

The easiest cut: managing elective surgery in the public sector

The problem of surgical waiting lists requires multifactorial solutions

The provision of public hospital services inevitably involves managing the demand for these services. This is usually achieved by rationing. Elective surgery is the easiest service for health administrators to manipulate to meet budget imperatives and to manage demand pressures, through controlling surgical waiting lists. In short, the pestle of demand grinds against the mortar of budget restriction in the management of elective surgical lists. Although health planners are able to accurately predict demand for surgical services, administrators often plan not to meet that demand because of budgetary restrictions.

In this issue of the Journal, Schofield and colleagues report on one aspect of demand management: the cancellation of operations on the day of surgery.¹ This is almost unheard of in the private health-care sector, where the supply of surgical services is virtually uncapped. Schofield et al also shed some light on the reasons for these cancellations.

In the tertiary-care hospital that was the focus of their investigations, the rate of on-the-day cancellations of surgery (11.9% overall, and 13.2% for weekday elective surgery) is a cause for concern. The Australian Council on Health Care Standards guideline is that the day-of-surgery cancellation rate should be low,² which, in New South Wales, is interpreted to mean not exceeding 1.5%. In my own hospital, Nepean (also a tertiary-care hospital), it is about 3%.

A higher rate of cancellations can be expected in hospitals where patients, such as those undergoing major general and cardiac surgery, depend postoperatively on a dedicated intensive-care bed. For these patients, Schofield et al found cancellation rates of 31.2% and 28.5%, respectively; these are higher than would usually be expected. As intensive-care beds are assigned in NSW as part of a statewide coordination service, the management of this problem requires involvement of agencies at a higher level than hospital administration. However, it is not clear why surgical services in the survey by Schofield et al, such as ear, nose and throat or plastic surgery (which should be largely independent of intensive-care and inpatient beds), had such high cancellation rates.

The reasons for elective surgery cancellations revealed by Schofield and colleagues fell into five nearly even groups — lack of theatre time, lack of postoperative beds, cancellation by patient or carer, patient clinical change, and procedural reasons. As elective surgery is one of the most predictable aspects of hospital medicine, the great bulk of these cancellations could be avoided with better management systems. With effective management, the only day-of-surgery cancellations should be occasional patients with an acute change in their medical condition. Managing elective surgery more efficiently requires a well thought out management system with quarantining of resources to ensure patient flow.

Such a system has recently been described by Ryan and colleagues — the 23-hour ward model.³ In this model, it is expected that the episode of care can be delivered within an envelope of 23 hours, during which time patients require only pain relief and monitoring in a supervised setting until fit for discharge. This model is quarantined from the rest of the hospital

or area bed-base, either in a designated ward or a smaller hospital in the area. Patient care is protocol driven, and patients are not admitted unless they are on a clinical pathway. The protocol includes compulsory pre-admission and pre-anaesthetic assessment, careful construction of lists matching patients to available beds and operating-room slots, and a guarantee that elective procedures will not be cancelled. Patient flows are predetermined, with a staged recovery process. This model does not lead to significant increases in readmission rates, nor does it significantly affect community services.³ It is suitable for about 80% of patients requiring elective surgery. The NSW Surgical Service task force has recently recommended the adoption of this model, and the NSW Department of Health has advised all area health services to institute it.

Adopting this model's approach may also help patients who require stays of over 23 hours. A management process that links the predictable demand for elective surgery to operating sessions and beds can avoid cancellations and enable effective and predictable access for all patients.

Waiting times are multifactorial and vary between areas, between hospitals in areas and between individual surgeons within hospitals.⁴ In addition to better management practices based on operational research,⁵ other solutions to the problem of waiting lists are needed. In elective orthopaedic surgery, there is a need for more resources for prostheses and a better system of prosthetic purchasing. In ear, nose and throat surgery, there is a need for more creative schemes to better utilise the few available specialists. Other solutions may involve contracting specific groups of patients to the private sector (the subject of a pilot study in NSW⁶) and developing whole new approaches, especially in the apparently insoluble area of intensive-care bed provision (eg, the surgical acute-care unit⁷).

Currently, 1% of the NSW population is on a surgical waiting list, with similar figures in other states and territories. We have clear evidence of the harm that excessive waiting times cause patients.⁸ All available means must be used to solve this problem. Above all, there is a need to avoid the distress caused to patients by day-of-surgery cancellations.

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Competing interests: Westmead Hospital, the subject of the report by Schofield et al, is now included in the Sydney West Area Health Service Surgical Network, but did not belong to it at the time of the report.

1 Schofield WN, Rubin G, Piza M, et al. Cancellation of operations on the day of intended surgery at a major Australian referral hospital. *Med J Aust* 2005; 182: 612-615.

2 Australian Council on Health Care. ACHS clinical indicator summary guide 2004. An approach to demonstrating the dimensions of quality. Sydney: The Council, 2004.

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- 3 Ryan R, Davoren J, Grant H, Delbridge L. A 23-hour care centre model for the management of surgical patients. *ANZ J Surg* 2004; 74: 754-759.
- 4 NSW Health. NSW hospital waiting times. Available at: <http://www.health.nsw.gov.au/waitingtimes/> (accessed Apr 2005).
- 5 Buhaug H. Long waiting lists in hospitals. *BMJ* 2002; 324: 252-253.
- 6 NSW Health pilot project. Contract number: DOH 05/10.
- 7 Bown MJ, Norwood MGA, Loftus IM, et al. The surgical acute care unit (SACU): effects on surgical workload and mortality. *ANZ J Surg* 2004; 74: 881-884.
- 8 Sobolev B, Mercer D, Brown P, et al. Risk of emergency admission while awaiting elective cholecystectomy. *CMAJ* 2003; 169: 662-665. □