Hospital capacity: what is the measure and what is the goal?

Sally M McCarthy

We need those not directly in the firing line to appreciate the evidence on overcrowding

Reducing the number of hospital beds and increasing occupancy above 85% in the name of operational efficiency have clearly had a negative effect, as the demand for hospital beds in Australia exceeds supply. The root cause of the problem will remain unless hospital capacity is addressed in an integrated approach at both national and state levels. In this issue of the Journal, several articles discuss hospital occupancy. Keegan (page 291) articulates the evidence for using hospital bed occupancy as an operational quality measure and target. As hospital bed occupancy rises above 85%, adverse effects include increased rates of hospital-acquired infections, staff health deterioration and escalating hospital inefficiency. Keegan advocates a shift to using patient outcome measures, rather than current process measures to judge health system function. This evidence presents a counterpoint to a discussion started by Bain and colleagues earlier in the year, which suggested that the 85% target occupancy figure is “a candidate for myth status” and is “both simplistic and likely to lead to flawed policy”.

Jones (page 298) points out that occupancy and hospital size are linked, and therefore broadens the debate to include hospital size. He explains clearly what we all know intuitively: hospital planners have been delivering hospitals that are too small. When planning new hospitals, future bed requirements would be more realistically estimated by using readily available figures for occupied bed-days and examining trends over time, compared with just using admission numbers and length of stay. This would take into account factors influencing volatility of demand for beds. Trends in occupied bed-days show that English hospitals needed as many beds in 2007 as in 1998, despite a large reduction in available beds. The situation is the same in Australia and Canada, yet there is a prevailing belief among planners that increasing efficiencies will account for any shortfalls. Jones discusses factors apart from demography that affect demand, including clinical practice changes, environmental cycles, and the increasing need for end-of-life care. He concludes, “can we please have a true evidence-based debate . . .?”, as patients and clinical staff deserve to benefit from the tools required to deliver effective and efficient health care.

It is very pleasing to see the debate continue; the rapid growth in the published literature on access block and ED overcrowding since 2007 demonstrates increased focus on this issue. But further than this, we need those not directly in the firing line to appreciate the evidence on access block and ED and hospital overcrowding, so that we see the end of policy setting without attention to relevant system capacity issues. For instance, the Australian Commission on Safety and Quality in Health Care has identified reduction of hospital-acquired infection as a priority; however, interventions are focused only at the individual staff and patient level, without mention of the system issue of overcrowding. Similarly, while EDs are the most commonly complained about sites of care in New South Wales, and a third of these complaints relate to access to care, the NSW public health system’s incident management system does not include access block and ED overcrowding as reportable incidents.

To acknowledge the causes and consequences of high hospital bed occupancy is seen in well publicised health system responses to incidents that have occurred in overcrowded EDs. The solutions proposed in response to these incidents so far have not included fixing the underlying reason for the patient being stuck in the waiting room — lack of hospital capacity. Transparent performance reporting and new national standards are part of planned health reforms in Australia, but there are problems with the accuracy of current performance data, and, as Keegan points out, development of meaningful outcome measures of patient care is required. In the meantime, the verdict is in on access block, high bed occupancy and ED overcrowding — they are bad for patients, staff and the system itself. It is time hospital capacity was also on the patient-safety policy agenda.

Competing interests
I am President of the Australasian College for Emergency Medicine.

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References


