

Safe Nursing and Midwifery staffing levels

Introduction

It is a national requirement to review staffing levels on a 6 monthly basis and provide recommendations to the board about safe staffing levels.

The purpose of this paper is to provide an overview of the nursing and midwifery staffing levels across the Trust, provide assurance to the Trust Board that there are safe staffing levels in place and to outline the rigorous process that has been applied in defining the correct levels.

1.0 Nursing and Midwifery Workforce Overview

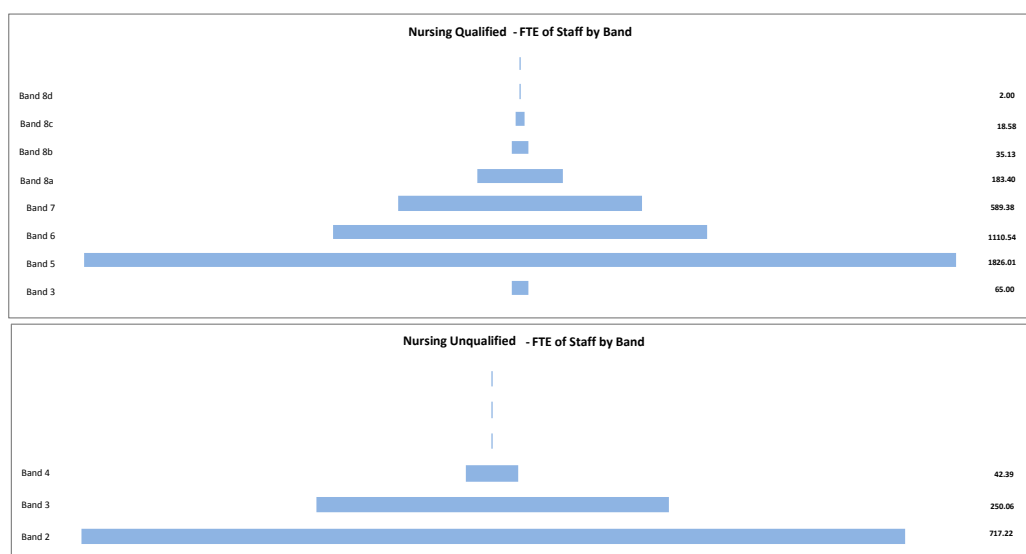
The total current nursing and midwifery (N&M) establishment in the Trust consists of 4350.27 FTE Qualified Nurses and Midwives and 1277.08 FTE Health care assistants.

The table below demonstrates a breakdown of the workforce and vacancies, turnover and sickness (Figures from March 2016). There are marked variations between sites and divisions which are shown in Appendix one. The breakdown of establishment by pay band is shown in Figure One.

Table One Vacancy Levels and Turnover

March 2016	In post	Vacancies	Turnover	Sickness
Qualified Nurses	3830.04	11.85%	14.48%	3.96%
Health Care Assistants	1009.67	23.25 %	13.96%	2.94%

Figure One Nursing/Unqualified Nursing by Pay Band



The nursing workforce can loosely be described in a number of different categories:

- **Frontline nursing:** Those working in wards, frontline departments, and operating theatres and clinics. The majority of these nurses are junior Band 5 qualified nurses, with a smaller management structure of band 6 and band 7 staff.
- **Practice development nurses** and others involved in Education and development of new staff or development of staff to provided tertiary care these are paid at band 6 or 7 dependent on level of experience

- **Those working in nursing management** above ward level; Matrons, Deputy Heads of Nursing, Heads of Nursing, and the Executive Nursing Team, Clinical site Managers, These posts are band 8a and above
- **Clinical Nurse Specialists** work in clinical teams alongside medical staff and are specialty specific. These range from Band 6 to and 8a depending on their role and level of autonomy. They are not an homogenous group and their roles vary widely. Some independently generate income by running nurse led clinics, seeing patients and performing tests and investigations. Others are substitute roles for medical staff while some are required to meet national guidance in relation to the support and care of patients related to specific conditions (e.g. Cancers).
- A proportion of nurse specialists and research nurses are funded externally. They are on the Trust payroll, but their salaries are paid by external bodies.
- **Above Ward Level Staff - Practice Development Nurses**
These Staff are Key to the development of new recruits, supporting student placements and developing tertiary skills to staff our wards in the future. They therefore play a role in retention of staff and help to fill seniority gaps on the frontline if Band six level ward recruitment is not successful.

In 2015/16 a review of Practice Development Nurses has been carried out to look for savings opportunities. 8.5WTE posts were identified for removal as CIPs (approx. 6%). This is a pragmatic choice where these posts are currently vacant.

- **Clinical Nurse Specialists**
The role of clinical nurse specialists is key to service delivery but their posts vary widely. Not all of these are funded by the Trust. We have carried out a review of the CNS posts and they have completed diary card exercises. The impact of CNS posts is difficult to quantify financially. Removal of CNS posts could result in loss of income or productivity. Again a pragmatic approach has been adopted and we have capitalized on removing vacant posts to reduce costs in year but ultimately some of these posts may have to be replaced. Simultaneously Heads of Nursing are looking for opportunities for service redesign in the medium term to substitute for any posts that may need to be reappointed. This will require support from transformation and will be influenced by any strategic decisions about future service developments and cessation of any services.

Frontline Nursing: Ward/Department level

In nursing terms this is the area of greatest risk to the organisation. The highest levels of vacancies are at band 5 and 6 level with a number of band 7 vacancies at the PRUH.

It is essential to have the correct numbers of nursing staff working at ward level to ensure service safety and efficiency (taking into consideration the safety issues associated with high levels of vacancies) but an exact formula for defining adequate numbers does not exist.

Available evidence has shown that numbers of less than 1 nurse to 8 patients results in an increase in avoidable harm (pressure ulcers, falls, infections and mortality), but this ratio is a base from which to build and will not guarantee optimum quality. Other evidence shows that harms are reduced where there are a higher proportion of qualified nurses. Otherwise, there is little guidance in terms of optimum nurse staffing levels.

As a result of a number of high profile care failures where poor nurse staffing has contributed to failure, NICE guidance was produced which outlined a more robust and informed approach based on the use of objective tools, triangulated with professional judgement. Additional National Guidance was produced instructing Trusts to assess staffing levels using the NICE recommendations on a twice yearly basis, for these levels to be signed off by the Trust Board, and to provide the board with monthly assurance that the “actual” staffing levels worked are the same

as those “planned” that have been signed off. To this end a monthly report is submitted to the board and those numbers uploaded onto Unify.

2.0 Approach to assessing staffing levels at KCH during 2014/5

A number of reviews of staffing levels were carried out during 2014/15. These are summarised in Appendix Two.

3.0 Most Recent Review 2015/2016

According to national guidance, routine reviews of staffing should take place twice a year. A further review was therefore undertaken in November 2015 when the acuity and dependency scores for all areas were reassessed using an internal peer review process. This was then followed up with a review of each clinical area with the Head of Nursing, Director of Nursing and a selection of members of the King’s Executive team to understand the process that was followed and to reconsider the staffing levels proposed.

Particular scrutiny was applied to areas where the acuity and dependency scores were more or less than the perceived staffing requirement.

Appendix 3 contains the wards where the acuity levels demonstrate a requirement for staffing over or below the staffing levels of those contained within the establishment. For highly specialist areas, benchmarking with other Trusts with similar services was undertaken. The table in appendix 3 demonstrates the actual difference and actions taken if any, and details of the difference following benchmarking with other organisations.

A summary of the reasons why staffing levels in excess or below the acuity score are recommended are shown below.

Surgery – Additional staff needed as a result of suboptimal ward size and/or a regular need to special vulnerable patients. Agreed no action required

Liver – Todd ward shows a staffing recommendation of less than the establishment and as a result it was recommended that the ward be benchmarked with the Liver Unit at United Hospitals Birmingham. The wards at Birmingham were larger in terms of beds, the staffing levels for day shifts are the same, but higher during the night.

Renal – demonstrated a variation in acuity but it was agreed no change was required due to the numbers of side rooms and suboptimal ward size and an unpredictable caseload of day cases also cared for by the ward staff.

Haematology – demonstrated suboptimal ward size, multiple side-rooms and complex drug regimens and it was agreed that the ward staffing should be benchmarked against similar wards in a neighboring Trust. Benchmarking with University College London took place which showed a more generous staffing level there during the day and the same staffing levels as KCH at night.

Trauma and Emergency Medical Wards and Cardiac Wards – demonstrated a variance but no change was made to the establishment due to a number of factors (see appendix 3).

Neurosciences – showed a variance thought to be due to the complexities of the patients, numbers of patients with tracheostomies being cared for on the ward and the higher numbers of cognitively impaired and vulnerable patients. Our staffing levels were benchmarked against those in the neuroscience wards at St Georges which demonstrated similar staffing levels.

Children’s – It was agreed that there would be no change to the establishment.

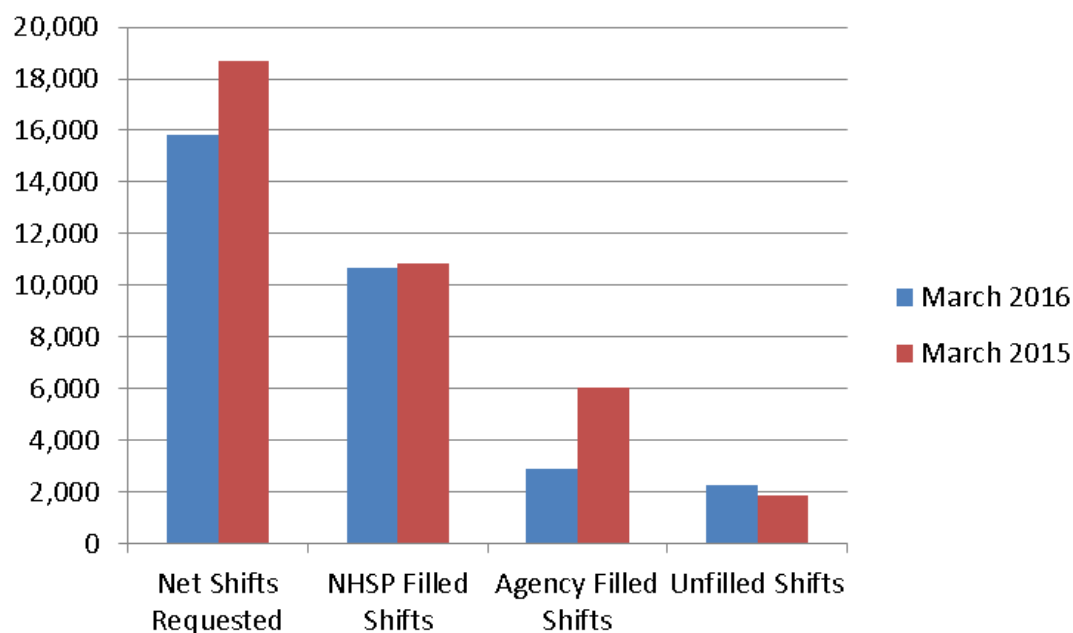
Key messages – Ward Level Staffing

- A series of different reviews have been carried to set safe staffing levels. None of the reviews or comparisons done have suggested that the nurse staffing levels are either inadequate or overly generous. The ratios vary in accordance with the specialty but if all staff were in post, across the wards of TEAM and surgery, the average ratios for these wards would be 1:6 at PRUH, and 1:6 at Denmark Hill. Overall ratios are skewed by the high number of high dependency and intensive care beds which have higher ratios.
- The CQC report of the April 2015 inspection states that frontline staffing levels are “broadly appropriate” although highlights that the Trust is over-reliant on temporary staffing, and identifies a small number of areas where staffing was not adequate on the day they visited (Cotton Ward, Neonatal ICU, and some high dependency areas).
- Monitor previously indicated that the information they hold on nursing costs indicates that KCH is not an outlier compared with other organisations (we have not seen these data to verify that). The Carter report suggests that Kings has higher numbers of nurses than “average” Trusts. These data do not take into account the effect of major trauma, tertiary services, number of higher dependency beds and the restrictions of the estate on the staffing requirement (see below). However the data require further analysis to ascertain the potential for savings in the future.
- Staffing levels at Denmark Hill are inflated by some of the wards being of suboptimal size, suboptimal being less than 20 beds per ward and includes Coptcoat, Waddington and the Children’s wards at Denmark Hill.
- The vacancy position is a risk across the whole of the Trust but particularly at the PRUH. There is a dependence on temporary staffing, and although vacancies in the ward areas are now slowly being filled, this is mainly by overseas recruits and new recruits. This is a cause for concern as the staffing numbers are made up of mainly junior and inexperienced nurses and safety issues were identified as a result although this picture has improved as staff have become more experienced.
- The wards report high levels of stress at both sites, and the loss of band five and band six staff is running at about 30 – 40/month.
- Over the winter we have opened additional beds to deal with patient demand but these have created areas of suboptimal size This is expensive from a temporary staffing point of view, and very unpopular with substantive staff.

3.0 Cost Control

Improved attention to roster management and tight controls on bank and agency usage has seen a reduction in nursing. Agency costs have dropped dramatically in 2014/2015 and the graph below demonstrates a reduction during 2015/2016.

Shift Performance – Nursing and Midwifery This year Vs Last Year



The creation of an internal “specials” team has gone some way to address the need for specials at Denmark Hill. The specials team continues to review all referrals made to the team on a daily basis and a small number of these are rejected. However despite a roster of 7 – 8 nurses/health care assistants per day, the demand on average is for up to 25 nurses/health care assistants per day so the specials team is only covering about 35% of the demand. A paper is being drafted to outline potential future savings if the team were to be extended.

The table below demonstrates the numbers of wtes requested per month through temporary staffing and the reasons for the requests.

Reasons for Booking Temporary Staff (wte)

Qualified	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Average
Vacancy	484.41	450.02	408.38	390.61	396.61	397.16	390.99	370.10	337.91	389.60	447.61	525.66	415.76
Sickness	70.20	61.60	50.05	54.76	58.95	68.59	74.89	61.02	71.16	73.94	71.76	69.69	65.55
Workload Increased	20.73	25.58	22.78	19.41	29.92	24.85	24.94	24.60	17.70	19.44	17.99	23.47	22.62
Escalation	21.09	20.88	16.33	8.89	8.37	15.43	23.18	24.09	15.12	14.99	16.15	19.00	16.96
Specialing	18.50	21.71	13.94	4.95	10.45	9.36	11.47	20.13	13.56	18.13	11.99	20.05	14.52
Maternity	13.65	14.49	14.03	13.47	10.97	13.20	12.53	11.00	13.39	12.97	15.55	15.58	13.40
Initiative	8.55	9.68	8.80	8.46	9.70	11.27	10.99	11.31	9.08	12.30	13.86	13.05	10.59
Planned Leave	12.13	15.52	11.60	10.23	11.92	5.37	4.18	5.08	12.48	10.42	10.79	10.36	10.01
Unplanned Leave	10.60	10.58	10.39	7.79	9.47	10.96	10.21	6.26	8.88	11.93	9.93	7.28	9.52
Seasonal Pressures	10.96	0.90	1.09	1.76	1.32	5.50	3.56	8.00	10.54	9.45	4.39	3.15	5.05
Grand Total	670.83	630.96	557.39	520.33	547.68	561.70	566.95	541.59	509.80	573.16	620.02	707.30	583.98

UnQualified	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Average
Vacancy	139.57	123.97	133.63	161.26	184.15	185.69	196.62	197.29	185.65	204.54	228.47	251.59	182.70
Specialing	112.59	87.16	46.21	30.14	35.38	26.32	35.37	48.61	50.89	62.61	55.57	71.01	55.16
Sickness	38.31	30.75	28.23	31.89	32.27	38.33	41.44	31.56	33.61	34.71	37.18	29.66	33.99
Workload Increased	16.24	17.03	10.34	10.13	11.31	13.32	9.07	10.42	14.86	17.30	8.07	11.58	12.47
Maternity	6.49	6.16	5.16	4.74	4.30	4.56	9.10	8.59	9.41	8.93	9.85	8.85	7.18
Unplanned Leave	4.67	5.06	4.32	3.96	7.86	7.18	5.93	6.75	5.60	6.87	5.48	7.69	5.95
Initiative	6.33	5.09	4.31	5.12	5.83	5.16	4.96	5.41	4.94	3.29	4.81	2.53	4.82
Planned Leave	7.03	4.83	6.64	4.05	4.46	3.59	2.63	1.85	2.46	1.84	2.85	3.89	3.84
Escalation	1.84	2.53	1.19	1.21	1.88	3.35	5.45	1.79	5.31	5.90	1.93	9.88	3.52
Seasonal Pressures	4.01	1.05	0.55	1.18	0.86	1.32	0.83	1.20	3.29	2.19	0.35	0.27	1.43
Grand Total	337.09	283.64	240.58	253.68	288.31	288.82	311.40	313.47	316.01	348.18	354.55	396.94	311.06

Fluctuations in temporary staffing use appear to be in line with changes in vacancies, sickness and the requirement of specials. The drive to reduce the uses of bank and agency workers continues but the Trust is still not in a position to terminate this use completely because of the need to ensure patient safety. Specialing at the DH site is predominantly managed by the specials team at DH and consideration needs to be given to the viability of such a team being introduced at the PRUH and associated sites. The creation of such a team may allow bank and agency use to be reduced further.

Conclusion

This Board paper has demonstrated that the Trust has complied with the Francis Report and Chief Nursing Officer requirements to review nurse staffing based on the safer nursing care tool and has been triangulated with national guidance and clinical judgement.

The recommendation is that staffing establishments at ward level continue at the level set by the initial review and agreed as funded establishments. Any ward area where a variance has been demonstrated by the peer review process has been explained and clarified within appendix 3 and it is anticipated that no further action will be taken about this variance ahead of a further review in 6- months' time.

Further consideration may need to be given to staffing establishments within the Emergency Department and whether staffing levels need to be flexed to accommodate the fluctuating patient numbers.

The Board Directors are asked to approve the staffing levels for the next six months when a further review will take place.

Nursing and Midwifery Divisional vacancies				Appendix 1
Division/Grade Group	DH & Ass. Sites	PRUH & Ass. Sites	DH & Ass. Sites	PRUH & Ass. Sites
ACLN	10.42	8.63	7.54%	8.39%
Band 2	-0.43	-0.26	0.00%	0.00%
Band 3-4	2.05	3.84	15.47%	31.32%
Band 5-7	8.80	5.05	7.45%	8.69%
CCTD	84.26	39.57	13.62%	15.30%
Band 2	7.69	-2.99	18.68%	0.00%
Band 3-4	6.02	19.14	54.63%	100.00%
Band 5-7	70.55	23.42	12.46%	10.85%
ENPDT	4.02	-3.10	4.95%	0.00%
Band 2		-8.00		0.00%
Band 3-4	3.93	0.00	9.66%	0.00%
Band 5-7	0.09	4.90	0.22%	21.09%
IPP	3.92		12.65%	
Band 2	-0.01		0.00%	
Band 3-4	0.00		0.00%	
Band 5-7	3.93		15.49%	
LRS	129.14	62.31	15.47%	19.34%
Band 2	13.08	14.62	13.43%	22.19%
Band 3-4	25.96	9.60	27.32%	24.81%
Band 5-7	90.11	38.09	14.03%	17.51%
NS	101.29	28.12	14.46%	13.28%
Band 2	28.40	7.02	20.53%	13.32%
Band 3-4	6.57	-1.80	48.42%	0.00%
Band 5-7	66.33	22.90	12.08%	14.55%
Ops Mng.	9.23	2.05	25.63%	9.97%
Band 5-7	9.23	2.05	25.63%	9.97%
R&D**	29.65		72.94%	
Band 3-4	2.00		100.00%	
Band 5-7	27.65		71.54%	
TEaM	71.53	123.97	11.95%	23.59%
Band 2	2.32	54.83	2.19%	31.35%
Band 3-4	11.85	0.31	45.11%	6.13%
Band 5-7	57.36	68.83	12.30%	19.91%
WCH	41.57	24.45	5.85%	8.11%
Band 2	30.52	11.02	34.50%	25.26%
Band 3-4	-2.02	11.90	0.00%	43.98%
Band 5-7	13.07	1.54	2.26%	0.67%
Workforce	15.09	1.50	24.85%	17.65%
Band 2	3.53		100.00%	
Band 3-4	5.23	1.50	13.00%	23.08%
Band 5-7	6.33	0.00	37.25%	0.00%
Grand Total	500.12	287.52	12.99%	16.19%

Appendix Two.

Summary of Staffing Reviews Carried out in 2014/15

a. Internal Review by the Executive Nursing Team

The staffing levels across the Trust were reviewed in the autumn of 2014 using the principles of NICE guidance by the Director of Nursing and Deputy Director of Nursing in conjunction with the Heads of Nursing for each division. In brief this involved:

- Using a recognized tool to measure patient acuity as a guide to calculate the number of staff needed (The Safer Nursing Care Tool, SNCT)
- Applying professional judgement to ensure that issues such as small sized wards, number of single rooms, seniority of staff, and patient outcomes are taken into consideration when defining an optimum level
- NICE guidance also advises that sickness rates and readiness of the availability of a contingent workforce should be taken into consideration

The outcome of this exercise was presented to the Board at a Quality and Governance Committee, along with the NICE guidance, the detail of the safer nursing care tool, and the number of trained and untrained staff per ward during day and night time hours. The outcome of the review was to increase the staffing levels at the PRUH, which were still at pre-acquisition levels and deemed to be too low and unsafe by ourselves and local commissioners. At Denmark Hill, numbers did not change significantly.

b. Independent review by three professionals with experience in workforce reviews

At the beginning of the financial turnaround process, toward the end of 2014, it was requested that an external review of the staffing levels recommended be carried out.

Three independent reviews were carried out; two of which were shared on with the Board (via Boardpad). These two of the reviews were supportive of the approach and the outcomes in terms of numbers. 1 reviewer, who looked at Denmark Hill only, recommended a change in skill mix (higher number of more experienced band six numbers and fewer band fives and Health Care Assistants) the effect of this recommendation would be cost neutral, but this recommendation, although not disputed was not adopted given the difficulties of recruiting band sixes in the current labor market.

c. Review by Price Waterhouse Coopers

Price Waterhouse Coopers (PWC) was asked to review our approach to nurse staffing and the outcome. This was done and resulted in a slight increase in numbers at Denmark Hill. The PWC work also estimated the cost benefits of staffing to appropriate levels and minimising the use of temporary staff by reducing dependence on agency staffing and applying more rigorous controls on temporary staffing.

d. Benchmarking with similar organisations

A benchmarking exercise was carried out with similar NHS Trusts. Imperial College, UCLH, Guys and Thomas' and Addenbrooke's Hospitals were used to compare staffing levels on general medical and surgical wards at Denmark Hill. Homerton and Epsom and St Helier Hospitals were selected to compare similar wards at the PRUH. In all cases levels of staff were broadly similar, in some hospitals there were fewer staff on nights but these tended to be more experienced nurses working at a higher pay band. Other Trusts also reported similar issues with vacancies, and an increase in the use of "specials" to manage vulnerable patients.

Following on from each of these reviews an agreed establishment was set and signed off by King's Executive and the budgets adjusted accordingly.

Appendix 2

							Variance in Acuity - Denmark Hill	
Division	Ward	Beds	Est	Ratios (D)	Ratios (N)	Acuity > 5 Difference	Reasons for difference	Actions
Surgery	Coptcoat	15	30.85	1:4	1:5	16.8	Sub optimal ward size. High patient turnover. Staffing admission lounge of up to 20 pts per day.	No change
	Trundle	16	27.92	1:4	1:5	16.7	Sub optimal ward size. High patient turnover. Plan to change patient cohort.	No change
	K.Monk ASU	26	53.74	1:4	1:4	34.7	High number of suicide risk and therefore high specials use. All surgical traches.	No change
Liver/Renal	Todd	22	41	1:4	1:5	29.4	Sub optimal ward size. All single rooms. Complex drug regimes. Stepdown from ITU and rapid deterioration risk none of which is captured by the acuity tool. All single rooms	Benchmarked with Birmingham - bigger wards (36) but ratios are the same during the day (1:5) but go up to 1:8 at night and at weekends. Ward manager supernummary and continuous reception and housekeeping cover. This would be unsafe to do that on Todd with less housekeeping and reception staff and ward manager in the numbers.
	Fisk and Cheere	30	49.18	1:5	1:4	40.5	4 HDU beds. High numbers of patients with mental health and delirium/dementia.	No change
Haematology	Davidson	17	32.79	1:4	1:5	24.6	Sub optimal ward size. All siderooms. Complex drug regimes which take time to prepare and administer.	Benchmarked with UCLH - ward size much bigger (24 beds). Ratio of patients to nurse is lower 1:3 for days and the same at 1:5 on nights. Ratios on Davidson 1:4/1:5.
	Elf and Libra	16	32.79	1:4	1:4	22.1	Sub optimal ward size. All siderooms. Complex drug regimes.	Investigate pharmacy technician to draw up and administer medication.
TEAM	Lonsdale	25	40.08	1:5	1:6	33.1	NIV. Multiple tracheostomies. Contains 9 CF patients on compleex drug regimes.	No change
	Oliver	30	46.58	1:6	1:7	40.2	High patient turnover approx. 30 patients per day. Challenging behaviour. Not accounted for in acuity tool.	No change
	RDL AMU	28	47.58	1:5	1:5	33.6	High patient turnover approx. 30 patients per day. Challenging behaviour. Not accounted for in acuity tool.	No change

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Division	Ward	Beds	Est	Ratios (D)	Ratios (N)	Acuity > 5 Difference	Reasons for difference	Actions
Cardiac	Sam Oram	17	45.88	1:5	1:6	35.6	High specials use, mental health patients and those with brain injury. High LoS.	No change
Neuro	David Marsden	31	55.27	1:5	1:6	46.5	Complex dependent patients. Step down from ITU. High no. of traches and specials. Need for escort to various departments and requirement to remain with patient. Not accounted for in acuity tool.	Benchmarked with St Georges's - Kent ward, 31 beds has 55.75 wte. KCH has 56.77 excluding the Housekeeper so are comparable.
	Murray Falconer	31	46.85	1:5	1:6	33.7	2 post op bays - intense monitoring. Telemetry service involving an additional 5 staff.	The post op bay work and telemetry not reflected in acuity. Benchmarking with St George's and 31 bedded neuro-ward have 57.07 wte. KCH establishment is lower and includes a housekeeper post ie non nursing.
	FCRU	15	31.05	1:7	1:7	22.8	Suboptimal ward size. Complex patients with high level rehab needs and behavioural issues.	Benchmark with other rehab units.
	Friends	29	59.88	1:5	1:5	46.5	3 shift patterns. HASU beds flex from 12 to 22 and therefore increased staffing requirement. Band 6 thrombolysis covered by ward and absent for up to 4 hours. Requirement daily.	No change

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							Variance in Acuity	
Division	Ward	Beds	Est	Ratio (D)	Ratio (N)	Acuity > 5 difference	Reasons for difference	Actions
TEAM	M4	20	34.95	1:6	1:6	20.8	Patient cohort has changed - Resp to MFSD. Mildly confused included.	Review once workload established.
	AMU 1 & 2	56	105.99	1:5	1:6	71.4	Turnover 26 patients per day. Acuity variable. Specials included. Acuity tool doesn't accommodate high turnover of patients.	No change
Surgery	S3	20	29.22	1:6	1:6	22.1	Change of usage.Includes ambulatory for which it is not established.	Review once workload established.
	S4	14	24.1	1:7	1:7	16.1	Small ward effect.Change of usage.	
Network - Neuro	Ontario	15	30.65	1:7	1:7	19.4	Ward not at 12 beds,at 15 at present and flexes up to 20 beds, stepdown patients, acuity varies on type of patients admitted from DH and PRUH and their rehab needs.	No change
	HASU/Stroke	40	72.29	1:4	1:4	62.2	Overall establishment and acuity to be considered. 400 admissions per month and nurses covering thrombolysis bleep.High requirement for escorts and long periods off ward not considered by acuity tool	No change
Network - Haem	Chartwell	12	24.09	1:4	1:4	17.9	Sub optimal ward. Complex patients treatment regimes not accounted for in the acuity tool.	No change - ward set to close