

Board of Directors

Date of Meeting 24th April 2013

Attachment

Report on safe staffing levels for our adult inpatient acute wards, including Midwifery and Evelina Children's Hospital

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Board of Directors

Date of meeting 24th April 2013

A paper prepared and presented by Eileen Sills, Chief Nurse & Director of Patient Experience

Report to the Board of Directors on the safe staffing levels for our adult inpatient wards, including midwifery and Evelina Children's Hospital

1.0 Introduction

There is now a requirement post the publication of the Francis Report, 2013 and the new nursing vision: Compassion in practice that all NHS organisations will take a 6 monthly report to their Board on the nurse and midwifery staffing levels and whether they are adequate to meet the acuity and dependency of their patient population.

This is not the first time that the Board of Directors have received a report from the Chief Nurse, the last one being in the summer of 2012 following a full review of ward staffing levels by Price Waterhouse Coopers, which led to an increase in 30 wte for our acute medicine and elderly care wards, a mix of qualified and unqualified staff.

For the purpose of this report it will focus on ward based staffing levels in the acute directorates, midwifery and Evelina Children's hospital, two further reports will be presented in the summer of this year which will cover the community workforce and the nurses and midwives who are non ward based. The reason for this is that further work in these two areas is underway.

2.0 Background

- 2.1 There is a greater focus now on ensuring that Trusts have the right size and shape of its nursing & midwifery workforce to meet the needs and expectations of its patients. Evidence which wasn't always available can now directly attribute failings in care and increased mortality rates to poorly staffed wards. Evidence also suggests that poorly staffed wards increase staff sickness, burnout and reduce staff well being all which have a direct consequence on outcomes of care, including experience. It isn't however just about the numbers of staff. Other factors which underpin safe dignified care include strong, empowered leadership at ward level, resources directed at supporting the ward leaders and the development and use of clinical and patient experience metrics.

- 2.2 The Trust has always taken its staffing levels of its wards very seriously, not just in terms of the need to grow the workforce in key areas but to also readjust its skill mix as it recognises that in recent years many areas have had near 100% qualified workforce. Over the past 8 years we have learnt a considerable amount about how to plan and ensure we have the right size and shape of the workforce, using a range of approaches which support the professional judgement of our staff. This has enabled us to safely adjust our skill mix and introduce a greater number of trained Nursing and senior Nursing Assistants. This is essential as we balance the need for safe care, delivered by competent practitioners against the current economic climate.

3.0 Our approach to assuring safe staffing levels on our adult wards

- 3.1 As far back as 2001 the Audit Commission recommended that establishment setting regardless of the method must be simple, transparent, integrated, benchmarked and linked to ward outcomes. There is no one recommended method but the utilisation of a range of approaches from using an acuity based tool which measures patient dependency, to a crude staffing ratio per bed model, supported by the professional judgement of the ward leader and their seniors. In addition the establishments must have built within them uplifts which enable the compliment of staff to absorb annual leave, short term sickness and study leave without the need to use temporary staff.
- 3.2 Within GSTT we use a number of methods to set ward establishments. Firstly we use the 'The Safe Nursing Care Acuity Tool', this measures the individual dependency of patients and uses generic multipliers to calculate the staffing required. Each ward is expected to record the acuity of the patient daily both on the patient status at a glance board and also on the electronic system. The electronic system enables us to have an overview of any ward whose acuity exceeds 10% of the staffing establishment. Notification triggers are sent to the senior nursing teams and a review of the dependency and available staffing takes place. An example of the data recorded is set out in appendix one which shows the acuity recording for a medical and a surgical ward for the month of February 2013.
- 3.3 We don't just use the acuity tool in isolation as experience tells us that acuity is often higher than the staffing levels, but adjustments don't need to take place as both the seniority and experience of staff on duty enables them to manage safely. Therefore when reviewing establishments it is important to take into account the skill mix, and strength in ward leadership. A ward leader must have an adequate number of deputies who can ensure safe, effective care throughout the 24 hour period.
- 3.4 Determining the skill mix between qualified and unqualified staff is not an exact science and requires a very good understanding of the patient population and nursing requirements to determine how many qualified staff versus unqualified staff can be safely deployed per shift. The RCN recommend as a minimum 65:35 split, but this is becoming increasingly difficult to achieve with many Trusts aiming for a 70:30 split if not higher. This is due to the increasing complexity of care, for example medication regimes and the number of intravenous drugs now given. Within GSTT many of our wards have reduced their skill mix from 100% qualified to 80:20 split if not in some cases lower. The decision to do this is taken with the ward team and signed off by the Chief Nurse. The one area that has seen a growth in its skill mix in recent years is acute medicine and elderly care, due to a sustained increase in the acuity and complexity of the patients admitted.

- 3.5 Last year Price Waterhouse Coopers supported us in developing a ward calculator, which enabled each ward to set its staffing levels per shift and to calculate for each ward the individual uplifts required to ensure the budget was set accurately. This exercise has been repeated as part of this years business planning. This is then tested against the numbers of patients a nurse would be allocated per shift and the available nursing hours per bed day.
- 3.5.1 There is currently no national recommendation on the number of patients per nurse. However in a recent European wide study 'RN4Cast' Professor Peter Griffiths is reported as saying that a 1:8 ratio would be unsafe and should be reported as a patient safety incident. Therefore in reviewing our establishments and the current acuity we would not want to go above 1:5 on average throughout the 24 hour period. This detailed review has highlighted that at present It is difficult to provide an accurate picture of the nurse to patient ratio's as this is also influenced as to how the ward sister organises her ward, and how patients are allocated. Therefore in the summer a further piece of work will be undertaken to understand the methods in place around patient allocation.
- 3.6 Following completion of the individual ward reviews this has been followed up by individual discussions with the Ward Sister/Charge Nurse, Head of Nursing and Chief Nurse to review the proposed establishments for the coming year and their current clinical indicators and patient experience performance. This has culminated in a final sign off, of the current ward establishments. With recognition that following the sign off of business plans or should the acuity or bed base change then these will be reviewed and as necessary readjusted. Appendix 2 sets out ward by ward the current establishments for 2013.
- 3.7 For the first time this year the directorate management teams were also asked to provide an assurance statement to the Chief Nurse that they felt their staffing levels were safe. All directorates have returned these statements and set out below is their assurance position.
- **Abdominal Medicine & Surgery** – within their funded bed base they have made a positive assurance return. However they have raised concern when their closed beds are opened regularly. They are attempting to address this as part of business planning. In addition within renal services they know that they can make progress to reducing their skill mix in some areas and workforce plans are being developed to address this.
 - **Acute Medicine** – within their funded bed base they have made a positive assurance statement, however it is recognised that out of hours they do not have control over closed beds being opened and the placement of patients. In these cases the directorate may need to adjust staffing levels accordingly.
 - **Cardiovascular** – cardiac: they have requested an increase in the ward establishments to manage the increasing acuity of their patients and support their ward sisters being supervisory. If this is supported then they will be able to provide a positive assurance statement, with the same caveat as both directorates above in terms of additional beds being opened. A further review of these establishments is to be undertaken. A positive position has been returned for the vascular wards
 - **Oncology, Haematology & Thoracic** – have provided a positive assurance statement with the caveat about out of hours opening of beds and placement of patients.
 - **Surgery** – they had provided a positive assurance statement.

- **Gynaecology** – a positive assurance statement has been received if the bed base remains within the funded establishment. As with the other directorates should their 4 closed beds be opened then the directorate cannot assume safe staffing levels unless adjustments have been made.

- 3.8 Although the establishments are set based on average acuity and occupancy there are times when additional staffing levels are required to 'special' patients and provide 1:1 observation. For example this would be to prevent a high risk patient from falling, patients sectioned under the mental health act, patients at risk of wandering or the acutely unwell patient who is unable to step up into an HDU bed. The use of specials is both a financial and quality burden on the ward as often they have to rely on the use of bank or agency staff, as these are often unpredictable short notice bookings. Although inpatient services employ a pool of staff this is inadequate to meet the needs of the organisation. Last year we spent £1.3 m on RMN and HCA specials and a case is currently being considered to employ our own pool of trained Senior Nursing Assistants to reduce the need for qualified RMN agency staff. This would reduce the cost pressure by 50% and improve the continuity and consistency of care.
- 3.9 Ward Supervision – In addition to ensuring that we have the right number of staff on duty it is also essential to ensure the ward leader is able to manage and supervise. The role is impossible if he or she is included in the patient allocation per shift. The Francis report recommendations make it clear that this is essential if you want to ensure the delivery of safe high-quality care. The supervisory role is about having the time to lead, support the staff and act as a role model and be visible to patients and staff. It is not a role which is to be based in the office. We have invested in the majority of our ward establishments, the requirement for our ward leaders to be in a supervisory role. With the clear expectation that they are clinically very visible. In the past 12 months we have put all of our ward leaders through a development programme to support this change. The cardiovascular directorate is waiting for the outcome of business planning to ensure the remaining 3 sisters on their cardiac wards are supervisory. This will then mean that 100% of our ward sisters are funded in a supervisory position. It is important to note that although this investment has been made we cannot always guarantee a ward sister can operate in a supervisory way if there are gaps on the rota due to unplanned absences.
- 3.10 Supporting our unqualified workforce – as we grow our unqualified workforce it is absolutely essential that they are fully supported, supervised, trained and feels part of the nursing team. We have put a framework in place which enables us to grow the number of unqualified staff who will now be known as Nursing and Senior Nursing Assistants to reflect their contribution to the whole nursing team. We have a new set of updated competencies, access to Diploma level 2 & 3 training and all directorates as part of their assurance statement have confirmed that their Nursing Assistants have been inducted are working towards completing their updated competencies and have had or have a date for their appraisal. We will also by May of this year have a central register of the training completed by this part of our workforce.

4.0 Our approach to ensuring safe staffing levels within Evelina

- 4.1 The workforce requirements for the Evelina Children's Hospital (ECH) are calculated using 2 tools. The RCN guidance "Defining Staffing Levels for Children's & Young People's Services"(RCN; 2003); which defines staffing levels for Neonatal and Paediatric Intensive Care services as well as specialist children's wards. This document is used by all the Specialist Children's Hospitals and is currently being reviewed. The updated guidance will be published in spring 2013. We also use

PANDA (Paediatric Acuity & Nursing Dependency Assessment tool) to score patient's acuity twice a day.

- 4.2. Within ECH the majority of our patients are managed using 1 nurse:3 patient's ratio or a 1 Nurse:2 patient's ratio if they require high dependency care. Within our Paediatric Intensive Care unit our ratio is 1:1. All of which are in line with RCN national guidance as discussed above. Within our Neonatal Unit, on neonatal intensive care (NIC), we do not meet the BAPM (British Association of Perinatal Medicine) standard of 1 nurse:1 baby for all our NICU cots. However, for the most recent service developments we have staffed our cots to meet these standards as we now see an increased number of very complex babies requiring 1:1 care. We would propose that future cot changes in this area be staffed at 1:1 ratio given the change in complexity of cases (i.e. Cardiac and complex surgical babies). This change in staffing levels to meet BAPM requirements is in line with practice in other large units nationally.
- 4.3 PANDA is an electronic tool based on the Department of Health criteria for paediatric high dependency and ward intensive care. The tool is used to score patients twice a day and to then calculate ward staffing levels based on RCN guidance as detailed above. We implemented the system in June 2012, however we identified that the system was categorising data inaccurately at the end of last year. It was over scoring HDU level therefore we have not been able to use the system to its full advantage. We have been working with Genysis and Great Ormond Street Hospital teams, who designed the tool to resolve this issue. We are currently re-testing the system and plan to go live later in April 2013.
- 4.4 Over the past two years we have reviewed our nursing establishment and skill mix to ensure that it is safe and in line with other specialist children's hospitals across the UK. Previously we had a 90-100% qualified; 10% unqualified workforce ratio. Review of other specialist Children's hospitals indicated that they had an average of 83:17 ratio. In 2010 we developed a workforce plan to make this change to our workforce over three years. This has enabled us to successfully introduce the Paediatric Senior Nursing Assistant role, and ensure that the new workforce is competent before we make changes to the qualified workforce. During this transition the budget has experienced a cost pressure which will now begin to reduce. The new role and course has been well evaluated and the second cohort will be starting in the spring 2013.
- 4.5 Within ECH, we have a team of Paediatric Nurse Practitioners who provide the senior nursing cover, bed management and specialist paediatric advice within the Trust predominantly out of hours. They lead the Paediatric Hospital at Night Team working very closely with Accident & Emergency to provide the specialist support required. This team is crucial to the operational functioning of ECH and the safety of patients throughout the 24hr period. Since the beginning of March 2013 we now have 2 PNPs on most shifts and we need to complete our recruitment to ensure that we have 2 on every shift. This enables them to review patients on discharge from PICU, as well as overseeing (with the medical teams) the complex medical and surgical patients in addition to the role as detailed above.
- 4.6 Over the last 2 months, one of the key challenges within ECH has been the number of vacancies and short term sickness. We currently have 56 vacancies, 37 of which are at Band 5 level. We have planned a series of recruitment campaigns over the spring and summer and are planning to look to recruit in Ireland to fill our more senior

posts within specialist areas.

- 4.7 The number of staff on Maternity leave is a constant challenge for the teams, across ECH, this equates to 5-7% of the workforce, but in some areas, it is as high as 10%, overall which equates to 30 posts across the children's hospital.
- 4.8 Given all the issues detailed above and assuming no further service developments or growth in activity the Directorate Management team has issued an assurance statement that staffing levels are safe.

5.0 Our approach to ensuring safe midwifery levels

- 5.1 The workforce requirements for the maternity unit have been calculated using a mix of 2 models, Birth-rate plus, supported by the more traditional method of calculating staff numbers based on ward activity and numbers.
- 5.2 Birth-rate plus is based upon the principle of providing one to one care during labour and delivery to all women, with additional hours being identified for the more complex deliveries. Where in adult services we undertake acuity recording daily, Birth-rate plus require the unit to record data for a period of 4 months, covering all aspects of midwifery care. In addition it also adds an additional 10% to the workforce requirements, which cover senior and expert midwifery roles. The outcome of the Birth-rate plus exercise at GSTT has identified that the ratio of midwives to women should be 1:27.5. It is currently 1:30 but at times of peak activity this ratio grows. It is recognised that 1:27.5 may be the absolute optimal number, that this is currently unaffordable. In addition NHS London had originally set a staffing ratio target of 1:28 for all midwifery units; this has now been revised to 1:30. Applying the 1:30 ratio consistently so that we can manage the peaks in activity will require us to grow by a 6.5 wte, however to fill the gap 3 'float' posts have been put in place.
- 5.3 There are further challenges within midwifery and that relates to the number of safe guarding cases, which often require additional specials and on average this equates to 4.94 wte Nursing Assistants, which is currently unfunded within the budget. It is hoped that this will be supported by the development of the Trust wide pool of staff trained to special patients with challenging behaviour.
- 5.4 A further challenge to this service is the average number of staff on maternity leave. On the Hospital Birth Centre this averages out at 11%, which is equivalent to 6.27 wte posts. These posts have to be backfilled and therefore there is always a significant cost pressure on the budget (refer to section 6.4)
- 5.5 Over the past 2 years the unit has successfully introduced the Maternity Support Worker; the post holders undertake a comprehensive training programme and are fully supported and supervised by their Midwives.
- 5.6 Given all of the issues above and with the ability to flex staffing levels as required the directorate management team have issued an assurance statement that staffing levels are safe.

6.0 Managing our staffing resource as effectively as possible

- 6.1 Effective recruitment – at present we have approximately 599 wte vacancies (from ESR) the majority at band 5. It is currently taking 16 weeks to recruit a nurse and the lack of a coordinated approach is hampering our ability to reduce the reliance on temporary staff and stabilise our workforce. There are a number of hotspots around vacancies in the Trust, Evelina and Critical Care having the biggest gaps. Evelina has a 31% shortfall across its 3 wards and Critical care has a 14.2% vacancy rate, although those in the recruitment pipeline reduce this to 5%, should all those offered jobs take up their posts.
- 6.1.1 To address this demand we have seconded a Matron into the Chief Nurses office to lead a Trust wide recruitment drive. She took up post on the 2nd April and her target is to appoint to all existing band 5 vacancies and to have a rolling recruitment programme to avoid the current shortfall being experienced again.
- 6.1.2 However this is reliant on the supply of appropriately trained nurses, and with the reduction in student nurse commissions within London there is real concern that within 12 months there will be a severe shortfall. This as the Board knows has been repeatedly raised at both London and a national level. At present we understand there are no plans to increase the number of commissions.
- 6.1.3 The Board through the workforce committee will be kept updated on our progress with recruitment.
- 6.2 Implementation of E-Roster – As a Trust we have invested in the implementation of an electronic roster system which will enable the effective allocation of staff to the shifts that are required to be filled. This will be fully rolled out across all inpatient areas by September. It is anticipated by improved rostering that the use of temporary staff will reduce, however it is difficult to identify by exactly how much. Those directorates that have already implemented the system have seen the benefits, one of which is a reduction in the amount of time it takes to complete the roster.
- 6.3 Reducing the use of temporary staff – our current use of temporary staff is too high, with on average £2.7m spend per month (£1.2m bank and £1.5m agency). This is due to the need to cover vacancies, maternity leave, sickness, increased acuity, additional Saturday working and additional beds being opened. We need to implement a range of strategies for this expenditure to reduce this year, including on going effective recruitment activities, establishment of a talent pool, appointing to a pool of staff to reduce the need for booking specials and reducing length of stay to reduce the need to open additional beds.
- 6.4 Managing maternity leave – The PWC review highlighted that on average we have 4% of our nursing & midwifery workforce on maternity leave at anyone time, this is currently unfunded within the ward budgets, therefore any member of staff going on maternity leave will lead to an immediate cost pressure at ward level. A solution needs to be found, as it is difficult to incentivise our ward leaders to manage their resources smartly when they are immediately starting with a financial deficit. The current overspend on the nursing budget this year equates to the financial gap generated by maternity leave.

7.0 Conclusion

We have undertaken a comprehensive ward by ward review of staffing levels to ensure they are staffed safely. This has also increased the understanding at ward level and all Ward Sisters and Charge Nurses have an understanding of their funded workforce resource, but that if required this will be adjusted to reflect the acuity and dependency of patients admitted. This will be reviewed every 6 months. This paper can assure the Board of Directors that it has safe staffing levels, however there is no element of complacency and there is a need to stabilise the workforce with an effective recruitment campaign and to ensure if the bed numbers increase that staffing is adjusted accordingly.

8.0 Recommendation

8.1 The Board of Directors is asked to:

- Review and be satisfied that the appropriate level of detail and assessment has been undertaken to assure itself that the inpatient wards, midwifery and Evelina are safely staffed
- To formally sign off the current staffing levels and to note that two further reports will be presented on the community workforce and non-ward based nurses.
- To note and support the further ward by ward review of how patient allocation takes place to maximise the effectiveness of the team on duty and ensure that patients are cared for safely and compassionately
- To note the challenges around recruitment
- To note the financial pressures experienced at ward level due to maternity leave

Eileen Sills CBE
Chief Nurse & Director of Patient Experience

24th April 2012

Appendix 1

Executive Dashboard: Acuity and Dependency

Ward: Northumberland
Recommended Establishment: 37.41
Funded Establishment: 25
Occupancy: 96.5

Occupancy.		50.5		Acuity Scores				Patient Flow							Staffing															
				Level				Adm.	Disch.	Trans In	Trans Out	Ward att	Deaths	Escorts	Registered				Reg. Bank / Agency				Non-reg.				Non-reg. Bank / Agency			
															E	L	LD	N	E	L	LD	N	E	L	LD	N	E	L	LD	N
Date	Beds	0	1a	1b	2	3	Daily Calculated								E	L	LD	N	E	L	LD	N	E	L	LD	N	E	L	LD	N
02/02/2013	27	10	9	7	0	0	36.22	0	1	0	0	0	0	0	0	0	7	5	0	0	1	2	0	0	2	1	0	0	2	1
04/02/2013	27	6	10	8	0	0	36.62	1	2	0	0	0	0	0	0	0	6	5	0	0	0	1	0	0	2	1	0	0	1	1
05/02/2013	27	9	11	9	0	0	42.55	4	5	0	0	0	0	1	0	0	3	3	0	0	3	0	0	0	1	0	0	0	2	2
06/02/2013	27	7	11	8	0	0	39.11	0	2	0	0	0	0	0	0	0	6	5	0	0	1	0	0	0	2	1	0	0	1	1
07/02/2013	27	6	8	5	0	0	27.64	3	5	0	1	1	0	0	0	0	7	5	0	0	1	1	0	0	2	2	0	0	1	1
09/02/2013	27	8	9	8	0	0	36.5	3	2	2	0	1	0	0	0	0	7	5	0	0	1	1	0	0	2	2	0	0	0	1
11/02/2013	27	9	9	8	0	0	37.29	2	1	0	0	1	0	0	0	0	7	5	0	0	0	0	0	0	3	1	0	0	2	1
13/02/2013	27	6	9	12	0	0	42.36	4	3	0	1	0	0	2	1	1	5	3	0	0	1	2	0	0	1	0	0	0	2	1
14/02/2013	27	10	8	8	0	0	36.38	3	1	1	1	0	1	0	1	1	6	5	0	0	2	1	0	0	2	1	0	0	0	1
15/02/2013	27	12	6	9	0	0	36.42	3	2	0	0	0	0	0	1	0	5	3	0	0	1	2	0	0	2	0	0	0	0	1
16/02/2013	27	10	9	8	0	0	38.08	2	1	2	1	0	0	0	0	0	7	5	0	0	1	2	0	0	1	1	0	0	0	0
18/02/2013	27	12	9	9	0	0	41.52	2	3	1	1	0	0	0	1	0	7	5	0	0	1	0	0	0	2	1	0	0	1	1
23/02/2013	27	13	1	12	0	0	34.29	0	0	0	0	0	0	0	0	0	7	5	0	0	0	0	0	0	2	1	0	0	0	0
24/02/2013	27	12	9	6	0	0	35.94	4	0	0	0	0	0	0	0	0	7	5	0	0	0	0	0	0	2	1	0	0	0	0
25/02/2013	27	11	9	6	0	0	35.15	0	3	0	1	0	0	0	0	0	7	5	0	0	1	1	0	0	2	1	0	0	2	1
26/02/2013	27	10	6	10	0	0	36.7	2	3	0	1	0	0	0	1	1	6	5	0	0	0	0	0	0	0	0	0	0	2	1
27/02/2013	27	7	7	11	0	0	37.89	2	2	0	0	0	0	0	0	0	6	4	0	0	1	1	0	0	0	1	0	0	1	0
28/02/2013	27	5	13	9	0	0	42.79	1	3	0	0	0	0	0	0	0	5	1	0	0	1	4	0	0	1	0	0	0	1	1
18	486	163	153	153	0	0		36	39	6	7	3	1	3	5	3	111	79	0	0	16	18	0	0	29	15	0	0	18	15
Multiplier		0.79	1.7	1.86	2.44	6.51																								
		128.77	260.1	284.58	0	0																								

Executive Dashboard: Acuity and Dependency

Ward: William Gull (STH)
Recommended Establishment: 46.53
Funded Establishment: 37.6
Occupancy: 95.6

Occupancy.		35.0		Acuity Scores				Patient Flow							Staffing																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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