

CRITICAL CAPACITY

A SHORT RESEARCH SURVEY ON CRITICAL CARE BED CAPACITY

March 2018



1 INTRODUCTION TO THE FINDINGS

“More beds, more nurses, and importantly more doctors are needed.” (London)

During the last two weeks of February 2018 as a short length research project, the FICM ran a survey of its membership to understand the complex picture behind the UK’s current critical care bed capacity. From a series of local workforce engagements and censuses, FICM has regularly had the issue of bed capacity raised as a concern for both the continuing quality care of patients and the wellbeing of the clinicians who look after them. Figures have been routinely collected in England for some years, but it is commonly felt by ICM doctors, that this does not give an accurate reflection of the day-to-day pressures felt on the majority of High Dependency Units (HDUs) and Intensive Care Units (ICUs).

386 responses were received, accounting for approximately 20% of ICM consultants. As there are around 210 units in the UK, this is likely to cover a large number of units. The Faculty liaised with the Guardian and released this data as an exclusive to them for publication. It was published on 7th March 2018.

2 EXECUTIVE SUMMARY

“We have spent the majority of the last 6 weeks in “surge” capacity mode with extra beds in the Recovery area. Efficiency, safety and quality all suffer when we run at this level of workload.” (East Midlands)

The survey demonstrated that large numbers of units across the UK are either current experiencing or moving towards a capacity crisis. Only a minority of units were not having to make difficult decisions to ensure that patients were able to receive the care they required.

The key messages are as follows:

- 3/5 of units do not have a full critical care nursing complement.
- Of those affected, the vast majority considered that bed capacity was inevitably impacted leading to cancelled operations. Quality of care and even patient safety might be impacted.
- 2/5 of units have to close beds due to staffing shortages on at least a weekly basis. Only 14% of units did not have to close beds.
- 4/5 of units had to transfer patients due to lack of beds. With 21% units doing this at least monthly.
- The bed fill rate for Northern Ireland and Wales was estimated to be at least 95%. Scotland was 84%. NHS England data put the critical care bed capacity rate at 87%, but a number of units responded to express doubt that the rate entered for their Trusts was a true reflection of their real capacity.

In 2017, the FICM worked with the Health Services Journal to undertake a Freedom of Information exercise aiming to gather information on non-medical transfers and bed closures due to lack of critical care staff. The data was not reliably collected across England. This, coupled with the information unearthed during this short survey, raises serious questions about how the NHS is modelling critical care demand and supply.



Dr Carl Waldmann, Dean of the Faculty of Intensive Care Medicine:

“The Faculty of Intensive Care Medicine recommends that the Departments of Health and each Health Board and Trust make modelling of critical care need and resources an urgent priority.

While I am very concerned with some of the results of this survey, unfortunately none will come as a surprise to the healthcare professionals who manage these challenges on a day-to-day basis. Especially at this time of year, when winter pressures exacerbate an already beleaguered system, critical care services come close to the absolute limits of their ability to provide good patient care.

All the four nation’s NHS bodies take considerable care to formulate escalation plans to protect the safety of critically ill patients during the winter period. The concern among the critical care community is that these pressures are now being felt throughout the year. Back in the late 1990s, these pressures on critical care services led to the service almost being brought to its knees during some very difficult winters. This in turn led to a government review of critical care in the year 2000 that led to positive changes in investment and configuration that vastly improved patient quality of care and the sustainability of the service.

That time is upon us again. There has not been any true service modelling since then, yet the service has dramatically changed and demand has escalated as the population ages and medical innovations lead to more people being able to benefit from critical support.

No intensive care doctor is willing to compromise on patient safety, but without specific interventions targeted towards alleviating system pressures, the strain on intensive care staff and resources will increase exponentially. Staff are doing an incredible job to keep patients safe with the resources available to them – it is the system that requires urgent critical care.

The Faculty launched its Critical Futures initiative in the autumn of 2017, with 12 clear recommendations on what the service needs or needs to adapt to in the coming 5-10 years. These are a mixture of proposals for research into service reconfiguration and effective investment in people and resources. We look forward to engaging with the government and the NHS on these areas, especially in the areas of enhanced care post-surgery, the new workforce of Advanced Critical Care Practitioners, and creating sustainable careers. Critical care is a truly rewarding career with a supportive environment and network. We have to fight to keep it this way.

Importantly for patients and their relatives, critical care teams across the UK work long and hard to ensure that patient safety is their highest priority at all times. We are actively working with multiple partners to ensure that the quality of care does not suffer in the coming years.”

“We have the smallest proportion of critical care beds in our region, and have been trying to engage the Trust in critical care expansion for more than 10 years. We have reached crisis point: We are currently cancelling elective surgical patients on an almost daily basis as we simply do not have anywhere to admit them to.” (North West)

3 A FULL SUMMARY OF THE SURVEY FINDINGS

4.1 Critical care nursing staff

“We often have to use expensive agency nurses to keep our capacity of beds.” (Scotland)

The first question asked about the complement of critical care nursing staff at each unit. **62% of UK units said they did not have a full complement.** This issue was universal through each devolved nation and region of England. Although including a range from 1-50, the average number of nurses that were needed to bring the complement back to full (factoring in 24:7 coverage and individual working patterns including less than full time) was 12.

4.2 The impact of the nursing shortage

“Elective surgery is cancelled nearly daily, which is a massive burden on patients and staff looking after them, both emotionally and physically.” (Kent, Surrey & Sussex)

The second question asked for the views of respondents who had a nursing shortage about the impact the shortage was having on practice and care.

The impact of your current nursing shortage.	COUNT	% OF POTENTIAL RESPONDENTS (238)
In my opinion quality of care can suffer	187	79
Bed closures vary from day to day	185	78
Elective surgery is cancelled	163	68
In my opinion patient safety may be compromised	160	67
Non-clinical transfers occur	82	34
Beds are permanently closed	27	11

The majority of respondents were concerned that quality of care could suffer and that there would be inevitable bed closures due to the lack of workforce to staff them.

4.3 Impact of workforce on bed capacity

“I am very concerned about bed capacity issues in this region. It is unsustainable. I can recall only a couple of occasions over the past 6 months that there was a physically empty bed when I came on shift. There is constant pressure on beds which is stressful for the whole team and is having a progressively deleterious impact on staff morale.” (North West)

The third question asked about whether lack of workforce (including nurses, doctors, practitioners and the wider team) impacted on their ability to keep all their beds open.

40% of units have a bed or beds closed due to lack of staff on at least a weekly basis. Only 14% of units never have to close beds due to lack of staffing and some will open beds with below the required standard of staffing due to local pressure.

From Dr Carl Waldmann, the Dean of the Faculty of Intensive Care Medicine:
“Without an open bed, which includes all the relevant critical care staff to safely manage that bed, ICUs and HDUs cannot admit patients. Guidelines for the Provision of Intensive Care Services (GPICS) clearly states the minimum safe staffing which has been endorsed by the entire critical care community as well as its interfacing services. Where no beds are available, this can either lead to cancellations of operations or to patients being transferred, at their sickest, to hospitals away from their loved ones. This is not what we want for patients, but something more and more units have to consider doing. Critical care staff are well aware of how valuable our essential service is for patients and families, literally lifesaving on many occasions. It is frustrating for staff when they are unable to do their job to the highest standard. This can be stressful and lead to difficulty in recruiting and retaining staff, exacerbating the current lack of resource.”

“Shortage of critical care beds in my hospital is recognised by the exec team with a plan to increase capacity by 50% in the near future to mitigate the shortage.” (London)

4.4 Patient transfers

“We have a serious under provision of ICU beds resulting in frequent non clinical transfers, overstretched nursing and medical staff. Very difficult decisions regarding management of where to nurse patients and frequent cancellation of elective operations.” (Kent, Surrey & Sussex)

The fourth question asked about the impact of lack of beds on the need for patients to be transferred to another hospital.

Patient transfer due to lack of ICU capacity happens (or has to be actively avoided by cancelling operations) at least sometimes in 80% of units. It happens at least monthly in 21% of units. Over 80% of units think the need for transfers due to lack of capacity is happening more often. A breakdown by region of the % saying it is happening more often is given in the table below.

Region	% more often
UK	82%
England: London	74%
England: North	81%
England: South & Midlands	85%
Northern Ireland	88%
Scotland	70%
Wales	91%

4.5 Overall bed fill rate

The fifth question asked about the current % fill rate of their critical care beds.

For Northern Ireland, Scotland and Wales, we asked for their estimation of the current bed capacity of their unit. The average for Scotland was 84%. Northern Ireland was higher at 95%. Wales was just short of 100% - many units here were already co-opting beds beyond critical care for temporary usage, giving a few responses over 100% fill.

For England, where the information is collected and presented nationally through NHS England, we asked them whether they felt the reported percentage fill rate for beds at their site was a true reflection of their current bed capacity. The NHSE SitRep data was estimating the average fill rate for England was just below 87% for January, which includes a number of units at or near 100%. The highest level recommended for safe and efficient patient care is 85%.

23% of units did not think their collected data was a true reflection of their current situation. The reasons given were varied:

1. A complete surprise at the number presented based on their experience: *"We have been full for the last 4 weeks and it states a consistent 60%" / "This figure says we are at 80% occupancy, this is totally wrong its 95-100%" / "We are sited 75% occupancy when we have been 85% plus occupancy."*
2. Which beds the data included: *"The SitRep takes into account only those usual beds rather than the additional ones we have had to open (under staffed) to cope with demand."*
3. A disconnect between beds being theoretically open but unable to use due to lack of staff or other resources: *"Bed occupancy will vary throughout the 24 hours. The figures quoted just state the physical beds available but do not take into account the beds unofficially closed due to lack of nursing staff. It also reflects beds that are potentially available but still have a patient in them as there is no room on the ward for the patient to be discharged into." / "The occupancy data assumes all our beds are open - which they are not because we don't have enough nurses to staff them."*
4. The simplicity of the data collected, which may mix different types of units together, including specialist units in with general units: *"We run a mixed ICU and HDU. Our actual occupancy will not be captured with basic data like number of beds occupied and beds open as this can underestimate the true occupancy with certain mixes of level 2 and 3 patients. A slightly more complex set of data is required to gauge the true occupancy rates."*
5. The average data will only include a maximum of 100% fill for any hospital, whilst many units will need to flex into potentially less safe areas (like Recovery) and therefore will have fill rates above 100%: *"Last week we overstretched by at least 2 beds in the recovery when the whole unit was full, but the [data does] not take consideration of this and shows only 100% occupancy. In truth this will be 115 to 130% occupancy."*