Gooroo Beds – planning optimum bed capacity against acceptable risk

Whether you're preparing for winter, reviewing your capacity requirements, or even planning a capital development or site reconfiguration, you're going to need the strongest possible case for enough beds to maintain a safe bed occupancy. Gooroo Beds enables healthcare managers to accurately plan optimum bed capacity against the type of clinical facility – intensive care, surgery, medicine – the anticipated demand and against acceptable clinical risk.

Bed shortages

We are continually bombarded with reports that the NHS has a shortage of beds, which appears to be the case when we compare ourselves against other countries. The latest OECD data* shows the UK has 2.34 beds per 1,000 population, while Germany has 7.82, France 5.73, and Sweden has 2.05.

We know restricted bed availability causes longer emergency and elective waits, and clinical risk to patients. We also know that each department has its own optimum bed occupancy level. For example, the right occupancy for critical care may be 50%, while surgery may be 75% and medicine 85%. No number, not even the popular 85%, could possibly be right everywhere.

Fundamental principles of risk and safety

Instead of relying on popular numbers like 85%, we must go back to the

fundamental principles of risk and safety. Gooroo Beds calculates the bed occupancy that delivers acceptable risks of outliers in different parts of the hospital – acceptable, that is, in the eyes of your clinicians.

Not only that, but Gooroo Beds helps you test strategies for bridging the gap between the beds you have and the beds you need. It enables you to switch to tactical mode, heading into every week with acceptable bed risks and maximising any opportunities for elective care.

Solution benefits

Risk is a much better basis for informed discussion than bed occupancy. Once we can identify the consequences of running out of beds, and agree the acceptable risks of that happening, Gooroo Beds makes it a technical exercise to calculate the corresponding levels of bed occupancy.

Gooroo Beds:

- Provides a statistically validated, clinically led basis for planning acute beds
- Evaluates potential solutions to overcrowded beds
- Communicates the level of pressure on bed usage far more effectively than simple bed occupancy percentages

As the Royal College of Emergency Medicine states:

The Gooroo Beds methodology is:

"a nuanced assessment that each hospital needs, to determine its own maximum capacity, depending on the size of the pool (large pools are able to absorb more demand surges) and different hospitals can provide different mitigations"

RCEM Acute Insight Series: Beds in the NHS - May 22



Solution overview

Gooroo Beds uses recent activity patterns to forecast predictable demand, and the likelihood of unpredictable demand, over the coming weeks. We then model this data to highlight where the crisis points are likely to occur. Bed occupancy exists to absorb the unpredictable variation in demand, and our model quantifies these risks for each service.



We discuss with operational and clinical leads the acceptable risks of putting non-elective patients into overflow bed areas (such as elective beds, assessment areas, daycase units), and calculate the bed occupancy that is consistent with that. For example, the right occupancy for critical care may be 50% while surgery may be 75%.

This allows the analysis to identify an initial 'long-list' of improvement scenarios to investigate in each bed pool to reduce risks and manage costs. These could include, identification of 'surge' bed availability, reduction in length of stay, improved bed turnover intervals, admission avoidance, and improvement in integration with community beds and services.

Beds vital to patient safety and operational effectiveness

It is time to move away from the broad generalities about bed occupancy, that have served the NHS so inadequately over the years and start planning beds based on acceptable risk.

Gooroo Beds gives you comprehensive and compelling visualizations that are ready to be inserted into your improvement plans, together with detailed explanations of the methods and supporting statistical cross-checks.

But best of all, we leave you and your clinical colleagues with a deep-rooted understanding of the bed risks in your hospital, and the most effective ways of dealing with them.

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Elective care solutions suite

Our comprehensive suite of elective care solutions encompasses waiting list management, data validation services, capacity planning, analytics, and eLearning solutions. This integrated portfolio is underpinned by our powerful data management engine which provides the unified data foundation to ensure a fast and targeted elective recovery.

About Insource

At Insource we bring the power of data to your organisation. Our leading data management platform seamlessly delivers validated, patient-level activity data from across the enterprise through our range of waiting list management, statutory reporting, capacity planning and other applications to help organisations manage their healthcare business more effectively.



