

## Meeting of the Trust Board

28 August 2017

<b>Report title:</b>	Safer Nurse Staffing Review	<b>Agenda item:</b> 3.3		
<b>Executive Director:</b>	Tracey Brigstock	<b>Title:</b> Acting Director of Nursing & Patient Services Interim Deputy Director of Nursing Associate Director of Nursing (Workforce)		
<b>Authors:</b>	Belinda Wood Adam Brown			
<b>Report summary</b>	This report details the findings of the six monthly Safer Nurse Staffing Review of adult in-patient wards, undertaken in June 2017.			
<b>Related Trust Objective / CQC Domain</b>	All CQC domains			
<b>Action</b> <i>(tick one box only)</i>	<b>Information</b> <input checked="" type="checkbox"/>	<b>Approval</b> <input type="checkbox"/>	<b>Assurance</b> <input type="checkbox"/>	<b>Decision</b> <input type="checkbox"/>
<b>Recommendation</b>	The Trust Board is asked note the contents of this report and action plan.			

**Impact Assessments** – None identified for this paper

<b>Equalities / Human Rights</b>	N/A
<b>Patient &amp; Public Involvement</b>	Data triangulation with quality indicators.
<b>Legal / Regulatory</b>	CQC Regulations Nursing Quality Board, 2013 & 2016; RCN, 2013; NICE, 2014
<b>Financial</b>	Recommendations identified within the report.
<b>Risk</b>	High risk – if safe staffing standards are not met
<i>Jargon Buster: Please detail acronyms used in the report</i>	SNCT - Safer Nursing Care Tool - recognised method RCN - Royal College of Nursing OSCE - Observation of Simulation Clinical Exercise RN - Registered Nurse RSCN - Registered Sick Children's Nurse CSW - Clinical Support Worker CQC - Care Quality Commission CNS - Clinical Nurse Specialist CHPPD - Care Hours Per Patient Day EPO - Enhanced Patient observation DoLs - Deprivation of Liberty NIV - Non Invasive Ventilation

## Executive Summary

This report details the findings of the Safer Nurse Staffing Review of adult in-patient wards, undertaken in June 2017 (full annual review) with six monthly progress update.

The aim of this report is to provide assurance to the Trust Board that safe staffing levels are being maintained.

There are a number of tools available to determine safe staffing levels, each having their own strengths and weaknesses. The tools applied here are Skill Mix review, Safer Nursing Care Tool (SNCT), Care Hours Per Patient Day (CHPPD) and Nurse to Patient Ratio. NICE and RCN staffing guidance was also considered. Professional judgement has also been applied by Matrons (skill mix and numbers of staff per shift). This data has been triangulated and reviewed with nurse sensitive indicators (Safety Thermometer, Pressure Ulcers, Fall incidence and incident reports).

Separate reviews of A&E and maternity have been conducted and will report separately as results become available (Best tool for A&E, Birthrate<sup>+</sup> for maternity).

## Findings

- Ward staffing levels are safe, with the monthly staffing fill rate over the last 12 months consistently above 95%.
- The Safer Nursing Care Tool shows variation in results however, triangulation appears to indicate that in most instances the demand reflects the current establishment.

More specific areas for action identified;

- Deeper dive into variant wards – Elizabeth, Howard and Shand.
- Further review of the use of staff to support enhanced patient observations (specialling).
- The 2nd annual review of CHPPD will be conducted across the STP footprint (Bedford, Luton and Dunstable and Milton Keynes Hospitals).

## Action Plan

- Review Russell and Arnold Whitchurch Ward in line with proposed service changes
- Review staffing levels following the planned ward reconfigurations within Integrated Medicine and Planned Care
- Review of IT systems options to support the comparison of acuity/dependency levels of patients and staffing. This will support real time monitoring of data. The acute providers within BLMK STP may consider collective bid for system.

## Recommendations

The Trust Board are asked to receive this report for assurance.

## Summary Table

Ward/ Department	Current funded Beds	Current funded WTE's	Skill Mix Ratio RN:CSW	SNCT Variance (for beds open)	CHPPD June 2017	Nurse to Patient Ratio (for open beds) over 24hrs	Comments
AA Unit	29	43.25	68:32	15.02	NA	1:5	Assessment unit not ward
Arnold Whitchurch (Frail)*	15	25.1	53:47	0.69	7.4	1:6	
CCU	16	23.36	76:24	-2.24	6.7	1:6	
Elizabeth (Frail)	27	36.76	51:49	-4.34	6.6	1:8	
Godber	18	24.57	56:44	0.27	6.3	1:8	
Harpur (Frail)	25	34.45	53:47	-3.45	6.4	1:7	
Howard (Stroke)**	20	30.27	49:51	0.07	7.2	1:8	Therapists, stroke nurse and high level of EPO
Orchard Gynae	10	11.4	89:11	-0.3	9	1:5	
Pilgrim (Acute)**	30	43.21	60:40	1.51	7	1:6	
Reginald Hart (Frail)	30	42.79	51:49	7.29	6.8	1:8	1:6 (6 beds closed) short stay / high turn over
Richard Wells	27	30.93	64:36	4.43	5.8	1:7	
Russell*	15	23.54	53:47	-1.66	7.7	1:6	
Shand	32	35.63	62:38	-8.17	5.1	1:9	
Shuttleworth	32	37.04	62:38	-2.16	5.5	1:9	
Whitbread	27	31.52	60:40	-0.58	6	1:7	

Figure 1

Details of metrics and findings are detailed in subsequent sections of this report

\* Elderly care wards requiring 1:6 ratios

\*\* Pilgrim Ward has 30 Acute Respiratory beds, including 2 specialist Non Invasive Ventilation (NIV) beds and Howard Ward has 10 acute Stroke beds

	Unsafe staffing level
	Action required
+	Satisfactory

# Safe Staffing Review (June 2017)

## 1. Introduction

All NHS Trusts are required to review their nurse staffing levels on a six monthly basis using nationally recognised evidence based tools (NQB, 2013 & 2016; NICE, 2014; Hard Truths, 2014). This report details the findings of the seventh Safe Staffing Review across all adult inpatient 'core' wards at Bedford Hospital NHS Trust (BHT) conducted in June 2017 and updated report from March 2017.

## 2. Aims and Objectives

The aim of this report is to:

- Provide a credible objective review of nurse staffing levels.
- Assure the Trust Board that safe staffing levels are being maintained.

The objectives of this report are to:

- Apply evidence based tools and review the output from each.
- Review quality indicators.
- Triangulate the evidence.
- Determine next steps.

## 3. Evidence Based Tools (Methodology)

There are a number of tools available to determine safe staffing levels, each having their own strengths and weaknesses. Experts recommend that none should be used without triangulation with other approaches and sources of information. The evidence based tools selected are Skill Mix, Safer Nursing Care Tool (SNCT) and Nurse to Patient Ratio. Additional quality indicators will also be considered for example, Safety Thermometer, Pressure Ulcer Incidence and Falls Incidence.

### 3.1 Skill Mix

The definition of skill mix is the number of RNs to CSWs allocated to ward areas and expressed as a ratio. Typically this would be 65:35 (RCN, 2010; Francis, 2013; NICE 2014). Skill mix may vary by setting. Some staff activity is not included in these reviews, which are;

- Ward based therapists
- Ward managers working in supervisory capacity
- Nurse specialist aligned to specialities

### 3.2 Safer Nursing Care Tool (SNCT)

This tool has been updated (Shelford Group, 2013). The multipliers for calculating patient demand have been revised and developed to reflect the increasing patient care demand seen nationally and to the higher turnover of patients seen in some areas, for example, medical assessment units and short stay surgical units. Within this review, ward staff collected data throughout June 2017 (4 weeks) which was entered into a central database for analysis. The data collection has been verified by Matrons. However, this tool has a degree of subjectivity and must not be viewed in isolation.

### 3.3 Nurse to Patient Ratios

Nurse to Patient Ratios have been applied to reflect RCN Guidance (2011), this being a ratio of 1:8 on all wards over 24 hour period, with the exception of elderly care wards where a 1:6 ratio is adopted.. There is no published guidance for nurse staffing ratios at night. A ratio of 1:10 has

been adopted. This reflects peers (Milton Keynes and Luton & Dunstable Hospital). Ratios are variable.

### 3.4 Care Hours Per Patient Day (CHPPD)

This comparator is a recommendation of the Carter report (2016) for the adoption of this index for staffing utilisation. The purpose of this metric is to provide a single consistent way of recording and reporting deployment of staff working on inpatient wards/units that have adopted CHPPD. CHPPD can be used to describe both the staff required and staff available in relation to the number of patients. It is calculated by adding the hours of registered nurses to the hours of healthcare support workers and dividing the total by every 24 hours of in-patient admissions (or approximating 24 patient hours by counts of patients at midnight). The Carter report requires that from April 2016 the CHPPD becomes the principal measure of nursing and care support deployment. This is reported monthly to NHSi and reported on the Model Hospital Dashboard.

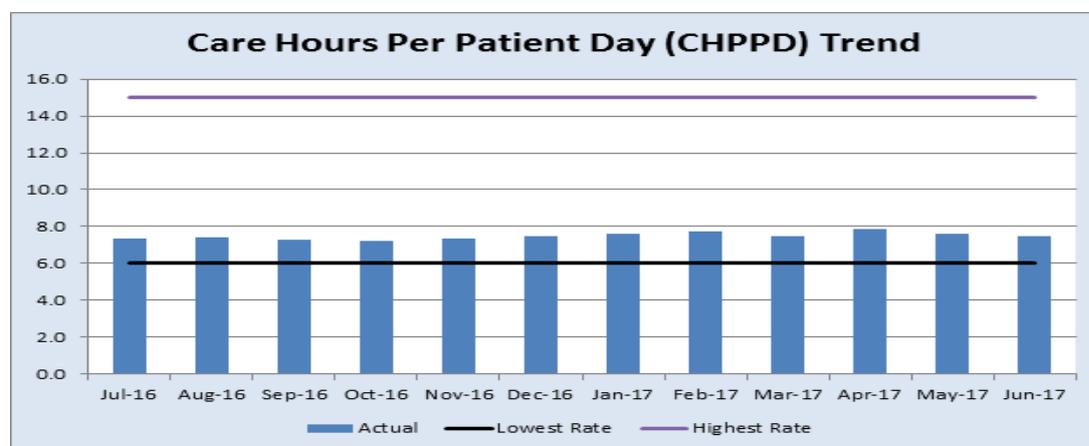


Figure 2

In the Carter report (2016) the 25 participating hospitals reported a range of 6.3 to 15.48 CHPPD. BHT records a level of 7 to 8 CHPPD and this is virtually the same as Luton & Dunstable and Milton Keynes Hospitals (benchmarked in Oct 2016).

### 3.5 Exclusions from the Safer Care Review (this report)

A&E has had a separate review to include 'streaming' of patients to the most appropriate parts of the service and the introduction of a Clinical Decisions Unit. Business cases have been developed and increased staffing requirements will be addressed in a separate report to board.

The Maternity staffing review was conducted in April 2016 by the Head of Midwifery. The staffing ratios are currently being reviewed against this by the senior management team within the division. Birthrate plus® has been commissioned to provide a report for staffing levels for the maternity service and is due to report in September 2017.

The Paediatric in-patient areas have been benchmarked against the Royal College of Nursing (2013) staffing criteria. Four hourly staffing risk assessments are conducted over each 24 hour period to reflect the fluctuations in capacity and demand, meeting identified CQC standard requirements. A review of the risk assessments confirms that during June 2017 these needs were met.

## 4. Quality Indicators

### 4.1 Safety Thermometer

The data from the Safety Thermometer shows that patient safety is being maintained across all wards and this is a testament to the hard work of the staff and the safety culture that has been embedded. Part of this however is the use of additional staff to maintain safety and quality when demand rises. The overall Harm Free Care score for the month of June 2017 is 93.48%. The Trust target is 94%. In quarter one the average score was 93.45%.

### 4.2 Pressure Ulcer Incidence

In June 2017, there was one Category 3 and three Category 2 pressure ulcers reported for the trust as a whole. One of the category 2's was avoidable and occurred on Shuttleworth Ward. Whilst some incidents are under investigation there is no indication that staffing levels were a contributory factor. Excellent progress has been made in trust wide pressure ulcer assessment and prevention. There were no hospital acquired category 3 pressure ulcers in Q1.

### 4.3 Patient Falls Incidence

In June 2017 there were 43 falls of which two resulted in serious harm. 37 of the falls were on clinical areas included in this report. Most falls resulted in no harm; two resulted in serious incidents as patient's sustained fractured neck of femur. Investigation has confirmed that these were deemed to be unavoidable events.

Falls for All Adult Wards in June 2017	AAU	AWW	CCU	Elizabeth	Godber	Harpur	Howard	Orchard Gynae	Pilgrim	Reginald Hart	Richard Wells	Russell	Shand	Shuttleworth	Whitbread	Total
No Harm	1	0	0	0	2	6	1	0	1	2	3	2	3	0	7	28
Minor Harm	1	0	1	1	0	0	1	0	1	0	0	1	0	1	0	7
Harm	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2

Figure 3

### 4.4 Incident notifications (datix)

During June there were 19 reported incidents relating to staffing shortages within the wards scoped by this report. None of these incidents resulted in patient or staff harm. Two incidents in maternity included red flag events. There was no correlation between harm event and reported staffing shortfall.

## 5. Findings

### 5.1 Additional Shift Usage – Enhanced patient observation (EPO)

At times it is necessary for ward templates to have additional duties added in order to provide increased care for single or multiple high risk patients. Such patients are likely to have physical/mental impairments, often with Deprivation of Liberty (DoLs) order in place. All requests for specials are authorised through a risk assessment process and reviewed daily for those patients requiring 1:1 care. These requests are signed off by a divisional lead nurse or above.

The number of hours' worth of EPO required across the trust over the last six months is shown below in figure 3

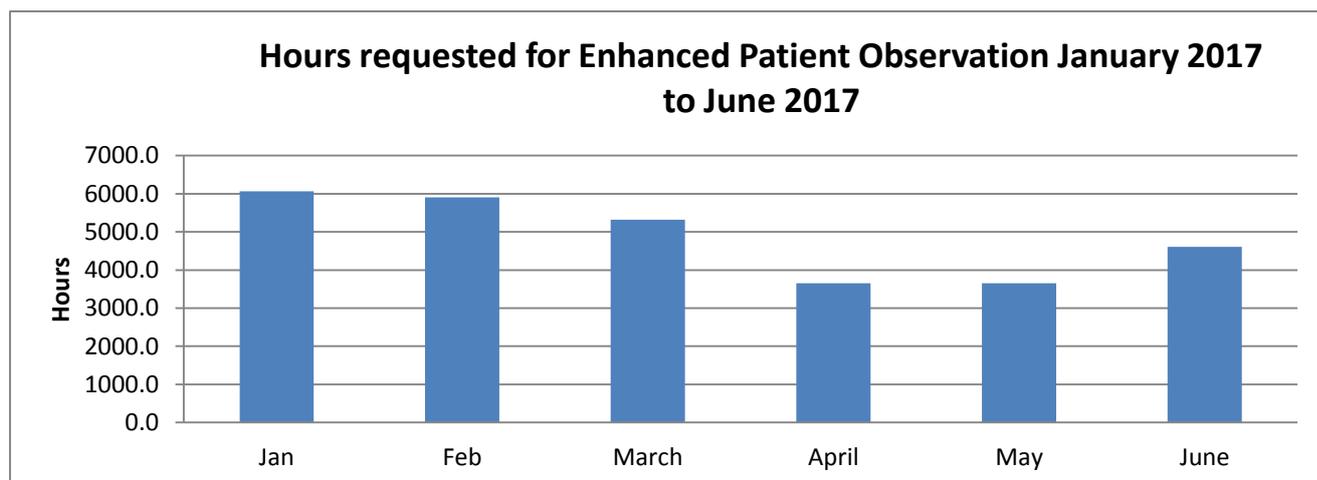


Figure 4

Some of these hours are filled and some remain unfilled, below in figure 5 is an illustration of how this has varied over the last year across the trust. Each day those shifts that remain unfilled are risk assessed and staff relocated where possible. Ward teams also reorganise their work to meet these patients' needs.

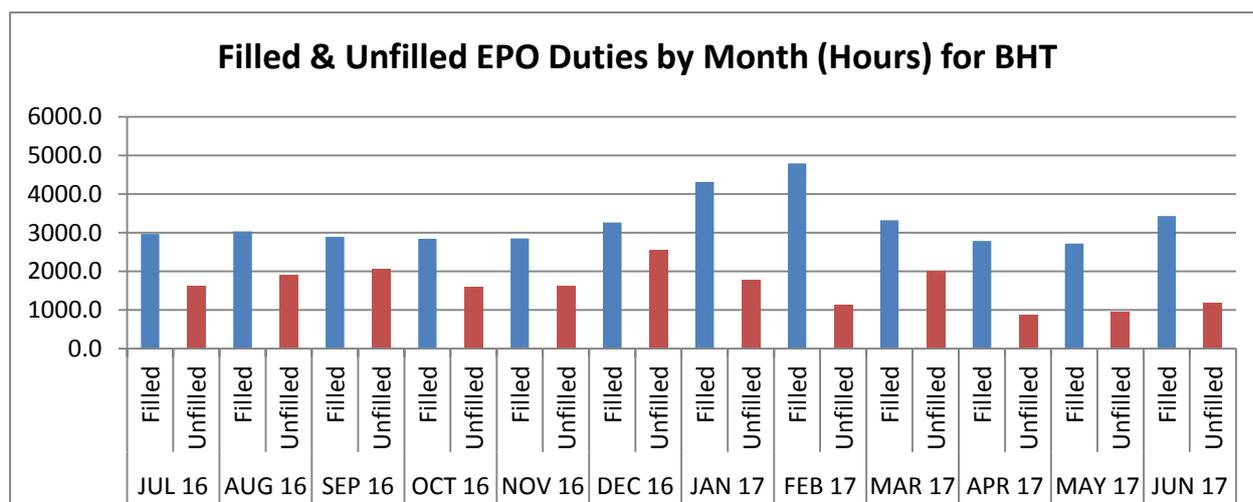


Figure 5

Of all the hours that were filled for EPO, 70% of these were on 5 wards. Figure 6 shows the distribution of filled hours by ward.

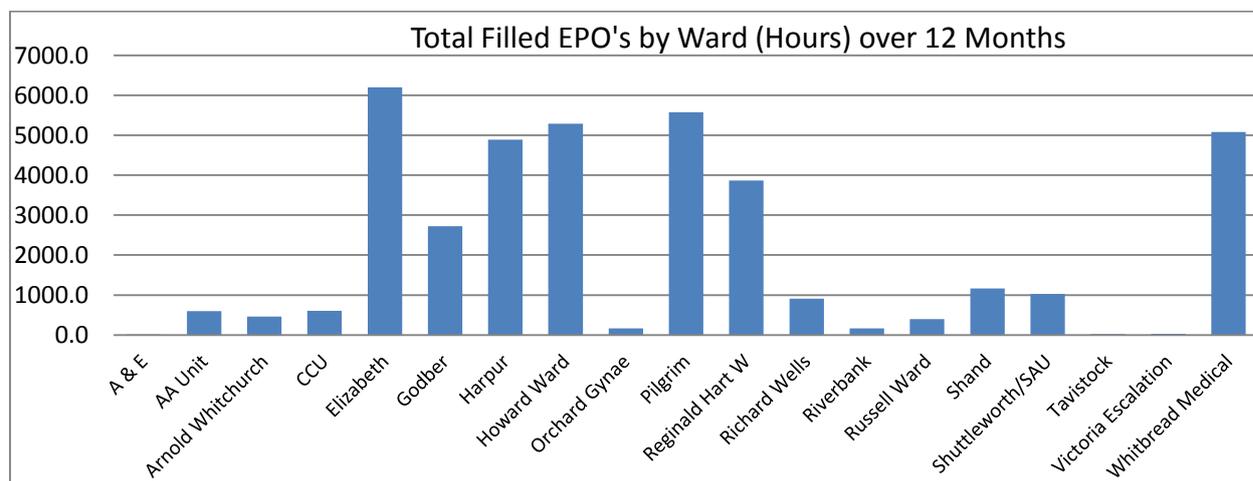


Figure 6

In the year from July 2016 to June 2017, the majority of the hours used were for patients on Elizabeth (15.8%), Pilgrim (14.2), Howard (13.5%), Whitbread (13%), and Harpur (12.5%).

The policy and processes for managing EPO have been reviewed since the last review. BHT is also working with the STP to review efficiencies and quality improvements in care provided for patients within this criteria.

## 5.2 Fill Rate Data – June 2017

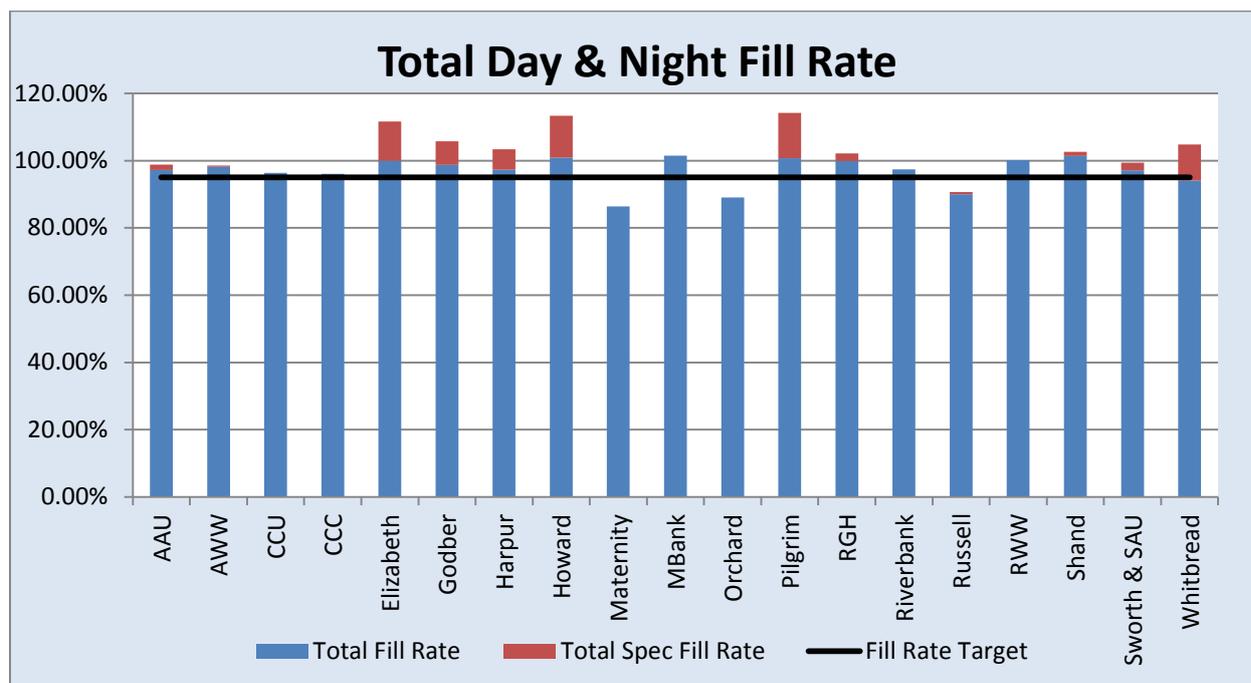


Figure 7

This metric is where the planned staffing level is compared with the actual staffing level; a level of 95% is the target and has been met since the last review, June 2016. The fill rate for June 2017 was 100.55%, including EPO. Without EPO the fill rate was 96.37%.

This tool is not sensitive to the shift by shift variation, for example where less staff required and where staff is adequate the fill rate will show a deficit against the planned staffing level.

## 6. Discussion

The following points concern those wards with anomalies which include;

### 6.1 A number of wards below the 55:45 RN:CSW ratio

(AWW, Elizabeth, Harpur, Howard, RHW and Russell) some of the mitigations include;

- AWW and Russell – provide step-down beds for patients who primarily no longer need acute care with 1:6 nurse to bed ratio.
- Elizabeth and Harpur – are dementia care wards where there is also a 1:6 ratio on day shifts.

- Howard Ward – The model of care is changing from that of an acute/hyper acute stroke service to continuing care of stroke patients. This ward is supported by a stroke nurse practitioner and dedicated therapy staff in addition to the staff counted in this ratio.
- RHW – had six beds closed during the review period due to essential maintenance work. The results are therefore skewed due to this. The fractured neck of femur pathway is also currently under review as part of bed reconfiguration proposals.

**6.2 AAU** – The use of SNCT is not validated for acute assessment units, whilst the results for the SNCT show a lower staffing requirement it must be noted that there is a significant and consistent patient turnover of 20 patients per day.

**6.3 Wards with a high percentage of EPO** – Elizabeth, Pilgrim, Whitbread, Howard and Harpur:

- Elizabeth Ward – this requires a deeper dive due to there being a 1:8 Nurse to bed ratio (over 24 hour period), 51:49 RN: CSW ratio and - 4.34wte SNCT variation.
- Pilgrim - The increase of EPO on this ward is due to the Non Invasive Ventilation (NIV), service primarily causing a fluctuating demand and resulting in a reduced threshold for the team to cope with patients also requiring EPO from within establishment resources.
- Whitbread – The speciality on this ward includes patients requiring detoxification treatments and demand for this enhanced level of care is likely to continue.
- Howard – Patients within this speciality often present with cognitive and neurological demands, however this unit is moving to a less acute service and community rehabilitation model.
- Harpur – This ward provides dementia care and has 1:7 ratio of RN to beds with fluctuating demands of patients.

## 7. Summary of findings

- Triangulation of ward establishment data and nurse sensitive indicators demonstrate that safe staffing levels are being maintained.
- This is supported by a fill rate > 95% and consistent CHPPD indicator.
- Elizabeth, Howard and Shand require a deeper dive into skill mix and SNCT variance due to anomalies identified.
- Paediatric staffing levels are maintained according to RCN guidance, evidenced by four hourly risk assessments.
- ED and Maternity specialities are to report separately (using Best tool and Birthrate<sup>+</sup> respectively)
- Further ward reconfiguration is due to take place in Q3. An options appraisal exercise is being conducted at the time of this report. Quality impact assessments will be conducted as part of this appraisal and then SNCT will be reviewed three months after implementation.

## 8. Emerging Issues

The trust is experiencing continued capacity and demand pressures with both Russell and Arnold Whitchurch Wards remaining open (Winter Wards) and currently funded for the whole year.

In April 2017 BHT became a ‘fast follower’ site as part of programme to train a new grade of nursing staff; the Nursing Associate. BHT is the lead partner in Bedfordshire partnership for this initiative. BHT has 21 staff training in this role and expects these staff to qualify in early 2019. In 2018/19 the workforce profile for clinical areas will require review to accommodate this new role.

Ward budgets and eRoster templates have been reviewed across all areas. Where previously bank and agency lines have been allocated these are being converted into substantive posts and realigned to the appropriate wards (April 2017).

## **9. Governance and Assurance**

- RSM Tenon conducted an audit regards eRoster efficiency using Good Practice Guide: Rostering (NHSi 2016 a) during March 2017 with resulting actions in place.
- Monthly Roster Review Meetings, with DDoN / Assoc DoN and Divisional Lead Nurses, to interrogate eRoster key performance indicators (KPI's)
- Workforce metrics and KPI's challenge at divisional performance review meetings with Executive team on a monthly basis
- Bank and Agency reports to workforce, education and well-being board, finance committee and Trust Board
- Meetings will be held with each area covered by this review in August 2017 to present the findings and confirm template, budget and establishment alignment
- Review risks as appropriate – risk register.

## **10. Recommendations / next six months**

- Conduct a deep dive for Elizabeth, Howard and Shand wards.
- Determine commissioned Paediatric model, including winter pressures, high dependency unit, Children's Assessment Units and mental health pathway.
- Review staffing levels following the planned ward reconfiguration within integrated medicine and planned care.
- Review findings and action for ED and Maternity.
- The 2nd annual review of CHPPD will be conducted across the STP footprint (Bedford, Luton and Dunstable and Milton Keynes Hospitals).

The trust board is asked to receive this report for assurance and to support the recommendations made.

Tracey Brigstock  
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Adam Brown  
Associate Director of Nursing

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