Report to:	**Public Board of Directors**	**Agenda item:**	
Date of Meeting:	**4 May 2022**		

Title of Report:	**Annual Nursing and Midwifery Safe Staffing Report**
Status:	**For approval**
Board Sponsor:	**Antonia Lynch, Chief Nurse**
Author:	**Ana Gleghorn, Associate Director of Nursing and Midwifery for Workforce & Education**
Appendices	**Appendix 1: References** **Appendix 2: BirthRate Plus Final Report**

1. Executive Summary of the Report

The purpose of this paper is to provide the Board of Directors with an assessment of the Nursing and Midwifery staffing levels at Royal United Hospitals Bath and assesses compliancy with Developing Workforce Safeguards (NHSI 2018) which builds on the National Quality Board (NQB) standards and the National Institute of Health and Care Excellence Guidance (DH 2014).

This paper provides an account of the process used to review staffing levels, the findings of the review and outlines the actions required by the Trust to right size the nursing workforce across the 23 wards, the Emergency Department (ED) and Maternity services.

The paper is split into two sections:

1. Nursing - advises on the findings of the review and demonstrates a requirement for additional Registered Nurses across the Trusts current adult and paediatric inpatient wards and the Emergency Department to meet the advised safe registered nurse to patient and skill mix ratio.
2. Midwifery – advises of the outcome of the BirthRate Plus review undertaken in 2021 and is reported in a way that complies with Safety Action 5 of the Maternity Incentive Scheme (MIS) and Immediate and Essential Actions from the Ockenden report 2020.

The anticipated outcome of this rightsizing will deliver a significant reduction in patient harms and patient complaints whilst having the additional benefits of staff wellbeing and a reduction in staff sickness and turnover.

2. Recommendations (Note, Approve, Discuss)

- The Board of Directors is asked to approve this report.

3. Legal / Regulatory Implications

It is a legal requirement to comply with the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014 (Part 3). Regulation 18 (staffing) sets out the requirement for sufficient numbers of suitably qualified, competent, skilled and experienced staff.

4.	Risk (Threats or opportunities, link to a risk on the Risk Register, Board Assurance Framework etc.)

Nursing and Midwifery workforce risks:

- 2075 – Patient safety could be affected by inadequate medical and nursing staffing in the ED and Urgent Treatment Centre (UTC)
- 2195 – Nursing/Midwifery patient ratios are being compromised through the unavailability of staff due to sickness/maternity/annual leave & vacancies
- 2220 – Patients safety may be compromised through insufficient paediatric trained nurses in ED
- 2134 – Inadequate registered nursing workforce to provide safe and timely chemotherapy due to vacancies (William Budd & Haematology Day Case)

5.	Resource Implications (financial / staffing)

The additional cost of increasing staffing to a safe level is significant; for the Trust to continue moving towards a financially sustainable position a funding source needs to be identified to cover this cost. The paper details the proposed approach to achieving this.

6.	Equality and Diversity

Compliant with the Equality and Diversity Policy.

The Trust has an Inclusion Nurse working within the Nursing and Midwifery Recruitment and Talent Management team to improve the Trust's ability to recruit from the widest possible talent pool, and support and champion the diversity of the existing workforce.

7.	References to previous reports

- Safer Staffing Report - March 2021
- Safer Staffing Report - September 2020
- Nursing and Midwifery Establishment Review – Private Board of Directors January 2022
- Nursing and Midwifery Establishment Business Case – Private Board of Directors March 2022

8.	Freedom of Information

Public.

Nursing and Midwifery

Safer Staffing Report

1.0 Introduction

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1. Nursing - this paper advises on the findings of the review and demonstrates a requirement for additional Registered Nurses across the Trusts current adult and paediatric inpatient wards and the Emergency Department to meet the advised safe registered nurse to patient and skill mix ratio.
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The anticipated outcome of this rightsizing will deliver a significant reduction in patient harms and patient complaints whilst having the additional benefits of staff wellbeing and a reduction in staff sickness and turnover.

2.0 Background

2.1 Evidence has shown there is a direct correlation between the Registered Nurse (RN) to patient ratio and the occurrence of adverse events (Murphy et al 2021) and the increased risk of inpatient mortality (Musy et al 2021).

Furthermore, an economic model found, increasing the number of RNs delivered better outcomes with a net decrease in cost because of reduced hospital stays (Griffiths et al, 2018). A later study found for every additional hour of RN care available during the first 5 days of their hospital stay, the risk of death was reduced by 3% (Griffiths 2019). Reducing mortality is not the only benefit of increasing nurse staffing; studies have shown correlation between nurse staffing levels and patient outcomes. Shang et al (2019) found the risk of health care acquired infections increased by 15% when patients were exposed to low staffing levels and concluded that while healthcare support workers have an important part to play in maintaining the safety of patients, they cannot act as substitute for registered nurses.

3.0 Nursing Establishment Review

3.1 Inpatient Departments

3.1.1 The following robust process was applied to undertake the nursing establishment reviews to assess safe staffing levels in line with NQB (2016) and DWS (2018) guidance:

- The reviews were led by the Associate Director of Nursing and Midwifery for Workforce and Education, supported by the Divisional Finance Manager.
- A data set was compiled to provide an evidence base on which to assess ward establishments as detailed in table 1.

- Each ward was met with individually and represented by their Ward Senior Sister/Charge Nurse, Matron and Divisional Director of Nursing/Midwifery. Clinical Leads, Speciality Managers and Human Resource (HR) Business Partners were also invited to attend. This allowed for professional judgement to be applied which included:
    - Ward purpose
    - Ward geography and layout
    - Patient acuity and dependency
    - Any specialist care requirements which impact on the time taken to provide care i.e., Infection, Prevention and Control (IPC)
    - Any staffing standards required for specialist wards i.e., Acute Coronary Unit, Acute Stroke Unit.
- The outputs of the establishment reviews were analysed by the Chief Nurse and further work was required to ensure they met the principles of safe staffing and recommended guidance was applied.
- A sign off was undertaken by each Divisional Director of Nursing/Midwifery.
- Final sign off by the Chief Nurse.

3.1.2 Areas excluded from this review:

3.1.2.1 Critical Care

The Critical Care Unit was commissioned to provide 13 beds prior to March 2020. During the pandemic a second 14 bedded unit was built with the appropriate facilities to manage patients with COVID-19. The Trust is currently reviewing the longer term, sustainable model for Critical Care which will need to include a review of the establishment once the size and location is agreed.

Critical Care now operate out of two units (on separate floors), one for non-COVID-19 and one for COVID-19 patients. The unit is staffed to 16 beds at a ratio of Level 3 - 1: 1 RN: Patient ratio, Level 2 – 1: 2 RN: Patient Ratio as recommended by the British Association of Critical Care Nursing.

During previous waves of COVID-19, like many other Trusts, the Trust had to derogate nurse staffing levels to manage demand resulting in ratios of Level 3 – 1: 2 RN: Patient Ratio and Level 2 :1 3 RN: Patient Ratio. It has been necessary to derogate nurse staffing levels over recent weeks to manage the volume of patients in Critical Care and to provide support to the Respiratory Unit caring for patients on Non-Invasive Ventilation (NIV).

It is probable the Trust will be required to derogate Critical Care staffing ratios to manage any future surge in COVID-19.

3.1.2.2 Theatres

The new Theatre Manager will lead this review as part of phase 2; it is anticipated that the Trust will work across the Bath, Swindon and Wiltshire Integrated Care Service (BSW ICS) to create underpinning principles for the theatre workforce.

3.1.2.3 Outpatients

Staffing guidance and recommendations are not described for outpatient areas therefore these are typically based on professional judgement. The review will focus on demand, capacity (to enable and support elective recovery), knowledge and skills required by the workforce to determine the composition.

3.1.3 Data sets used to assess safe staffing

The following data sets were used to assess each establishment taken from December 2020 – May 2021.

Data sets used to underpin the establishment reviews
All workforce data including vacancy rate, turnover, sickness, appraisal, mandatory training compliance.
Workforce profiles including composition of staff (full time: part time split), length of service (to the Trust only), age and ethnicity profile
Staff Survey and Freedom to Speak Up information
Care Hours Per Patient Day
Safer Nursing Care Tool (SNCT) (Shelford 2013)
Patient outcome data including falls and health care acquired infections & other harms
Patient experience data including Friends and Family Test, Patient Advice and Liaison Service (PALS) and complaints
Professional judgement
Statistical analysis assessing the impact of fill rates (a proxy for nursing staffing levels) on patient and workforce outcomes

Table 1: Data sets used to underpin the establishment reviews

3.1.4 Principles of safe staffing

The key principles which underpin the nursing safe staffing review:

- The establishments in acute ward areas should be at a minimum of 65%:35% - registered nurse to healthcare support worker ratio (RCN)
- The Registered Nursing Associates should be included as healthcare support worker staffing cohort (SNCT).
- The ward co-ordinator to be included in the overall ward establishment but excluded from the RN to patient ratio calculation (daytime only in general wards) – (accepted good practice professionally).
- The establishments should not be greater than 1 nurse: 7 patients in general wards (excludes assessment and specialist areas)
- The Senior Sister/Charge Nurse is supervisory (NICE)
- Headroom:
    - Adult inpatient wards – the Trust applies a 20% headroom across inpatient wards
    - Emergency Department - the review has applied the Royal College of Emergency Medicine recommendation of 27%
    - Paediatrics – the review has applied the Royal College of Nursing recommendation of 25%.

  A review of headroom across the Trust is recommended and will form part of ensuing reviews.

4.0 Correlation between Safer Staffing and high-quality patient and staff outcomes

A literature review and data analysis have been completed to test the relationship between safety, quality and staffing levels.

A full data set has been analysed to identify the statistical significance of the relationship between Registered Nursing staff levels and a range of patient data safety and quality indicators.

An analysis of staff feedback from the quarterly Making a Difference survey and NHS Staff Survey are also included.

The analysis of Trust information supports national research, that there is a direct correlation between nurse staffing levels and the risk of mortality for our patients (Musy et al, 2021).

4.1.1 Principle of the Analysis

Registered nurse fill rates (actual staff level versus planned staff level) and fifteen patient and staff quality indicators were analysed using Pearson's correlation, a test of linear correlation. This initial analysis was used to identify measures that display a strong or very strong correlation with nurse fill rates, either negative or positive. In one case, a moderate correlation has been included as it falls just below the category of strong correlation.

Pearsons Correlation Value	Significance	
.70 or higher	Very strong positive relationship	Inclusion Threshold
+.40 to +.69	Strong positive relationship	
+.30 to +.39	Moderate positive relationship	
+.20 to +.29	weak positive relationship	
+.01 to +.19	No or negligible relationship	
0	No relationship [zero correlation]	
-.01 to -.19	No or negligible relationship	
-.20 to -.29	weak negative relationship	
-.30 to -.39	Moderate negative relationship	
-.40 to -.69	Strong negative relationship	Inclusion Threshold
-.70 or higher	Very strong negative relationship	

Table 2: Detailing the significance of the Pearson's Correlation Value observed for each measure compared with nurse fill rate.

Using Pearson's regression, a positive correlation suggests that both analysed measures move in the same direction, either an increase or decrease. For example, a decrease in both nurse fill rate and staff appraisal rate is a positive correlation.

The inverse, a negative correlation, suggests that both analysed measures move in opposing directions. For example, a decrease in nurse fill rate and an increase in patient falls.

The relationship between nurse fill rate and the patient and staff safety and quality measures is also analysed using scatter plots and linear regression to ensure that the Pearson's correlation result reflects what can be seen in the pattern of the data.

The data used from January 2019 to December 2021 has been aggregated to a monthly level, in line with current Board reporting and to allow the work to be completed in a suitable timeframe. This aggregation has the potential to impact the analysis by 'flattening out' any in-day or weekly events. For example, if staffing levels are very low on a single day but at normal levels for the rest of the month then the impact of this event may not be identified. If patient safety measures deteriorated on a specific day, whilst they would still be captured, the correlation with staff level would appear to be less significant.

This does not render the correlations invalid but may cause them to appear less significant and some comparisons may not have been included in this paper as a result.

A further caution, the fill rate relates to the current establishments however the correlation between staffing levels and safety remains valid.

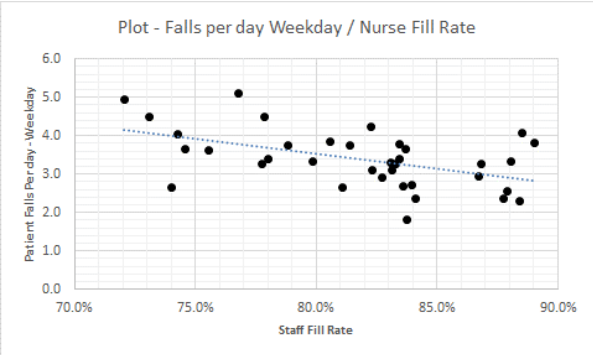
4.2.2 Benchmarking

The presented analysis also includes benchmarking for mortality indicators (HSMR) and compares the Trust to the Shelford Trust group and the 3 local Trusts (Great Western Hospitals NHS Foundation Trust, Salisbury NHS Foundation Trust, Yeovil Hospital NHS Healthcare).

4.3 Patient falls

Patient falls for both the weekend and weekday show a strong negative correlation when compared with nurse fill rate (-0.5, -0.41). From this we can observe that as the nurse fill rate increases patient falls decrease

and inversely falls increase as nurse fill rate decreases. This correlation is stronger for weekdays than weekends.



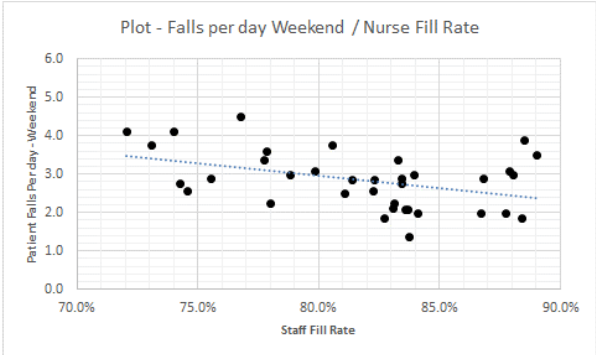


Table 3 and 4: Patient Falls compared to staff fill rates

The staffing ratios do not change across emergency driven bed base; however, the Senior Sister/Charge Nurse role does not provide 7 day a week cover, resulting in variable presence through the 7-day period. The weekday/weekend variation is most likely due to the ward-based activity being different, patients leave the ward for diagnostics/treatment/intervention requiring nurse escorts thereby reducing the nurse-to-patient ratio.

Patient falls is one of the proposed metrics to monitor the impact of this business case, set out in section 11.

4.4 Healthcare Associated Infections

Healthcare Associated Infections (HAI), including MRSA, MSSA, C-Diff, Ecoli, Pseudomonas, Klebsiella, COVID-19 show a strong negative correlation when compared with nurse fill rate (-0.45). From this we can observe that as the nurse fill rate increases, HAI cases decrease and inversely HAI increase as nurse fill rate decreases.

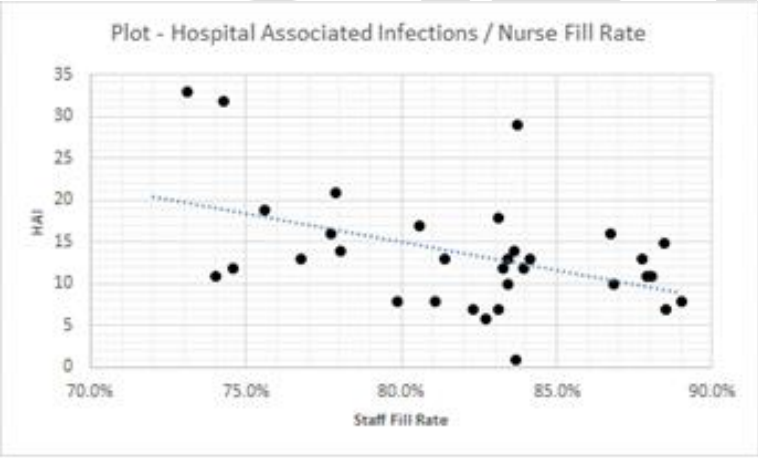


Table 5: Healthcare Associated Infections vs Nurse Fill rate

These findings are supported by the literature; Mitchell et al (2018) undertook a systematic review and overall, the results were consistent with a previous systematic review which found staffing to be linked to the risk of healthcare associated infection (HAI) acquisition. In particular, the use of temporary staffing and the increased incidence of HAI, which was explained by stating it was plausible that temporary staff were less familiar with ward routine and infection prevention strategies, may lack specific training and may not have the same level of communication with co-workers due to the inability to form established relationships.
HAIs are one of the proposed metrics to monitor the impact of this business case, set out in section 11.

4.5 Complaints

Patient complaints show a moderate negative correlation when compared with nurse fill rate (-0.35). From this we can observe that as the nurse fill rate increases patient complaints decrease and inversely patient complaints increase as nurse fill rate decreases (table 6).

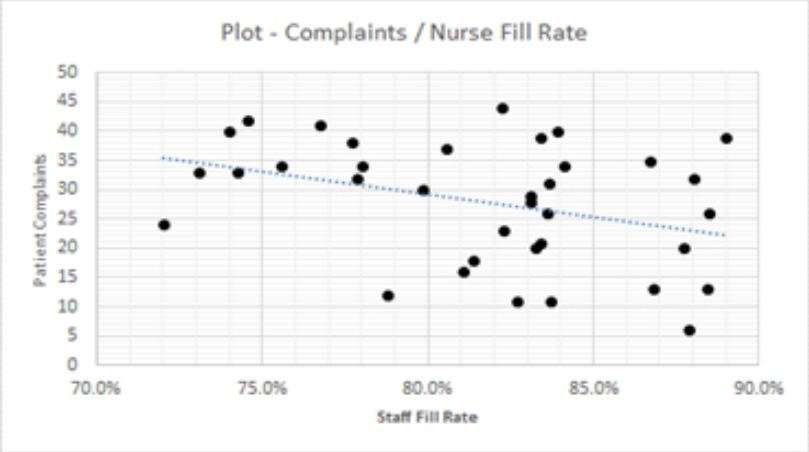


Table 6: Complaints associated with Nurse Fill rate

Patient complaints are one of the proposed metrics to monitor the impact of this business case, set out in section 11.

4.6 Mortality

The Hospital Standardised Mortality Ratio (HSMR) score is produced by Dr Foster Intelligence. This allows the Trust to review mortality performance in a way that can be compared and contrasted with other Trusts.

The HSMR score is worked out by looking at performance in the NHS and adjusting the mortality risk in a spell of patient care for risk factors such as their age, gender and health conditions. The HSMR uses risk models to provide the number of 'expected deaths' per Trust per month, compared with the number of actual deaths at the Trust. This helps to produce the level of risk, called the 'relative risk figure' for each Trust, which shows how each Trust performs against the NHS average. If mortality levels are higher in the population being studied than would be expected, the HSMR will be greater than 100.

The Trust reports the HSMR indicator every month, three months in arrears. In the most recently available information, there has been a continued improvement of within month HSMR to 97 as shown in table 7.

Table 7: HSMR (3-month lag)

Clinical Outcomes Group continues to commission deep dive reviews into reported contributors to changes in HSMR. This in turn informs the work of the Patient Safety Steering Group.

Musy et al (2021) found a direct correlation between nurse staffing levels and the risk of mortality but unlike other studies, their research looked at the impact of both lower and higher staffing. They found there was a 10% greater risk of mortality for lower staffed shifts and an 8.7% reduction in risk when shifts were better staffed.

In the Trust analysis, we have measured the Trusts mortality performance against the Shelford Group – a group of ten leading NHS Trusts in England, all of whom are understood to be broadly compliant with the staffing ratios set out in the nursing establishment review.

The funnel plot below highlights the Trust ranks 8th when the relative risk of death is compared to that for the Shelford Group Trusts. The Trust falls within the expected range of risk of death, however, is very close to the 95% confidence limit. All Shelford Trusts, with the exception of two, fall significantly below the expected range of risk of death.

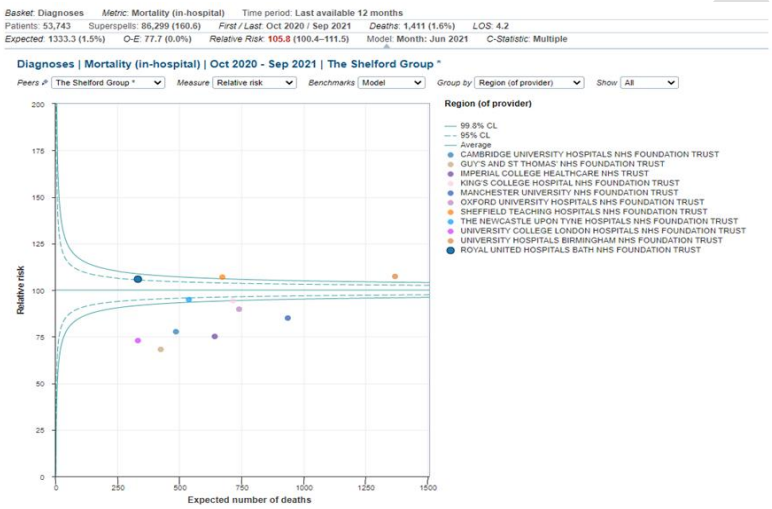


Table 8: Mortality rate in the Trust compared with the Shelford Group.

The funnel plot below shows the same dataset for the same group of Trusts but focuses on the weekend only. The Trust still ranks as 8th in this group, however, sits outside of the 95% confidence limit and outside the expected level of relative risk of mortality.

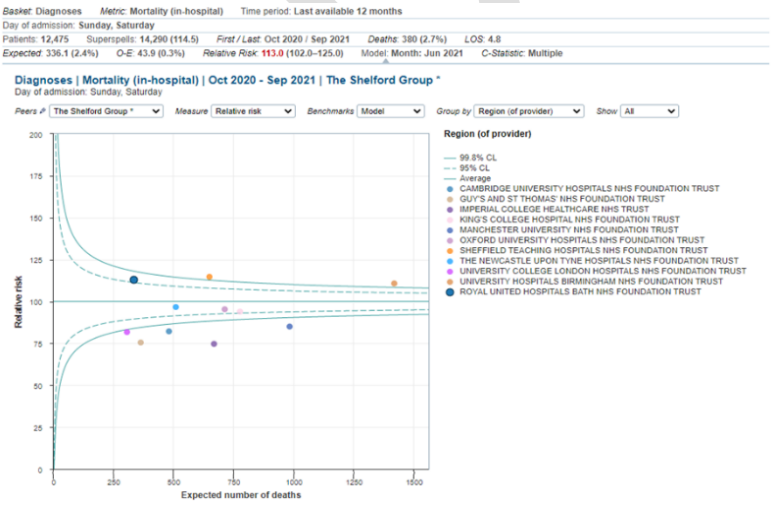


Table 9: Mortality rate in the Trust compared with the Shelford Group, weekends only

4.7 Staff Sickness

The data analysis also identified areas of strong or moderate correlation between staffing levels and improved workforce indicators:

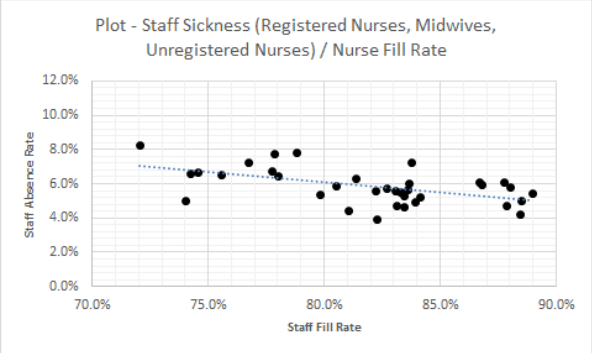


Table 10: Registered Nurse Sickness

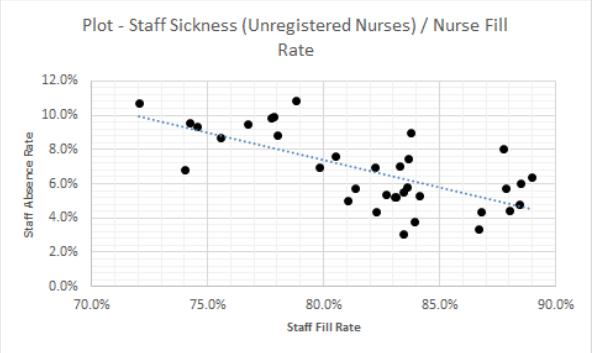


Table 11: Unregistered Nurse Sickness

Staff sickness rate shows a strong negative correlation when compared with nurse fill rate (0.54) as seen in table 10. A stronger correlation when sickness rate for unregistered nurses (a subset of the total sickness rate) is analysed is seen (-0.68) as seen in table 11. From this we can observe that as the nurse fill rate increases staff sickness decreases.

This is particularly true of the unregistered nursing group. Shin et al (2018) found a strong correlation between RN: Patient ratio and nurse burnout, an increase of one patient per RN was associated with a 7% increase in the odds of burnout. Furthermore, the same study concluded a similar correlation between RN: Patient ratio and job satisfaction, where job dissatisfaction increased by 8%, resulting in an increase in nurses intentions to leave.

In 2010, the World Health Organisation (WHO) included nurse staffing levels as a key element in the Positive Practice Environments (PPE) campaign in Health Care Services, stating safer staffing leads to higher retention rates and overall job satisfaction. Developing guidelines on nurse-to-patient ratio prevents adverse nurse outcomes and promotes nurses' health and well-being and an approach adopted by Wales in 2016 and Scotland in 2019. The Royal College of Nursing continues to campaign for nurse staffing laws in England and Northern Ireland.

Further analysis was carried out to focus on the staff sickness episodes where anxiety, stress & depression were given as the reason for the absence.

In 2018, Scottish Health Boards reported to lose more than 420,000 working days in 2017-2018 due to anxiety, stress and depression a rise of 17% on 2015-2016 and saw the Health and Care Staffing Bill as an opportunity to enhance staff well-being and patient safety.

Not all staff groups show a strong correlation between nurse fill rate and sickness due to anxiety, stress and depression, however, amongst the midwives a strong negative correlation can be seen (-0.46). Although absence rates are lower in the midwife staff group it can be observed that as midwife fill rate increases, sickness rate related to these reasons decreases.

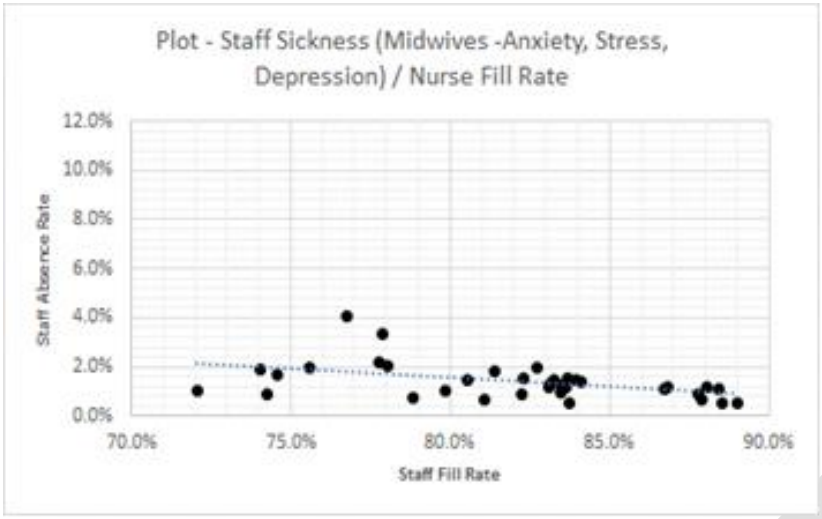


Table 12: Midwifery staff absence reported as anxiety, stress and depression

According to a recent survey published by the Royal College of Midwives (RCM), midwives are leaving the profession and the NHS due to understaffing and fears they cannot deliver safe care to women in the current system. The report also identifies burnout among midwives and all maternity staff being higher than previously experience, particularly as a result of the COVID-19 pandemic, with an increase in sickness absence adding to pre-existing shortage of 2,000 midwives in England alone.

There is a similar situation in nursing and in a 2020 survey, the Royal College of Nursing identified 91% of the nearly 42,000 respondents saying they're concerned about the wellbeing of those in the nursing profession generally, and 50% saying better staffing levels would make them feel more valued (second only to improved pay). A study by Sizmur and Raleigh (2018) which analysed data from NHS Trusts in England, found staff health and wellbeing was negatively affected by a workforce that is over stretched and supplemented by temporary staff.

Staff sickness is one of the proposed metrics to monitor the impact of this business case, set out in section 11.

4.8 Staff Appraisals

Staff appraisal rate shows a strong positive correlation when compared with nurse fill rate (0.68) and this is true of all staff groups. From this we can observe that as the nurse fill rate increases staff appraisal rate also increases.

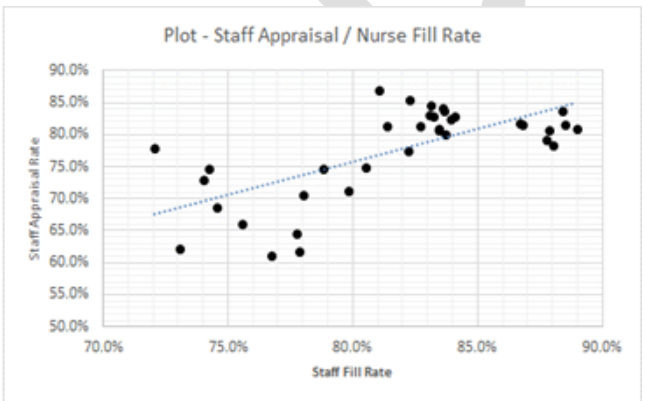


Table 13: Staff appraisal rate vs Nurse fill rate

4.9 Feedback from our staff

The findings detailed above demonstrate the link between staffing levels and key workforce indicators. Critically, feedback from our workforce strongly demonstrate the level of concern felt about staffing levels and the impact on their personal wellbeing and psychological safety, and the quality of care they can provide to our patients.

Staff appraisals is one of the proposed metrics to monitor the impact of this business case, set out in section 11.

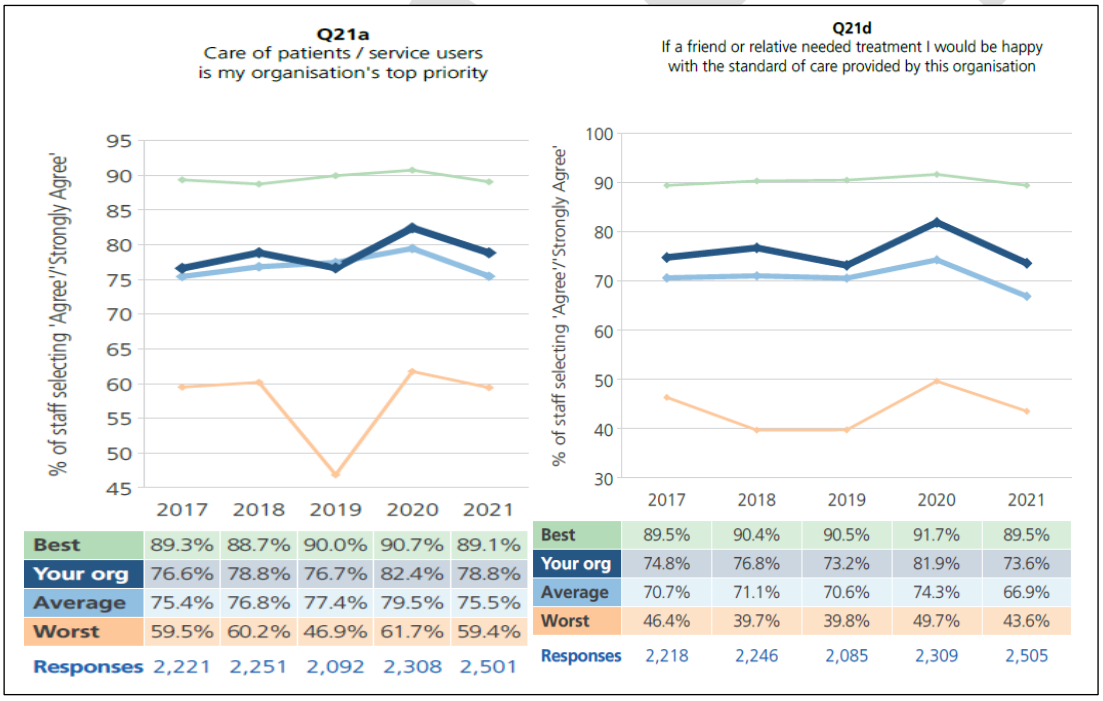
4.9.1 NHS Staff Survey

The annual NHS Staff Survey provides consistent feedback from staff over time, and allows the Trust to compare our outcomes to those of other NHS organisations.

For the last five years, the Trust has scored below average on indicators related care being an organisational top priority and satfication with the standard of care provided by the organisation, table 14 and 15.

Without investment these scores will not improve.

- *There are enough staff at this organisation for me to my job properly – from 35.1% to agreeing 22.9%*
- *I am able to meet all the conflicting demand on my time at work* - from 41.1% agreeing to 36.9%



	2017	2018	2019	2020	2021
Best	89.3%	88.7%	90.0%	90.7%	89.1%
Your org	76.6%	78.8%	76.7%	82.4%	78.8%
Average	75.4%	76.8%	77.4%	79.5%	75.5%
Worst	59.5%	60.2%	46.9%	61.7%	59.4%
Responses	2,221	2,251	2,092	2,308	2,501

	2017	2018	2019	2020	2021
Best	89.5%	90.4%	90.5%	91.7%	89.5%
Your org	74.8%	76.8%	73.2%	81.9%	73.6%
Average	70.7%	71.1%	70.6%	74.3%	66.9%
Worst	46.4%	39.7%	39.8%	49.7%	43.6%
Responses	2,218	2,246	2,085	2,309	2,505

Tables 14 and 15: Staff satisfaction score with the Quality of Care

As a staff group, registered nurses and midwives report a lower score than other staff groups for both safe and healthy (5.2 average score for felling safe and healthy indicators compared with 5.9 for the Trust as a whole), and for morale (5.3, compared with 5.8 for the Trust as a whole).

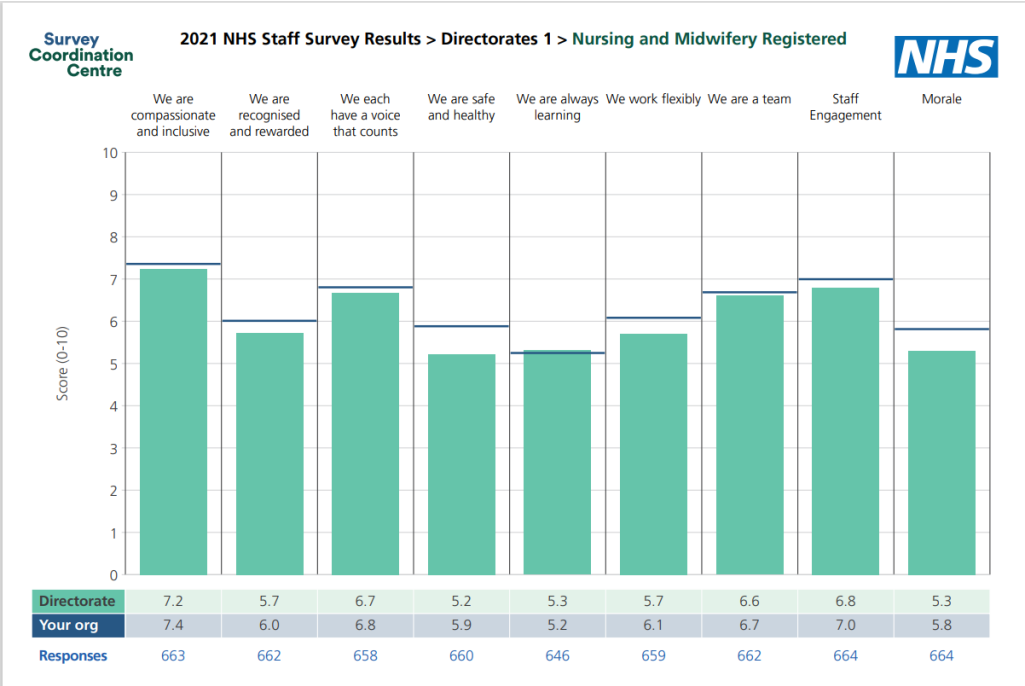


Table 16: 2020 Staff survey result for Nursing and Midwifery

Nursing staff morale is one of the proposed metrics to monitor the impact set out in section 11.

4.9.2 Making a Difference survey

Making a Difference is a nationally recognised model of engagement, which uses 64 questions to measure several key factors associated with levels of staff engagement, wellbeing and factors that are perceived by staff to enable or block their engagement. The model focuses on 16 enablers of engagement and wellbeing, including:

- Resources - The extent to which staff believe they have the necessary tools, training and equipment required to do their work
- Workload - The extent of job demands on staff and their ability to manage those demands

The outcomes of Making a Difference strongly correlate with the NHS Staff Survey, and point to a workforce with little resilience, compromised by skeleton establishment levels.

In the Q3 2021/22 survey:

- Resources and Workload were the lowest scoring enablers (table 17)
- Within Resources, the lowest score was for Enough Staff
- Within Resources, many staff comments described how staff felt under pressure and over worked, due to staff shortages in their area. Staff shortages were also a patient safety concern.

Regarding Workload, many staff commented on their inability to manage the growing demands within their job and the impact this had on their well-being. Many felt overwhelmed by the volume of work they had been facing. Workload was the second strongest predictor of well-being, after Work Life Balance.

Table 17: Enablers of Engagement and Well-being

The Making a Difference survey allows staff to make comments; many of the comments reflect the correlation demonstrated above between the impact of lower staffing levels on patients and on staff.

Making a Difference results are also available by staff group.

Within Registered Nursing as a staff group:

- Overall score is the second lowest of all staff groups
- Resources, workload and perceived fairness are the lowest scoring enablers, mirroring feedback from the Trust as a whole

5.0 Findings

5.1.1 Findings from inpatient wards

All 23 inpatient wards nursing establishments have been reviewed and required posts identified.

In total, an additional 70.35 Whole Time Equivalent (WTE) Registered Nurse/Midwife are required to meet safe staffing guidelines.

Overall, the Trust ratio is 53% Registered Nurses to 47% Healthcare Support Workers. The recommendation to fund the additional staff would bring the Trust overall ratio for the 23 wards to 65% Registered Nurses to 35% Healthcare Support Worker in line with the NHSE/I DWS (2018) guidelines.

5.2 Emergency Department

5.2.1 The Royal College of Emergency Medicine (RCEM) and Royal College of Nursing (RCN) (2020) highlight the importance of an appropriate ED workforce for providing safe, effective, high quality emergency care in a timely, cost-effective and sustainable manner.

5.2.2 ED Safer Nursing Care Tool

The Emergency Department Safer Nursing Care Tool was published in September 2021, developed by the Shelford Group Chief Nurses, licenced by Imperial College London and supported by the NHS England Chief Nursing Officer. This calculates nurse staffing requirement for Emergency Departments based on patients' needs (acuity and dependency). Together with professional judgement, the tool supports Emergency Department managers and Chief Nurses in their safe staffing decisions.

The Emergency Department (ED) Consultant Nurse undertook an establishment review underpinned by:

- The ED Safer Nursing Care Tool evidence*
- Professional judgement
- Benchmarking against other type 1 Emergency Departments
- Application of the recommendations from the RCN/RCEM (2020)
- Patient and workforce metrics and outcomes

*The assessment of Emergency Department staffing using the SNCT tool was undertaken in October 2021 following its publication in September 2021. The outputs of this review are featured in this report. Subsequently the Trust received a letter dated the 13th January 2022 from the regulators detailing an opportunity to undertake inter-reliability training. The Trust nominated three staff to attend the training and will repeat the SNCT audit as part of the next bi-annual establishment review.

5.2.3 - Benchmarking

Name of ED	Approximate numbers of patients seen per day	Staffing morning	Staffing afternoon/evening	Staffing Night
Trust 1	285-315	24+6	24+6	19+6
Trust 2	250-300	22+10	22+10	22+10
Trust 3	200-250	16+9	17+9	16+9
Trust 4	270	16+8	17+8	17+8
Trust 5	250-300	17+12	17+12	17+12
Trust 6	250	21+7	21+7	21+7
Trust 7	240-270	17+7	19+7	17+7
Royal United Hospitals	**250-300**	**13+3**	**14+3**	**13+3**
Trust 9	190	10+4	10+4	10+4
Trust 10	300-320	16+6	16+6	16+6

Table 18 provides staffing benchmark data from 9 type 1 Emergency Departments.

5.2.4 Findings

The required staffing levels in ED to promote safety and achieve operational efficiency have been calculated using 27% uplift as per the RCEM recommendations which supports the level of training and education to ensure staff have the right skills to provide safe care.

The recommended staffing in this paper addresses safety critical roles only and does not capture other roles that are required to meet RCEM recommendations including education roles, Advanced or Nurse Practitioner roles or medical staff. In total, 61.96 WTE additional staff are required to meet safe staffing guidance.

5.3 Paediatric Service

The paediatric service is split into three sections:

1. Paediatric Assessment Unit
2. Inpatient beds which include 2 non-commissioned high dependency beds
3. Outpatients

5.3.1 Paediatric Assessment Unit – the initial staffing and operating model provided a service between 0800 – 2000 hours, 5 days per week. Due to increasing demand this was extended to 24/7 from January 2018, however the staffing model did not change to reflect this change in service delivery. A 24/7 staffing model is included in this review and will require further dialogue with the Clinical Commissioning Group in relation to funding the service.

5.3.2 Inpatient beds – the Trust is not commissioned to provide high dependency for children, however where there is a requirement for high dependency care, the operational plan stipulates that two general beds should be closed to provide high dependency care, however in reality this does not happen due to demand. As the service is not formally commissioned, the HDU beds do not feature in the staffing model and staffing levels are flexed when acuity increases, thereby depleting other areas. Further work is required to agree the commissioning of the beds and the funding for the requisite staffing however the safe staffing model for current custom and practice is captured in this report.

5.3.3 The RCN: Defining staffing levels for children and young people's services (2013) details 16 minimum core standards for children's services to provide safe care delivery. The first phase of the service review has taken into account the minimum standards which pertain to paediatric inpatient beds and assessment units.

5.3.4 Findings

The proposed establishment does not include staffing of the paediatric outpatient area as the operating model is being reviewed. This will be included in the subsequent review of outpatient areas. In total, an additional 43.05 WTE are required on top of the current establishment in order to meet safe staffing recommendations.

5.4 Neonatal Nursing

5.4.1 To meet the recommendations set out in year four of the Maternity Incentive Scheme, the Trust is required to be compliant with the British Associate of Perinatal Medicine (2019) nurse staffing recommendations.

5.4.2 Compliance with the recommended guidance can be achieved through workforce redesign, however further recommendations are expected through work that is being undertaken by the South West Neonatal Network. Any recommendations will be reviewed in the next staffing review.

6.0 Total Investment Required

In total 175.36 WTE are required to meet the safer staffing guidance as described in table 19.

Investment Summary	Additional Staff	Composition	
	wte	HCA	RN
Inpatient Areas	70.35	-73*	70.35
Emergency Department	61.96	22.61	39.35
Paediatrics Inc PAU	43.05	4.72	38.33
Total	**175.36**		

Table 19: Investment Summary
*The reduction in HCA (73.0 WTE) will be replaced by an additional 73.0 WTE band 5 RNs

7.0 Maternity Services (reporting period 1st October 2021 – 31st March 2022)

7.1 To meet Safety Action 5 of the Maternity Incentive Scheme and the Ockenden review (2020), Maternity Services must demonstrate an effective system for planning the Midwifery workforce which must include:

- A systematic, evidence-based process is completed to calculate midwifery staffing establishment requirements
- The midwifery coordinator in charge of labour ward must have supernumerary status, defined as having no caseload of their own during the shift, to ensure there is oversight of all birth activity within the service
- All women in active labour receive one-to-one midwifery care
- Submit a midwifery staffing oversight report which covers staffing/safety issues to the Trust Board every 6 months, during the Maternity Incentive Scheme year four reporting period

7.2 The minimum evidence required to be seen by the Trust Board is listed below and will be explained fully within this paper.

- A clear breakdown of BirthRate Plus® (BR+)
- Details of planned versus actual midwifery staffing levels. To include evidence of mitigation and/or escalation for managing a shortfall in staffing
- An action plan to address the findings from the full audit or table-top exercise of BR+ or equivalent undertaken, where deficits in staffing levels have been identified
- Maternity services should detail progress against the action plan to demonstrate an increase in staffing levels and any mitigation to cover any shortfalls
- The midwife to birth ratio (MW:BR)
- The percentage of specialist midwives (non-clinical workforce) employed and mitigation to cover any inconsistencies. BR+ accounts for 8-10% of the establishment, who are not included in clinical numbers. This includes those in management positions and specialist midwives
- Evidence from an acuity tool (may be locally developed), local audit, and/or local dashboard figures demonstrating 100% compliance with supernumerary labour ward co-ordinator status and the provision of one-to-one care in active labour. This must include plan for mitigation/escalation to cover any shortfalls.
- Did COVID-19 cause impact on staffing levels?
    - Was the staffing level affected by the changes to the organisation to deal with Covid-19?
    - How has the organisation prepared for sudden staff shortages in terms of demand, capacity and capability during the pandemic and for any future waves?

7.3 BirthRate Plus

7.3.1 Maternity Services are under increasing scrutiny to improve the outcomes for birthing people and their babies following the publication of the Ockenden report.

7.3.2 Birth rate plus (BR+) is a nationally recognised framework for workforce planning and strategic decision making. It is based on an understanding of the total midwifery time required to care for birthing people/women and on a minimum standard of providing one to one midwifery care throughout established labour. The principles are consistent with the recommendations in the NICE Safer Staffing guidelines for Midwives in maternity settings and been endorsed by the Royal College of Midwifery and the Royal College of Obstetricians and Gynaecologists.

BR+ is the most widely used system for classifying women and babies according to their needs and using clinical outcome data to calculate the number of midwives required to provide intrapartum and postpartum care.

Birth rate plus has been used in maternity units ranging from stand-alone community/midwife units through to regional referral centres and is therefore an appropriate tool for the Trust to utilise.

Birth rate+ have applied 20% headroom for qualified and support staff with 15% added for community travel.

5.3.4 Delivering Midwifery Continuity of Carer at full scale – Guidance on planning, implementation and monitoring (NHSI 2021) details the ambition for Maternity Continuity of Carer (MCOC) to be the default model of care for maternity services and to be available for all pregnant people in England, with rollout prioritising those most likely to experience poor outcomes. The Local Maternity System (LMS) is required, by January 2022, to agree a local plan that describes how MCOC will be achieve; this must include putting building blocks in place by March 2022 to achieve the plan by March 2023. Subsequent to this, the final Ockenden report (2022) recommends a review of the implementation of MCOC and where required a cessation or pause to continued implementation until sufficient staffing levels are in place to implement safely.

Birth Rate+ undertook a review in August to October 2019 and repeated the review in 2021 acknowledging a change in staffing demand caused by the Continuity of Carer model.

7.3.5 The Birth rate+ have made several recommendations:

- To achieve a 50% Continuity of Carer model, an additional 23.02 WTE are required as detailed in table 20
- Birth Rate+ recommend reviewing the case mix and staffing requirement once 50% is achieved.
- To achieve 75% Continuity of Carer model they state a further 18.98 WTE are required (additional to the 23.02) detailed in table 21
- The report did not calculate the total workforce to achieve 100% compliance. The Chief Nurse is communicating with Birth Rate+ to understand why the report does not include this recommendation.

	Birth Rate Plus WTE	Current WTE	Variance
Total Clinical, Specialist and Management wte	205.15	182.13	-23.02
Postnatal Midwifery Support worker	18.82	17.88	- 0.94
Registered Midwives (band 5-8)	186.33	164.25	-22.08

Table 20: Summary of results

	Birth Rate Plus WTE Bands 3-7	Current WTE Bands 3-7	Variance
Core Services and with Continuity Teams at 75%	191.66	172.68	-18.98

Table 21: Staffing required to achieve 75% CoC

7.3.6 Funding has not been identified to fund the 23.03 WTE midwifery posts detailed in the BirthRate Plus report. The Chief is raising the issue of funding of maternity services with the LMNS.

7.4 Recruitment, retention and mitigating staffing shortfalls.

Mitigation to cover the 23.03 WTE deficit

7.4.1 Maternity services have appointed a Band 7 specialist midwife to lead on recruitment and retention, they will commence Q1 2022/23. A rolling recruitment campaign is ongoing and all students training within the services are offered (after interview) substantive band 5 posts on qualification. The Maternity Service is actively engaged with agencies to provide temporary staffing and have secured a midwife from overseas to cover the summer months. Over recruitment in the Maternity Care Assistant workforce is currently underway to support midwifery services.

7.4.2 The Trust is currently training and upskilling the Band 3 MSWs to undertake midwifery postnatal care. The role and remit of the MSW is outlined in detail by the Royal College of Midwives (RCM).

7.4.3 External funding from the Local Maternity and Neonatal System (LMNS) has created a Transformation Midwife post with responsibility for leading the Better Births Transformation programme. In addition, NHSE/I have provided funding for a retention lead midwife post and a clinical practice facilitator.

7.4.4 The Ockenden Report (December 2020) highlighted the need for all Trusts to have robust and strong leadership within maternity services, including a Director of Midwifery. There is currently a vacancy in the Director of Midwifery post however the Deputy Chief Nurse who is also a midwife has responsibility for this post. The Trust also has an ambition to introduce a Consultant Midwife in the near future. With this in mind, the maternity service is working in collaboratively across the South West Region to provide training for Consultant Midwives to secure a future pipeline for career progression in this role.

7.4.5 The services have appointed a Deputy Director of Midwifery which replaced the former Senior Matron role and provides direct operational leadership for the midwifery service.

7.4.6 When planning a midwifery workforce, BR+ include the requirement for Maternity Care Assistants (MCAs) on the Delivery Suite (Bath Birthing Centre), Outpatient Services and Ante/postnatal Wards to provide support to women and their babies. Maternity Care Assistants are not the same as Maternity Support Workers but are in addition to the calculated clinical establishments reported on in the BR+ audit and uses professional judgement, table 22 details the results of this assessment.

	Professional Judgement	Current WTE (band 2 & 3)	Variance
Midwifery Care Assistants	27.90	21.41	-6.49

Table 22: Summary of assessment

7.5 Variation in demand

7.5.1 In addition to the BR+ audit review as summarised above, the Trust are required to have procedures in place for monitoring and responding to unexpected changes in midwifery staffing requirements.

7.5.2 The Trust uses a real time acuity tools to monitor staffing requirements (BR+ intra partum and ward acuity tool). This enables the senior midwives, Matron and co-ordinating midwife in charge of Bath Birth Centre (BBC) to assess the workload arising from the number of women needing care and their dependency need on admission. It also enables evaluation of workload during the process of labour and birth.

7.5.3 On the inpatient ward it enables the midwife in charge to predict the workload over the next 6 hours by assessing current demands and/or upcoming care needs. The system is based upon an adaptation of the same clinical indicators for intrapartum care used in the well-established workforce planning system BirthRate Plus®.

7.5.4 The maternity service Matrons meet weekly with senior members of the midwifery team to plan and ensure safe staffing for the upcoming week. These meetings have been especially beneficial during COVID-19 where preparation for sudden staff shortages in terms of demand, capacity and capability have been implemented. The maternity escalation guideline has been revised and the maternity services now report the Operational Pressures Escalation Level (OPEL) status twice daily (Monday-Friday) to the Trust site team and out of hours when in OPEL 3 or above. The South West Maternity leads continue to meet weekly with the Chief Regional Midwife to discuss service continuity plans and potential need for mutual aid. Furthermore, with LMNS, the Matrons have a robust system in place to ensure, when capacity cannot meet demand, this is communicated locally to ensure any diversion of activity from one maternity service to another is undertaken safely with senior management involvement.

7.6 Data from BR+ Acuity tool

7.6.1 The data in the paper has been recorded using the intrapartum acuity tool and was collected during the COVID-19 pandemic. Maternity inpatient activity during this time did not reduce, the number of births has remained approximately the same, on average of 361 births per month (2,167 over the reporting period).

7.6.2 The Trust has seen an increase in acuity through a reduction by 1.2% in spontaneous vaginal births; an increase of 1.3% in women booking with a BMI between 40–49.9 and the total number of caesarean births, at 33.1%, has risen by 0.2% compared to the previous 6 months. Elective and emergency caesareans have together increased by 3.3% compared with last year's figures. This has had a direct impact on acuity levels across the whole maternity service. There has however been a reduction in induction of labour by 2.6%. Anecdotally, this increase in acuity is in keeping with regional and national trends.

7.6.3 Sickness levels, including staff absence from COVID-19 is approximately 9.49%, with on average 2.22% related to COVID-19 absence. This along with the requirement for pregnant staff to be in a non-patient facing role from 26 weeks gestation has had a significant impact on safe staffing. The service has an average of 11 WTE staff on maternity leave at any one time and is now recruiting substantively to permanently cover any shortfall.

7.6.4 The Maternity Service staffs BBC at a minimum of 80% of demand to ensure the peaks in demand can be met in line with NICE 2015. Maternity services over the last three months have been particularly affected by staff absence and gaps in qualified midwifery establishment figures whilst awaiting new starters to the Trust. Table 23 demonstrates staffing gaps against acuity.

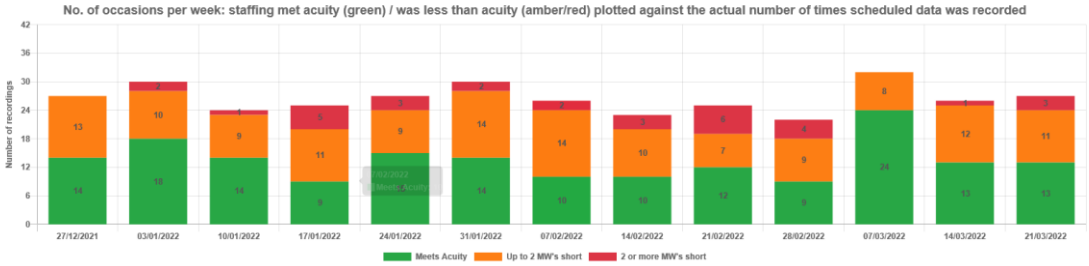


Table 23: Staffing v acuity 20/12/21 – 14/03/21

7.6.5 The community midwifery workforce and non-clinical midwifery staff were redeployed to the acute service to fill vacant shifts and meet acuity needs. To ensure one to one care in labour and safe staffing levels on BBC, MCOC has been suspended whilst a robust recruitment campaign is underway.

7.6.6 Community workload has not reduced, however it has been possible to rearrange non-urgent antenatal and post-natal appointments which enabled the redeployment of staff. For 4 weeks in December – January the community and home birth service has been suspended to enable staff to be redeploy to the acute centre in maintain safe staffing for women in labour.

7.6.7 The maternity escalation guideline was enacted on each occasion when workload or acuity necessitated it, enabling redeployment to BBC from internal (Mary ward and Day Assessment Unit) or community settings. Figure 1 shows that for 49.1% of the time BBC was at least 2 midwives below safe staffing levels during Q4 2021/22. COVID-19 staff absences were present and as mentioned earlier has been a contributing factor to the staffing levels during this timeframe.

7.7 Factors affecting Workload - BBC

7.7.1 Staffing Factors

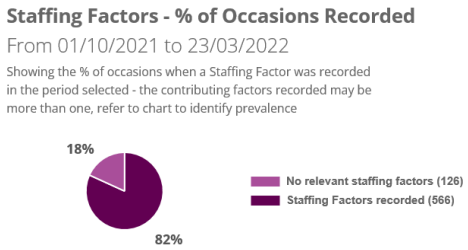


Figure 1. October 2021 – April 2022 pie chart of staffing factors recorded.

The staffing factors recorded during this time were: -

- Unexpected staff absence 177 (23%)
- Unable to fill vacant shifts 425 (55%)
- Midwife on transfer 4 (1%)
- Midwife redeployed to another area 10 (1%)
- No ward clerk available 70 (9%)
- No MCA on duty 37 (5%)
- No cleaner on duty 34 (4%)

7.7.2 Clinical actions are reported 4 hourly on Bath Birthing Centre. During October 2021 to April 2022 on 11 (2%) occasions the co-ordinator was not able to maintain supernumerary status. To rectify this situation rapidly, the senior midwife will inform the Maternity Matron/Maternity Manager on Call and instigate the Maternity Escalation policy.

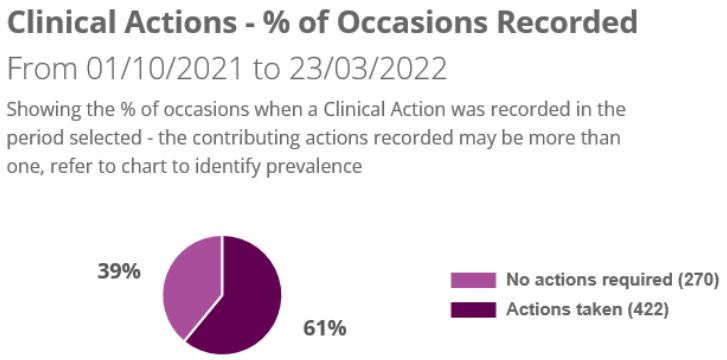


Figure 2. October 2021 – April 2022 pie chart of clinical actions recorded.

7.7.3 Other actions to maintain safety during peak activity and ensure the co-ordinator did not have a caseload during the shift were:

- Delay in continuing induction of labour/augmentation of labour (IOL) >4 hrs 306 recorded entries (48%)
- Delay in admission for IOL from home 204 recorded entries (32%)
- Delay in commencing IOL (inpatients) >4hrs 119 recorded entries (19%)

7.7.4 The following actions were also taken by the co-coordinating midwife on labour ward during times of escalation were:

- Redeployed staff internally 255 (43%)
- Redeployed from community 156 (26%)
- Management working clinically 12 (2%)
- Called in on call staff 127 (21%)
- Specialist midwives working clinically 6 (1%)
- Diverted care to neighbouring Trust 4 (1%)

7.7.5 Despite the above actions on 28 (5%) occasions, staff were unable to take a 30-minute break and during this period there were 2 occasions' when a midwife was not able to maintain one to one care and support in labour.

7.7.6 Midwife to Birth Ratio average over the 6-month time period is 1:32.45 (1:30.15 with bank cover factored in), BR+ recommend 1:27.

7.7.7 Within the maternity service, midwifery red flag events are recorded 4 hourly within the intrapartum acuity tool. Red flag events may be a warning sign that care could be affected, or something may be wrong with midwifery staffing, by monitoring this situation every four hours enables the senior team to be responsive and take action by prioritising care needs to ensure safety of service and to rectify and escalate concerns.

Number & % of Red Flags Recorded
From 01/10/2021 to 31/03/2022

RF1	Delayed or cancelled time critical activity EI LSCS delayed > 24hrs	3	1%
RF2	Missed or delayed care Perineal suturing > 60 mins 'Fresh eyes' CTG review delay > 60 mins Breast feeding not initiated within 60 mins	1	0%
RF3	Missed / delayed medication > 30 mins IV Abx Antihypertensives Anti-epileptics Glycaemic control Regular post op pain relief Requested ad hoc pain relief Anticoagulants / low molecular weight heparin	2	0%
RF4	Delay between presentation and triage > 30 mins	8	1%
RF5	Delay in admission for IOL from home (>24hrs)	178	32%
RF6	Delay in continuing IOL / Augmentation (> 4 hrs)	336	61%
RF7	Delay between admission for induction and beginning of process (In patient > 4 hrs)	23	4%
RF8	Delayed recognition of and action on abnormal vital signs (for example, sepsis or urine output)	0	0%
RF9	Any occasion when 1 midwife is not able to provide continuous one-to-one care and support to a woman during established labour	2	0%

Table 24. Red Flags recorded on Bath Birthing Centre.

7.8 Staffing Factors affecting Workload – Mary Ward

7.8.1 BirthRate Plus® have developed a ward acuity tool to proactively assess the clinical needs of women requiring inpatient admission against the staff available. The antenatal and postnatal ward acuity tool mirrors the picture recorded from the intrapartum acuity tool. A summary of the data from Mary ward is detailed in figure 3.

Figure 3: Staffing Factors on Mary ward

Number and % of staffing factors recorded during this period are:

- Unexpected Midwife absence/sickness 98 (24%)
- Unexpected MSW absences/sickness 36 (9%)
- Unable to fill vacant midwife shifts 135 (33%)
- Unable to fill MSW shifts 66 (16%)
- Midwife redeployed to other area 63 (16%)
- MSW redeployed to other area 7 (2%)

7.8.2 Delaying induction of labour is the main service interruption on the inpatient ward during the staffing factors was recorded 181 times (71%), but also includes delay in discharging families on 60 occasions (24%) from the ward.

As with Bath Birthing Centre, a number of actions have been taken to account for the staffing factors above to include:

- Redeploy staff internally 59 (30%)
- Redeploy staff from community 60 (30%)
- Specialist midwives working clinically 2 (1%)
- Manager/Matron working clinically 2 (1%)
- On call midwives utilised 26 (13%)

7.8.3 Although the above measures were undertaken, staff were unable to take allocated breaks on 25 occasions (13%) and on 10 (5%) occasions staff stayed beyond rostered hours.

7.8.4 Red flags are recorded on the ward acuity tool and can be seen below.

Number & % of Red Flags Recorded
From 01/10/2021 to 31/03/2022

RF1	Delayed or cancelled time critical activity	31	22%
RF2	Missed or delayed care (for example, delay of 60 minutes or more in washing and suturing)	11	8%
RF3	Missed medication during an admission to hospital or midwifery-led unit (for example, diabetes medication)	4	3%
RF4	Delay in providing pain relief	58	41%
RF5	Delay between presentation and triage	2	1%
RF6	Full clinical examination not carried out when presenting in labour	2	1%
RF7	Delay between admission for induction and beginning of process	32	23%
RF8	Delayed recognition of and action on abnormal vital signs (for example, sepsis or urine output)	0	0%
RF9	Any occasion when 1 midwife is not able to provide continuous one-to-one care and support to a woman during established labour	1	1%

Table 25: Red Flags recorded on Mary ward.

7.9 Ockenden Funding

The Trust has received non-recurrent funding to support the workforce changes including those relating to the Neonatal Medical and Nursing workforce as detailed in table 26.

Role
Consultant Obstetrician – 0.9 WTE
5.9 WTE band 5-6 Midwives
Advanced Nurse Practitioners
Continual Training Requirement - Backfill

Table 26: MIS / Ockendon Investment

A final decision from the Treasury is awaited on whether there will be on-going financial support as detailed in the Health and Social Care Committee report: The safety of maternity services in England.

8.0 Anticipated Benefits

The national evidence indicates that as a Trust, once the correct registered nurse to patent ratios are established in the departments plus the respective skill mix of registered nurses to health care workers is achieved, a significant reduction in patient harms such as pressure ulcers, falls (including falls with harm), medication errors, failure to rescue a deteriorating patient and patient complaints will be achieved.

In addition to the expected improvement of department outcomes outlined above the following benefits are expected to be realised.

Benefits have been gained by other Trusts who have adopted this approach and achieved the staffing ratios required by NHSE/I (2018) DWS Safe Staffing guidance. These benefits have been a reduction in staff sickness rates, increased uptake in own staff undertaking bank and a reduction in staff turnover.

9.0 Financial Investment

The additional cost of increasing staffing to a safe level is significant; for the Trust to continue moving towards a financially sustainable position a funding source needs to be identified to cover this cost. The proposed approach to achieving this is set out below.

9.1 Cost mitigation

The Trust has an indicative cost reduction target for 2022/23 to reduce the registered nursing spend on agency to 4% of the total registered nursing pay bill, phased over the year, in part to reflect the increasing impact of this case as new nurses are recruited, inducted, development and start working independently.

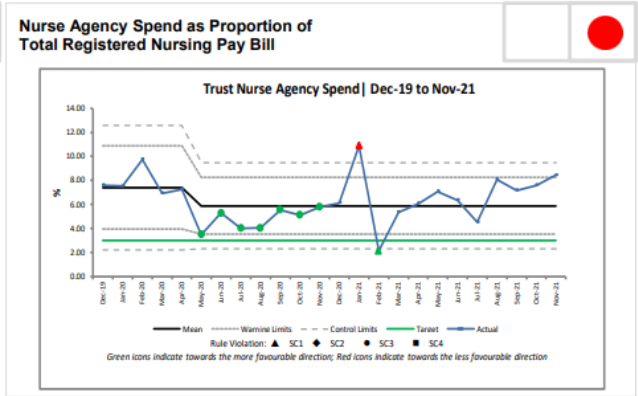


Table 27: Nurse Agency spend as a proportion of the total Registered Nurse pay bill.

9.2 For context, this could be achieved by booking approximately one less Tier 1 Agency Nurse per 24-hour period on half of the inpatient wards. Nurse agency spend as a proportion of the nursing pay bill increased in November to 8.43%, well above the 4% target.

9.3 A range of actions, led by the Agency Transformation project team, are in progress to reduce agency spend as detailed in table 28, including:

Allocate/eRostering	• Trust-wide implementation of HealthRoster: embedding use across the Divisional Directors of Nursing/Midwifery to provide organisational oversight and reduce hours put out to Bank/Agency • Deputy Divisional Directors of Nursing: "Super User" training/support to maximise functionality of Health Roster • Wider implementation of Allocate/e-rostering: maximising system functionality
Temporary Workforce	• Explore 3rd party managed bank solutions and scope modular support • BNSSG& B Agency framework tender process to secure a new nursing neutral vendor

Table 28: Agency Transformation Schemes.

9.4 However, even with significant improvements in the rostering of substantive staff, and in the booking process for temporary staff, further improvement will be limited given the need to ensure wards and departments are able to operate safely. With improved staffing levels that meet national standards, increased resilience and flexibility in the nursing workforce will support a reduction in agency spend. Improved staffing levels enables a more flexible approach to staff allocation, based on day-by-day acuity which will support a reduction on the reliance on temporary workers and the use of high-cost agency.

9.5 To ensure the increased establishment does not become a driver of increased agency spend, the following controls on agency spend will remain in place:

- The Divisional Directors of Nursing/Midwifery lead 3 times per day Safe Staffing meetings with the Matrons. This scrutinises the staffing levels, mitigates risk across the Trust and ensure all actions are undertaken to enhance levels
- The Divisional Directors of Nursing/Midwifery & wider senior nurse team provide a 7 day on call rota to support staffing decisions
- Executive sign off will be required for high-cost agency usage.

10.0 Risks addressed by this investment

The Trust has several nurse staffing risks currently on the risk register as detailed in table 29:

Risk	Description	Current Score
2075	Patient safety could be affected by inadequate medical and nursing staffing in the ED and UTC.	16
2195	Nursing/Midwifery patient ratios are being compromised through the unavailability of staff due to sickness/maternity/annual leave & vacancies	20
2220	Patient safety may be compromised through insufficient paediatric trained nurses in ED	16
2134	Inadequate Registered Nursing workforce to provide safe and timely chemotherapy due to vacancies (William Budd & Haematology Day Case)	16

Table 29: Nurse staffing risk scored greater than 15

10.1 These risks are currently being reviewed to ensure the post-COVID-19 impact on the health and wellbeing of staff is appropriately reflected, particularly given the indicative 2021 NHS Staff Survey results suggesting the percentage of staff reporting feeling unwell because of stress at work in the last 12 months has gone up from 40% to 46%.

10.2 In addition, the case also addresses in part Board Assurance Framework risk 4 – *inability to maintain safe staffing levels across the hospital.*

11.0 Monitoring impact

One way the Board of Directors meets its regulatory requirement to ensure *that care and treatment are provided in a safe way,* is through regular review of a detailed set of quality measures which monitor the quality of care the Trust delivers to patients. As set out in section 4, further analysis of these measures has been undertaken to understand the correlation between lower staffing levels and performance against the measures. Taken collectively, they demonstrate the impact improved nurse staffing levels will have on the quality and efficiency of care provided by the Trust.

The measures identified in table 30 form the core suite of indicators which will be monitored to demonstrate improved performance. All already form part of the Trust's Integrated Performance Scorecard. In addition, going forward:

- The collective suite of measures will be monitored monthly at the Nursing and Midwifery Workforce Planning Group, with quarterly comparison undertaken to test the future correlation between staffing levels and patient and workforce safety.
- A six-monthly review of Nurse and Midwifery staffing levels, presented to the Board of Directors, with accompanying analysis of performance and the link to improved staffing levels.

One of the strongest pieces of evidence identified in the literature review relates to the link between improved staffing levels and reduced length of stay. Although there is a strong relationship between staffing levels and length of stay, there are also a variety of other factors which impact on length of stay which are outside of the influence of the Trust – non criteria to reside patients being the most extreme example.

There is also strong correlation between nurse staffing levels and quality of discharge – the information given to the patient and family, speed of coordinating often complex discharge arrangements, and consequently time of day of discharge. The national NHS SAFER patient flow bundle sets out a standard of achieving 33% of discharges by midday, as a marker of quality of discharge and to support patient flow. The Trust has consistently underperformed against this metric, largely due to the lack of capacity within ward nursing teams to prioritise discharges ahead of care of acutely unwell patients when nurse staffing numbers are below plan.

Time of day of discharge has therefore been included as an indicator in table 30.

Indicator			**Trust stretch target**	**Performance as at March 2022**	**Comments**
Quality of care	**Safety**	Falls resulting in significant harm	<=1 per month	2	Not achieved since September 2021; 9 of the previous 12 months were above target
		Healthcare Associated Infections (HAI)	<=11 per month	59	Not achieved since May 2021; 10 of the previous 12 months were above target
		Pressure Ulcers	<=1 hospital acquired per month	3	Categories 2,3,4, including medical device related 2 of the previous 12 months were above target
	Patient experience	Formal complaints	<30 per month	43	
		Staff reporting being satisfied with the quality of care provided by the organisation to patients/service users	Align with the best (2021 NHS Staff Survey – 89.5%)	73.6%	NHS Staff Survey Indicator whilst above average has fallen since the last survey.

Workforce	Appraisal rate	90%	59..84% (RMNs)	
	Sickness	4.0%	6.20% (rolling 12 months, RMNs)	
	Turnover rate	-	8.73% (rolling 12 months, RMNs)	Turnover significantly reduced during COVID-19; the pre-COVID turnover rate has been applied to the workforce model, our target is to remain within the current turnover level as a result of the retention activities in progress.
	Morale – Nursing & Midwifery Directorate	-	5.3 (2021 NHS Staff Survey)	Increase in score to be tracked in 2022 NHS Staff Survey
	National Safer Staffing target fill rate – registered nurses	90%	74% day, 80% nights	
Efficiency	Time to initial assessment (ED Minors)	>=85% within 15 minutes	44.7%	
	Agency spend	<4% of Registered Nursing budget	8.12%	See section 9.1 for more information
	Discharges before midday	45%	24.3%	

Table 30: Key Performance Indicators

11.0 Conclusion

The review has identified the need for investment in Nursing and Midwifery for inpatient wards, maternity services, paediatrics and the Emergency Department to align with national standards to improve patient outcomes and staff experience.

The investment will require significant focus to operationally manage the change to establishments, ensuring funds are prioritised to the areas of most need in the first instance.

Appendix 1 - References

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