

Safe, sustainable and productive staffing
An improvement resource for children and
young people's inpatient wards in acute
hospitals

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

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 and Social Care

For further information about NQB, please see:

https://www.england.nhs.uk/ourwork/part-rel/nqb/

This improvement resource was developed by a working group of national experts from organisations including: Birmingham Women's and Children's NHS Foundation Trust, Trent Perinatal and Central New-born Networks, Women's and Children's Specialist Services, Northern Neonatal Networks, Staffordshire, Shropshire & Black Country Newborn & Maternity Network, Yorkshire & Humber Neonatal Operational Delivery Network and West Midlands Clinical Networks & Clinical Senate. It was further developed through engagement and consultation with entities indicated in Section 8.

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Message from the Chair

I am delighted to present England's first improvement resource for the safe, sustainable and productive staffing of children and young people's care in inpatient and hospital settings.

Children are not mini adults. Their care needs to be different. They depend on adults to feel safe and secure when they are at their most vulnerable, and it is our duty as healthcare providers to get this right for them.

There is no one-size-fits-all approach. Leadership is key, and our leaders have a complex task at hand to take into account so many factors when planning staffing – from getting the ratios right to considering the impact of the physical environment of the ward, the skill mix, productivity and efficiency of the team, and measuring the quality of the team to develop staffing plans.

What we know from our research and review of current evidence is that the very best practice combines professional judgement with professional standards and benchmarking; the use of an appropriate staffing model/dependency tool; robust evaluation of outcomes and feedback from our children and families to ensure that the staffing approach is working.

This improvement resource offers clinical managers on the front line clear and easy guidance to help them understand all the information that's out there and adapt it to suit their needs – something that's never been available before. And even with very restricted budgets, this approach proves that it is still possible to create the right teams to care for children, young people and their families in the best possible way.

This work hasn't been done in isolation. An enthusiastic team of specialist experts from a range of care settings and professions has come together with children, young people and families to truly understand what they want and need from their care and define what 'good' looks like. We enlisted acclaimed academic Dr Keith Hurst to review and appraise all the existing literature, research and models around

safe staffing for children and young people, and have brought this together with reallife working case studies around culture, staff engagement and quality dashboards in a practical toolkit that won't just sit on the office shelves getting dusty.

We really hope that you find this resource useful. Our children and young people are our future and only by caring for them in the best possible way will we give them the healthiest start to life that they need and deserve.

Michelle McLoughlin

Chief Nurse, Birmingham Women's and Children's NHS Foundation Trust Chair, Children and young people workstream, Safe, Sustainable and Productive Staffing Programme

Summary

We have designed this improvement resource for those involved in setting, approving and deploying the clinical establishment within the framework that NHS provider boards are individually and collectively responsible for making judgements about staffing and delivering safe, effective, compassionate and responsive care within available resources (NQB 2016).

No standard model exists for children and young people's inpatient wards. This improvement resource therefore includes all inpatient wards caring for 'infants, children and young people under the age of 18', based on the Royal College of Paediatrics and Child Health (RCPCH) agreed definition (2015),¹ with special consideration given to young people with long-term conditions up to the age of 25 (Department of Health 2012).

The resource outlines a systematic approach to identifying the organisational, managerial and ward factors that support safe staffing. This includes outlining decision support tools in workforce planning, factors in calculating uplift, and the role of peer comparison. The resource also identifies factors in the right skills mix and deploying these resources appropriately. It makes recommendations for monitoring and acting if not enough staff are available on the ward to meet patients' needs. It builds on standards and recommendations from the Royal College of Nursing (RCN) (2012), Royal College of Paediatrics and Child Health (2014),² Paediatric Intensive Care Society (PICS) (2015) and Care Quality Commission (CQC) (2016). And it is informed by a comprehensive evidence review of the research relating to staffing systems for children and young people's wards (Hurst 2016), commissioned for this

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¹http://www.rcpch.ac.uk/sites/default/files/page/Facing%20the%20Future%20Together%20for%20Child%20Health%20final%20web%20version.pdf

² There are separate standards and guidance for children's critical care services levels 1, 2 and 3 and retrieval (Royal College of Paediatrics and Child Health (2014) and the Paediatric Intensive Care Society (2015).

improvement resource. This resource complements the above standards and recommendations, and should be used in conjunction with the widely used RCN guidance for CYP settings.

Recommendations

In determining staffing requirements for children and young people's inpatient settings:

- 1. Adopt a systematic approach using an evidence-based decision support tool, triangulated with professional judgement and comparison with peers.
- 2. Undertake a strategic staffing review annually or more often if changes to services are planned.
- 3. Staffing decisions should consider the impact of the role of parents and carers.
- 4. Factor into the establishment the requirement that all children and young people should have access to a registered children's nurse 24 hours a day particularly important in NHS acute trusts and district general hospitals where the children's services are often a small department.
- Take staffing decisions in the context of the wider registered multiprofessional team.
- 6. Safe staffing requirements and workforce productivity should be integral to operational planning.
- 7. Organisations should have plans to address local recruitment and retention priorities, and review them regularly.
- 8. Hospitals should offer flexible employment and deploy staff efficiently to limit use of temporary staff, paying particular attention to the younger age profile of registered children's nurses.
- Organisations should have a local dashboard to assure stakeholders about safe and sustainable staffing. It should include quality indicators to support decisionmaking.
- **10.** Organisations should have an appropriate escalation process in case staffing is not achieving desired outcomes.
- 11. All organisations should have a process to determine additional staffing uplift requirements based on the needs of patients and staff.

- **12.** All organisations should investigate staffing-related incidents and their effect on staff and patients, taking action and giving feedback.
- 13. Feedback from children, young people, families and carers, including complaints, should be an early warning to identify service quality concerns and variation.

1. Introduction and context

This is an improvement resource to support nurse staffing in children and young people's inpatient wards in acute hospitals. It is aligned to Commitment 9 in *Leading change, adding value: a framework for nursing, midwifery and care staff* (NHS England 2016). It is also based on the National Quality Board's (2016) 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. The structure of this improvement resource reflects the expectations in the NQB guidance (see Figure 1).

Figure 1: 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 3 Expectation 2 Right Staff Right Skills Right Place and Time** 1.1 evidence based 2.1 mandatory training, 3.1 productive working and workforce planning development and education eliminating waste 1.2 professional judgement 2.2 working as a multi-3.2 efficient deployment 1.3 compare staffing with professional team and flexibility 3.3 efficient employment 2.3 recruitment and peers retention and minimising agency

We designed this improvement resource for those involved in setting, approving and deploying the clinical establishment – from the ward manager/sister/charge nurse to the board of directors. NHS provider boards are individually and collectively responsible for making judgements about staffing and delivering safe, effective, compassionate and responsive care within available resources (NQB 2016). The resource outlines a systematic approach for identifying the organisational, managerial and wards factors that support safe staffing. It makes recommendations for monitoring and acting if not enough staff are available on the ward to meet patients' needs. It builds on standards and recommendations from the Royal College of Nursing (2013), Royal College of Paediatrics and Child Health (2014),³ Paediatric Intensive Care Society (2015) and Care Quality Commission (2015). It is informed by a comprehensive evidence review of the research relating to staffing systems for children and young people's wards (Hurst 2016), commissioned for this improvement resource.

It is also useful to recognise how professional organisations and unions can support 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. We also engaged with children, young people and families in developing the resource.

No standard model exists for children and young people's inpatient wards. This improvement resource therefore includes all inpatient wards caring for 'infants, children and young people under the age of 18', based on the Royal College of Paediatrics and Child Health's agreed definition (2015),⁴ with special consideration

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³ There are separate standards and guidance for children's critical care services levels 1, 2 and 3 and retrieval (Royal College of Paediatrics and Child Health (2014) and the Paediatric Intensive Care Society (2015).

⁴http://www.rcpch.ac.uk/sites/default/files/page/Facing%20the%20Future%20Together%20for%20Child%20Health%20final%20web%20version.pdf

given to young people with long-term conditions up to the age of 25 (Department of Health 2012).

1.1 Complexities of children and young people's services

An organisation's senior nurse leadership must be strong, visible and effective to ensure children and young people's needs are recognised, articulated and listened to, especially when the service is part of a large general hospital.

Children and young people's services are complex and cover multiple pathways of care in many hospital settings: for example, specialist hospitals for children and young people and small discrete departments within NHS acute trusts and district general hospitals. All areas where children and young people are cared for must be subject to effective governance that fully reflects the specialist input of registered children's nurses, especially in acute trusts and district general hospitals where the service may be a small department.

Workforce planning should take account of parents' and carers' vitally important roles. Young patients depend on adults. They may have complex physiological and psychological needs; in addition, those caring for them must take account of their growth and development needs, which will require specific training, knowledge, skill and time.

The bedside nurse reassures us that they will call if our son becomes more unwell (and they do) – Parent

1.2 Standards for safe staffing in children and young people's services

Because safeguarding children and young people is of paramount importance. Organisations must have the appropriate policies in place to ensure their staff can provide safe, dignified and compassionate care. Staff should be trained to the appropriate level required for their role. Competencies are described in the Royal College of Pediatrics and Child Health intercollegiate document *Safeguarding children and young people: roles and competences for health care staff* (March 2014).

The Royal College of Nursing's publication, *Defining staffing levels for children's and young people's services* (2013), provides guidance and standards for safe staffing in children and young people's services. These have been widely adopted (see Appendix 1).

While all trusts' should have a safe staffing and rostering policy, any policy or guidance must clearly demonstrate the staffing requirements of children and young people's services, especially in adult-focused trusts.

1.3 Demographic of children and young people's nursing workforce (2017)

In general the children workforce is younger than other specialist areas. It is therefore important to consider the needs of younger nurses in the workplace. These are outlined more fully in reports by Jones et al (2015) and Health Education England (HEE 2016). We discuss this in more detail in Section 3.4.

2. Right staff

Children and young people's inpatient wards must have sufficient and appropriate staffing capacity and capability to provide safe, high quality and cost-effective care at all times. Staffing decisions must take account of available resources and be aligned to operational and strategic planning so that high quality care can be provided immediately and sustainably.

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

2.1 Evidence-based workforce planning

The range of staff providing children and young people's care must work closely in a collaborative manner to offer the highest possible standards. Workforce planning should include a training needs analysis, particularly where there are specialty-specific knowledge and skill needs. You should also consider the ward team's skill mix, using both registered and non-registered staff. In addition, the workforce must be suitably trained and experienced to offer the most flexible means of achieving recommended staffing levels for meeting children and young people's needs.

2.1.1 Staffing reviews

Decision-making to determine 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/support workers provide a significant proportion of direct care, other groups to consider include:

- medical staff
- AHPs for example, occupational therapists

- pharmacists
- advanced clinical practitioners/clinical nurse specialists
- volunteers
- 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, physiotherapists who are rostered on the ward team would be part of the establishment, but those who provide a defined number of sessions to the ward would not.

You should have a transparent governance structure, including ward-to-board reporting of staffing requirements, for determining staffing numbers and skill mix and monitoring the effectiveness of staffing plans.

Boards should carry out a strategic staffing review every 12 months as NQB recommends, aligned to the operational and business planning process, or more frequently if changes to services are planned. The key elements of such a review are:

- obtaining feedback from children, young people and families on what is important to them and how well their needs are met
- using a systematic, evidence-based approach to determine the number and skill mix of staff required
- using a valid and reliable acuity/dependency tool
- exercising professional judgement to meet specific local needs, but ensuring
 this does not duplicate elements included in the tool being used: for example,
 if the tool takes account of patient turnover, an additional allowance for this
 would be duplication
- benchmarking with peers
- taking account of national guidelines, bearing in mind they may be based on professional consensus.

Actual staffing data should be compared monthly with expected staffing, and reviewed alongside quality of care, patient safety and patient and staff experience data.

Managers and leaders should consider how the workforce meets children and young people's care demands. They should be confident enough to challenge preconceptions of roles and responsibilities, and support staff to innovate in their practice while working safely within the sphere of their registration. Opportunities to develop innovative workforce models and new ways of working that enhance care quality and improve productivity should be continuously explored as part of workforce planning (See Section 5 for more detail.)

Collaboration with education and training providers is essential to ensure training is fit for purpose and meets the needs of the individual and the service. Assess and address the financial implications of training and education, and take into account the cost of courses, study leave and back fill. Sourcing funding for post-registration education is increasingly difficult, and organisations may need to consider new, innovative and cost-effective ways of delivering education and training without compromising quality. Headroom/uplift (discussed in Section 2.3) should include education and training time.

The workforce requirements for children and young people's inpatient services will vary with demand and specialism. To use beds flexibly it is important to create and maintain a pool of appropriately skilled staff. A correct baseline establishment allows you to absorb the peaks and troughs in activity and workload.

Each ward should always have at least two registered children's nurses on duty irrespective of its size or layout (RCN 1994; RCN 2013; West Midlands Quality Review Service 2015).

2.2 Decision support tools

A systematic literature review yielded 22 recommendations for workforce planning for children and young people's services (Hurst 2016). In addition, a telephone benchmarking survey of senior children's nurses across England assessed actual practice in 24 centres providing children and young people's inpatient services (Jones et al 2016). We also had feedback from children, young people and parents/carers about the staffing aspects of feeling safe in hospital (see Appendix 2). All this information was cross-checked using the members of the Association of Chief Children's Nurses (2016) as an expert reference group.

What makes us feel safe?

We feel safe and reassured leaving our son in the care of his nurse when in a 1 to 1 unit as the nurses have been very efficient at managing his condition'

'Close supervision, having someone around'

Specific considerations for planning the children and young people's workforce arising from the expert reference group's cross-check include:

- Children and young people's ward managers should use at least two methods for calculating ward workload and staffing requirements.
- Boards should ensure there is no local manipulation of the identified nursing resource from the evidence-based figures in the tool being used, as this may adversely affect the recommended establishment figures and remove the evidence base. Children and young people's acuity/dependency tools should include a weighting for parents/carers, so their impact on the ward team is reflected in ward establishments.
- Most parents or carers will stay in the hospital, making a significant
 contribution to their child's care and wellbeing. However, they also require
 support, information and often education and training to enable them to care
 for their child in partnership with hospital staff. A child cannot be viewed in
 isolation, but must be cared for within the family unit (Hurst 2016). In some

circumstances it may prove difficult for parents and carers to stay, visit daily or remain for long periods with the child or young person. Their personal circumstances and responsibilities such as other siblings, work commitments and the travelling distance to the hospital may prevent them from visiting. The child or young person will then depend more on staff for fundamental care, stimulation and emotional support.

- Time-out percentages (uplift) should be explicit in all ward staffing calculations. Managers should articulate any reasons for deviation from the 21.6% to 25.3% range emerging from the evidence review.
- Staff activity data on children and young people's wards should be measured and reported separately from that of adult wards.
- Staffing multipliers (staffing resource) aligned to levels of patient acuity/dependency should be empirical and drawn only from quality assured services to avoid extrapolating from wards delivering suboptimal care.
- Adjustments should be made to workforce plans to accommodate ward geography – for example, single-room design wards.
- All children and young people should have access 24 hours a day to outreach registered children's nurses. This is particularly important in acute trusts and district general hospitals where the children's service is frequently a small department.
- Two registered children's nurses should be on duty at all times in an inpatient ward.
- Resource planning must take account of the impact and needs of child and adolescent mental health services (CAMHS) patients on a general ward.
- You may need to review support for international registrants with relevant experience and academic qualifications who wish to register as a children's nurse with the Nursing and Midwifery Council.
- Allocate time within the establishment for regular events such as patient interhospital transfers and escort duties for patients requiring procedures and investigations if this is not already factored into the validated acuity/ dependency tool.
- Allow time 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 should be built into the ward establishment using professional judgement. This is commonly referred to as 'responsiveness time'.

Decision support tools, such as those for measuring acuity/dependency, help managers determine safe, sustainable staffing levels and remove reliance on subjective judgements. There are few validated decision support tools for children and young people's inpatient wards. Professional consensus suggests no single tool meets every area's needs, so we recommend combining methods (see Appendix 3).

2.2.1 Constituents of decision support tools

Consider the principles in Figure 2 when evaluating decision support tools or developing future tools.

Figure 2: Constituents of decision support tools

Systematic approach

• **Does the tool** integrate a classification scheme to determine/capture the care needs (acuity/dependency) of children and young people?

Evidence base

essential

aspects of

nursing resource

• Does the tool:

- have a robust evidence base for nursing time derived from data gathered in comparable NHS best practice wards (or a demonstrably comparable health system)?
- demonstrate that the resources recommended are sufficient to deliver care of acceptable quality?
- incorporate patient acuity and dependency?

Does the tool include:

- direct patient care
- ·admissions, discharges and ward attenders
- ·care handover
- •indirect patient care, eg documentation
- communication with familes
- •bed occupancy and patient turn over at ward level
- schedule breaks
- ward management supervisory/nurse incharge, link workers
- mentoring and supervision
- education and training for staff and familes
- appraisal

Consider additional requirements*

•Does the tool include:

- uplift
- escort duties
- ward layout
- geographic location
- professional standards
- registered children's nurse outreach duties
- ·ward attenders
- impact of CAMHS on acute inpatient services

*It is essential to understand what is included in your validated decision support tool to ensure additional elements described are not already included, avoiding inaccurate baseline establishments being recommended.

2.2.2 Examples of decision support tools in use in the UK

Safer Nursing Care Tool (SNCT) - the Shelford Group, 2017

Patients are classified into one of five categories; each category has a multiplier which calculates the nursing requirement. It is recommended that all patients'

acuity/dependency is collected for at least 20 days twice a year to provide a recommended establishment. It can be applied more frequently if desired.

PANDA (Paediatric Acuity and Nursing Dependency Assessment)

This is a web-based tool developed at Great Ormond Street Hospital. To determine safe staffing, PANDA calculates patient dependency and acuity levels by assessing patients against more than 70 'care categories'. It identifies the appropriate 'nursing dependency' category from the four standard categories based on the Royal College of Nursing's guidance on paediatric nurse staffing, which is assessed on a shift-by-shift basis.

SCAMPS (Scottish Children's Acuity Measurement in Paediatric Settings)

The tool has been developed in NHS Scotland in line with standards for paediatric intensive care units and the Paediatric Intensive Care Society in 2010. The tool requires a daily workload measurement, with seven levels of care identified from ward-level care to intensive care. Patients are scored every 12 hours.

Occupied bed-to-staff ratio methods (using healthcare resource groups)

This method is used widely for calculating establishments for acute ward and critical care beds (Knauf et al 2006; RCPCH 2014; PICS 2015) and is based on a nurse-to-bed ratio.

Defining staffing levels for children's and young people's services – RCN 2013

Although these are guidelines rather than a decision support tool, we include them as they are widely used, valued and respected in children's and young people's services. The guidance and standards are based on best practice and a consensus of professional judgement. They set out the minimum essential requirements for providing an adequate and appropriate workforce, as well as indicative baseline day-and-night nurse: patient ratio. These have been widely adopted (see Appendix 1). The ratios underpin the staffing calculations in the PANDA tool and closely correlate to the children and young people's version of the SNCT.

See Appendix 3 for more details.

2.3 Calculating and allowing for uplift

Uplift, also known as headroom or time-out, is a judgement about additional staff to cover time spent out of the clinical area. Essentially this covers activities such as annual leave in line with Agenda for Change or local terms and conditions, study leave, sickness absence, parenting leave, emergency or carer's leave, link meetings and improvement projects.

The RCN (2013) recommends a minimum uplift of 25%, excluding critical care. The uplift reported in the literature ranges from 21.6% to 25.3% (Hurst 2016). The uplift in the benchmarking telephone survey of trusts across England (Jones et al 2016) ranged from 15% (plus a percentage for real time maternity leave) to 25% (plus a percentage for real time maternity leave).

It is important to manage leave efficiently and responsibly. Several areas report that uplift is often reduced in times of financial hardship. However, failure to consider uplift in staffing calculations can lead to reliance on temporary and agency staff, reduced compliance with statutory and mandated training, staff burnout, and recruitment and retention difficulties. These will challenge nursing quality and patient safety and experience.

The percentage uplift allocation must be based on historical data, future staffing projections and the staffing profile. Review it annually to ensure an adequate allocation. For example, an organisation with a predominantly young workforce should expect a higher than normal level of parenting leave. The historical percentage can be built into the prospective workforce plan.

Table 1: What to consider when setting uplift

Element	Rationale			
Annual leave	The average annual leave across the nursing workforce in line with Agenda for Change, and accounting for local service patterns			
Sickness/absence	The organisation's target/aspiration level; it should be aligned to plans to implement improvement			
Study leave	Includes mandatory and core/job-specific training and learning activities such as link nurse roles			
Parenting leave	Managed centrally in some organisations. It includes maternity, paternity and adoption leave. Driven by local workforce demography			
Other leave	Includes carer's leave, compassionate leave, etc.			

Accurate uplift is important where the local temporary staffing resource is small or non-existent and so having a budget for temporary staffing is not necessarily useful. To make it less likely you will need temporary staff, build the expected percentage for all types of leave into the baseline establishment.

Making substantive appointments to cover maternity leave helps maintain workforce numbers. The expectation is that there will be constant turnover and other staff taking maternity leave throughout the year, so the likelihood of becoming overestablished is small. Substantive appointments may be more attractive to prospective employees.

2.4 Professional judgement for specific local needs

Staffing decisions based solely on professional judgement –the expert opinion of clinical staff – are considered subjective and may not be transparent. But professional judgement remains an essential element of staffing decisions.

Use the principles of professional judgement (Appendix 4) or the Telford approach (Telford 1979; Arthur and James 1994) combined with a tool, which will give credibility to figures and multipliers and enable scrutiny.

Professional judgement should also consider:

Ward layout/facilities: The configuration of wards and facilities affects staff time available to care for patients, and professional judgement can reflect this in staffing establishments. For example, wards with a high proportion of single rooms might make adequate surveillance of vulnerable patients more difficult. Some ward layouts – for example, a 'racetrack' layout – are associated with significantly more walking between patients than others.

Escort and specialling duties: It is important to understand whether the tool you are using already takes account of escort and specialling duties. Where it is not included but is likely to affect the skill mix and number of staff required, local data collection and analysis may help in determining a percentage to add to the establishment to ensure staffing can respond to daily patient care needs.

Multiprofessional working: Consider the make-up of the care team for the ward. Specific AHPs or support roles may meet patient groups' needs at particular periods of the day more appropriately. But without administrative support staff such as ward clerks, nurses' workload may increase at particular times. Talking and listening to staff will enable organisations to develop more sustainable care models.

2.5 Benchmarking staffing levels with peers

Peer comparisons can act as a platform for further enquiry. While it is important to be cautious, comparing staffing with peers can act as a 'sense check', particularly on assumptions and professional judgements. Benchmarking can also stimulate sharing best practice.

We recommend quality assurance and using dashboards so that staffing recommendations perpetuate good care (Hurst 2016). Some specialist areas benchmark using national and local benchmarking tools and peer review – for example, cancer standards and quality review services.

Other commonly used outcome measures are (Jones et al 2016):

- mortality and morbidity
- preventable cardiac arrest rates
- complaints
- children, young people and family feedback
- staff experience feedback
- 15 steps first impressions
- critical care data collection
- parental concern model
- patient stories
- using PEWS scores for acuity measuring
- nursing care quality indicators
- peer review
- children and young people safety thermometer.

See Appendix 5 for an example of a quality dashboard and its use.

'Care hours per patient day' (CHPPD) is a unit of measurement increasingly used to record and report staff deployment. It is still being developed for children and young people's services. Any unit used should be defined carefully to reflect the individual specialty casemix in children and young people's services in the same way as in adult inpatient care.

CHPPD is useful 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 of Coles 2016) (see box below).

	Hours	s of	regis	tered	nurse	es and	
	midwives alongside						
Care hours per patient day =	Hours of healthcare support workers						
	Total	numb	er of	inpatie	ents (midnight	
	censu	s) ⁵					

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 2016) to assess the impact on patient outcomes. The Model Hospital dashboard makes it possible to compare 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 – for example, patient specialty make-up – as well as differences in the accuracy and completeness of data collection.

Section 5 has more detail on this.

⁵ Midnight census: definition (approximating 24 patient hours by counts of patients at midnight).

3. Right skills

3.1 Skill mix

The skill mix and staffing required to deliver services safely and effectively within the resources available should be regularly reviewed. In particular, it should be integral to providers' operational planning.

The nurse is key to planning and delivering care for children and young people and their families. Nurses connect to and provide continuity within the multiprofessional team. Decision-makers should consider the skill mix required to deliver services as safely, efficiently and effectively as possible, as well as patients' acuity and dependency, using a validated decision support tool. From the 24 trusts (covering 30 hospitals) in the telephone survey, the skill mix of registered to unregistered staff varied between low dependent areas and acute specialist care. See Section 9 for more details.

Clinical leaders and managers should be developed and supported to deliver high quality, efficient services, and staffing should reflect a multiprofessional team approach. Clinical leaders should use the workforce competencies to the full, developing new roles in line with national policy where they identify a need or skills gap.

Do not underestimate the value of AHPs and the wider multiprofessional team: the 12 AHP disciplines form 6% of the NHS workforce, ⁶ making a significant contribution to the care pathway (Read 2016). Specialist hospitals employ more AHPs than small acute or general hospitals, so comparing appropriate staffing levels for the wider

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⁶ A list of the AHP professions and a description of their contribution to the wider health and care system can be found in *Allied health professions into action* (NHS England 2017), pages 31-36.

workforce is difficult. The NHS Benchmarking Database was the only model for comparison for AHP workforce planning we found (Hurst 2016).

While AHPs are not typically rostered as part of the ward staffing establishment, they are part of the core team vital to delivering the acutely ill child's care and rehabilitation. All wards should have access to paediatric dietetics, paediatric physiotherapy, paediatric speech and language therapy, paediatric occupational therapy and pharmacy. This list is not exhaustive. More work is required to identify and gather evidence on the quality and effectiveness of the individual professions' contribution and of the core multidisciplinary team to this service.

Traditionally AHPs, and the wider professional workforce, have been regarded primarily as experts in their clinical fields. *Allied health professions into action* provides a framework for assessing how to use the AHP workforce. It applies equally to all professions when reviewing how to use them to optimise productivity and efficiency. The framework in Figure 2 can help you think about how to use a more flexible workforce.

Figure 2: State of readiness for future care

State of readiness for future care

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

Source: Allied health professions into action (NHS England, 2017)

Administrative and data support

All wards need adequate administrative and data support so that clinical staff do not use valuable time undertaking these roles.

3.2 Role of the nurse within the multiprofessional team

Decision-makers should consider the skill mix and staff required to deliver services as safely and effectively as possible within available resources.

All children and young people's wards should be led by a supervisory and supernumerary band 7 (minimum) sister/charge nurse.

Ward leaders need to be prepared for their role and continuously supported. It is important to ringfence time in the roster for managerial work and supervising staff. Determine the extent of supervisory time locally: it needs to reflect both administrative work and clinical leadership, and undergo an impact assessment and analysis. A key recommendation of the Mid Staffordshire inquiry report was:

"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."

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⁷ The Mid Staffordshire NHS Foundation Trust Public Inquiry (2013).

3.3 Staff training, development and education

All staff should be effectively trained and complete competency assessments relating to their skills. The sister, charge nurse or team leader is responsible for assessing individual team members' training requirements as part of an annual training needs analysis. Education plans should link to feedback from children, young people and families, service need, individual appraisal and development needs. Prioritise these and develop a plan to meet those using available resources.

Uplift (see Section 2.3) allows for study leave, which should be aligned with the training need analysis and include mandatory and role-essential education and training.

This assessment enables you to identify opportunities for upskilling staff to address gaps in patient care. Education and training needs can be met through, for example, local skills training, e-learning, seminars, shadowing, clinical placement exchanges, rotation, and research and development programmes. Include compliance with appraisal and mandatory training in the local quality dashboard.

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

As set out in the 2012 RCN guidance, all non-registered staff should be appropriately trained and have the competency, knowledge and skills they need to work in the neonatal setting. This is particularly important and must cover any expansion of the nursing associate role in the area of neonatal care.

The knowledge, skills and competencies for current and future services need to be regularly assessed. Education and training are essential for succession planning,

⁸ The Trust Special Administrators of Mid Staffordshire NHS Foundation Trust, 2013.

which with an ageing nursing workforce and evident generational differences has never been a greater priority. Training and development are essential for staff satisfaction and retention (Fitzpatrick et al 2011; HEE 2016).

Clear policies should be in place to define staff who are supernumerary because of their learner status and there should be systems in place to ensure this is factored into planning.

Staff should be trained in considering the placement of children and young people to keep them safe from each other, particularly where they are placed in the same environment.

3.4 Induction of new staff

Depending on the nature of the ward area and the level of specialist or critical care it provides, the budget will need to include an agreed uplift to cover backfill costs for initial training. For example, a nurse who is new to a hospital and new to a specialty will require induction to the hospital, ward and specialism plus specialist training, support and supervision. This may take from several weeks to several months. In addition, the requirement for preceptorship should be factored in for newly qualified nurses, which includes time away from the workplace and support. These are important factors when agreeing the uplift to be included in ward staffing establishments.

3.5 Recruitment and retention

Recruitment and retention strategies are vital parts of a workforce plan alongside succession planning. Strategies to improve retention prove cost-effective because experienced staff are retained while temporary staffing and recruitment costs are

avoided. Leadership and adequate resources strongly influence turnover intention (Hayes et al 2012).

Managers must have in-depth knowledge of local recruitment and retention issues including:

- vacancy rates and trends
- turnover
- staff supply pipeline
- age profile
- themes from exit interviews.

Recruit staff using a competencies and values-based selection process aligned to the NHS Constitution and local policy. Involving children, young people and families/carers in recruiting staff is highlighted as best practice.⁹

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

- personal circumstances, aspirations, preferences and career stage
- clinical specialty/workload
- ward and/or organisational culture
- leadership/team dynamics
- proactively supporting all staff in their development to identify talent early
- flexible working arrangements/shift patterns
- quality of clinical learning environment
- preceptorship programmes/ongoing education and training opportunities
- geographical location for example, ease of travel and cost of living.

Most of the children's nursing workforce is young, so it is important to consider younger nurses' needs in the workplace and create working conditions that enhance job satisfaction for all generations. *Mind the gap* (Jones et al 2015) and *Narrowing the gap* (HEE 2016) offer guidance. These reports found that flexibility to manage work-life balance and enhanced professional autonomy were essential to retain staff

⁹ http://www.nhsemployers.org/news/2015/11/children-and-young-people-in-the-recruitment-process

of all generations. Consider assessing opportunities to retain early career professionals and encourage those approaching retirement to work longer.

Many overseas recruits have extensive experience of working with children and young people but do not have a qualification that enables the Nursing and Midwifery Council (NMC) to register them to do so; they are therefore registered to work with adults. Education and service providers should continue to work with HEE and NMC to seek opportunities for their formal recognition.

4. Right place, right time

Staff should be deployed in ways that ensure children and young people and their families receive the right care and information, first time, in the right setting, in a sustainable way. All units should have a formal escalation process to highlight patient safety and staffing concerns. Using red flags enhances this process (see Appendix 6 for an example of an escalation algorithm).

In exceptional circumstances, children and young people may be cared for outside a clinical area dedicated to them. A telephone survey with senior children's nurses in 24 trusts covering more than 30 hospitals (Section 9) found this was rare and happened mainly when the clinical environment was more appropriate for the condition – for example, spinal units or obstetrics and gynaecology. Where it happens, the required staffing must be provided in addition to that identified by the decision support tool used to set the recommended ward establishments. However, there should be outreach registered nurse access for all children and young people 24 hours a day. This must be factored into the establishment, and is particularly important in acute trusts and district general hospitals where children's services are often a small department.

4.1 Productive working

Transparent and expert workforce planning within and across teams will ensure staff are appropriately placed.

Delayed discharges and transfers of care should be monitored and escalated as appropriate.

Ensure the most appropriate person is assigned the most appropriate tasks, including non-registered members of the workforce.

Wards increase productivity in various ways, 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)
 http://webarchive.nationalarchives.gov.uk/20150401102711/http://www.institute.nhs.uk/quality_and_value/productivity_series/productive_ward.html
- Transforming Care at the Bedside (Institute for Healthcare Improvement)
 http://www.ihi.org/engage/initiatives/completed/tcab/pages/default.aspx

4.2 Efficient deployment and flexibility

The Carter report recommends electronic rostering systems to use staff effectively.¹⁰ Best practice guidance for effective e-rostering is available from NHS Employers¹¹ and NHS Improvement.¹²

¹⁰ https://www.gov.uk/government/publications/productivity-innhs-hospitals

¹¹ http://www.nhsemployers.org/your-workforce/plan/agency-workers/reducing-agencyspend/e-rostering

¹² https://improvement.nhs.uk/uploads/documents/Rostering_Good_Practice_Guidance_Final_v2.pdf

Factors to consider when rostering clinical staff include: in-charge capability/competence; skill/band mix; admission and discharge profile; day attenders; theatre schedule; patient-focused activity – for example, case conferences and team huddles; dependency/acuity; and opportunities to increase time spent providing direct care by using technology and support services. Operational rostering should be completed to maximise care hours per patient.

4.2.1 Flexible working

Flexible working within and between wards is essential to meet patient care needs. Flexible working options may be a useful retention strategy, but balance them against service requirements and the job satisfaction of staff without them who are rostered opposite staff with flexible working arrangements. Organisations can offer flexibility in different ways:

- part-time working
- compressed hours
- job share
- self-rostering/range of shift patterns
- flexi-time/twilight shifts
- annualised hours
- term-time contracts
- flexible retirement schemes.

Follow NHS Employers' guidance when developing opportunities for flexible working.¹³

Managers should have detailed knowledge of the number of flexible working arrangements and review each request annually.

Electronic rostering can be used creatively with retention initiatives as detailed above. For example, allow staff to access rosters and make requests remotely.

¹³ www.nhsemployers.org/your-workforce/retain-and-improve/managing-your-workforce/flexible-working

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Staff should have adequate opportunity for rest between shifts. Avoid long periods of working without a day off, or quick and frequent transitions from night to day working. This reduces cumulative fatigue and maximises recovery time.

A literature review reported 12-hour shifts as potentially more cost-effective as they reduced shift overlaps and the number of handovers. Staff benefited, for example, by working a compressed week. However, these benefits are partly counteracted by reports of increased fatigue, errors and decreased alertness (Ball et al 2015). Consider these factors when workforce planning, and identify measures to monitor impact and outcomes on patients and staff of 12-hour shift working.¹⁴

4.2.2 Staff deployment

Ward establishments need 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 leading to frequent use of agency staff may incur significant expense. Specific training and support for staff that 'float' to other units is likely to maximise effectiveness and make the positions more attractive (Crimlisk et al 2002; Dall'Ora and Griffiths 2016).

4.2.3 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.

¹⁴ Additional research on 12-hour shift patterns for registered nurses and healthcare support workers can be accessed at

http://webarchive.nationalarchives.gov.uk/20160603154026/https:/www.england.nhs.uk/6cs/groups/safe-staffing/

This reduces risks of staff fatigue, safeguarding staff health and wellbeing (Dall'Ora et al 2016).

4.3 Minimising agency staffing

Children and young people's acute inpatient services are affected by a seasonal variation in workload demand. See Section 4.2.2 for variations in service demand.

Relying on high levels of agency staff is unlikely to be an effective or sustainable solution to ensuring you have the right staff, with the right skills, at the right place, at the right time.

If you need to use bank or agency staff due to a lack of regular staff, they must be trained to care for children and young people or have training in the specialty. Bank staff managed by an in-house resource partly mitigate the issues with training and quality of agency staff.

Short-term, agency or redeployed staff must receive an induction and adequate orientation for the area in which they are working.

Some services might benefit from rotating staff, which may add depth to the workforce resilience in generalist areas. This may be more difficult in specialist areas or where the area for children and young people within a large adult facility is relatively small.

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 on staff themselves. The aim is to continuously improve patient outcomes and use of resources in a culture of engagement and learning.¹⁵ Evidence-informed ward-based metrics may focus on:

- patient and staff outcomes (eg infections, falls, pressure damage and Serious Incidents)
- patient and staff experience (eg patient and staff survey, Friends and Family 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).

Organisations should have a quality dashboard for safe and sustainable staffing that includes ward-level data to support decision-making and inform assurance. This should be reviewed monthly and take account of the budgeted establishment and expenditure to date, including temporary staffing. Interpreting metrics at a ward or unit level is essential, and can be effectively monitored ward by ward. Learning lessons to improve the quality and safety of patient care is a prime function of the dashboard review (see Appendix 5). It is also important to understand metrics on a pathway basis, where harm can occur at different stages. For example, data from the Children and Young People's Services Safety Thermometer cannot always be easily attributed to one professional group's actions or omissions.

Interpreting metrics at a ward or unit level can be challenging. Staffing data can usually be directly linked to a ward, while processes carried out on a ward (such as rounding, taking observations or administering medication) can be effectively monitored ward by ward. However, patient pathways will typically include more than

¹⁵ https://www.kingsfund.org.uk/publications/leadership-engagement-for-improvement-nhs

one ward or unit, and linking outcomes directly to a single ward or unit is often not possible.

5.1 Measure patient outcomes, people productivity and financial sustainability

The Children and Young People's Services Safety Thermometer¹⁶ is a national tool designed to measure commonly occurring harms, and focuses on deterioration, extravasation, pain and skin integrity. It is a point-of-care survey carried out on a single day each month, and information can be used to improve patient care and patient experience. It prompts immediate actions by healthcare staff, and integrates measurement for improvement into daily routines. Ideally safety thermometer data should be compared with staffing data on the day in question, so that underperformance can be related to staffing numbers and skill mix.

5.2 Report, investigate and act on incidents

NHS providers should follow best practice guidance when investigating all patient safety incidents, including root cause analysis for any Serious Incidents. As part of this approach, providers should consider any staff capacity and capability issues identified, and act accordingly. NHS Improvement is seeking views on how guidance could be revised to support the system to respond appropriately when things go wrong. The engagement period will close on 12 June 2018 and responses will be used to shape a new Serious Incident Framework¹⁷.

NHS providers should actively encourage all staff to report any occasion where a less than optimal level of suitably trained or experienced staff led to patient harm, or seems likely to have done so. Professional judgements must be made about patient

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¹⁶www.safetythermometer.nhs.uk/index.php?option=com_content&view=article&id=40&Itemid=423

¹⁷ www.improvement.nhs.uk/resources/future-of-patient-safety-investigation/

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 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.¹⁸ There should be policies¹⁹ to support staff who raise concerns.

Managers should ensure that incident and quality reports, feedback and learning from incidents and mortality reviews are acted on, and any learning shared.

Staffing gaps may be identified and notified to the trusts from;

- CQC reviews
- feedback from regulators
- HEE quality visits
- NHS Improvement diagnostic reviews
- specialised commissioning visit reports
- peer review process.

If these methods identify any shortfalls, plans must be produced to address the issues and maintain safety.

5.3 Patient, carer and staff feedback

The views of children and young people, families, carers and staff provide vital insight into staffing capacity, capability and morale. This will enable organisations to better understand the actual and perceived levels of staff and their effectiveness.

www.nmc.org.uk/standards/guidance/raising-concerns-guidance-for-nurses-and-midwives

¹⁹ <u>www.nhsemployers.org/your-workforce/retain-and-improve/raising-concerns-at-work-and-whistleblowing</u>

Organisations should consider findings from incident and Serious Incident investigations alongside the suggested quality indicators listed below:

This feedback can be gained in ways such as:

- complaints and compliments
- direct care rounds by the nurse in charge
- patient stories
- local surveys
- Friends and Family Test
- patient experience walk rounds
- feedback apps
- focus groups.

Organisations need to be aware of feedback from regulators and agree through their governance processes their formal actions in response. These may include:

- feedback from CQC inspections
- HEE quality visits²⁰ (includes views of preregistration and medical trainees)
- NHS Improvement diagnostic reviews
- clinical commissioning group reviews
- peer review process.

Equally, staff can provide vital feedback about the working environment through:

- staff satisfaction surveys
- General Medical Council trainee feedback/undergraduate student feedback
- exit interviews
- · recruitment and retention statistics
- vacancy rates
- sickness and absence levels.

https://hee.nhs.uk/sites/default/files/documents/HEE_J000584_QualityFramework_FINAL_WEB.pdf

²⁰ HEE Quality Framework:

Concerns highlighted by patients or staff using any of these methods must be carefully scrutinised and addressed.

5.3.1 Culture

Do not underestimate the importance of the organisational and ward-level culture. Supporting and developing workplace cultures that promote job satisfaction, career development and inclusive talent management are fundamental to successful recruitment and retention (Jones et al 2015; HEE 2016).

NHS England, NHS Improvement and other arm's length bodies produced the NHS leadership framework, *Developing people, improving care* (National Improvement and Leadership Development Board 2016). This evidence-based national framework has been designed to guide improvement skill-building, leadership development and talent management for people in NHS-funded roles. The framework emphasizes compassionate and inclusive leadership: leaders must pay close attention to all the people they lead, understand in detail the situations they face, respond empathetically and take thoughtful and appropriate action to help. The framework emphasises the importance of leaders creating appropriate cultures, explaining that:

"It means progressing equality, valuing diversity and challenging existing power imbalances. This may sound a curiously 'soft' and timeless leadership approach to prioritise when health and care services face unprecedented, urgent pressures. But compassionate and inclusive leadership is embedded in high quality, high performing systems because it is the right way to behave. Evidence shows it is also the right way to unleash people's full potential to improve care working with patients and service users, improve population health and wellbeing, and improve value for money."²¹

The framework focuses on helping NHS and social care staff to develop four critical

²¹ Developing people, improving care (NILD 2016) page 7.

capabilities:

- **systems leadership** for staff working with partners in local services on 'joining up' health and care systems for their communities
- **established quality improvement methods** that draw on staff and service users' knowledge and experience to improve service quality and efficiency
- inclusive and compassionate leadership, so that all staff are listened to, understood and supported, and that leaders at every level of the health system truly reflect the talents and diversity of people working in the system and the communities they serve
- talent management to support NHS-funded services to fill senior current vacancies and future leadership pipelines with the right numbers of diverse, appropriately developed people.

See Appendix 7 for a case study outlining cultural development to enhance staff engagement.

6. Conclusion

This improvement resource is based on NQB's expectations of safe, effective, caring, responsive and well-led care, on a sustainable basis that ensures the right staff with the right skills are in the right place at the right time. We designed it for all those involved in setting, approving and deploying clinical establishments; from the ward manager to the board of directors. We recognise the need for further research into the contribution of families, AHPs and the wider multidisciplinary team members' to care.

6.1 Future research recommendations

- More work is required to identify levels of support from individual AHP professions.
- Further work should be commissioned to explore recommended safe staffing levels for AHPs.
- The impact of parents and carers on staffing in children and young people's services should be further explored.
- The impact of children and young people and their workforce needs in the emergency department should be further explored.
- Community children's nursing should be further explored.
- Workforce implications for child and adolescent mental health should be further explored.

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9. Working group members

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Sally Shearer	Chief Nurse	Sheffield Children's Hospital
John Courtney	Former Assistant Chief Nurse – Nursing Workforce	Great Ormond Street Hospital
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10. Stakeholders consulted

Association of Chief Children's Nurses: consensus building workshops - March 2016 - September 2016 - December 20	 Alder Hey Children's Hospital Arrowe Park Hospital Birmingham Children's Hospital NHS Foundation Trust Bradford Teaching Hospital NHS Foundation Trust Bristol Royal Hospital for Children Buckinghamshire Healthcare Trust Chelsea and Westminster Hospital NHS Foundation Trust Chesterfield Royal Hospital NHS Foundation Trust Great Ormond Street Hospital NHS Foundation Trust Hampshire Hospitals NHS Foundation Trust Jersey General Hospital Kings College Hospital Lewisham and Greenwich NHS Trust London Southbank University NHS England North Manchester General Hospital Nortingham NHS Foundation Trust Oxford University Hospital NHS Foundation Trust Portsmouth Hospital NHS Trust Royal Alexander Children's Hospital, Briton Royal College of Nursing Royal Free London NHS Foundation Trust Royal Manchester Children's Hospital Sheffield Children's Hospital NHS Foundation Trust Southampton Children's Hospital Southend University Hospital Foundation Trust Southend University Hospital Foundation Trust Sussex Community NHS Foundation Trust Sussex Community NHS Foundation Trust The Derbyshire Children's Hospital Walsall Healthcare NHS Trust Western Sussex Hospitals Wirral University Teaching Hospital BCH Scholars – Student Nurses, Child Branch
Telephone interviews	 24 CYP service providers were interviewed – some managed services on more than 1 site, often with different systems. Participants from all regions of England DGH Services only x 11 DGH plus Regional specialisms x 7 DGH plus Regional specialisms plus Trauma x 3 Standalone CYP hospitals x 3 With PICU x 10
Children Young People and Families	 BCH Young Persons Advisory Group (YPAG) 'Tea at 3' – Parents consultation

Student Nurse	 Youth club meetings Patient experience survey on what 'safe' staffing means to children and families Student Nurse, Child Branch - Birmingham City University and University of Birmingham
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