who are not trained in the care of neuroscience patients (Children's Neuroscience Networks Specific Standards 2012 D11).

Statement	Rationale	
Education		
Relevant training and education to equip staff to be fit for practice in caring for the neuroscience patient is identified. Staff competences include specific training and education. Neuroscience services should have an education strategy that ensures that staff are not only provided opportunities to access neuroscience education but opportunities to update/maintain the currency of such education.	Tertiary neuroscience centres should be fully equipped and optimally staffed with multi-professional teams trained and competent in the management of these conditions (NHS Modernization Agency, 2006).	
Nurses employed within the neuroscience setting caring for neurological patients must have a relevant post-qualifying qualification and have relevant experience or be undertaking education/training in the field.	A requisite level of educational achievements and experience must support nurses practising at this level (Safe Neurosurgery, 2000; BACCN, 2009).	
A minimum of 75% of trained nurses will be involved in or have completed a course of study in neuroscience related care (Standards for Patients Requiring Neurosurgical Care 2002, standard 2.2/9).	Staff within the High Dependency Unit (HDU) NICCU and PICU must have specialist training in the care and management of patients with high dependency/NICCU/PICU needs, as well as the neurological care of children (Children's Neuroscience Networks Specific Standards, 2012:D23).	
Courses are available that meet the needs of the staff to enable the necessary knowledge and skills to nurse the neurologically impaired patient.	Inexperienced staff are more likely to cause errors or fail to observe/ recognise potential hazards (National Reporting and Learning system, 2009).	
Clinical nurse specialists must be educated to the requisite level and Specialist Nurse numbers must meet the needs of the patients.	Minimum Specialist Nurse (SpN) staffing levels to assure a safe and sustainable service for 100 new patients with brain and other CNS tumours per year is 1.5 FTE (NICE, 2006).	
Care for children and young people with neurological disorders should be carried out by Children trained nurses.	Support and advice from staff with the relevant expertise must be available at all times (Children's Neuroscience Networks Specific Standards, 2012 D11).	
There is a cohort of nurses who have training and demonstrate competency in the care of children and young people requiring neurosurgical management in the lead/specialist centres (Welsh Assembly Government 2009).	Nursing care must be provided by a dedicated team of nursing staff trained in the care of children and in paediatric neurosurgery in line with the RCN (2003) (Children's Neuroscience Networks Specific Standards 2012 D23).	

References

Aiken L, Sloane DM, Cimiotti JP, Clarke SP, Flynn L, Seago JA, et al. (2010) Implications of the California nurse staffing mandate for other states. *Health Services Research* 45(4): 904–921

Association of United Kingdom University Hospitals (2007) *AUKUH Acuity / Dependency tool.* London: AUKUH Assessed on 27th January 2012 http://www.aukuh.org.uk/index.php/affiliate-groups/directors-of-nursing/patient-care-portfolio.

BACCN National Board, Benchmark Communications, Newcastle upon Tyne, NE1 4HZ, UK.BACCN, CC3N, RCN. *Standards for Nurse Staffing in Critical Care*. September 2009. http://www.baccn.org.uk/downloads/BACCN_staffing_document.pdf Accessed

Ball J and Catton H. (2011) Make sure that the numbers add up. *Health Service Journal* 12th May 2011 pp20-22

Bray K, Wren I, Baldwin A, St Ledger U, Gibson V, Goodman S and Walsh D. (2010) Standards for nurse staffing in critical care units determined by: The British Association of Critical Care Nurses, The Critical Care Networks National Nurse Leads, Royal College of Nursing Critical Care and In-flight Forum. *Nursing in Critical Care*.15 (3):109-11

Care Quality Commission (2010) *Guidance about compliance:* essential standards of safety and quality, London: Care Quality Commission.

Children's Neuroscience Networks Specific Standards (2012) NHS Specialized Services

Department of Health (2000) Comprehensive Critical Care a review of adult critical care services. London: Department of Health.

Department of Health (2001) *National Specialised Services Definition Set (2nd Edition) Complex Specialised Rehabilitation for Brain Injury and Complex Disability* - Definition No.7 (adult)

Department of Health (2005) *National Service Framework for Long-term Conditions.* London: Department of Health.

Francis R. (2013) Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry: executive summary. London: The Stationery Office.

Hart S, Berquist S, Gajewski B and Dunton N. (2006). Reliability testing of the National Database of Nursing Quality Indicators pressure ulcer indicator. *Journal of Nursing Care Quality* 21(3): 256-265.

Irish Nurses and Midwives Organisation Working Together (INMO) (2012) *Tools for Safe Practice Dealing with Inadequate Staffing levels and Inappropriate Skill Mix Ratio's- Safety* Issue1

Kane RL, Shamliyan T, Mueller C, Duval S and Wilt TJ. (2007) Nurse staffing and quality of patient care. *Evidence Report/Technology Assessment Publication* No. 07-E005. Rockville, MD: Agency for Healthcare Research and Quality (Full Rep).No.151:pp1-115.

Mass M, Johnson M and Moorehead S (1996) Classifying nursing-sensitive patient outcomes. *Journal of Nurse Scholarship* 28 (4), 295-30.1

National Reporting and Learning System (2009) *Quarterly Data Summary England 13 – Patient Safety Incident Reports.* London: The National Patient Safety Agency.

NHS Modernisation Agency (2006) *The Neuroscience Critical Care Report.* Leicester: The Neurosciences Group NHS Modernisation Agency.

NICE (2006) Guidance on Cancer Services Improving Outcomes for People with Brain and Other CNS Tumours. Analysis of the Potential Economic Impact of the Guidance. National Institute for Health and Clinical Excellence London.

NICE (2010) *Critical illness rehabilitation* (CG83) London: National Institute for Health and Clinical Excellence.

Nursing and Midwifery Council (2008) *The code: standards of conduct, performance and ethics for nurses and midwives.* London: Nursing and Midwifery Council.

Paediatric Intensive Care Society (2010) *Standards for the Care of Critically III Children.* 4th Edition Paediatric Intensive Care Society.

Rafferty AM, Clarke SP, Coles J, Ball J, James P, McKee M, et al. (2007) Outcomes of variation in hospital nurse staffing in English hospitals: Cross-sectional analysis of survey data and discharge records. *International Journal of Nursing Studies* 44 (2): 175–182.

Royal College of Nursing (2003) Defining safe staffing levels for children and young people's services. London: Royal College of Nursing.

Royal College of Nursing (2010) *Guidance on safe nurse staffing levels in the UK. Policy and International Department.* London: Royal College of Nursing.

Safer Nursing Care Tool (2013) available at http://www.institute.nhs.uk/quality and value/introduction/safer nursing care tool.html

Skills for Health NHS Benchmarking Database available at http://www.benchdb.skillsforhealth.org.uk/

Standards for Patients Requiring Neurosurgical Care (2002) *Joint Standards Development Group Of the Clinical Standards Committee of the Society of British Neurological Surgeons And Regional Specialised Services Commissioning Group.* Society of British Neurological Surgeons.

The Health and Social Care Act 2008 (Regulated Activities) Regulations (2010) No. 781. London: The Stationery Office.

Welsh Assembly Government (2009) All Wales Neurosciences Standards for Children and Young People's Specialised Healthcare Services. Welsh Assembly Government.