Bed.P.A.C.

Bed Management Software for Capacity Planning

Don't plan on an **average**. *Include* **variation** *in your bed forecasting for* **accurate** *planning.*

- ✓ ***Test your annual strategic plan***
- ✓ ***Calculate your optimal bed census***
- ✓ ***Increase stakeholder engagement***

Transforming healthcare delivery with our ***users*** for over 20 years

NHS · Johns Hopkins Medicine · Geisinger · Department of Health

Why choose Bed.P.A.C.

Healthcare organisations using Bed.P.A.C. have:

- Increased utilization of existing bed capacity through realignment of unit capabilities
- Improved performance against waiting time targets
- Reduced analyst planning time
- Improved stakeholder discussions and agreement on improvement solutions

Putting a patient in the wrong bed has a cost

A patient in the wrong bed extends their stay by one day, costing $1,600 per day per patient. If ***just 10% of patients*** are in the wrong bed that's ***$9,800 per day.***

Delayed Operations cause patient harm and expensive overtime

4% of scheduled surgery is cancelled for non-surgical reasons.
Surgery generates an average revenue of ***$1,500 per case***.
That adds up to ***$75,000 per month in lost revenue***.

More accurate than a spreadsheet

Variability in arrivals and lengths of stay and ensuring that patients are able to access the right inpatient unit for their condition add to the complexity of managing beds, all factors that ***simulation can help manage***.

Rapid decision making

Bed.P.A.C. enables you to ***quickly forecast*** bed capacity requirements. Results for any hospital, specialty, elective and/or emergency can be run in a morning and produced in a format that can be used for the meeting that afternoon, giving the flexibility to respond to ***"what if"*** questions from key stakeholders.

Better bed management can ***save $370,000*** a month ***per hospital*** and give patients better outcomes.

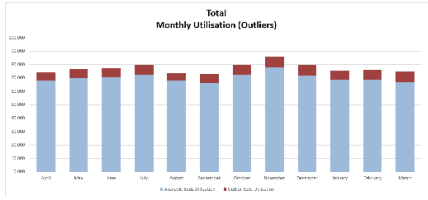
Isle of Wight Case Study

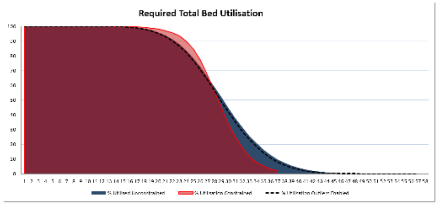
NHS Isle of Wight

The Hospital wanted to test their 2016/17 demand plan and determine if they had the capacity to meet it.

Bed.P.A.C. has led to:

- Constructive system wide discussions to resolve bed capacity issues
- Increased bed capacity for medical patients by approximately 17%
- Extension of the provision of winter resilience step down bed capacity to end Q1 of 16/17
- Increased community bed capacity based on identified need
- Increased home care packages delivering services to people in their own homes and in localities, for episodes that can be safely managed elsewhere.





*"Bed.P.A.C. has **stood up** to scrutiny from clinicians and managers within the Trust, consequently the results output have led to constructive discussions about **solutions** to issues rather than ongoing debates about the integrity of modelling. Consultants have been **particularly impressed** by our ability to recognise the maximum bed requirements and how often a certain number of beds will be utilised rather than referring to average bed requirements."*

Iain Hendey
Deputy Director - Information Finance & Performance Information Service
Isle of Wight, NHS Trust

How it works

Bed.P.A.C. uses historical data from the last 12 months to ***automatically identify*** distributions for:

- ✓ *Arrival times by hour of day, day of week*
- ✓ *Length of stay dependent on time and day of arrival*
- ✓ *Discharge time*

This is combined with the monthly demand for each specialty and the number of staffed beds which Bed.P.A.C. then uses to ***automatically build*** the simulation.

Bed.P.A.C. runs 3 initial scenarios :

- Unlimited beds
- On-unit staffed beds only
- On-unit staffed beds with placement on another unit if wait limit is exceeded

Bed.P.A.C. creates a results report that shows the discrepancy in performance between ideal bed capacity and actual bed constraints. This allows you see the ***capacity requirements*** needed to meet the patient demand.

After running the baseline you can then experiment with :

- Demand numbers
- Length of stay
- Discharges

To test the impact on capacity requirements.