National Quality Board

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Safe, sustainable and productive staffing

An improvement resource for adult inpatient wards in acute hospitals

This document was developed by NHS Improvement on behalf of the National Quality Board (NQB).

The NQB provides co-ordinated clinical leadership for care quality across the NHS on behalf of the national bodies:

- NHS England
- Care Quality Commission
- NHS Improvement
- Health Education England
- Public Health England
- National Institute for Health and Care Excellence
- NHS Digital
- Department of Health & Social Care

For further information about the NQB, please see:
https://www.england.nhs.uk/ourwork/part-rel/nqb/

Contents

Summary

The National Quality Board (NQB) publication *Supporting NHS providers to deliver the right staff, with the right skills, in the right place at the right time: Safe, sustainable and productive staffing* (2016) outlines the expectations and framework within which decisions on safe and sustainable staffing should be made to support the delivery of safe, effective, caring, responsive and well-led care on a sustainable basis.

This improvement resource is part of a suite of specialty resources which underpin the overarching NQB staffing improvement resource. It focuses specifically on nurse staffing in adult inpatient wards in acute hospitals and is aligned with Commitment 9 of *Leading change, adding value*: "We will have the right staff in the right places and at the right time" (NHS England 2016).

The resource is designed to be used by all those involved in clinical establishment setting, approval and deployment – from the ward manager to the board of directors. It builds on National Institute for Health and Care Excellence (NICE) guidelines on safe staffing for nursing in adult inpatient wards, and is informed by NICE's comprehensive evidence reviews of research, and subsequent evidence reviews focusing specifically on staffing levels and outcomes, flexible staffing and shift work.

Recommendations

The resource includes recommendations to aid decision-making as outlined below.

In determining nurse staffing requirements for adult inpatient settings:	
1.	A systematic approach should be adopted using an evidence-informed decision support tool triangulated with professional judgement and comparison with relevant peers.
2.	A strategic staffing review must be undertaken annually or sooner if changes to services are planned.
3.	Staffing decisions should be taken in the context of the wider registered multi-professional team.
4.	Consideration of safer staffing requirements and workforce productivity should form an integral part of the operational planning process.
5.	Action plans to address local recruitment and retention priorities should be in place and subject to regular review.
6.	Flexible employment options and efficient deployment of staff should be maximised across the hospital to limit the use of temporary staff.
7.	A local dashboard should be in place to assure stakeholders regarding safe and sustainable staffing. The dashboard should include quality indicators to support decision-making.
8.	Organisations should ensure they have an appropriate escalation process in cases where staffing is not delivering the outcomes identified.
9.	All organisations should include a process to determine additional uplift requirements based on the needs of patients and staff.
10.	All organisations should investigate staffing-related incidents and their outcomes on patients and staff, and ensure action and feedback.

1.   Introduction

This is an improvement resource to support the safe, sustainable and productive staffing of adult inpatient wards in acute hospitals which is aligned to Commitment 9 of *Leading change, adding value: A framework for nursing, midwifery and care staff* (NHS England 2016). It is also based on the NQB's expectations that to ensure safe, effective, caring, responsive and well-led care on a sustainable basis, trusts will employ the right staff with the right skills in the right place and at the right time.

We have structured this improvement resource under the expectations in the NQB guidance as outlined below.

NQB's expectations for safe, sustainable and productive staffing (2016)

Safe, Effective, Caring, Responsive and Well- Led Care		
Measure and Improve -patient outcomes, people productivity and financial sustainability- -report investigate and act on incidents (including red flags) - -patient, carer and staff feedback-		
-implement Care Hours per Patient Day (CHPPD) - develop local quality dashboard for safe sustainable staffing		
Expectation 1	**Expectation 2**	**Expectation 3**
Right Staff 1.1 evidence based workforce planning 1.2 professional judgement 1.3 compare staffing with peers	**Right Skills** 2.1 mandatory training, development and education 2.2 working as a multi-professional team 2.3 recruitment and retention	**Right Place and Time** 3.1 productive working and eliminating waste 3.2 efficient deployment and flexibility 3.3 efficient employment and minimising agency

We have designed this improvement resource to be used by all those involved in clinical establishment setting, approval and deployment – from the ward manager to the board of directors. NHS provider boards hold individual and collective responsibility for making judgements about staffing and the delivery of safe,

effective, compassionate and responsive care within available resources (NQB 2016).

The resource outlines a systematic approach for identifying the organisational, managerial and ward factors that support safe staffing. It makes recommendations for monitoring and taking action if not enough staff are available on the ward to meet patients' needs. It builds on NICE guidelines on safe and sustainable staffing for nursing in adult inpatient care in acute wards (NICE 2014), and is informed by NICE's comprehensive evidence reviews of research (Griffiths et al 2014; Simon et al 2014) and subsequent discussion paper (Griffiths et al 2016a) relating to aspects of staffing levels, shift work and flexible staffing. Additional evidence reviews focusing specifically on staffing levels and outcomes, flexible staffing and shift work have been undertaken to inform this improvement resource (Dall'Ora and Griffiths 2017a,b; Griffiths et al 2017).

Because adult inpatient wards vary so much, no standard definition of them exists. We therefore adopted NICE's definition[1] for consistency. We recognise that local wards vary and that leaders must take into account factors such as ward layout, geography and estate when calculating staffing needs.

We recognise the need to consider the wider multidisciplinary team when looking at the size and composition of staff for any setting, but as there is little workforce modelling or planning evidence on how this has been successfully achieved, we focus on nursing and signpost the evidence we found that informs multiprofessional workforce planning.

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[1] "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." www.nice.org.uk/guidance/SG1/chapter/6-Glossary

The value of allied health professionals (AHPs) and the wider multiprofessional team, must not be underestimated: the 12 allied health professions form 6% of the NHS workforce, making a significant contribution to care pathways (Read 2016).

The recommendations, aligned to NHS Improvement's ethos of 'measure and improve', are made to enable safe and sustainable staffing in adult inpatient wards in acute hospitals.

It is also useful to identify and recognise the role professional organisations and unions can provide in supporting this work. A partnership approach with staff-side representatives is important in developing and monitoring workforce policies and practices, and in influencing the organisational culture.

2. Right staff

There must be sufficient and appropriate staffing capacity and capability on adult inpatient wards to provide safe, high-quality and cost-effective care to patients at all times. Staffing decisions must be aligned to operational planning processes so that high-quality care can be provided now and on a sustainable basis.

The nursing establishment is defined as the number of registered nurses and healthcare assistants who work in a particular ward, department or team (see Section 2.3 Uplift). The ward establishment may include AHPs and other support staff, dependent on the model of care being delivered. It is important to distinguish between the establishment and number of staff available to be rostered on any given day.

2.1 Evidence-based strategic workforce planning[2]

Decision-making to ensure safe and sustainable staffing must follow a clear and logical process that takes account of the wider multidisciplinary team. Although registered nurses and healthcare assistants (HCAs)[3] provide a significant proportion of direct care, other groups to consider include:

- medical staff
- AHPs
- pharmacists
- advanced clinical practitioners
- volunteers

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[2] Workforce planning aims to ensure organisations strategically plan to have sufficient staff (clinical and non-clinical) with the appropriate skills to meet the current and future needs of their population. (Health Education England *Recipe for workforce planning*)

[3] HCAs work under the supervision and guidance of a registered nurse and are also known as nursing assistants, healthcare support workers or nursing auxiliaries. For consistency we refer to HCAs throughout this document.

- hostess/support staff
- administrative and managerial staff.

There is a difference between staff members who are part of the core ward establishment and those who are not. For example, occupational therapists who are rostered on the ward team are part of the establishment, whereas those who provide a defined number of sessions to the ward are not.

A transparent governance structure, including ward-to-board reporting of staffing requirements, should be in place for determining staffing numbers and skill mix, and monitoring its effectiveness.

Boards should carry out a strategic staffing review as outlined by NQB (2016) at least annually, aligned to the operational planning process, or more frequently if changes to services are planned. Boards should be assured that these key elements of planning are followed:
- using a systematic, evidence-based approach to determine the number and skill mix of staff required
- exercising professional judgement to meet specific local needs, but ensuring this does not duplicate elements included in the tool used – for example, if the tool takes account of patient turnover, any additional allowance for this would be duplication
- benchmarking with peers – for example, care hours per patient day (CHPPD) through the Model Hospital
- taking account of national guidelines, bearing in mind they may be based on professional consensus.

On a monthly basis, actual staffing data should be compared with expected staffing and reviewed alongside quality of care, patient safety, and patient and staff experience data. This will help to ensure that improvements are learned from and celebrated, and areas of emerging concern are identified and addressed promptly.

2.2   Decision support tools

The following principles should be considered when evaluating current decision support tools, or developing or procuring future tools.

Does the tool?

Use a systematic approach
- Integrate a classification scheme for determining/capturing the care needs for individual patients (acuity and dependency)

Use the best evidence avaliable
- Have a robust evidence base for the nursing time that is empirical, based on data gathered in a comparable setting and drawn only from quality assured services, to avoid extrapolating from wards delivering sub-optimal care
- Demonstrate that the resources recommended are sufficient to deliver care of acceptable quality
- Incorporate patient acuity and dependency

Include essential aspects of nursing resource
- Direct patient care
- Admissions, discharges and ward attenders
- Care handovers
- Indirect patient care, eg documentation
- Communication with relatives
- Bed occupancy and patient turnover at ward level
- Scheduled breaks
- Ward management (supervisory/nurse in charge time)
- Mentoring and supervision
- Education/training of staff
- Appraisal

Consider additional resource aspects
- Escort duties
- Ward layout
- Geography
- Professional standards, eg revalidation

NICE has endorsed several tools that help identify nurse staffing establishments for adult inpatient wards. These can be accessed at:

www.nice.org.uk/guidance/sg1/resources

In addition boards should ensure there is:

- no local manipulation of the identified nursing resource from the evidence-based figures embedded in the tool, except in the context of a rigorous independent research study, as this may adversely affect the recommended establishment figures derived using the tool
- quality control of the data
- a cohort of relevant staff who are trained to use the tool
- independent and systematic validation so that the tool is applied consistently across the organisation and as directed by the tool's evidence base
- adherence to the guidance on the number of datasets and content required for setting ward establishments
- transparency of the results and agreed routes for decision-making
- an agreed allowance for planned and unplanned leave (uplift as outlined below)
- the mechanism for staff to respond effectively to changes in patient need and other demands for nursing time that occur often but are not necessarily predictable – for example, patient deterioration, admissions and end-of-life care
- capacity to deal with unplanned events which should be built into the ward establishment; this is commonly referred to as 'responsiveness time'
- follows good procurement practice.[4]

2.3   Allowing for uplift

Establishments for adult inpatient acute wards should include an 'uplift' to allow for the efficient and responsible management of planned and unplanned leave and to ensure that absences can be managed effectively.

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[4] When making 'buy' versus 'build' and purchasing decisions, boards should comply with all existing, relevant public procurement policies and regulations (eg OJEU). This includes formally capturing user requirements and selecting and/or building solutions that accommodate these requirements while delivering best value for money to the NHS.

An inpatient ward establishment includes uplift for:

- annual leave in line with Agenda for Change or local terms and conditions
- study leave
- parenting leave
- sickness/absence/compassionate leave.

It is important that the level of uplift is realistic and reviewed at least annually. Local factors must be considered when calculating the percentage allowances for inclusion in the uplift, such as:

- operating a central funding pool for parenting leave (calculated at ward level and then managed centrally)
- leave entitlements vary with long service enhancements
- planning should be based on the organisation's target level of sickness/absence (eg 3% to 4%) and aligned to plans to implement improvements
- estimates for study leave should include mandatory and elements of core/job-specific training, both delivered face to face and via e-learning
- mentorship and preceptorship
- learning activities such as fulfilling link-nurse roles and participation in quality improvement 'collaboratives'
- a greater allowance for study leave uplift if there is a higher proportion of part-time staff[5]
- as ward-based teams become more multi-professional, consideration should be given to applying this allowance across the whole team.

Table 1 below gives an example of how uplift can be calculated and may support local decision-making.

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[5] For example, if all staff are required to attend two days of mandatory training, four days will be needed if two individuals share a whole-time post.

Table 1: Considerations in setting uplift

Element	Example (%)	Rationale
Annual leave	14.7	This is the average annual leave across the nursing workforce, in line with Agenda for Change, and taking account of local patterns of length of service
Sickness/absence	3	This is the target/aspiration level for the organisation and should align with plans to implement improvement
Study leave	3	This includes mandatory and core/job-specific training and learning activities such as link nurse roles
Parenting leave	1	In some organisations this is managed centrally. It includes maternity, paternity and adoption leave. This is driven by local workforce demography
Other leave	0.5	This includes carers' leave, compassionate leave, etc
Total	**22.2**	

2.4   Professional judgement

Staffing decisions based solely on professional judgment – the expert opinion of clinical staff – are considered subjective and may not be transparent, but professional judgement remains an essential element of staffing decisions. For this reason we advocate a triangulated approach, which uses a decision support tool in conjunction with clinical quality indicators and professional judgement/scrutiny.

For the principles of professional judgement, see Appendix 1.

Professional judgement should include consideration of:
- **Ward layout/facilities:** The configuration of wards and facilities affect the nursing time available to deliver care to patients and this can be reflected in staffing establishments through professional judgement. In some ward layouts there is significantly more distance between patients than in others. Also, if a ward has a high proportion of single rooms, adequate surveillance of vulnerable patients may be more difficult.
- **Escort duties:** It is important to understand whether the tool you are using already takes account of escort duties. Where these are not included but are

likely to affect the numbers of staff required, a local data collection and analysis exercise may be useful in determining a percentage to add to the establishment to ensure staffing remains responsive to daily patient care needs.

- **Multiprofessional working:** Consider the make-up of the care team for the ward. Would specific AHPs or support roles more appropriately meet the needs of patient groups at particular times of the day? Conversely, the absence of administrative support staff such as ward clerks may increase nurses' workload at particular times. Thinking about how services can be designed for the future, and talking and listening to staff, can enable organisations to develop models that are more likely to be sustainable.

- **Shift pattern:** Remember that the type of shifts (long day versus short day) in use may affect the overall establishment required to ensure shift-to-shift staffing levels. These should be monitored to understand the impact and effect on staff and patients.

Where it is hard to construct a strong evidence base, it is important to apply professional judgement to staffing requirements. However, some decision support tools may already cover these and therefore it is essential to understand the tool used to avoid duplication. For example, the nursing resource in the safer nursing care tool (SNCT) includes a factor for escort duty and therefore any additional allowance for this would be duplication.

2.5   Comparing staffing levels with peers

Peer comparisons can act as a platform for further enquiry. While you need to exercise caution, comparing staffing with peers can act as a 'sense check', particularly of assumptions and professional judgements. Benchmarking can also help stimulate the sharing of best practice.

Care hours per patient day (CHPPD) is a useful metric for making these comparisons. It gives a picture of the total ward care workforce but is split between registered nurses and healthcare support workers (Lord Carter 2016):

Care hours per patient day =	Hours of registered nurses and midwives alongside Hours of healthcare support workers
	Total number of inpatients (midnight census)[6]

While the summary CHPPD measure includes all care staff, the registered nurse hours must always be considered in any benchmarking alongside quality care metrics (Griffiths et al 2016b) to assess the impact on patient outcomes. See Appendix 2 for more details.

The Model Hospital dashboard makes it possible to compare with peers using CHPPD. Finding peers that are close comparators is important as aspects such as patient acuity, dependency, turnover and ward support staff will differ. You should take account of local factors, eg patient specialty make up, as well as differences in the accuracy and completeness of data collection.

Section 6: 'Measure and improve give more detail on the importance of reviewing comparative data on staffing and skill mix in the wider context of patient and staff perception of adequacy of staffing levels, alongside indicators of safety, effectiveness, patient experience and measures of productivity.

Until staff are confident using CHPPD, some rough 'ready reckoner' conversions may help them check for obvious anomalies (see Appendix 3).

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[6] Midnight census: definition (approximating 24 patient hours by counts of patients at midnight)

3.   Right skills

Decision-makers should give appropriate consideration to the skill mix required to deliver services as safely, efficiently and effectively as possible. Clinical leaders and managers should be supported to deliver high quality, efficient services, and staffing should reflect a multiprofessional team approach. Clinical leaders should use the workforce's competencies to the full, introducing and supporting the development of new roles where they identify a need or skills gap in line with national policy.

Our workforce, like many in other large sectors and industries, is facing numerous challenges and the transformation set out in the Five Year Forward View is being delivered so that we have health and care services that can adapt to the future. In this changing landscape we know we cannot rely on the traditional solutions to some of our major workforce pressures and we need to think differently moving forwards.

Our ability as professions to adapt and innovate is critical to achieving high-quality care in the right place and at the right time. By modernising, we can shape a workforce that is fit for purpose for the next decade and beyond, and demonstrate positive outcomes and experience for those for whom we care.

3.1   Role of nursing within a multiprofessional team

Nurses in adult inpatient settings work closely with a range of other healthcare professionals and the following should be considered when determining who is best placed to safely meet the patients' care needs. To utilise the workforce efficiently and effectively, it is important to identify the skills needed to deliver the care required and to deploy the right staff to deliver that care.
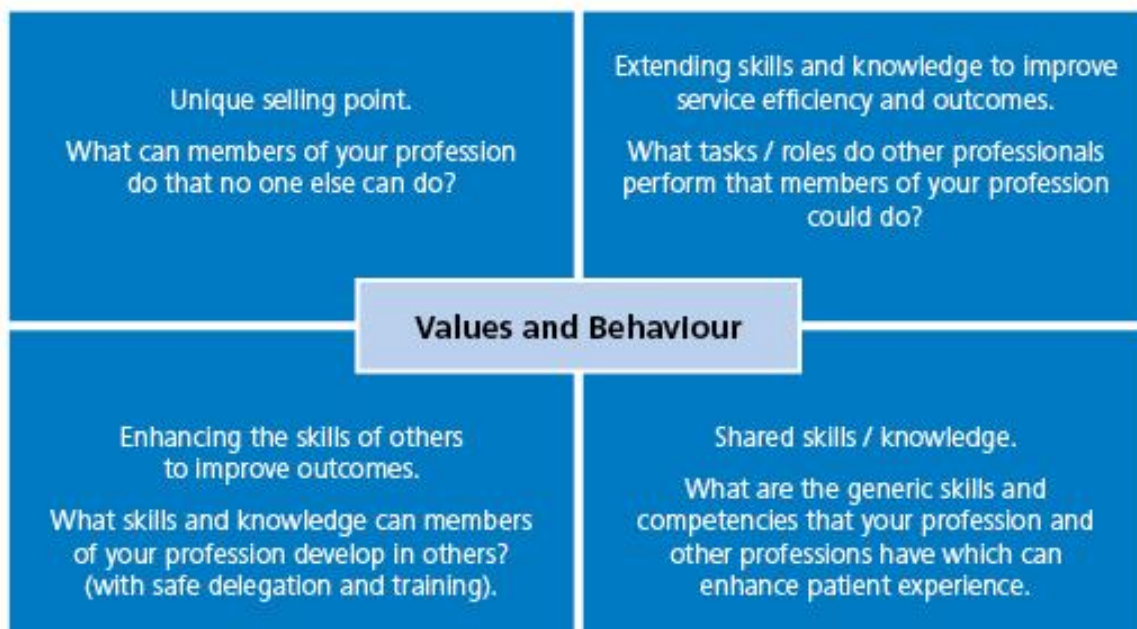
While AHPs are not typically rostered as part of the ward staffing establishment, they are part of the core team and vital to the delivery of care. AHPs are involved in many clinical areas of the hospital and can positively impact on patient flow and provide continuity of care at all stages of the care pathway.

AHPs have a key role in directly influencing the quality of care a patient receives and the decisions made around all aspects of an individual's admission, treatment and discharge. The AHP skills across the professions are wide and varied in the hospital setting but some core themes are:

- highly developed clinical reasoning
- rapid but effective decision-making
- patient focused goal setting.

A framework to support thinking about how organisations can utilise their workforce is posed in *AHPs into action. Using AHPs to transform health, care and well being* (NHS England 2017). The framework is equally applicable to all professions when reviewing utilisation of competence and skill mix, and can support decision-making about who is based placed to deliver care. The framework below (state of readiness) can be used as a self-assessment: four areas of notable significance pose questions to support consideration of a more flexible and varied workforce. AHPs are developing wider skills, eg advanced clinical practice, that complement their individual specialisms and provide flexibility of care delivery.

State of readiness for future care

Unique selling point. What can members of your profession do that no one else can do?	Extending skills and knowledge to improve service efficiency and outcomes. What tasks / roles do other professionals perform that members of your profession could do?
Values and Behaviour	
Enhancing the skills of others to improve outcomes. What skills and knowledge can members of your profession develop in others? (with safe delegation and training).	Shared skills / knowledge. What are the generic skills and competencies that your profession and other professions have which can enhance patient experience.

3.2   Skill mix

In adult inpatient settings a range of specialist, advanced and consultant nurses, and AHPs provide expert advice, intervention and support to ward-based teams. It is important therefore when considering the 'right skills' to meet patient needs that, as well as the staff allocated to each ward/unit, to take a wider view of access to the relevant expertise across a trust.

Nursing teams include registered nurses and HCAs. Some also include ward clerks and housekeepers. The appropriate mix of registered nurses and support staff should be informed by the use of decision support tools, evidence reviews and professional judgement.

New roles, such as the nursing associate, are intended to support nursing teams to work more effectively. There will be regular updates from the pilot sites on the progress of the nursing associate initiative. Trust boards and clinical managers should ensure they keep up to date with these reports.

Some organisations operate a 'link nurse' model whereby members of the ward team assume a lead role for a particular area of practice: for example, education, nutrition, tissue viability, safeguarding or diabetes. It is important that these members of staff have the relevant education, training and dedicated time to function safely and effectively in these roles.

The particular care needs of people with learning disabilities admitted to adult inpatient wards need to be met. Appendix 4 includes principles to assist with the provision of the specialist care needs of this patient group.

3.3   Staff training, development and education

All members of the clinical team must be appropriately trained to be effective in their roles. The sister, charge nurse or team leader is responsible for assessing the training requirements of individual team members. These should be prioritised and a

plan developed to meet them using available resources as part of the locally agreed uplift (see Section 2.3).

This assessment enables opportunities to be identified to upskill staff to address gaps in expertise in the delivery of patient care. Education and training needs can be met through, for example, local skills training, e-learning, seminars, shadowing, clinical placement exchanges and rotation programmes. Compliance with appraisal and mandatory training should be incorporated into the local quality dashboard.

Registered professionals require periodic revalidation. Although individual nurses are responsible for ensuring they revalidate, many organisations have adopted a partnership approach.

3.4   Leadership

The ward sister/charge nurse/team leader role is critical to ensuring the delivery of safe and effective care in adult inpatient wards, and is responsible for ensuring staffing meets locally agreed levels. This post holder is also responsible for setting the culture of compassionate care and team working. Ward sisters/charge nurses/ team leaders need to be prepared for the role and given ongoing support. It is important to ring-fence time in the roster for managerial work and for supervision of staff. The extent of supervisory time should be determined locally and needs to reflect both administrative work and clinical leadership with an appropriate impact assessment and analysis. Cognisance should be taken of the Mid Staffordshire Inquiry Report recommendation:

"Ward nurse managers should operate in a supervisory capacity, and not be office-bound or expected to double up, except in emergencies as part of the nursing provision on the ward. They should know about the care plans relating to every patient on his or her ward. They should make themselves visible to patients and staff alike, and be available to discuss concerns with all, including relatives. Critically, they should work alongside staff as a role model and mentor, developing clinical competencies and leadership skills within the team. As a corollary, they would

monitor performance and deliver training and/or feedback as appropriate, including a robust annual appraisal."

The following resources can aid your decision-making in relation to supervisory aspects of the ward sister/charge nurse/team leader role:

- *A survey to provide baseline activity in relation to ward sister/charge nurse supervisory roles* (RCN and Warwick University 2015)
- *Stepping in, stepping out, stepping up. Research evaluating the ward sister supervisory role (REWardSS). A survey to provide baseline activity in relation to ward sister/charge nurse supervisory roles* (RCN 2015)
- *Making the business case for ward sisters/team leader to be supervisory to practice* (RCN 2011)

3.5   Recruitment and retention

Recruitment and retention strategies at organisation and ward level are vital to the overall workforce plan.

Ward sisters/charge nurses/team leaders can identify or anticipate problems with recruitment and retention by monitoring, managing and planning for:
- vacancy rates
- sickness absence
- turnover
- the team's age profile
- staff survey results
- outcomes from retention/exit interviews.

Staff should be recruited using a competencies and values-based selection process aligned to the NHS Constitution and local policy.

Factors important in attracting new staff and retaining existing staff are:

- ward and/or organisational culture including leadership and management support

- team dynamics

- equality of opportunity, valuing diversity and inclusion of all staff

- flexible working arrangements/shift patterns

- quality of clinical learning environment

- preceptorship programmes/ongoing education and training opportunities

- ensuring a safe working environment, eg addressing the risk of work-related violence and other workplace health and safety risks. (More information can be found on the NHS Employers' website.

- promoting opportunities for staff to improve their own health and wellbeing (RCN 2016; NHS Employers)

- taking into account personal circumstances, aspirations, preferences and career stage (see Section 4.2 Flexible working)

- clinical specialty/workload

- geographical location, eg ease of travel access and cost of living.

Strategies to improve retention can prove cost-effective because experienced staff are retained while agency and recruitment costs are avoided. Leadership and adequate resources strongly influence turnover intention (Hayes et al 2012).

Ward and organisational leaders need to work to boost retention across generations by understanding what motivates people to stay in their jobs. More details can be accessed through the *Mind the gap* report (Health Education England 2015).

Ward sisters, charge nurses and team leaders should be developed, supported and provided with clear policies and resources for preventing and managing sickness absence. These should take a work-focused approach to managing sickness absence as recommended by Boorman (2009). This approach aims to reduce sickness absence while managing the unintended consequences, such as higher levels of presenteeism of staff which can impact on patient safety and staff fatigue. NHS Employers (2013) has published guidelines on prevention and management of sickness absence.

We recommend working closely with staff at a local level to monitor job satisfaction and general working environment, and to identify what influences their decision to leave, so that ways to retain them can be found.

4. Right place, right time

Staff should be deployed in ways that ensure patients receive the right care, first time, in the right setting, in a sustainable way. This requires effective management and rostering, with clear escalation policies if concerns arise.

4.1 Productive working

Work processes should be routinely[7] reviewed at both the hospital and ward level to reduce unwarranted variation and increase productive direct care time with patients.

Hospital wards use a number of methods to increase productivity, often based on LEAN methods that focus on eliminating waste and promoting activities that 'add value'. Examples include:

- the productive ward (NHS Institute for Innovation and Improvement)
- transforming care at the bedside (Institute for Healthcare Improvement)
- Virginia Mason production system (NHS Improvement and Virginia Mason Institute)

There is some evidence for the potential benefits of the productive ward programme, particularly in increasing time available for 'bedside care'. The programmes appear to be suited to environments that are already looking to make improvements and where staffing is stable and leadership strong (Hamilton et al 2014) – it is important that all organisations evaluate and capitalise on the opportunities provided by such programmes.

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[7] Annually, or more frequently where there have been changes to services

> **Case study: releasing clinical staff time for patient care**
>
> The appropriate employment of technology: eg the safe staffing app developed by Nottingham University Hospitals NHS Trust to enable real-time monitoring of nurse staffing levels. This is accessible on mobile devices which reduces the time needed to communicate staffing levels to numerous stakeholders ().

4.2   Efficient deployment and flexibility

Lord Carter's report (2016) recommends use of electronic rostering systems for effective staff utilisation.

Best practice guidance for effective e-rostering is available from NHS Employers.

Factors to consider when rostering clinical staff include:
- in-charge capability/competence
- skill/band mix
- admission and discharge profile
- day attenders
- theatre schedules
- patient-focused activity, eg case conferences and team huddles
- opportunities to increase the time spent providing direct care through the utilisation of technology and support services.

Flexible working

Flexible working within and between wards is essential in ensuring that patient care needs are met. In addition, flexible working options suit many nursing staff and are important in their retention. Organisations can offer these in different ways:
- part-time working
- compressed hours
- job share
- self-rostering/range of shift patterns
- flexitime

- annualised hours

- term-time contracts

- flexible retirement schemes.

NHS Employers' guidance should be followed in developing opportunities for flexible working.

Most ward-based staff work in shifts. Shifts should be planned with best practice principles in mind. While many trusts use shifts of varying lengths to accommodate patient need and staff preferences and because of potential efficiency gains from reduced handover periods, losses in efficiency may be associated with longer shifts. Managers planning rosters should aim to organise shift patterns to reduce cumulative fatigue and maximise recovery time (Dall'Ora and Griffiths 2017b).

Research on 12-hour shift patterns in registered nurses and healthcare support workers can be accessed at: www.england.nhs.uk/6cs/groups/safe-staffing/

Staff deployment

Ward establishments need some capacity to respond to peaks in patient need or unanticipated staffing shortages. Capacity can be increased with overtime, temporary staffing and dedicated 'float pools' of staff across hospitals to be deployed where demand is greatest. Float staff may be deployed on a 'home' ward and redeployed on demand. There is no clear evidence on the relative effectiveness of different staffing policies. Policies which lead to frequent deployment of agency staff may incur significant expense. See Section 4.3 below.

Specific training and support of staff who 'float' to other units is likely to maximise effectiveness and make these positions more attractive (Dall'Ora and Griffiths 2017a).

Rest breaks

Local policies for managing rest periods must meet working-time regulations. Staff breaks should be taken during the shift rather than at the beginning or end of a shift. This reduces risk of staff fatigue, safeguarding staff health and wellbeing (Dall'Ora et al 2016).

4.3   Minimising agency staffing

Flexible use of the establishment

Temporary staff are a valuable and valued part of the workforce, and can be a useful contingency for filling both anticipated and unanticipated staff shortages. They should be recruited from in-house staffing banks. Only if this is not possible should a framework agency be approached. Relying on high levels of agency staff is unlikely to represent an effective or sustainable solution to ensuring that there are the right staff, with the right skills, in the right place at the right time.

Temporary staff should receive local training and induction to ensure they are familiar with how the organisation works.

Escalation processes

Despite the best planning there will be times when patient care demands exceed the planned levels of staffing. Organisations should have a protocol for escalation of concerns about the safety and effectiveness of care by frontline staff to a senior level.

5. Measure and improve

Trusts should collect ward and organisation-level metrics to monitor the impact of staffing levels on the quality of patient care and outcomes, the use of resources and staff. The aim is to continuously improve patient outcomes and use of resources in a culture of engagement and learning. Evidence-informed ward-based metrics may focus on:

- patient and staff outcomes (eg infections, falls, pressure ulcers)
- patient and staff experience (eg patient and staff survey, Family and Friends Test and complaints)
- staffing data (eg appraisal, retention, vacancy, sickness)
- process measures (eg hand hygiene, documentation standards)
- training and education (eg mandatory training, clinical training).

A local quality dashboard for safe and sustainable staffing that includes ward-level data should be in place to support decision-making and inform assurance. This should be reviewed on a monthly basis and take account of the budgeted establishment and expenditure to date, including temporary staffing. Interpretation of any metrics at a ward or unit level is essential and can be effectively monitored on a ward-by-ward basis. Learning lessons to improve the quality and safety of patient care is a prime function of the dashboard review. It is also important to understand metrics on a pathway basis, where harm can occur at different stages. For example, patient safety thermometer data on pressure ulcers and infections cannot always be easily attributed to one professional group's actions or omissions.

Interpreting any metrics at a ward or unit level can be challenging for a variety of reasons. Patient pathways will typically include more than one ward or unit, and it is often not possible to link outcomes directly to a single ward or unit. Although staffing data can usually be directly linked to a ward and processes carried out on a ward (such as rounding, taking observations or medication administration) can be effectively monitored ward-by-ward, careful attention needs to be paid to trends over time or significant changes, recognising that for most processes some variation is inevitable.

5.1 Measure patient outcomes, people, productivity and sustainability

While NICE guidance identified evidence of "increased risk of harm associated with a registered nurse caring for more than 8 patients during the day shifts", it clearly stated there is "no single nursing staff-to-patient ratio that can be applied across all acute adult inpatient wards". We have found no new evidence to inform a change to this statement (NHS Improvement Evidence Review One 2016). However, NICE guidance recommended indicators for monitoring safe nurse staffing on acute wards, including 'red flags'.

Section 2.5 gives further information on peer comparisons along with use to CHPPD to support professional judgement.

It is important to identify the aspects of quality that are linked to safe staffing in adult ward environments. The literature highlights that falls and medication errors are strongly linked to staffing (NICE evidence review 2014), with other areas providing insights into staffing capacity and capability including omissions in care, missed or delayed observations and unplanned admissions to ITU. However, these indicators can be challenging to monitor consistently and a thorough audit programme must be in place to do so.

Leading change, adding value: A framework for nursing, midwifery and care staff
(2016) was co-produced and endorsed system-wide and is a vehicle to help achieve the 'triple aim' of better outcomes, better patient and staff experience, and better use of resources, leading to significant improvements and empowering local leaders to drive quality in their own areas. Commitment 9 is the workforce commitment: "We will have the right staff in the right places and at the right time". Commitment 6 addresses the fact that better staff health and wellbeing is associated with improved outcomes and experience for the individuals and populations they serve.

5.2　Report, investigate and act on incidents

Trusts should follow best practice guidance in the investigation of all patient safety incidents, including root cause analysis for Serious Incidents. As part of this systematic approach to investigating incidents, providers should consider staff capacity and capability, and act on any issues and contributing factors that are identified.

NHS providers should consider reports of the 'red flag' issues suggested in the NICE guidance (NICE 2014, 2015), and any other incident where a patient was or could have been harmed, as part of the risk management of patient safety incidents. Incidents must be reviewed alongside other data sources, including local quality improvement data (eg for omitted medication), clinical audits or locally agreed monitoring information, such as delays to or omissions in planned care.

NHS providers should actively encourage all staff to report any occasion where a less than optimal level of suitably trained or experienced staff harmed or seems likely to have harmed a patient. Professional judgements must be made in relation to patient need and staff resources, including skills, to meet that need. These locally-reported incidents should be considered patient safety incidents rather than solely staff safety incidents, and they must be routinely uploaded to the National Reporting and Learning System.

Staff in all care settings should be aware that they have a professional duty to put the interests of the people in their care first, and to act to protect them if they consider they may be at risk. Policies should be in place to support staff who raise concerns when they arise.

5.3　Patient, carer and staff feedback

The views of patients, carers and staff can give vital insights into staffing capacity, capability and morale, using mechanisms such as national and local surveys, patient or staff stories, complaints and compliments. The findings of incident and serious incident investigations should also be considered alongside the suggested list of

quality indicators so that the nature and causes of any issues can be rapidly identified and acted on. Some national and local surveys include questions that have direct or indirect bearing on staffing (for example, asking patients if they think there were enough staff to meet their needs, and whether they had to wait for call bells to be answered, etc), but wider feedback on the overall experience of receiving or delivering care is also likely to be affected by staffing.

Organisations need to be cognisant of feedback from regulators and, through their governance processes, agree the formal actions they will take in response to this. Feedback may include that from:

1. CQC inspections
2. Health Education England (HEE) quality visits (includes views on pre-registration students and medical trainees; see the HEE quality framework)
3. NHS Improvement diagnostic reviews
4. CCG reviews.

Further detail on patient, carer and staff indicators recommended by NICE and the NQB is given in Appendix 1.

Culture

The importance of the organisational and ward-level culture should not be underestimated. Further work will be developed by NHS Improvement around leadership and staff engagement.

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7.   Glossary

Capability: Competence/skills/experience of the individuals in the care team.

Capacity: Size of the care team relative to their workload and ability to manage it.

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

Healthcare assistants (HCAs): Work under the supervision and guidance of a registered nurse. Also known as nursing assistants, healthcare support workers or nursing auxiliaries.

Patient acuity: Refers to how ill the patient is, their increased risk of clinical deterioration and how complex their clinical care needs are. This term is sometimes used interchangeably with 'patient complexity' and 'nursing intensity' (NICE, 2014).

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

Workforce planning: Aims to ensure organisations strategically plan to have sufficient staff (clinical and non-clinical) with the appropriate skills to meet the current and future needs of their population (HEE, Recipe for Workforce Planning).

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