

Report to: Finance Committee

Date: 18th November 2022

Subject: Business Case to Increase Substantive ED Staffing

Executive Summary

ED demand has continued to grow over recent years, driven by increased attendances and longer length of stay in the department largely due to increased bed waits due in turn to poor flow through and out of the Trust.

There is a fundamental requirement to deliver the expected nurse staffing requirements and clinical decision making staff in accordance with the ECIST capacity and demand modelling to ensure safe, high quality care. In summary this includes the necessity to:

- Increase the number nursing staff - The requirements are due to increased patients attending the department, extended bed waits for patients resulting in longer time spent in ED and an increase in acuity of patients.
- Increase the number of Clinical Decision Makers - The requirements are due more patients attending ED, resulting in more clinical decisions required
- Improve run-rate – By substantively recruiting , leads to better value for money, improves well-being of staff and improved retention.

Staffing levels have been increased through the use of bank and agency however this offers poor value for money, is not sustainable and is detrimental to the health and wellbeing of existing staff many of whom are servicing these additional shifts.

The case addressed the Trust strategic priorities as follows:

To provide outstanding care	Correct staffing is the key to delivering timely and high quality care in the ED
To promote and support health and wellbeing	‘ED is well-recognised as having amongst the most intense working environment for Senior Decision Makers in a healthcare system’ (RCEM Workforce Recommendations 2018). Sustainable working leads to more effective working. Tired or burned-out staff are less safe, less efficient, and less effective.
To maximise the potential of our workforce	A department that adequately resourced will enable an environment that is less pressurised and therefore decision making will improve. Retention of staff?
To continuously learn and improve	With a sustainable workforce model there will be more time enabled to support, educate and train staff.
To achieve better value	Maximising the productivity of the ED workforce. In a less pressurised and crowded department, evidence shows that length of stay is reduced (ED crowding leads to a higher conversion to admission) Also agency to substantive better value for money

The risks this proposal will mitigate are:

Risk 1429: Overcrowding in ED due to High Volume and delayed patient transfer from ED to admission area – currently 20 – would reduce to 12
Risk 2522: Overcrowding in ED waiting Room – currently 15 – would reduce to 9
Risk 2568: Safety of children in the Emergency department caused temporary closure of paediatric area – currently 12 – would reduce to 9
Risk 2410: Staffing levels - medical - UTC Newark – currently 12 – would reduce to 6

The purpose of this paper is to provide the Executive Board with a report outlining:

- The 'case for change' for the nurse staffing review and recommendations that have been made within the business case
- The current nursing workforce provision in KMH Emergency Department
- The detail of the approach taken in developing the business case including the planning assumptions, the rationale for the safe staffing tool used, the proposed revised service model and the proposed workforce implementation plan
- The proposed key metrics for workforce, quality and performance that, subject to approval, the Emergency Department would expect to be delivered
- A recommendation for the implementation that has been discussed and supported by the Senior Leadership Team is included.

Background

- Capacity has not increased in line with rising levels of patient demand - There has been an increase in patient demand that at times overwhelms the staffing resource. Expectations have risen, and advanced models of care involve more front-loaded investigations and treatment, the burden for which has largely fallen on the Emergency Department (ED). Correct staffing is therefore the key to delivering safe, timely and high quality care in the ED.
- Increased Acuity - With the innovative introduction of Same Day Emergency Care Pathways and single front door streaming, the demographics and acuity of patients within the Emergency Department has seen a significant shift compared to Pre-Covid. The new SDEC unit became operational on 12th April 2021. Upon operationalising, there was a 68% increase in patients being streamed into SDEC when compared to 2019/20 and an average of 34 patients per day, which would historically have been admitted and spent a proportion of this time in ED. As these are ambulant patients, the patients which are streamed to ED are typically more complex. Patients streamed to SDEC still require clinical decision making in ED, so whilst the success of SDEC has impacted on the number of bed waits in the department, it has not impacted on the number of attendances or clinical decision making time.
- Increase in admitted bed waits – There has been an increase in the number of patients and length of time these patients spend in ED awaiting admission due a lack of capacity within social care, leading to an increase in medically safe for transfer patients, impacting on flow out of ED. Should this improve over time, UEC will be able to reduce costs by reducing the staffing.

Proposal and Options

Option 1 – Do Nothing

Under-staffing in EDs results in:

- Longer waits for initial assessment, treatment and disposition
- Crowding
- Reduction in the quality of patient care
- Greater propensity for mistakes
- Poor patient experience
- Poor staff experience including adverse health effects
- Poor experience for doctors and other clinicians in training
- Difficulty retaining and recruiting ED staff
- Lost opportunities for system efficiency (care isn't delivered right-first-time)
- Cost arising from high staff turnover, locums, mistakes, and performance failure
- Failure to innovate, develop practice, or invest time in basic departmental management and quality

Option 2 – Partial Recruitment

Nursing:

- Recruit 10.80 wte Registered Nurses to support 2 x per shift
- Recruit 16.10 wte Unregistered Nurses to support 3 x per shift
- Recruit 2.2 wte Registered Nurses to support extension of Paediatric opening hours

Clinical Decision Makers

- Recruit 11 wte x Junior Doctors / Advanced Clinical Practitioners – costed at Clinical Fellow
- Recruit 6 wte x Speciality Doctors (not CESR)
- Recruit 1 wte x Consultant

Admin

- Recruit 1.9 receptionists

Total recruitment of 49.20 wte

Option 3 – Full Recruitment to meet current demand

Nursing:

- Recruit 16.10 wte Registered Nurses to support 3 x per shift
- Recruit 16.10 wte Unregistered Nurses to support 3 x per shift
- Recruit 2.2 wte Registered Nurses to support extension of Paediatric opening hours

Clinical Decision Makers

- Recruit 11 x Junior Doctors / Advanced Clinical Practitioners – costed at Clinical Fellow
- Recruit 6 x Speciality Doctors (not CESR)
- Recruit 1 x Consultant

Admin

- Recruit 1.9 wte receptionists

Total recruitment of 54.30 wte

Exit Strategy

We are actively working on demand management as a system and organisationally. The Optimising Patient Journey Programme aims to rapidly build on work happening across the Trust to improve the experience of patients from admission to discharge. We will do this by learning from what we currently do well and will jointly build, test and learn from implementing improvement processes as part of an evidence based approach.

Our outcomes will improve the patient experience, reduce the number of ward moves and enable patients to return to their home or community in a safe and timely way. The optimising patient journey programme cycle will begin from next Monday (31 October to 30th November) focussing on ward processes.

We have created a discharge to assess hub on site at Kings Mill Hospital to support timely supported discharges.

Should demand significantly reduce (in particular if the ICS is successful in reducing the MSFT backlog to manageable levels), there are 151 wte nursing vacancies within the organisation which we would redeploy the nursing staffing into. Clinical decision makers would be managed through attrition and job planning reductions to 10PA's.

Cost

Options 2 and 3 both offer a saving on the current projected spend, however these would require an increase in budget.

Scheme	Budget £'000	Option 1 - Do nothing £'000	Option 2 - Partial Recruitment £'000	Option 3 - Full Recruitment £'000
ED middle grades *	(3,323)	(306)	(236)	(236)
ED juniors	(1,807)	(361)	(82)	(82)
ED nursing *	(7,046)	(1,167)	(948)	(1,196)
ED reception	0	0	(56)	(56)
Forecast Outturn @ month 5	(14,010)			
Total	(1,834)	(1,834)	(1,322)	(1,570)

*includes winter funding

In the table above option 1 of do nothing is the month 5 forecast outturn position.

The current overspend of the do nothing, includes divisional, COVID and winter spend as detailed below.

Broken down	£'000	Funded
Divisional overspend at FOT Mth 5	(663)	No
Winter	(1,041)	Via Winter
Swabbing team	(130)	Via COVID April 22 to August 22
Total	(1,834)	

The winter funding will be required to support the transformation benefits on a recurrent basis.

The swabbing team has also been included in as a full year (noting that 5 months has been paid from COVID but this will not continue into future years).

Methodology

Model Hospital Comparison

Domains - Benchmarked metrics

■ 1st quartile ■ 2nd quartile ■ 3rd quartile ■ 4th quartile

Demand (-3)		Capacity (-8)		Flow (3)		Outcomes (3)	
Metric Name	Site Value	Metric Name	Site Value	Metric Name	Site Value	Metric Name	Site Value
Proportion of catchment population attending per year	% 27.6	Annual ED attendances per ED consultant	8,530.7	% of 999 ambulance handover delays > 30mins	% 4.1	APBR 12 (Admitted Patient Breach Rate >12hrs)	% 5.1
% of ED admissions aged 75+	% 34.7	Annual ED admissions per ED consultant	3,338.9	% Discharged, Admitted or Transferred <= 2hrs of arrival (DAT2)	% 26.1	APD12 (Aggregated Patient Delay >12hrs)	346.3
% ED attends in highest deprivation quintile	% 31.2	Annual ED attendances per ED registered nurse	882.5	APBR6 (Admitted Patient Breach Rate >6hrs)	% 27.7	Annual Delay Related Harms	53.4
GIRFT ED Acuity Index	0.0	Annual ED admissions per M&R cubicle	1,054.4	APD6 (Aggregated Patient Delay >6hrs)	350.4	Litigation liability per attendance	GBP 16.5
% of ED attendances admitted (SUS)	% 37.8	Annual ALL overnight admissions per G&A bed	65.0	SDEC (Same Day Emergency Care): Emergency Admissions with Zero LoS	% 39.6	Staff Survey Score - Recommendation	4.0
% of emergency admissions via ED	% 92.0	Annual acute overnight admissions per G&A bed	59.0	% Adms via A&E with a LoS >0 and < 2 days	% 13.7		
% of elective I/P admissions	% 8.9	Annual elective overnight admissions per G&A bed	6.1	% Adms via A&E with LoS > 6 days	% 22.4		
Trauma status	ND	Annual Trust admissions per Trust consultant w/e	449.1				
		ED estate adequacy					

For queries please email NHSI.AnalyticsProductsTeam@nhs.net

The following assumptions have been made in the development of this proposal. They are as follows:

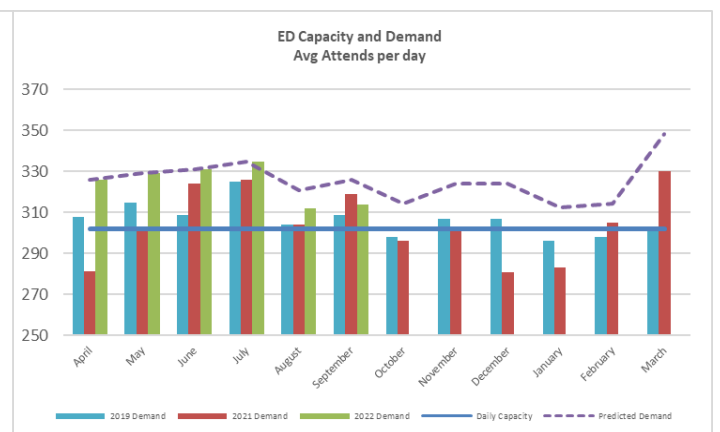
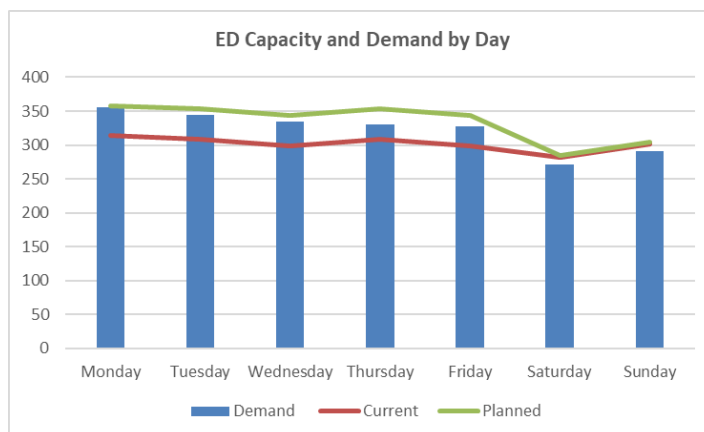
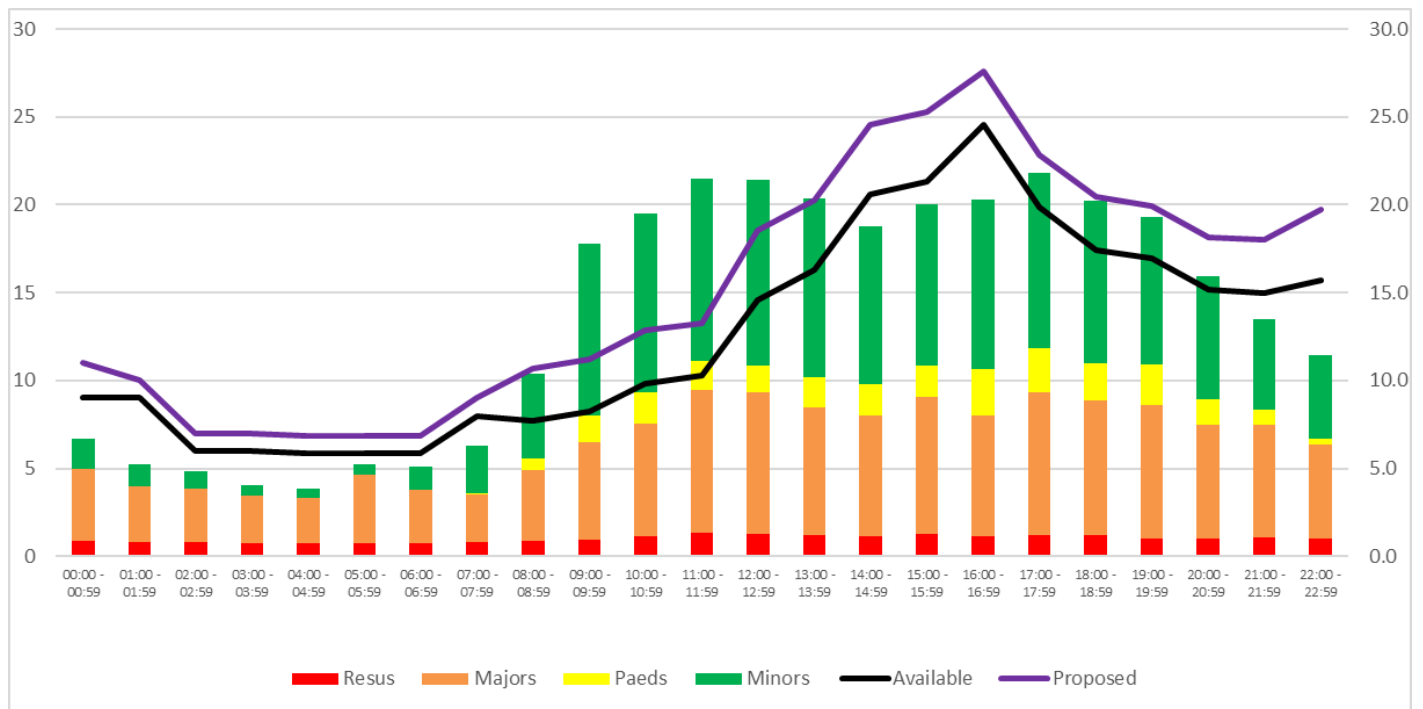
- This workforce proposal identifies the clinical decision makers required to provide a safe effective ED service in line with the nationally recognised ECIST staffing model
- This tool analyses the acuity of the number of patients in the department at any one time, displaying them by hour – the number of required clinical staff to support this is then calculated
- The proposed template for trained nursing staff reflects the requirement for the provision of specialist standard nurse to patient ratio's as summarised within the National Quality Board's report 'Safe, sustainable and productive staffing: urgent and emergency care' 2017
- The model includes assumptions about implementation of best practice – streaming/handover nurse etc.

- This model has been developed to meet the current needs/ expected standards of the departments. Further work will be required in year to assess the impact of this plan against the proposed bed modelling and impact of overcrowding due to lack of beds
- Reviewed against The College of Emergency Medicine Medical and Practitioner Staffing in Emergency Departments

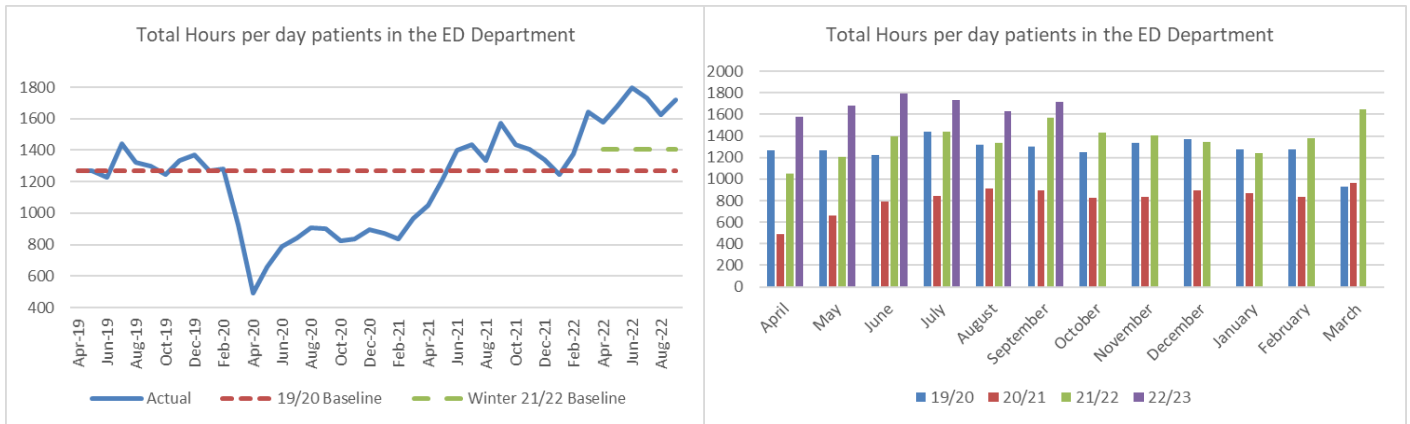
Proposed vs Current Capacity for Clinical Decision Makers (85th Percentile)

The planned additional shifts are:

- 1 x 10pm – 8am Middle Grade – 7 days per week
- 1 x 12noon – Midnight – Junior Doctor – Monday to Friday
- 2 x 4pm - 10pm Junior shifts
- 1 x Consultant support (on-call switch to resident) 11pm – 12:30am
- 1 x 8am – 4pm ACP/ENP Shift



The charts below show the exponential increase in workload for ED. The charts show the total hours of hours per day (work for staff), patients are within the ED department. Year to date, compared to 21/22 this is a 31% increase in workload for the department, and 29% increase compared to 19/20.



Key Outcome Metrics

Metric	Baseline (YTD)	Expected Performance
4 hour breaches	96 per day	66 per day
Time to initial assessment KMH ED - Time to initial assessment for arrivals to A&E % seen within <= 15 minutes	44.6%	64.6%
Waiting to be seen – Total time in ED (95th percentile <=4 hours, 240 minutes)	611 mins	360 mins
Average (mean) time in Department - non-admitted patients	169 mins	138 mins
Appraisal	93%	96%
Mandatory Training	87%	94%
Reduction in Patient Hours within ED	1688 hrs per day	1593 hrs per day
Ambulance Turnaround < 15 minutes	41.9%	53.1%
Ambulance Turnaround < 30 minutes	4.78%	3.93%

Recommendation

The Division of Urgent and Emergency Care recommend that substantive investment outlined within Option 3.

This proposal would require substantive investment of the approved winter plan of £1.04m and £130k of COVID spend. With the investment outlined in Option 3, we will reduce the divisional forecasted run-run rate by £264k FYE, therefore requesting £399k additional to budget FYE, to support the increase in attendances and workload. If approved, immediate recruitment would commence and the additional clinical decision making shifts which are not currently in the run rate will not be rostered until commencement of individuals in post in order to not worsen the current forecast.

Should demand decrease and bed waiters reduce, staffing will be adjusted accordingly on the basis of every 138 hours per day reduction in patients spending in the department, 1 RN and 1 HCA can be released.