NICE National Institute for Health and Care Excellence

NICE guideline

Safe staffing for nursing in adult inpatient wards in acute hospitals

Safe staffing guideline

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Contents

Introduction

The Department of Health and NHS England has asked NICE to develop evidence-based guidelines on safe staffing, with a particular focus on nursing staff, for England. This request followed the publication of the following reviews and reports.

- Francis report on Mid Staffordshire (Francis 2013)
- Keogh review into the quality of care and treatment provided in 14 hospital trusts in England (Keogh 2013)
- Cavendish review, an independent enquiry into healthcare assistants and support workers in the NHS and social care setting (Cavendish 2013)
- Berwick report on improving the safety of patients in England (Berwick 2013).

The need for guidelines on safe staffing, including nursing staff, was also highlighted in the recent policy documents and responses:

- How to ensure the right people, with the right skills, are in the right place at the right time. A guide to nursing midwifery and care staffing capacity and capability (National Quality Board 2013).
- Hard truths. The journey to putting patients first (Department of Health 2013).

Focus of the guideline

This is the first guideline for this new NICE work programme. It makes recommendations on safe staffing for nursing in adult inpatient wards in acute hospitals, based on the best available evidence. The guideline focuses on wards that provide overnight care for adult patients in acute hospitals. It does not cover intensive care, high dependency, maternity, mental health, acute admission or assessment units or wards, or inpatient wards in community hospitals.

In this guideline, nursing staff refers to registered nurses and healthcare assistants unless otherwise specified.

The guideline identifies organisational and managerial factors that are required to support safe staffing for nursing, and indicators that should be used to provide information on whether safe nursing care is being provided in adult inpatient wards in acute hospitals. (For further information, see the scope for the guideline.)

This guideline is for NHS provider organisations and others who provide or commission services for NHS patients. It is aimed at hospital boards, hospital managers, ward managers, healthcare professionals and commissioners. It will also be of interest to regulators and the public.

Those responsible and accountable for staffing for nursing in adult inpatient wards in acute hospitals, at an organisational and a ward level, should take this guideline fully into account. However, this guideline does not override the need and importance of using professional judgement to make decisions appropriate to the circumstances.

This guideline does not cover nursing workforce planning or recruitment at regional or national levels, although its content may inform these areas.

While we acknowledge the important contribution of a multi-disciplinary approach to ensure safe nursing care, staffing requirements in relation to doctors, specialist nurses and other healthcare professionals are not addressed in this guideline. They may however be covered in future staffing guidelines.

Related documents

The National Quality Board for England considers that nursing staff capacity and capability are the main determinants of the quality of care experienced by patients, and has issued guidance about what is expected of commissioners and providers in this area (National Quality Board 2013). NHS England and the Care Quality Commission also recently published joint guidance to NHS trusts on the delivery of the 'Hard Truths' commitments on publishing staffing data regarding nursing, midwifery and care staff levels. In early 2014, the Department of Health consulted on Introducing Fundamental Standards to promote care that is safe, high quality, and puts patients first (Department of Health 2014). The Department was analysing the responses at the time this guideline was published and a final version was not available. This guideline should be read alongside these documents.

Toolkits to support this guideline

The guideline will also be of interest to people involved in developing decision support toolkits and resources for assessing and determining safe nursing staff requirements. NICE offers a separate process to assess whether submitted decision support toolkits for informing nursing staff requirements comply with the guideline recommendations. Details of any tools that can help with implementing this guideline are listed alongside other resources.

Patient-centred care

Assessing the nursing needs of individual patients is paramount when making decisions about safe nursing staff requirements for adult inpatient wards in acute hospitals. Consequently this guideline makes a series of recommendations that focus on safe nursing for adult inpatient wards in acute hospitals. Assessment of patients' nursing needs should take into account individual preferences and the need for holistic care and patient contact time.

Patients should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals. Healthcare professionals and others responsible for assessing safe staffing requirements for nursing on adult wards in acute hospitals should also refer to NICE's guidance on the components of good patient experience in adult NHS services.

It is also important to note that patients have rights and responsibilities as set out in the NHS Constitution for England: all NICE guidance is written to reflect these. The Compassion in Practice strategy also sets a shared purpose for nurses, midwives and care staff to deliver high-quality, compassionate care, and to achieve excellent health and wellbeing outcomes (Department of Health and NHS Commissioning Board 2012).

Evidence to recommendations

When drafting these recommendations, the Safe Staffing Advisory Committee considered evidence from the systematic reviews, an economic analysis report and the additional reports described in section 2. In some areas there was limited or no published evidence. In these cases, the Committee considered whether it was possible to formulate a recommendation on the basis of their experience and expertise. The evidence to recommendations tables detail the Committee's considerations when drafting the recommendations.

The Committee also identified a series of gaps in the evidence and formulated research recommendations – please see section 3 and section 4 for further details.

The Committee considered the following factors when drafting the recommendations:

- whether there is a legal duty to apply the recommendation (for example, to be in line with health and safety legislation)
- the strength and quality of the evidence base (for example, the risk of bias in the studies looked at, or the similarity of the patient populations covered)
- the relative benefits and harms of taking (or not taking) the action
- any equality considerations.

Strength of recommendations

In general, recommendations that an action 'must' or 'must not' be taken are usually included only if there is a legal duty (for example, to comply with health and safety regulations).

Recommendations for actions that should (or should not) be taken use directive language such as 'agree', 'assess', 'calculate', 'ensure procedures are in place', 'record' or 'take'.

Recommendations for which the quality of the evidence is poorer, or where there is a closer balance between benefits and harms (factors that could be used or actions that could be taken), use 'consider'.

1 Recommendations

This guideline begins with recommendations for the responsibilities and actions at an organisational level to support safe staffing for nursing in individual acute adult inpatient wards.

There is no single nursing staff-to-patient ratio that can be applied across the whole range of wards to safely meet patients' nursing needs. Each ward has to determine its nursing staff requirements to ensure safe patient care. This guideline therefore makes recommendations about the factors that should be systematically assessed at ward level to determine the nursing staff establishment. It then recommends on-the-day assessments of nursing staff requirements to ensure that the nursing needs of individual patients are met throughout a 24-hour period.

The guideline also makes recommendations for monitoring and taking action according to whether nursing staff requirements are being met and, most importantly, to ensure patients are receiving the nursing care and contact time they need on the day. The emphasis should be on safe patient care not the number of available staff. This includes recommendations to review the nursing staff establishment for the ward and adjust it if required.

1.1 Organisational strategy

These recommendations are for hospital boards, senior management and commissioners. They should be read alongside the National Quality Board's guide to nursing, midwifery and care staffing capacity and capability**.**

Focus on patient care

1.1.1 Ensure patients receive the nursing care they need, including specialist nursing, regardless of the ward to which they are allocated, the time of the day or the day of the week. This includes planning to locate patients where their clinical needs can best be met.

Accountability for ward nursing staff establishments

1.1.2 Develop procedures to ensure that ward nursing staff establishments (the number of registered nurse and healthcare assistant posts that are funded to work in particular wards) are sufficient to provide safe nursing care to each patient at all times.

1.1.3 Ensure that the final ward nursing staff establishments are developed with the registered nurses who are responsible for determining nursing staff requirements at a ward level and approved by the chief nurse (or delegated accountable staff). The board should retain organisational responsibility. (See section 1.3 for recommendations on setting ward nursing staff establishments.) This includes when the ward establishment and budget are set.

1.1.4 Ensure senior nursing managers are accountable for the nursing staff roster that is developed from the ward nursing staff establishment.

1.1.5 When agreeing the ward nursing staff establishment, ensure it is sufficient to provide planned nursing staff requirements at all times. This should include capacity to deal with planned and predictable variations in nursing staff available, such as annual, maternity, paternity and study leave (commonly known as uplift). Consider adjusting the uplift for individual wards where there is evidence of variation in planned or unplanned absence at a ward level.

1.1.6 When agreeing the ward nursing staff establishment, ensure capacity to deal with fluctuations in patients' nursing needs (such as seasonal variations indicated by historical records of nursing staff requirements) and staff unplanned leave or absences.

1.1.7 When agreeing the skill mix of the ward nursing staff establishment, this should be appropriate to patient needs and take into account evidence that shows improved patient outcomes are associated with care delivered by registered nurses (see recommendation 1.3.6).

Responsiveness to unplanned changes

1.1.8 Ensure that there are procedures to identify differences between on-the-day nursing staff requirements and the nursing staff available on a ward.

1.1.9 Hospitals need to have a system in place for nursing red flag events (see section 1.4) to be reported by any member of the nursing team, patients, relatives or carers to the registered nurse in charge of the ward or shift.

1.1.10 Ensure there are procedures for effective responses to unplanned variations in predicted patients' nursing needs or the availability of nursing staff at any time

during the day and night. These procedures should include prompt action to enable an increase or decrease in nursing staff.

1.1.11 Action to respond to nursing staff deficits on a ward should not compromise staff nursing on other wards.

1.1.12 Ensure there is a separate organisational contingency plan and response for patients who require the continuous presence of a member of the nursing team (often referred to as 'specialing' care).

1.1.13 Consider implementing approaches to support flexibility, such as adapting nursing shifts, nursing skill mix, assigned location and employment contract arrangements.

Monitor adequacy of ward nursing staff establishments

1.1.14 Ensure that there are procedures for systematic ongoing monitoring of safe nursing indicators (see section 1.5) and formal review of nursing staff establishments of individual wards at a board level at least twice a year (and more often if there are significant changes such as ward patient characteristics). These procedures should include periodic analysis of reported nursing red flag events and the safe nursing indicators (see section 1.5).

1.1.15 Make appropriate changes to the ward nursing staff establishment in response to the outcome of the review.

Promote staff training and education

1.1.16 Enable nursing staff to have the appropriate training for the care they are required to provide.

1.1.17 Ensure that there are sufficient designated registered nurses who are experienced and trained to determine on-the-day nursing staff requirements over a 24-hour period.

1.1.18 The organisation should encourage and enable nursing staff to take part in programmes that assure the quality of nursing care and nursing standards to maximise the effectiveness of the nursing care provided and the productivity of the nursing team.

1.1.19 Involve nursing staff in developing and maintaining hospital policies and governance about nursing staff requirements, such as escalation policies and contingency plans.

1.2 Principles for determining nursing staff requirements

These recommendations are for registered nurses in charge of individual wards or shifts who should be responsible for assessing the various factors used to determine nursing staff requirements.

1.2.1 Use a systematic approach that takes into account the patient, ward and staffing factors in box 1 to determine nursing staff requirements both when setting the ward nursing staff establishment and when making on-the-day assessments.

1.2.2 Use a decision support toolkit endorsed by NICE to facilitate the systematic approach to determining the nursing staff requirements (see the details of the process for assessing toolkits).

1.2.3 Use informed professional judgement to make a final assessment of nursing staff requirements. This should take account of the local circumstances, variability of patients' nursing needs, and previously reported nursing red flag events (see section 1.4).

1.2.4 Consider using the nursing care activities summarised in tables 1 and 2 as a prompt to help inform professional judgement of the nursing staff requirements. Tables 1 and 2 may help to identify where patients' nursing needs are not fully accounted for by any decision support toolkit that is being used.

Box 1: Factors to determine nursing staff requirements

Patient factors

- Use individual patient's nursing needs as the main factor for calculating the nursing staff requirements for a ward. (The term patient nursing needs is used throughout this guideline to include both patient acuity and patient dependency.)
- Make a holistic assessment of each patient's nursing needs and take account of specific nursing requirements and disabilities, as well as other patient factors that may increase nursing staff requirements, such as:
  - difficulties with cognition or confusion (such as those associated with learning difficulties, mental health problems or dementia)
  - end-of-life care
  - increased risk of clinical deterioration
  - need for the continuous presence of a member of the nursing team (often referred to as 'specialing' care).

Ward factors

- Expected patient turnover in the ward during a 24-hour period (including both planned and unscheduled admissions, discharges and transfers).
- Ward layout and size (including the need to ensure the safety of patients who cannot be easily observed, and the distance needed to travel to access resources within the ward).

Nursing staff factors

- Nursing activities and responsibilities, other than direct patient care. These include:
  - communicating with relatives and carers
  - managing the nursing team and the ward
  - professional supervision and mentoring of nursing staff. Student nurses are considered supernumerary
  - communicating with and providing nursing clinical support to all healthcare staff involved with the care of patients on the ward

- undertaking audit, and staff appraisal and performance reviews.

These activities and responsibilities may be carried out by more than one member of the nursing team.

- Support from non-nursing staff such as the medical team, allied health professionals and administrative staff.

	Table 1: Ongoing nursing care activities that affect nursing staff requirements		
	Routine nursing care needs	**Additional nursing care needs (about 20-30 minutes per activity)**	**Significant nursing care needs (more than 30 minutes per activity)**
Care planning	Simple condition and care plan	Complex condition or care plan (such as multiple comorbidities)	Attending multidisciplinary meetings
Direct contact and communication	Providing information and support to patients, including all emotional and spiritual needs	Complex multiple health needs	Difficulties with communication including sensory impairment or language difficulties
Eating and drinking	Ensuring food and drink provided and consumed	Assistance with eating and drinking	Parenteral nutrition
Fluid management	8-hourly IV fluids	IV fluids more frequently than 8 hourly or blood components	Complex fluid management (such as hourly or requiring monitoring in millilitres)
Management of equipment	Simple intermittent (such as catheters, IV access)	Central lines, drains, stomas	Multiple lines, drains, ventilator support

Medication	Regular oral medication	IV medication or frequent PRN medication	Medication requiring complex preparation or administration, or 2 nursing staff
Mobilisation	No assistance needed	Assistance needed (such as post-op or during out of hours periods)	Mobilisation with assistance of 2 nursing staff
Observations	4–6 hourly	2–4 hourly	More frequent than 2 hourly
Oral care	No assistance needed	Assistance needed	Intensive mouth care needed (such as patient receiving chemotherapy)
Skin and pressure area care	Less frequent than 4 hourly	2–4 hourly	More frequent than 2 hourly or requiring 2 nursing staff
Toileting needs	No assistance needed	Assistance needed	Frequent assistance or 2 nursing staff needed
Washing or bathing and dressing	Minimal assistance with washing, dressing and grooming	Assistance with some hygiene needs by 1 member of the nursing staff	Assistance with all hygiene needs, or needing 2 nursing staff
Abbreviations: IV, intravenous; PRN medication, medication administered as needed **Note: these activities are only a guide and there may be other ongoing activities that could be considered**			

	Table 2: One-off nursing care activities that affect nursing staff requirements

	Routine nursing care needs	Additional nursing care needs (about 20-30 minutes per activity)	Significant nursing care needs (more than 30 minutes per activity)
Admission		Admission assessment	Complex admission assessment
Care after death			Arrangements after the death of a patient, including support for relatives and carers
Discharge planning	Simple follow-up and transfer home	Coordination of different services	Organising complex services, support or equipment
Patient and relative education and support	Routine teaching about condition, routine post-op care	Teaching about a significant new condition (such as diabetes, heart disease or cancer)	Teaching about a new complex or self-managed condition (such as dialysis, colostomies), or to patient or their carers or relatives who have difficulties with communication including sensory impairment or language difficulties
Patient escorts	Routine escorts or transfers for procedures	Escorting a patient off a ward for 20-30 minutes	Escorting a patient off a ward for more than 30 minutes
Procedures and treatments	Simple wound dressings, specimen collection	Catheterisation, nasogastric tube insertion, multiple wound dressings	Complex wound dressings (such as vacuum-assisted closure), tracheostomy care
Note: these activities are only a guide and there may be other one-off activities that also could be considered			

1.3 Setting the ward nursing staff establishment

These recommendations are for senior registered nurses who are responsible for determining nursing staff requirements or those involved in setting the nursing staff establishment of a particular ward.

1.3.1 Set ward nursing staff establishments using the stages outlined in recommendations 1.3.2–1.3.8. This should involve the designated senior registered nurses at a ward level who are experienced and trained in determining nursing staff requirements. This process could be facilitated by the use of a NICE-endorsed decision support toolkit.

Stage 1: Calculate the average nursing staff requirement throughout a 24-hour period

1.3.2 Routinely measure the average amount of nursing time required throughout a 24-hour period for each of the ward's patients. The measurement should take into account the patient factors and nursing care activities outlined in section 1.2. It could be expressed as nursing hours per patient to ensure ward nursing staff establishments are derived from individual patient's needs. (A measurement of nursing hours per patient enables the nursing needs of individual patients and different shift durations of the nursing staff to be more easily taken into account than with a nurse-to-patient ratio. See the glossary for more information.)

1.3.3 Formally analyse the average nursing hours required per patient at least twice a year when reviewing the ward nursing staff establishment.

1.3.4 Multiply the average number of nursing hours per patient by the average daily bed utilisation (the number of patients that a ward nursing team is responsible for during each 24-hour period). Using bed utilisation rather than bed occupancy will ensure that the nursing care needs of patients who are discharged or transferred to another ward during a 24-hour period are also accounted for.

1.3.5 Add an allowance for additional nursing workload based on the relevant ward factors such as average patient turnover, layout and size, and staff factors such

as nursing activities and responsibilities other than direct patient care (see recommendations section 1.2, box 1).

Stage 2: Determine required nursing skill mix and shift allocation

1.3.6 Identify the appropriate knowledge and nursing skill mix required in the team to meet the nursing needs of the ward's patients, with registered nurses remaining accountable for the overall care of patients. Base the nursing staff requirements on registered nurse hours, and consider which activities can safely be delegated to trained and competent healthcare assistants. Take into account:

- the level of knowledge, skill and competence of the healthcare assistants in relation to the care that needs to be given
- the requirement for registered nurses to support and supervise healthcare assistants
- that improved patient outcomes are associated with a higher proportion of registered nurses in the ward nursing staff establishment.

1.3.7 Use average patients' nursing needs and the estimated time of day or night when care will be required to:

1.3.8 Take account of the following factors (commonly known as 'uplift' and likely to be set at an organisational level, see recommendation 1.1.5):

- planned absence (for example, for professional development, mandatory training, entitlement for annual, maternity or paternity leave)
- unplanned absence (such as sickness absence).

The following diagram summarises the process of setting nursing staff establishments for an individual ward:

Summary of the process of setting ward nursing staff establishments

1. Average nursing staff requirement throughout a 24-hour period
Average nursing hours per patient Use results of a systematic approach
x

Average daily bed utilisation The average number of patients cared for in a ward per day
+
Additional workload in nursing hours per day This should take into account: • average patient turnover • ward layout and size • nursing activities and responsibilities, other than direct patient care
↓
2. Determine required ward nursing staff establishment and shift allocation
Use the care needs of patients and the time when care will be required together with professional judgement to determine: • nursing skill mix • allocation of nursing staff during shifts **Add an allowance for planned and unplanned absence (commonly known as uplift)**
Note: This process of setting ward nursing staff establishments could be facilitated by using a decision support toolkit

1.4 Assessing if nursing staff available on the day meet patients' nursing needs

These recommendations are for the registered nurses on wards who are in charge of shifts.

1.4.1 Systematically assess that the available nursing staff for each shift or at least each 24-hour period is adequate to meet the actual nursing needs of patients currently on the ward. The nurse in charge on individual shifts should make the on-the-day assessments of nursing staff requirements, which could be facilitated by using a NICE-endorsed decision support toolkit. Also take into account the patient factors outlined in section 1.2, box 1 and tables 1 and 2.

1.4.2 Monitor the occurrence of the nursing red flag events shown in box 2 throughout each 24-hour period. Monitoring of other events may be agreed locally.

1.4.3 If a nursing red flag event occurs, it should prompt an immediate escalation response by the registered nurse in charge. An appropriate response may be to allocate additional nursing staff to the ward.

1.4.4 Keep records of the on-the-day assessments of actual nursing staff requirements and reported red flag events so that they can be used to inform future planning of ward nursing staff establishments or other appropriate action.

Box 2: Nursing red flags

- Unplanned omission in providing patient medications.
- Delay of more than 30 minutes in providing pain relief.
- Patient vital signs not assessed or recorded as outlined in the care plan.
- Delay or omission of regular checks on patients to ensure that their fundamental care needs are met as outlined in the care plan. Carrying out these checks is often referred to as 'intentional rounding' and covers aspects of care such as:
  - Pain: asking patients to describe their level of pain level using the local pain assessment tool.
  - Personal needs: such as scheduling patient visits to the toilet or bathroom to avoid risk of falls and providing hydration.
  - Placement: making sure that the items a patient needs are within easy reach.
  - Positioning: making sure that the patient is comfortable and the risk of pressure ulcers is assessed and minimised.
- A shortfall of more than 8 hours or 25% (whichever is reached first) of registered nurse time available compared with the actual requirement for the shift. For example, if a shift requires 40 hours of registered nurse time, a red flag event would occur if less than 32 hours of registered nurse time is available for that shift. If a shift requires 15 hours of registered nurse time, a red flag event would occur if 11 hours or less of registered nurse time is available for that shift (which is the loss of more than 25% of the required registered nurse time).
- Less than 2 registered nurses present on a ward during any shift.

Note: other red flag events may be agreed locally.

There is an example on the NICE website to illustrate the use of recommendations in sections 1.3 and 1.4.

1.5 Monitor and evaluate ward nursing staff establishments

These recommendations are for senior management and nursing managers or matrons to support safe staffing for nursing at a ward level.

1.5.1 Monitor whether the ward nursing staff establishment adequately meets patients' nursing needs using the safe nursing indicators in box 3. These are indicators that evidence shows to be sensitive to the number of available nursing staff and skill mix. Consider continuous data collection of these safe nursing indicators (using data already routinely collected locally where available) and regularly analyse the results. (Section 9 gives further guidance on data collection for the safe nursing indicators.)

1.5.2 Compare the results of the safe nursing indicators with previous results from the same ward at least every 6 months. The comparisons should also take into account the specific ward and patient characteristics (such as patient risk factors and ward speciality). Reported nursing red flag events (see section 1.4, box 2) should also be reviewed when undertaking this monitoring and prompt an earlier examination of the adequacy of the ward nursing staff establishment.

1.5.3 There is no single nursing staff-to-patient ratio that can be applied across all acute adult inpatient wards. However, take into account that there is evidence of increased risk of harm associated with a registered nurse caring for more than 8 patients during the day shifts. Therefore if the available registered nurses for a particular ward (excluding the nurse in charge) are caring for more than 8 patients during the day shifts, the senior management and nursing managers or matrons should:

- closely monitor nursing red flag events (see section 1.4, box 2)
- perform early analysis of safe nursing indicator results (see section 1.5, box 3)
- take action to ensure staffing is adequate to meet the patients' nursing needs if indicated by the analysis of nursing red flag events and safe nursing indicators.

  In many cases, patients' nursing needs, as determined by implementing the recommendations in this guideline, will require registered nurses to care for fewer than 8 patients.

Box 3: Safe nursing indicators (please see section 9 for further information)

Patient reported outcome measure

Data can be collected for the following indicators from the National Inpatient Survey:

- Adequacy of meeting patients' nursing care needs.
- Adequacy of provided pain management.
- Adequacy of communication with nursing team.

Safety outcome measures

- Falls: record any fall that a patient has experienced. The severity of the fall could be further defined in accordance with National Reporting and Learning System categories: no harm; low harm; moderate harm; severe harm; death.
- Pressure ulcers: record pressure ulcers developed or worsened 72 hours or more after admission to an organisation. The patient's worst new pressure ulcer could be categorised as grade 2, 3 or 4.
- Medication administration errors: record any error in the preparation, administration or omission of medication by nursing staff. The severity of the error should also be recorded.

Staff reported measures

- Missed breaks: record the proportion of expected breaks that were unable to be taken by nursing staff working on inpatient hospital wards.
- Nursing overtime: record the proportion of nursing staff on inpatient hospital wards working extra hours (both paid and unpaid).

Ward nursing staff establishment measures

Data can be collected for some of the following indicators from the NHS England and Care Quality Commission joint guidance to NHS trusts on the delivery of the 'Hard Truths' commitments on publishing staffing data regarding nursing, midwifery and care staff levels and more detailed data collection advice since provided by NHS England.

- Planned, required and available nursing staff for each shift: record the total nursing hours for each shift that were planned in advance, were deemed to be required on the day of the shift, and that were actually available, plus the bed utilisation during the same period.

- High levels and/or ongoing reliance on temporary nursing: record the proportion of nursing hours provided by bank and agency nursing staff on inpatient hospital wards. (The agreed acceptable levels should be established locally.)
- Compliance with any mandatory training in accordance with local policy (this is an indicator of the adequacy of the size of the ward nursing staff establishment).

Note: other safe nursing indicators may be agreed locally.

2 Evidence

The Committee considered the following commissioned reports.

- **Evidence review 1**: Griffiths P, Ball J, Drennan J, Jones J, Reccio-Saucedo A, Simon M (2014) The association between patient safety outcomes and nurse/healthcare assistant skill mix and staffing levels and factors that may influence staffing requirements. University of Southampton.
- **Evidence review 2**: Simon M, Ball J, Drennan J, Jones J, Reccio-Saucedo A, Griffiths P (2014) Effectiveness of management approaches and organisational factors on nurse sensitive outcomes. University of Southampton.
- **Economic analysis**: Cookson G, McGovern A (2014) The cost effectiveness of nurse staffing and skill mix on nurse sensitive outcomes. University of Surrey.

The Committee also considered the following:

- **Expert paper 1**: Expert testimony presented to the Safe Staffing Advisory Committee.
- **Expert paper 2**: Patient testimony presented to the Safe Staffing Advisory Committee.
- **Expert paper 3**: Report from the Safe Staffing Advisory Committee sub-group meeting 11 April 2014.
- **Report on field testing of the draft guideline**

The reviews, economic analysis and expert papers are available on the NICE website.

Evidence review 1 focused on ward-level activities and considered the following review questions:

- What patient safety outcomes are associated with nurse and healthcare assistant staffing levels and skill mix?
    - Which outcomes should be used as indicators of safe staffing?
    - What outcomes are associated with tasks undertaken by registered nurses, healthcare assistants and other staff?
- Which patient factors affect nurse and healthcare assistant staffing requirements at different times during the day? These include:

  - patient dependency and acuity assessment and grading
  - patient turnover.
- How does the ward environment, including physical layout and diversity of clinical disciplines, affect safe staffing requirements?

Evidence review 2 focused on ward-level managerial activities and organisational level factors and considered the following review questions:

- What management approaches affect nurse and healthcare assistant staffing requirements?
  - What nursing staff supervisory and/or team management approaches are required?
  - What approaches for identifying required nurse staffing levels and skill mix are effective, and how frequently should they be used?
- What organisational factors influence safe staffing at a ward level? These include:
  - management structures and approaches
  - organisational culture
  - organisational policies and procedures, including staff training.

The **economic analysis** used the best available evidence and data from the UK to determine the relationship between nursing and skill mix and nursing sensitive outcomes. The cost effectiveness of altering staffing or skill mix was also assessed.

Expert paper 1 presented testimony from the topic specialist member on the experience of safe staffing in the New Zealand public health system.

Expert paper 2 presented testimony from the topic specialist lay member of the Committee.

Expert paper 3 presented a summary of a subgroup meeting of the Committee to explore the key patient factors and nursing needs that must be considered when calculating nursing care requirements, and aspects of nursing missed care that could be monitored as red flag nurse staffing indicators.

The **Report on field testing of the draft guideline** presented results of testing the use of the draft guideline with nursing staff.

3 Gaps in the evidence

The Safe Staffing Advisory Committee identified a number of gaps in the available evidence and expert comment related to the topics being considered. These are summarised below.

- There is a lack of high-quality studies exploring and quantifying the relationship between registered nurse and healthcare assistant staffing levels and skill mix and any outcomes related to patient safety, nursing care, quality and satisfaction. All of the identified studies were observational and the majority were not for UK populations. Where evidence was available it tended to be associational with limitations due to confounding factors that affected the outcome.
- There is a lack of appropriately designed interventional studies relating to the outcomes of interest with appropriate control for confounding variables, such as studies designed to identify the outcomes associated with increasing numbers of available nursing staff. The outcomes identified generally report on failures of care rather than the more positive aspects of quality of care. There is also a lack of research on measures of missed care that could be routinely monitored and therefore easily collected and investigated.
- There is a lack of evidence from UK data that allows the effects of actual nursing staff that are present (as opposed to variations in nursing staff) to be readily determined.
- There is a lack of good quality research on the:
    - effect of different patient factors and patients' nursing care needs on the nursing staff requirement
    - indicators that are most sensitive to numbers of available registered nurses
    - impact of healthcare assistants (and the different levels of healthcare assistants) on the outcomes of interest
    - effect of ward layout and ward size on nursing staff requirements
    - relationship between time of day and patient-related outcomes
    - impact of ward-level team leadership and management (including supervisory roles and models of organising nursing care) on nursing staff requirements
    - influence of training approaches set at an organisational level.

- There is a lack of research that assesses the effectiveness of using defined approaches or toolkits to determine nursing staff requirements and skill mix. Only 1 study, which assessed 1 particular approach, was identified and this did not assess the frequency of its use. No evidence relating to other approaches was found.
- There is limited evidence about the effectiveness of management structures and organisational culture. There is some evidence from studies assessing the American Nurses Credentialing Center Magnet Programme, and the transferability of the principles and practices in this programme warrants further exploration.
- No evidence was found relating to organisational policies and procedures and nursing staff or nursing-sensitive outcomes in acute adult wards. Studies evaluating 'lean'-type approaches, such as the 'productive ward' and the elimination of non-productive care activities in order to help release more time for nursing care, were also not identified.
- There is a lack of economic studies exploring ward nursing staff establishments, requirements and skill mix. Any evidence identified is derived from countries with very different contexts and cost bases to the UK and therefore is of limited relevance to NHS decision-making.
- No economic evidence relating to ward environment, patient factors and their effect on nursing staff requirements was identified. No economic evidence was found that explored the relationship between ward-based management approaches (including the use of toolkits) and organisational factors and nursing staff requirements.
- There is a lack of data collection in relation to the wide variety of outcome variables at a ward level that would allow a detailed economic analysis of patient outcomes in relation to ward nursing staff establishments or requirements in the NHS. Patient level costing data were also limited, which hampered a clearer understanding of the cost implications of nursing staff changes and skill mix.

4 Research recommendations

The Safe Staffing Advisory Committee has made the following recommendations for research, based on its review of the evidence, to improve NICE guidelines and patient care in the future.

Relationship between staffing factors and patient outcomes

What is the relationship between the following factors and outcomes related to nursing care, patient safety and patients' and nursing staff satisfaction with the quality of care in the UK?

- Number of nursing staff
- Nursing skill mix
- Shift patterns

Why this is important

Insufficient evidence is available about the effects that nursing staff numbers, skill mix and shift patterns have on nursing care, and patient safety and satisfaction-related outcomes. Research is needed to compare outcomes from acute adult inpatient wards that use different staff numbers, skill mix, and shift patterns. Data should be collected on both positive and negative outcomes (such as number of complaints of missed care or satisfaction with quality of nursing care provided), and resource use and costs. Confounding factors (such as patient characteristics) should be controlled. This research would be best done using a cluster randomised controlled trial design.

The evidence from this research would help to establish whether there is an optimum number of nursing staff for different wards, and whether there are types of shift patterns and skill mix that are associated with the best outcomes for patients.

Factors affecting nursing staff requirements at ward level

How do the following factors affect the nursing staff requirement at ward level in the UK?

- Patient factors
- Patients' nursing needs (sometimes referred to as acuity and dependency)
- Time of day

- Ward layout and size (including the use of single rooms)
- Ward level team leadership and management
- Organisational training approaches
- Organisational policies and procedures (for example, productive ward, Lean)

Why this is important

Insufficient evidence is available about the relationship between staffing, ward-level factors and patient outcomes. Prospective cohort studies should be conducted to examine the relationship between the factors above and both positive and negative outcomes relating to nursing care, patient safety, patients' and nursing staff satisfaction, resource use and costs. The studies should also examine if these factors act as an effect modifier and/or confounder of the relationship between staffing and outcomes. Research should control for other confounding factors (such as patient characteristics).

This research should provide evidence on the ward-level factors that should be included in approaches to determining nursing staff requirements, including decision support toolkits.

Using defined approaches or decision support toolkits

What is the effectiveness of using defined approaches or decision support toolkits to determine nursing staff requirements and skill mix on acute adult inpatient wards in the UK?

Why this is important

Insufficient evidence is available about whether using defined approaches or decision support toolkits for determining nurse staffing requirements has an impact on patient and staff outcomes.

Cluster randomised controlled trials or prospective cohort studies should be designed to compare outcomes relating to nursing care, patient safety, and patients' and nursing staff satisfaction on acute adult inpatient wards that use defined approaches or decision support toolkits to other approaches or professional judgement. Replicate studies should be carried out to provide evidence of reliability and validity.

These comparative studies should help to assess the value of using defined approaches and decision support aids, and to identify those that perform best.

5 Related NICE guidelines

- Pressure ulcers: prevention and management of pressure ulcers. NICE clinical guideline 179 (2014)
- The assessment and prevention of falls in older people. NICE clinical guideline 161 (2013)
- Patient experience in adult NHS services. NICE clinical guideline 138 (2012)
- Acutely ill patients in hospital. NICE clinical guideline 50 (2007)

6 Glossary

Adult inpatient wards in acute hospitals

Wards that provide overnight care for adult patients in acute hospitals, excluding intensive care, high dependency, maternity, mental health, day care, acute admission or assessment units or wards. Other than these exceptions, the guideline covers all general and specialist inpatient wards for adults in acute hospitals.

Bed utilisation

The number of patients that the ward nursing team is responsible for during each 24-hour period. This includes patients who are discharged or transferred to another ward during the 24-hour period.

Decision support toolkit

A practical resource to facilitate the process of calculating the nursing staff requirements for wards or organisations. It may be electronic or paper-based.

Healthcare assistant

Healthcare assistants are all unregistered clinical staff working in hospital or community settings under the guidance and supervision of a registered healthcare professional. They may have a variety of titles such as healthcare support worker, nursing auxiliary and nursing assistant. In this guideline, the term healthcare assistants also includes assistant practitioners. The responsibilities of healthcare assistants vary, depending upon the healthcare setting and their level of training and competence.

Missed care

When a patient does not receive an aspect of planned care that has been assessed by healthcare professionals as being required. Care may be delayed, performed to a suboptimal level, omitted or inappropriately delegated.

Nursing hours per patient

This is how the measure of nursing staff requirements could be expressed. It represents the number of hours of nursing time (for both direct patient care and other nursing activities) provided by registered nurses and healthcare assistants per patient over a defined period. This is an alternative to expressing nursing time as a ratio of how many patients each nurse cares for. The 2 measurements are interchangeable. For example, a registered nurse or healthcare assistant working an 8-hour shift (after accounting for breaks) can contribute 8 hours of nursing time that day, which includes direct patient care as well as other necessary nursing activities.

Nursing red flag events

Events that prompt an immediate response by the registered nurse in charge of the ward. The response may include allocating additional nursing staff to the ward or other appropriate responses.

Nursing skill mix

The composition of the nursing team in terms of qualification and experience. This is typically expressed as a percentage of registered nurses to healthcare assistants. Nursing skill mix should also encompass individual clinical competencies and different areas of expertise and grades of registered nurses healthcare assistants.

Nursing staff

This refers to registered nurses and healthcare assistants, unless otherwise specified.

Nursing staff requirement

The nursing staff required by each ward. This should take into account all nursing care needs of patients, ward factors and staff factors including nursing activities other than direct patient care. This can be expressed as number of nursing hours.

Nursing staff roster

The daily staffing schedule for registered nurses and healthcare assistants to work on an individual ward.

Patient acuity

This refers to how ill the patient is, their increased risk of clinical deterioration and how complex their care needs are. This term is sometimes used interchangeably with the terms 'patient complexity' and 'nursing intensity'.

Patient dependency

The level to which the patient is dependent on nursing care to support their physical and psychological needs and activities of daily living, such as eating and drinking, personal care and hygiene, mobilisation.

Patients' nursing needs

The total nursing care needed by each patient on an individual ward that has been assigned to the nursing profession. This term is used throughout the guideline to include both patient acuity and patient dependency.

Patient turnover

Rate of movement of patients into and out of a ward. This can be calculated by the number of patient admissions, discharges and internal transfers during a defined period of time.

Registered nurse

A registered nurse holds active registration with the Nursing and Midwifery Council with a licence to practise.

Nursing is a regulated profession for registered nurses, but they may appropriately delegate and supervise the delivery of nursing activities to healthcare assistants.

Safe nursing care

When reliable systems, processes and practices are in place to meet required care needs and protect people from missed care and avoidable harm.

Ward nursing staff establishment

The number of registered nurses and healthcare assistants funded to work in a particular ward, department or hospital. This includes all nursing staff in post, as well as unfilled vacancies or vacancies being covered by temporary staff. Ward nursing staff establishments are usually expressed in number of whole time equivalents.

7 Contributors and declarations of interest

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Declarations of interests

The following members of the Safe Staffing Advisory Committee made declarations of interest. All other members of the Committee stated that they had no interests to declare.

Committee member	Interest declared	Type of interest	Decision taken
James Buchan	Paid columnist 'Nursing Standard'; nursing advisor	Personal pecuniary interest	Declare and participate
James Buchan	Professional advisor, NHS Centre for Workforce Intelligence	Non-personal pecuniary interest	Declare and participate
Ann Casey	Part of the team that developed the Safer Nursing Care Tool	Personal non-pecuniary interest	Declare and participate
Georgina Dwight	Remuneration from consultancy undertaken in 2011	Personal pecuniary interest	Declare and participate
Elaine Inglesby	Member of the Safe Staffing Alliance	Personal non-pecuniary interest	Declare and participate
Hugh McIntyre	Chair of Quality Standards Advisory Committee	Personal pecuniary interest	Declare and participate
Julia Scott	NICE Social Care Fellow (until May 2014); honorary Fellow of Brunel University	Non-personal pecuniary interest	Declare and participate
Julia Scott	Chief Executive of the College of Occupational Therapists	Personal non-pecuniary interest	Declare and participate
Other declarations			

Peter Griffiths (author, evidence reviews)	Co-author of 1 of the studies referred to in the review 1. Other studies of potential relevance co-authored were considered for but excluded from the review. These studies were handled according to the protocol and as specified in our tender (that is, members of the team who were not authors considered the studies' eligibility and undertook risk of bias assessments)	Personal non-pecuniary interest	Declare and participate

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9 Safe nursing indicators

Safe nursing indicator: Adequacy of meeting patients' nursing care needs

Data collection

Local collection could use the following National Inpatient Survey questions developed by the Picker Institute which contains a number of questions where patients' experience of care could be affected by the number of available nursing staff:

Patients' experience of nursing care on hospital inpatient wards

Q.23 Did you get enough help from staff to eat your meals?

Q.30 In your opinion, were there enough nurses on duty to care for you in hospital?

Q.40 How many minutes after you used the call button did it usually take before you got the help you needed?

Patients' experience of nursing care on hospital inpatient wards

Q.39 Do you think the hospital staff did everything they could to help control your pain?

Patients' experience of communication with nursing staff on hospital inpatient wards

Q.27 When you had important questions to ask a nurse, did you get answers that you could understand?

Q.34 Did you find someone on the hospital staff to talk to about your worries and fears?

Q.35 Do you feel you got enough emotional support from hospital staff during your stay?

Local collection of patient experience could use these questions to provide a more frequent view of performance than possible through annual surveys alone, but please note NHS Surveys' request that local patient surveys are mindful of avoiding overlap with national patient surveys.

Outcome measures

Responsiveness to inpatients' personal needs.

Data analysis and interpretation

The annual national survey results for your hospital can be compared with previous results from the same hospital and with data from other hospitals (but be aware that comparison between hospitals is subject to variation in expectations of care between different populations). Data from more frequent local data collection, where available, can be compared with previous results from the same ward and with data from other wards in your hospital.

Safe nursing indicator: falls

People falling whilst admitted to hospital

Definition

A fall is defined as an unplanned or unintentional descent to the floor, with or without injury, regardless of cause (slip, trip, fall from a bed or chair, whether assisted or unassisted). Patients 'found on the floor' should be assumed as having fallen, unless confirmed as an intentional act.

Record any fall that a patient has experienced. The severity of the fall could be further defined in accordance with National Reporting and Learning System categories: no harm; low harm; moderate harm; severe harm; death:

- No harm – fall occurred but with no harm to the patient.
- Low harm – patient required first aid, minor treatment, extra observation or medication.
- Moderate harm – likely to require outpatient treatment, admission to hospital, surgery or a longer stay in hospital.
- Severe harm – permanent harm, such as brain damage or disability, was likely to result.
- Death – where death was the direct result of the fall.

Data collection

Proportion of people admitted to a ward who fall while in hospital.

Numerator: the number of reported falls for the ward.

Denominator: the number of occupied bed days for the ward.

Data source: Local incident reporting systems.

Outcome measures

Reported falls per 1,000 occupied bed days.

Data analysis and interpretation

Rates of falls should be compared with previous results from the same ward with caution, as not all falls will be recognised and reported, and because frequency at ward level may be too small for significant increases or decreases in these to be apparent. Rates of falls should not be compared with data from other wards or hospitals, because of differences in patient case mix and clinical specialties of the wards. Incident reporting systems may be affected by under-reporting. Periodic local collection of data on whether falls are going unreported will identify if changes in reported falls rates are true changes in actual falls rates or are affected by changes in completeness of reporting.

Although falls may be sensitive to the number of available nursing staff, falls prevention requires a multidisciplinary approach, and falls rates will also be affected by:

- availability of physiotherapy, occupational therapy, pharmacy and medical staff
- knowledge and skills of all healthcare professionals and support staff
- safety of the environment, furniture and fittings
- access to mobility aids and falls prevention equipment.

Safe nursing indicator: pressure ulcers

People acquiring pressure ulcers while in hospital

Definition

A pressure ulcer is a localised injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear. Record any pressure ulcer developed or worsened 72 hours or more after admission to an organisation. The patient's worst pressure ulcer could be categorised as 2, 3 or 4 according to the European Pressure Ulcer Scale (Defloor T et al. Statement of the European Pressure Ulcer Advisory Panel - pressure ulcer classification. J Wound Ostomy Continence Nurs 2005;32:302-6).

Data collection

Proportion of people admitted to a ward who develop a pressure ulcer (or have an existing pressure ulcer that worsens) while in hospital.

Numerator: the number of reported new or worsened pressure ulcers for the ward.

Denominator: the number of occupied bed days for the ward.

Data source: Local incident reporting systems.

Data on the number of patients in hospital with a pressure ulcer greater than category 2 (irrespective of location of origin) will also be collected for the NHS Outcomes Framework 2014/15 indicator 5.3: Proportion of patients with category 2, 3 and 4 pressure ulcers.

Outcome measures

Reported hospital-acquired pressure ulcers per 1,000 bed days.

Data analysis and interpretation

Rates of pressure ulcers should be compared with previous results from the same ward with caution, as not all pressure ulcers will be recognised and reported (distinguishing pressure ulcers from other skin lesions and grading them correctly is not always straightforward). In addition the frequency of pressure ulcers at ward level may be too small for significant increases or decreases to be apparent. Rates of pressure ulcers should not be compared with data from other wards or hospitals, because of differences in patient case mix and clinical specialties of the wards. Incident reporting systems may be affected by under-reporting. Periodic local data collection by specialist nurses/matrons visiting wards to carry out skin inspections can be used to cross-check with incident reports and Safety Thermometer data to assess if pressure ulcers are being correctly identified, graded and reported.

Although pressure ulcers may be sensitive to the number of available nursing staff, pressure ulcers prevention requires a multidisciplinary approach, and pressure ulcers rates will also be affected by:

- access to pressure ulcer prevention equipment and mobility aids
- availability of physiotherapy, occupational therapy, pharmacy and medical staff
- knowledge and skills of all healthcare professionals and support staff.

Safe nursing indicator: medication administration errors

People receiving the wrong medications whilst in hospital

Definition

A medication administration error is any error in the administration, omission or preparation of medication by nursing staff. This could include deviation from prescriptions, manufacturer medication information instructions or recommended local pharmacy procedures. The severity of the medication error should be recorded,

Data collection

Proportion of people admitted to hospital who experience a medication error while in hospital.

Numerator: the number of reported medication errors for the ward.

Denominator: the number of occupied bed days for the ward.

Data source: local incident reporting systems.

Outcome measures

Reported medication errors per 1,000 bed days.

Data analysis and interpretation

Rates of medication errors should be compared with previous results from the same ward with caution, as not all medication errors will be recognised and reported. In addition the frequency of medication errors at ward level may be too small for significant increases or decreases to be apparent. Reported medication administration errors should not be used as an indication of actual harm from medication error as wards with the most knowledgeable and vigilant nursing staff may be more likely to detect and report medication errors. Incident reporting systems may be affected by under-reporting. Periodic local collection of data on whether medication errors are going unreported will identify if changes in reported medication error rates are true changes in actual medication error rates or are affected by changes in completeness of reporting.

Although medication errors may be sensitive to the number of available nursing staff, medication errors prevention requires a multidisciplinary approach, and medication error rates will also be affected by:

- knowledge and skills of all healthcare professionals and support staff
- involvement of pharmacy and medical staff.

Safe nursing indicator: missed breaks

Nursing staff unable to take scheduled breaks

Definition

A missed break occurs when a nurse is unable to take any scheduled break due to lack of time.

Data collection

Proportion of expected breaks for registered nurses and healthcare assistants working on inpatient hospital wards that were unable to be taken.

Numerator: the number of breaks in the denominator that were unable to be taken.

Denominator: the number of expected breaks for registered nurses and healthcare assistants on inpatient hospital wards.

Data source: Local data collection.

Outcome measures

Proportion of missed breaks due to lack of time amongst nursing staff.

Safe nursing indicator: nursing overtime

Nursing staff working extra hours

Definition

Nursing overtime includes any extra hours (both paid and unpaid) that a nurse is required to work beyond their contracted hours at either end of their shift.

Data collection

a) Proportion of registered nurses and healthcare assistants on inpatient hospital wards working overtime.

Numerator: the number of registered nurses and healthcare assistants in the denominator working overtime.

Denominator: the number of registered nurses and healthcare assistants on inpatient hospital wards.

b) Proportion of nursing hours worked on hospital inpatient wards that are overtime.

Numerator: the number of nursing hours in the denominator that are overtime.

Denominator: the number of nursing hours worked on hospital inpatient wards.

Data source: Local data collection. Data are also collected nationally on the number of staff working extra hours (paid and unpaid) in the NHS National Staff Survey by the Picker Institute.

Outcome measures

Staff experience.

Safe nursing indicator: planned, required and available nurses for each shift

The number of planned, required and available nursing hours on hospital inpatient wards in relation to bed utilisation

Definition

The number of nursing hours which were planned in advance, deemed to be required during that shift and that were actually available and bed utilisation during this period.

Bed utilisation is defined as the number of patients that the ward nursing team is responsible for during each 24-hour period. This includes patients who are discharged or transferred to another ward during the 24-hour period.

Data collection

a) Proportion of total nursing hours for each shift that were planned in advance and that were actually available

Numerator: the number of nursing hours for each shift that were actually available and the actual bed utilisation.

Denominator: the number of nursing hours for each shift that were planned in advance and the expected bed utilisation.

b) Proportion of total nursing hours for each shift that were deemed to be required on-the-day and that were actually available

Numerator: the number of nursing hours for each shift that were actually available and the actual bed utilisation.

Denominator: the number of nursing hours for each shift that were deemed to be required on-the-day (calculated by following the recommendations of this guideline) and the actual bed utilisation.

Data source: local data collection, which could include data collected for the NHS England and the Care Quality Commission joint guidance to Trusts on the delivery of the 'Hard Truths' commitments on publishing staffing data regarding nursing, midwifery and care staff levels and more detailed data collection advice since provided by NHS England.

Outcome measures

Deviation between planned and available nursing staff; deviation between required and available nursing staff in relation to bed utilisation.

Safe nursing indicator: high levels and/or ongoing reliance on temporary nursing

Temporary nursing staff on hospital inpatient wards

Definition

Registered nurses and healthcare assistants who are working on adult inpatient wards who are not contracted with the hospital.

Data collection

a) Proportion of registered nurses and healthcare assistants working on adult inpatient wards who are on bank contracts.

Numerator: the number of registered nurse and healthcare assistant shifts in the denominator who are employed on bank contracts.

Denominator: the number of registered nurse and healthcare assistant shifts per calendar month to work on adult inpatient wards.

Data source: local data collection.

b) Proportion of registered nurses and healthcare assistants working on adult inpatient wards who are on agency contracts.

Numerator: the number of registered nurse and healthcare assistant shifts in the denominator who are employed on agency contracts.

Denominator: the number of registered nurse and healthcare assistant shifts per calendar month to work on adult inpatient wards.

Data source: local data collection.

Outcome measures

Expenditure (£) on bank and agency staff per inpatient bed.

Safe nursing indicator: compliance with any mandatory training

Compliance of ward nursing staff with any mandatory training in accordance with local policy

Definition

Nurses who are working on adult inpatient wards who are compliant with the mandatory training that has been agreed in line with local policy.

Data collection

Proportion of registered nurses and healthcare assistants working on inpatient hospital wards who are compliant with all mandatory training.

Numerator: the number of registered nurses and healthcare assistants in the ward nursing staff establishment who are compliant with all mandatory training.

Denominator: the number of registered nurses and healthcare assistants in the ward nursing staff establishment.

Data source: local data collection.

Outcome measures

% compliance with all mandatory training.

10 Changes after publication

April 2015

Minor maintenance.

September 2014

In box 2 (Nursing red flags) the 4th bullet has been changed to clarify that the delay or omission of regular checks is a red flag, and 'Less than 2 registered nurses present on a ward during any shift' has been moved to the end of the list.

The information on safe nursing indicators has been moved to section 9. Originally this was published as a separate file.

Other minor maintenance.

August 2014

Minor maintenance.

11 About this guideline

How this guideline was developed

The Department of Health asked the National Institute for Health and Care Excellence (NICE) to produce this guideline on safe staffing in adult wards in acute hospitals (see the scope).

The recommendations are based on the best available evidence. They were developed by the Safe Staffing Advisory Committee – for membership see section 7.

The guideline was developed in line with the methods and processes contained in the draft manual for developing all NICE guidelines. Modifications to this were needed in order to produce this guideline in the requested timeframe.

Other versions of this guideline

The recommendations from this guideline have been incorporated into a NICE Pathway.

We have produced information for the public about this guideline.

Implementation

Implementation tools and resources to help you put the guideline into practice are also available.

NICE also has a process for assessing decision support toolkits.

Your responsibility

This guideline represents the views of NICE and was arrived at after careful consideration of the evidence available and the Committee's considerations. Those working in the NHS, local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties.

Implementation of this guideline is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guideline, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this

guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

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