Cambridge University Hospitals NHS Foundation Trust

February 2021

Board of Directors
Monthly Nurse Safe Staffing
Lorraine Szeremeta, Chief Nurse

1. Executive Summary

1.1 The Chief Nurse's Office, divisional heads of nursing, operational leads and the workforce teams are working closely together to ensure our wards and departments are safely staffed at Cambridge University Hospitals (CUH) as we respond to the third surge of the Covid-19 pandemic.

2. Purpose

2.1 The purpose of this paper is to present the Board of Directors an overview of current process in place to ensure oversight and decision making in relation to nurse staffing levels during the current wave of the Covid-19 pandemic.

2.2 The report gives an overview of nurse staffing across the Trust including nurse to patient ratios, staff redeployment, reports of NICE red flag staffing issues as well as bank usage and nursing and midwifery recruitment pipeline.

3. Background – National and Local Context

3.1 In December 2020, NHSE/I together with Health Education England, produced advice on acute sector workforce models during Covid-19. The document provides a framework to help support trusts to organise their workforce in a way best suited to deliver plans while responding to Covid surge. It gives guidance on critical care staffing ratios, potential groups of staff to provide critical care nursing and staff deployment and training.

3.2 Since March 2020, in response to the pandemic, CUH has required an extensive re-design of wards and department reconfigurations resulting in significant impact on the nursing workforce.

3.3 The Trust has required further reconfiguration of services as the current wave of the pandemic has seen a significant critical care surge and increasing numbers of patients with Covid-19 cared for in ward areas throughout December and January. This has required extensive staff redeployment to ensure staff with the right skills are in the right place in order to ensure patient safety.

3.4 Availability of nursing staff has been significantly affected as a result of self- isolation of staff who have either been required to do so as deemed clinically extremely vulnerable or have been subject to Covid contact tracing, along with an increased sickness rate.

4. Process for staff deployment

4.1 The rapid increase in Covid-19 prevalence and admissions in December required a responsive staff redeployment process to match the operational reconfiguration of wards and critical care surge.

4.2 The Chief Nurse leads daily huddles with representation from divisional heads of nursing, director of AHP and deputy director of workforce. Nursing and AHP staffing challenges are discussed and key decisions are taken in respect to staff redeployment, training and skills mix and nurse to patient ratios. Key principles, which underpin decision-making, were agreed and approved through management executive.

4.3 Quality and safety metrics, staff well-being and patient experience are also discussed and actions taken as necessary with support from workforce teams.

4.4 Key decisions agreed at the huddle are overseen by Management Executive and a taskforce consisting of the workforce director, finance director and chief nurse has been established to ensure oversight of decisions

4.5 Nurse staffing ratios are reviewed three times a day and actions taken to ensure safe deployment of the workforce, concerns escalated in line with safe staffing policy and through command structure if necessary.

4.6 Ratios in critical care vary shift by shift (see section 7) we are predominantly working at 1:2 (CC trained nurse to patient). On some occasions in the last month this has increased to 1:3 but only following clinical risk assessment of safety

4.7 Ratios on wards have been impacted due to the need for redeployment of staff to critical care, with ratios of 1:8.

4.8 Processes within critical care and at ward level have been reviewed and changes agreed by the senior nursing team to release time for direct patient care.

4.9 Principles for setting establishments at short notice have been agreed and are in place.

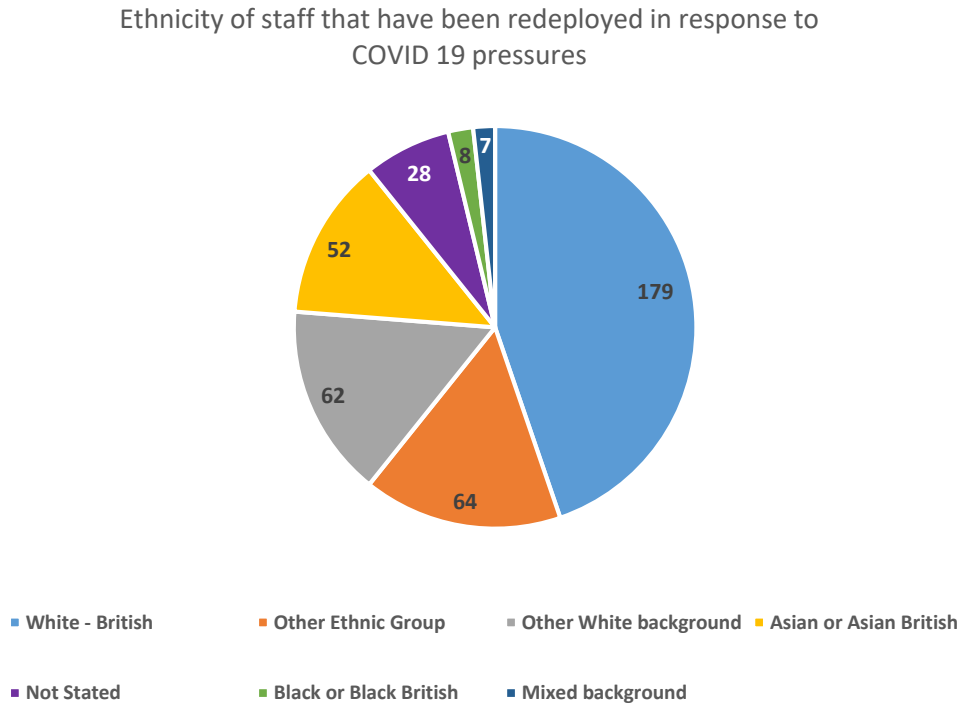
4.10 Non-clinical staff have been deployed into support roles.

4.11 Processes for rapid decision making on any financial incentives for staff are in place, e.g. increased bank enhancements.

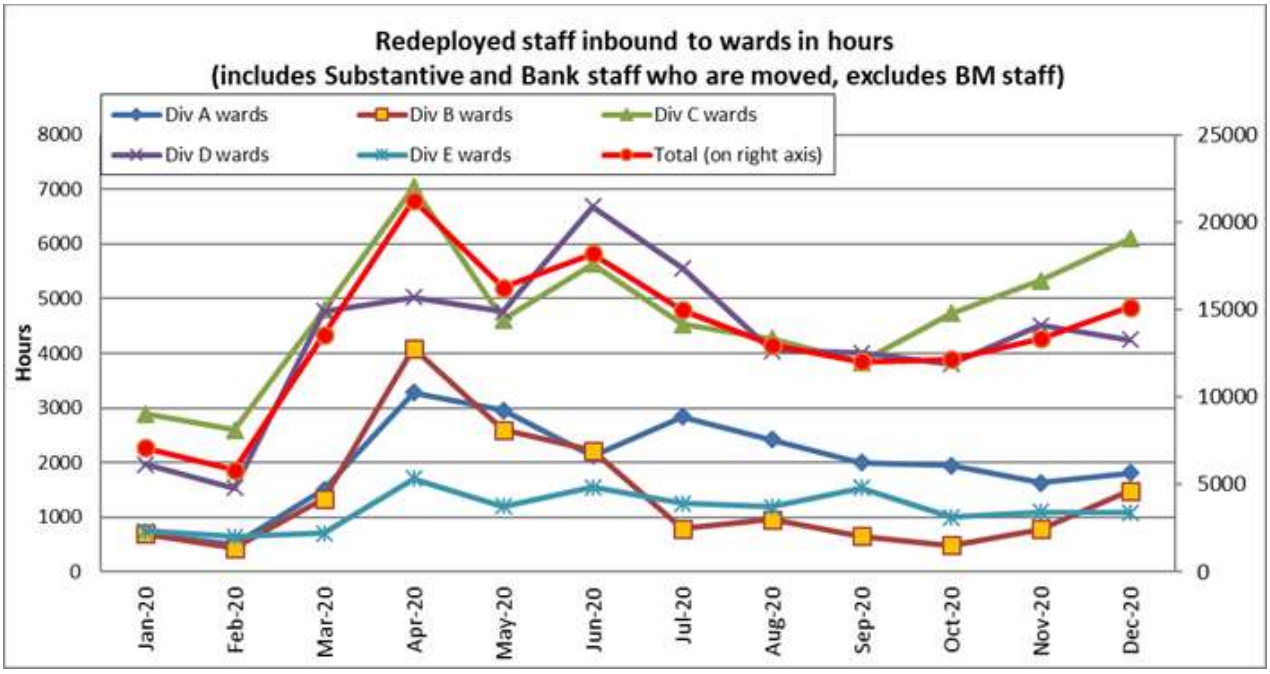
4.12 The number of staff deployed to critical care since mid-December is 193.

4.13 The number of staff deployed to and between ward areas for the same period is 272 (this does not include ad-hoc movement of staff).

4.14 The chart below provides a breakdown by ethnicity of those staff who have been redeployed during this Covid-19 wave. It indicates that this is broadly proportionate to the ethnicity of our overall staffing cohort. We will continue to track this as we move through de-escalation and any further redeployment, and provide further breakdowns of the data in future reports.



4.15 Movement of staff across wards to support safe staffing can be seen in the chart below. It shows that 15,152 hours were redeployed in December which is circa. 2,000 hours more than November. This does not show the number of staff movements during shifts which has also be significant throughout December and January.



5. International Nurse Deployment

5.1 The Nursing and Midwifery Council (NMC) have recognised the need to identify alternative Nursing workforce solutions to ensure sufficient numbers of staff to provide care to patients during the third wave of the pandemic. They have acknowledged that there are large numbers of highly skilled overseas nurses within the UK who could support the workforce at this time.

5.2 On 5 January 2021, the NMC announced that the Covid-19 temporary register would be expanded to invite overseas-trained nurses who are currently undertaking an objective structured clinical examination (OSCE) preparation programme and who are booked to attempt their OSCE at a NMC test site within the next few months.

5.3 The NMC are inviting eligible nurses to join the temporary register however it should be noted that there was a delay in Cambridge University Hospitals (CUH) employees receiving their invitation, which is currently being resolved by the NMC.

5.4 CUH have 74 international nurses on the OSCE programme who are eligible to join the temporary register. All of these have indicated that they wish to join however currently only 10 have received their invitation and have successfully joined the register. The Head of Education: Nursing, Midwifery and Allied Health professionals' is working with the NMC to expedite this process.

6. Students

6.1 On 14 January 2021, the NMC reintroduced the emergency standards to enable final year nursing students to opt-in to a paid extended clinical placement. This decision was in response to a request from the secretary of State for Health and Social care and the Chief Executive of NHS England to enable students to be able to support the NHS and Social care workforce to provide care to patients.

6.2 CUH's partner universities have provided final year nursing students with the opportunity to work for 30 hours per week on a paid clinical placement. These students will be rostered within the non-registered nursing establishment as a band 4 final year student.

6.3 28 final year nursing students have taken up this opportunity to support CUH from 1 February for 12 weeks.

6.4 It should be noted that these emergency standards only relate to final year nursing students (excludes midwifery). The Higher Education Institutions (HEIs) have taken the decision to remove all first year Nursing and Midwifery students from practice and they are currently undertaking academic work in partner HEIs. All Allied Health professional students, 2nd year nursing and midwifery students and final year midwifery students will continue on supernumerary placements within the trust.

7. Non-Medical Training

7.1 In response to this surge a number of training programmes have been developed and delivered in collaboration with specialist practice development nurses, the clinical education team and subject matter experts to ensure that staff who have been redeployed to different clinical areas are supported with the right skills to be able to deliver safe care to patients.

7.2 The table below illustrates the educational programmes that are being delivered and the number of staff who have been trained in these areas.

Table 1: Covid-19 training programmes and number of staff trained

Education programme	Number of staff trained
Tracheostomy skills	37
Non-invasive ventilation	22
Hi Flow Oxygen delivery	22
Respiratory management	47
Deteriorating patients	28
Ward skills (redeployment training)	105
Critical care	367
IV Pump training	58
Respiratory management within the Emergency Department	100

7.3 Additional training is being delivered in clinical areas based upon training needs as they are identified.

7.4 Skills based training has been provided to 764 staff throughout December and January to support staff working with different patient groups during this phase of the pandemic.

8. Critical Care Staffing Overview

8.1 Based on experience during Wave 1, intensive care units believe they will provide the best care and best support and staff wellbeing if they plan to maintain staffing ratios at a minimum of one critical care nurse to two level 3 beds (compared with the normal one-to-one ratio), supported by the MDT approach, (NHSE/I advice on acute sector workforce models during Covid-19).

8.2 NHSE/I advice is that the following staffing ratios should not be exceeded unless local and regional mutual aid options have been explored and exhausted and escalated appropriately:

- Bedside trained critical care nurses to level 3 patients – 1:2.
- Bedside registered nurses – 1:1 (including both core critical care staff and surge capacity staff).
- in addition to bedside nurses, on each shift there should be at least one co-ordinating nurse (or more, depending on the level of surge).
- Assistants or medical support workers will also be required to act as runners and support bedside nurses.

8.3 The current wave of the Covid-19 pandemic has required critical care to surge to between 90 – 100 beds (the baseline prior to the pandemic was 46).

8.4 Critical care nurse to patient ratio has been maintained overall at 1:2. However, due to the need to maintain ratio of 1:1 in 21 side rooms and up to 6 geographical locations, ratios' are often 1:3 in Bays. This is mitigated by having 2 supervisory critical care staff on duty per area. Critical care experienced physiotherapists have been working as part of the bedside care team throughout the pandemic.

8.5 Redeployed staff have provided the required 1:1 bedside care. Daytime fill rates have been easier to achieve than nights. This is partly due to redeployed staffs' availability to work night shifts. A number of other professions have supported the bedside shifts including medical staff.

8.6 Critical care nurses have been supported by the deployment of task/patient repositioning teams, medical students, orthoptists, theatre support workers and HCSWs fulfil this role.

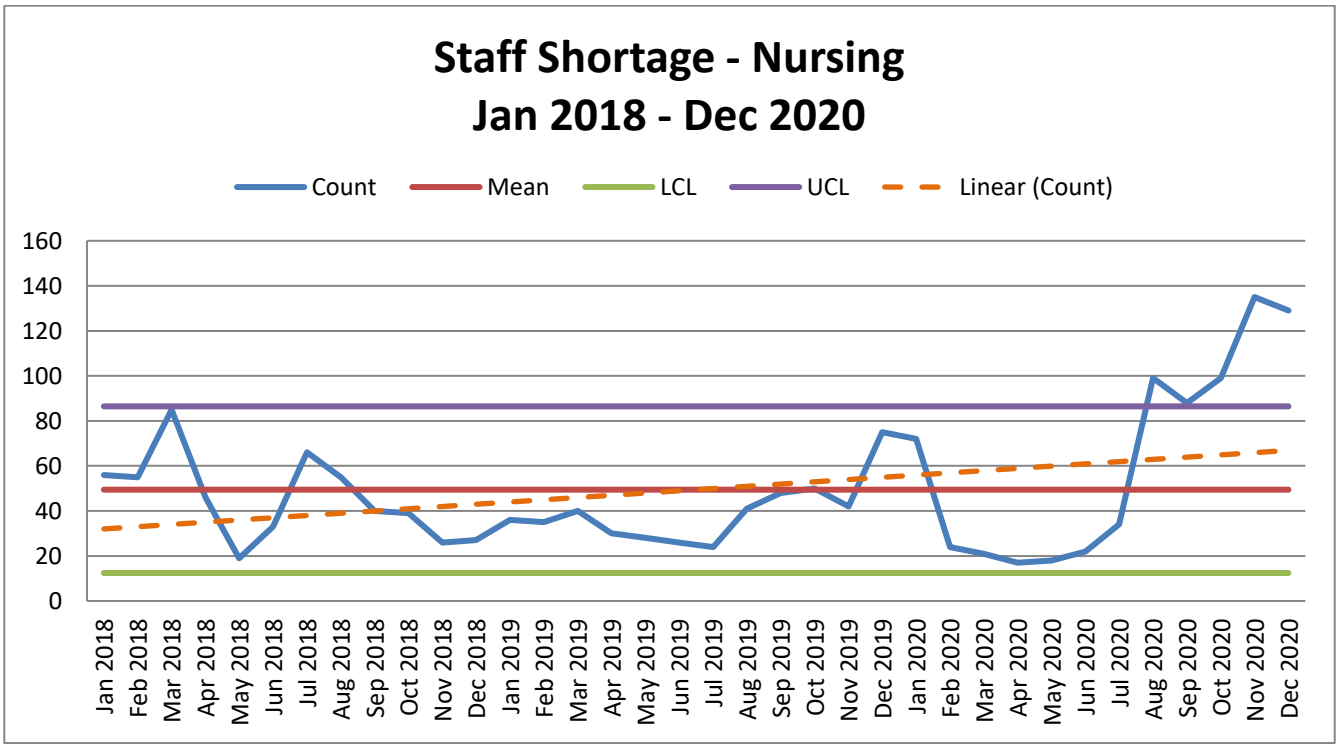
8.7 During the first phase of the pandemic a total of 450 staff were trained to work in critical care. During the past 2 months training has been provided to a further 367 staff.

9. Safety and Risk

9.1 The trend in Safety Learning Reports (SLRs) completed in relation to nurse staffing is shown in chart 1 below. The number of incident reports reported relating to nurse staffing has remain similar to November with 129 incidents being reported in December (November 135). There was no direct patient harm due to staff shortage incidents however, there were delays in care delivery. There has been an increase in number of incidents reported in Division C.

9.2 In January we have seen an overall reduction in incident reporting generally including for safe staffing most likely due to increased pressure on staff therefore, we are monitoring safety through the daily staffing meetings and a member of the patient safety team now joins these meetings to pick up on safety trends and support areas report where necessary.

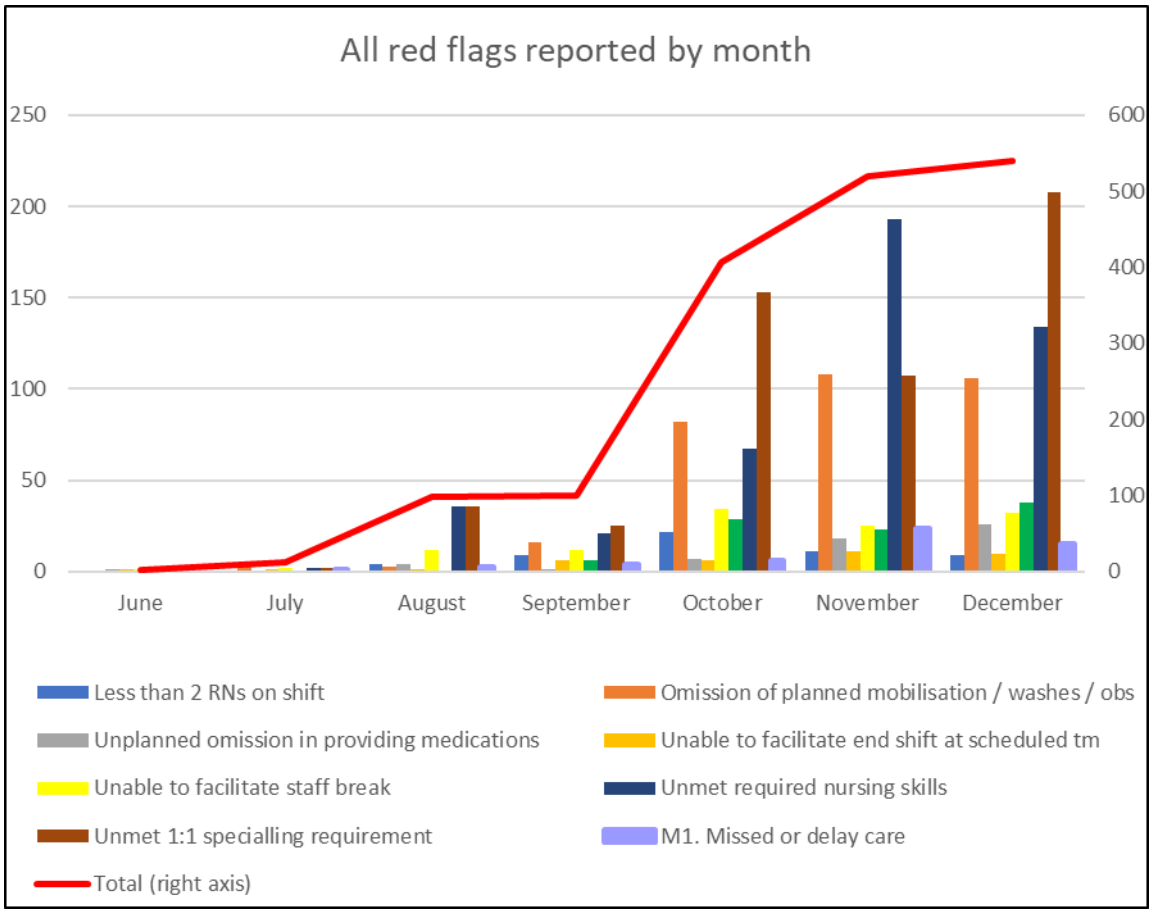
Chart 1: Incidents reported relating to nurse staffing



10. Red Flags

10.1 A staffing red flag event is a warning sign that something may be wrong with nursing or midwifery staffing. If a staffing red flag event occurs, the registered nurse or midwife in charge of the service should be notified and necessary action taken to resolve the situation. In December, a total of 540 red flags were raised in relation to staffing on adult wards (Chart 2). This was higher than the total number raised in November, (520). Red flags and areas of concern are raised and reviewed at the Trust site safety meetings and actions put in place to mitigate and maintain patient safety. While safety is maintained with deployment of staff, it is noted that ward areas did not have their full complement of staff on a regular basis. This has a potential negative impact on staff morale.

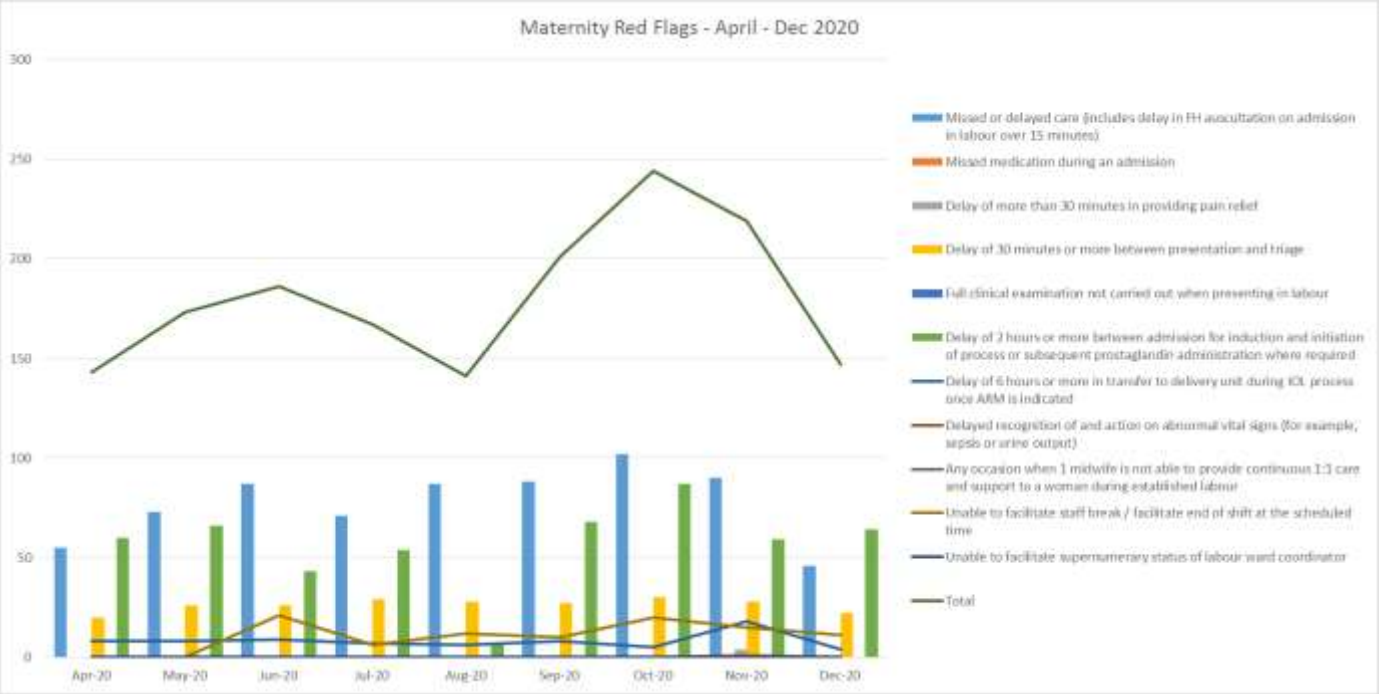
Chart 2 Staffing red flags – December



10.2 Chart 3 shows the maternity red flags for December. The overall number of maternity red flags has decreased in December. All red flags were highlighted and resolved in a timely way.

10.3 In January we have noted an increase of concerns being raised regarding staff not being able to take adequate breaks, this is currently being reviewed in discussion with sisters/charge nurses, matrons and heads of nursing to ensure escalation is taking place.

Chart 3: Maternity red flags

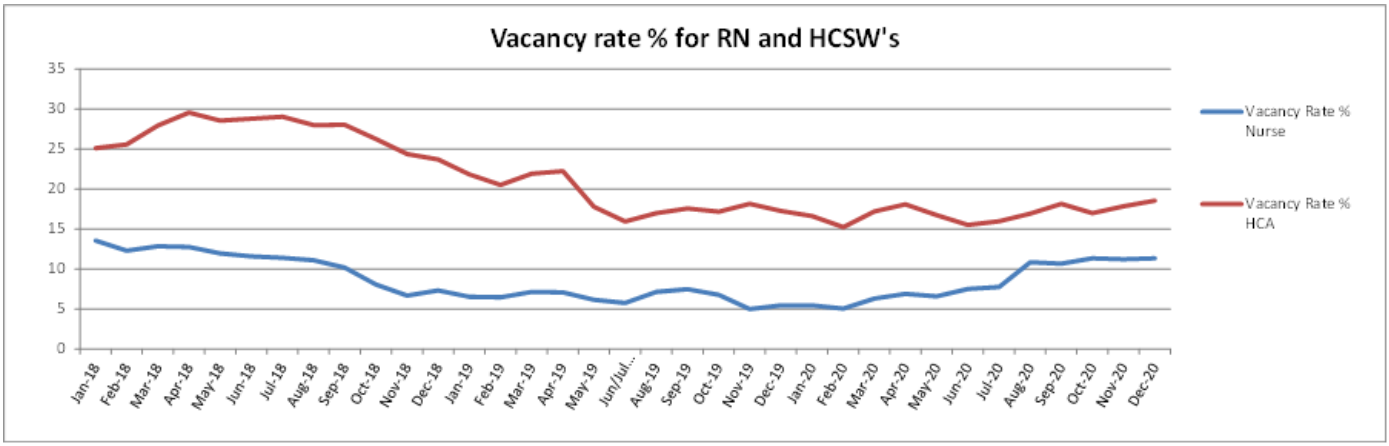


11. Forecast of Nurse Staffing Position

11.1 Chart 4 shows the nurse vacancy rate for both RNs and HCSWs. The vacancy rate for RNs (bands 5, 6, 7) is 11.34% and HCSW (bands 2,3,4) vacancy rate is 18.54%.

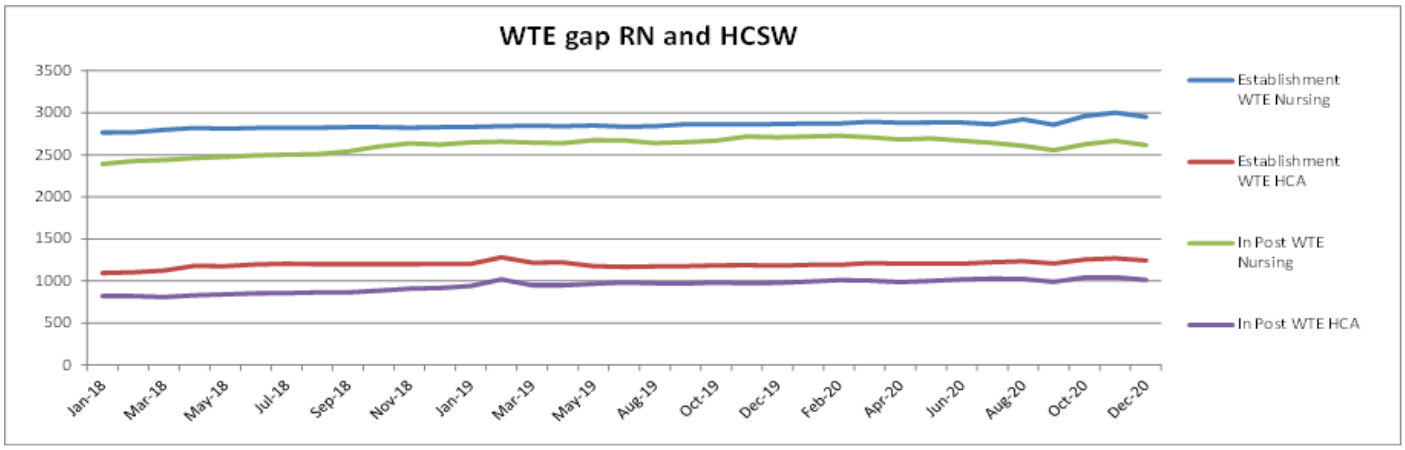
11.2 The RN vacancy rate is a worsening positioning (pre-covid 6.4%) and this is largely due to a slowing of the international RN pipeline. The majority of RN vacancies are currently across all inpatient ward areas.

Chart 4: Vacancy rate % for RN and HCSWs



11.2 Chart 5 shows the WTE gap yet to be filled for both RNs and HCSWs. There are 291 Band 5 Nurses in the pipeline (those who have been made offer) 231 from overseas and 60 (external applicants only) from the UK.

Chart 5: WTE Gap RN and HCSW



11.3 The self-reported vacancy rate in paediatrics for registered children's nurses (RCN) for December was 10.48% (across all paediatric areas).

11.4 The pipeline for HCSWs is positive and includes recruitment to nursing apprenticeship and trainee nursing associate programmes.

11.5 Appendices 3 provides detail on the forecasted position in relation to the number of RN and HCSW vacancies based on FTE and includes UK experience, UK newly qualified, apprenticeship route, EU and international recruits up to March 2021. Numbers based on those interviewed and offered positions in addition to planned campaigns. Recruitment campaigns for RNs are particularly focused on Division C and D, the areas with highest vacancy rates.

12. Bank Fill Rate and Agency Usage

12.1 The Trust's Staff Bank continues to support the clinical areas with achieving safe staffing levels. In November, the total number of requests for RN Bank shifts was 9,728 and this increased to 10.450 in December (week month). The average fill rate of 65.9 % (see chart 12). The total number of requests for HCSW Bank shifts in November was 9,032 and in November there was an increase to 9,118 (5 week month) with an average fill rate of 62.9 % (5,727 shifts filled with 3391 unfilled) (see Chart 13).

Chart 12: RN bank shift fill

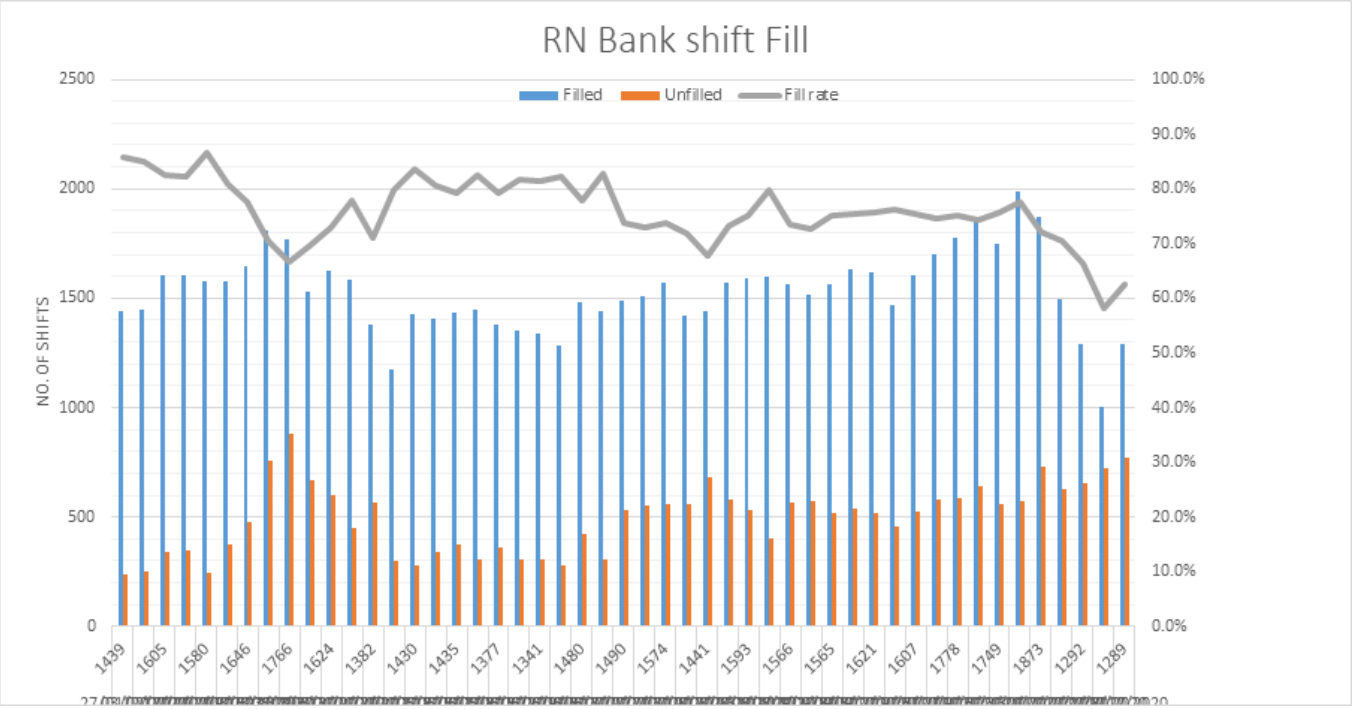
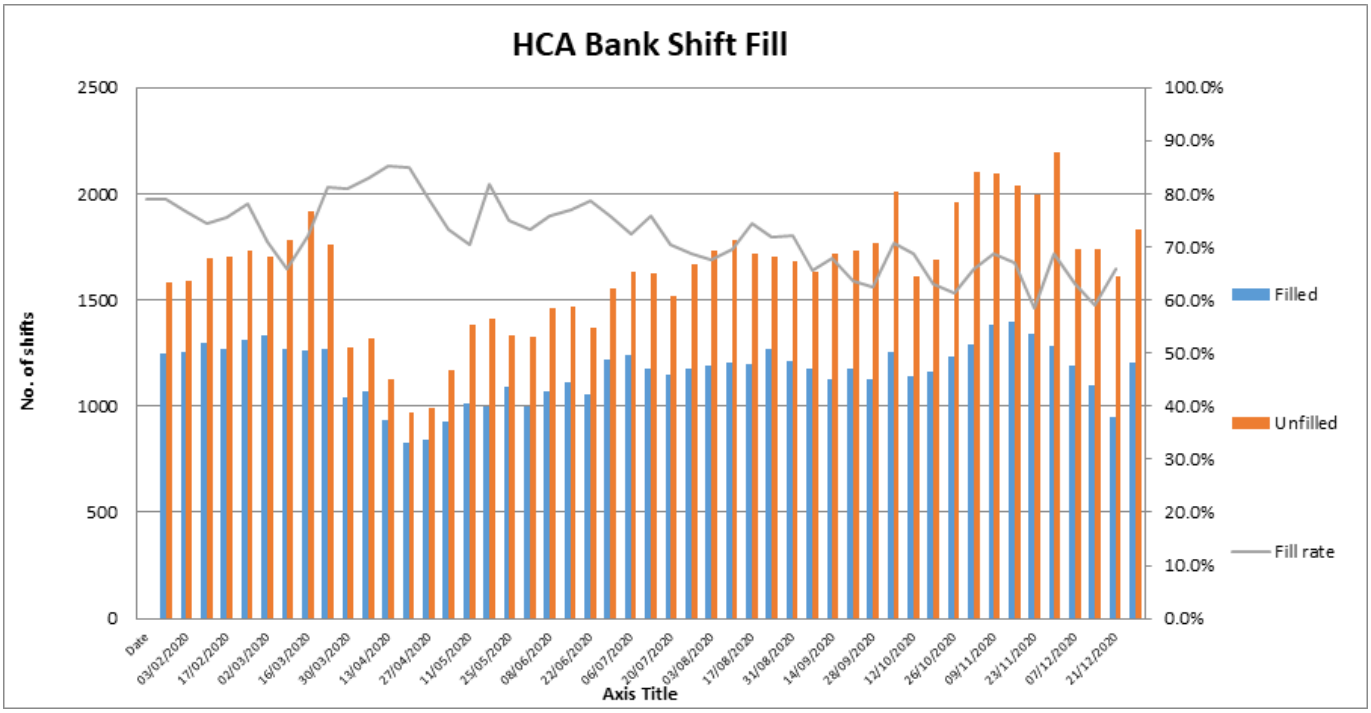


Chart 13: HCA bank shift fill



13. Care Hours per Patient Day (CHPPD)

13.1 Care hours per patient day (CHPPD) is the total number of hours worked on the roster (clinical staff) divided by the bed sate captured at 23.59 each day. NHS Improvement began collecting care hours per patient day formally in May 2016 as part of the Carter Programme. All trusts are required to report this figure externally. In March 2020 mandatory national reporting of CHPPD was suspended due to Covid-19 and the impact of rapid deployment. Where possible we continued to report internally, however the

current pandemic surge and need for rapid deployment has made the data invalid for the current time.

14. Recommendations

14.1 The Board of Directors is asked to:

- Note the content of this report.
- Note the response to ensure the safest possible nurse staffing during the third wave of the Covid-19 pandemic.
- Note that the calculation of Care Hours Per Patient Day (CHPPD) and ward staffing fill rates is currently not possible due to the dynamic reconfiguration of wards and staff redeployment.

Appendix 1: Nurse staffing data

Month	UK based exp. applicants	Anglia Ruskin NQ (60% of graduates)	Other NQ	NAP	Return to Practice	EU	Overseas	Total New Starters FTE	Leavers FTE	Promotions and transfer out of scope- retained by the trust	Staff in post FTE	ESR Establishment FTE	Vacancy rate based on established FTE	No. of vacancies based on established FTE	Starter leaver variance
Apr-20	8							8	7.36	5	1539	1659	7.29%	120.96	0.64
May-20	5							5	12.7	4	1511	1660	8.95%	148.6	-7.7
Jun-20	2	1						3	13.97	10	1506	1659	9.22%	152.98	-10.95
Jul-20	5							5	9.4	11	1503	1670	10.04%	167.71	-4.4
Aug-20	2	3					1	5.44	16.32	12	1471	1671	11.99%	200.41	-10.88
Sep-20	3	6	3				13	25	18.37	12	1468	1661	11.64%	193.4	6.63
Oct-20	3	2	2				4	11	21.35	12	1486	1685	11.82%	199.07	-10.35
Nov-20	8	1			1	1	21	32	11.76	12	1486	1641	9.40%	154.31	20.24
Dec-20	7	4				1	22	34	16.6	12	1506	1666	9.63%	160.39	17.4
Jan-21	5	3					27	35	10	12	1519	1666	8.85%	147.39	25
Feb-21	5						20	25	17.04	12	1515	1666	9.09%	151.43	7.96
Mar-21	6	5	5	12		10	15	53.48	22.3	12	1534	1666	7.94%	132.25	31.18
TOTAL	**59**	**25**	**10**	**12**	**1**	**12**	**123**	**243**	**177.17**	**126**	**1534**	**1666**	**7.94%**	**132.25**	**170.91**

Paediatric band 5 RN position based on predictions and established FTE														
Month	UK based exp. applicants	Anglia Ruskin NQ	Other NQ	Return to Practice	Overseas	Conversion	Total New Starters FTE	Leavers FTE (based on leavers in the last 12 months)	Promotions and transfer out of scope-retained by the trust	Staff in post FTE	ESR Establishment FTE	Vacancy rate based on established FTE	No. of vacancies based on established FTE	Starter leaver variance
Apr-20	1		1				2	0	1	196.21	236.45	17.02%	40.24	2
May-20	0						0	2	2	195.24	236.45	17.43%	41.21	-1.8
Jun-20	1						1	2	2	191.28	236.45	19.10%	45.17	-0.6
Jul-20	1						1	1	0	193.01	236.45	18.37%	43.44	0
Aug-20	1						1	3	2	188.89	236.45	20.11%	47.56	-2.11
Sep-20	1	5	1	1			8	6	1	192.33	236.45	18.66%	44.12	2.39
Oct-20	5	7	4		1	2	17	3	1	208.28	236.45	11.91%	28.17	13.77
Nov-20	2	1	0.64		1		5	6	2	207.26	236.45	12.35%	29.19	-1.76
Dec-20	2				1		3	2	1	205.39	236.45	13.14%	31.06	1
Jan-21	2						2	2	1	204.39	236.45	13.56%	32.06	0
Feb-21	2						2	2	2	202.39	236.45	14.40%	34.06	0
Mar-21	2						2	3	2	199.39	236.45	15.67%	37.06	-1
TOTAL	**20**	**13**	**6.64**	**1**	**3**	**2**	**44**	**32**	**17**	**199.39**	**236.45**	**15.67%**	**37.06**	**11.89**

Band 2 HCSW position based on predictions and established FTE										
Month	UK based applicants	Apprenticeship (direct entry)	Associate	Total New Starters FTE	Leavers FTE	Staff in post FTE	ESR Establishment FTE	Vacancy rate based on established FTE	No. of vacancies based on established FTE	Starter leaver variance
Apr-20	9			9	8	733	861	14.9%	128	1
May-20	12	15		27	12	752	861	12.6%	109	15
Jun-20	4	25		29	9	771	861	10.4%	90	20
Jul-20	7	7		14	13	775	861	10.1%	87	1
Aug-20	6	4		10	22	756	856	11.7%	101	-12
Sep-20	10	8		18	12	735	862	14.8%	127	6
Oct-20	16			16	13	740	862	14.2%	122	3
Nov-20	22	4		26	10	726	844	13.9%	117	16
Dec-20	18	5		23	12	749	862	13.1%	113	11
Jan-21	24			24	10	763	862	11.5%	99	14
Feb-21	23	10		33	13	784	862	9.1%	78	20
Mar-21	21			21	19	786	862	8.9%	76	2
TOTAL	**172**	**78**	**0**	**250**	**153**	**786**	**862**	**8.9%**	**76**	**97**

Adult band 5 RN position based on predictions and established FTE														
Month	UK based exp. applicants	Anglia Ruskin NQ (60% of graduates)	Other NQ	NAP	Return to Practice	EU	Overseas	Total New Starters FTE	Leavers FTE	Staff in post FTE	ESR Establishment FTE	Vacancy rate based on established FTE	No. of vacancies based on established FTE	Starter leaver variance
Apr-20	8							8	7.36	1539	1659	7.29%	120.96	0.64
May-20	5							5	12.7	1511	1660	8.95%	148.6	-7.7
Jun-20	2	1						3	13.97	1506	1659	9.22%	152.98	-10.95
Jul-20	5							5	9.4	1503	1670	10.04%	167.71	-4.4
Aug-20	2	3					1	5.44	16.32	1471	1671	11.99%	200.41	-10.88
Sep-20	3	6	3				13	25	18.37	1468	1661	11.64%	193.4	6.63
Oct-20	3	2	2				4	11	21.35	1486	1685	11.82%	199.07	-10.35
Nov-20	8	1			1	1	21	32	11.76	1486	1641	9.40%	154.31	20.24
Dec-20	4						23	27	14.34	1487	1641	9.36%	153.65	12.66
Jan-21	5						20	25	10	1490	1641	9.18%	150.65	15
Feb-21	5						15	20	17.04	1481	1641	9.73%	159.69	2.96
Mar-21	5	5	5	12		10	15	52.48	22.3	1499	1641	8.62%	141.51	30.18
TOTAL	**55**	**18**	**10**	**12**	**1**	**11**	**112**	**220**	**174.91**	**1499**	**1641**	**8.62%**	**141.51**	**150.17**

Paediatric band 5 RN position based on predictions and established FTE													
Month	UK based exp. applicants	Anglia Ruskin NQ	Other NQ	Return to Practice	Overseas	Conversion	Total New Starters FTE	Leavers FTE (based on leavers in the last 12 months)	Staff in post FTE	ESR Establishment FTE	Vacancy rate based on established FTE	No. of vacancies based on established FTE	Starter leaver variance
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May-20	0						0	2	195.24	236.45	17.43%	41.21	-1.8
Jun-20	1						1	2	191.28	236.45	19.10%	45.17	-0.6
Jul-20	1						1	1	193.01	236.45	18.37%	43.44	0
Aug-20	1						1	3	188.89	236.45	20.11%	47.56	-2.11
Sep-20	1	5	1	1			8	6	192.33	236.45	18.66%	44.12	2.39
Oct-20	5	7	4		1	2	17	3	208.28	236.45	11.91%	28.17	13.77
Nov-20	2	1	0.64		1		5	1	207.26	236.45	12.35%	29.19	4.03
Dec-20			1				1	2	205.26	236.45	13.19%	31.19	-1
Jan-21							0	2	202.26	236.45	14.46%	34.19	-2
Feb-21	2						2	2	200.26	236.45	15.31%	36.19	0
Mar-21	2						2	3	197.26	236.45	16.57%	39.19	-1
TOTAL	**16**	**13**	**7.64**	**1**	**2**	**2**	**40**	**26**	**197.26**	**236.45**	**16.57%**	**39.19**	**13.68**

Band 2 HCSW position based on predictions and established FTE									
Month	UK based applicants	Apprenticeship (direct entry)	Total New Starters FTE	Leavers FTE	Staff in post FTE	ESR Establishment FTE	Vacancy rate based on established FTE	No. of vacancies based on established FTE	Starter leaver variance
Apr-20	9		9	8	733	861	14.9%	128	1
May-20	12	15	27	12	752	861	12.6%	109	15
Jun-20	4	25	29	9	771	861	10.4%	90	20
Jul-20	7	7	14	13	775	861	10.1%	87	1
Aug-20	6	4	10	22	756	856	11.7%	101	-12
Sep-20	10	8	18	12	735	862	14.8%	127	6
Oct-20	16		16	13	740	862	14.2%	122	3
Nov-20	22	4	26	10	726	844	13.9%	117	16
Dec-20	10	5	15	11	730	844	13.5%	113	4
Jan-21	23		23	10	743	844	11.9%	100	13
Feb-21	23		23	13	753	844	10.7%	90	10
Mar-21	23		23	19	757	844	10.2%	86	4
TOTAL	**165**	**68**	**233**	**152**	**757**	**844**	**10.2%**	**86**	**81**