Responses to access block in Australia

Australian Capital Territory

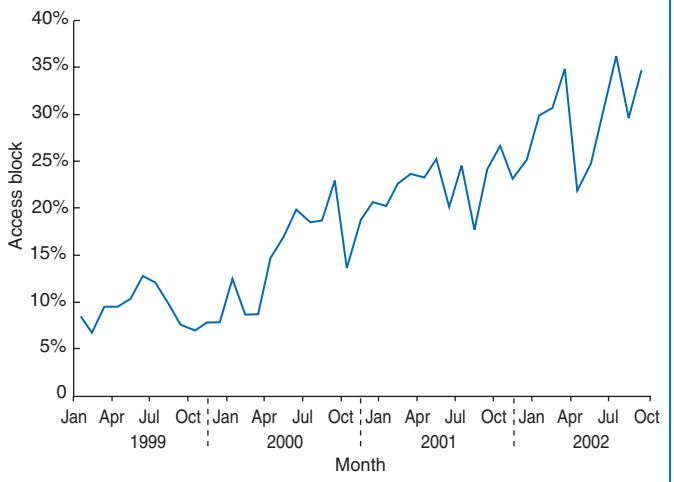
Drew B Richardson

ACCESS BLOCK BEGAN to affect hospitals in the Australian Capital Territory during the winter of 2000. Practice was seriously affected first at the Canberra Hospital, a 500-bed mixed adult/paediatric tertiary hospital, in 2000, and then in 2002 at Calvary Hospital (220 beds), the other hospital in the ACT with an emergency department (ED).

Access block in the Canberra Hospital averaged 9.1% (Australasian College for Emergency Medicine/Australian Council for Healthcare Standards [ACEM/ACHS] definition: proportion of admissions with total time in the ED longer than eight hours) during 1999. For 14 days between May and September the rate exceeded 20%. During 2000, it averaged 16.3%, with 56 days in excess of 20% between May and September (Box). This trend continued in 2001, when the figures were 22.9% and 79, respectively. The major underlying cause was a reduction in hospital bed capacity from a monthly average of 533 staffed beds in January–August 1999 to 491 in January–August 2000. As a corollary, a marked reduction in access block occurred when additional beds were made available by cancellation of elective surgery during the Sydney Olympics in September 2000.

Although access block had a measurable effect on ED waiting time performance in 1999,[1] it began to affect overall ED function in the second half of 2000,[2] when a significantly lower proportion of presentations achieved their desired ACEM/ACHS waiting time performance.

Access block at the Canberra Hospital, January 1999 to September 2002



Interventions

The onset of access block prompted review of ED work practice, leading to some improvement in ED performance in the face of access block during 2000, but little change since. The continued severity of the problem has stimulated ongoing review of all hospital work practice, aiming to reduce the demand on overnight beds through improving overall patient flow, and to improve ED function. The changes have proven to be of variable effectiveness.

Interventions to improve patient flow

- Restructuring and expansion of the ***Bed Management Unit*** (May 2001);
- ***Revision of admission, discharge and bed management policies*** (July 2001 to March 2002);
- Expansion and increased use of ***hospital in the home and day surgery services*** (ongoing);
- ***Off-site transitional care arrangements*** for elderly patients (ongoing increase in transitional care beds);
- Activation of ***real-time estimated date of departure notification system*** and daily estimates of occupancy over next 24 hours (May 2001);
- ***Containment of elective surgery,*** particularly during winter (ongoing since 2001); and
- Opening of a ***discharge lounge*** (relatively little effect on time of discharge).

Interventions to reduce ED demand for overnight beds

- Increased use of ***overnight discharge from the ED*** followed by day surgery for orthopaedic, plastic surgical, and gynaecological presentations; and
- Improved ***links with community services*** to facilitate discharge, particularly of geriatric patients.

ED changes to mitigate effects of access block

- ***Rearranging medical staff rosters*** (2001 and 2002);
- ***Increasing by one the number of nursing staff on each shift*** (winter 2001 and ongoing);
- ***Drawing additional nursing staff from the hospital pool*** at times of excessive inpatient care in ED (2002 and ongoing);

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■ ***Establishing formal policies and procedures on prioritisation of ED activity*** (2001 and 2002);

■ ***Revising hospital policies on ambulance diversion,*** although the effect has been limited, as the Canberra Hospital offers the only acute inpatient service in the region for paediatrics, orthopaedics, and most tertiary services; and

■ ***Providing additional Hospital Assistant and Wardsman staff*** to assist in the ED (ongoing).

Interventions planned for 2002–2003

■ ***Renovation of the ED*** to make better use of the available space;

■ Construction of a ***Clinical Decision Unit/Observation Unit*** in the ED to manage short-stay patients; and

■ Opening of a ***short-stay surgical unit*** close to the operating theatre to better manage short-stay surgical patients.

Outcome

Access block is the major issue facing EDs in the ACT. Despite the above measures, hospitals in the ACT have experienced a continued increase in access block and significant decline in ED waiting time performance.

1. Richardson DB. Association of access block with decreased ED performance [abstract]. *Acad Emerg Med* 2001; 8: 575-576.
2. Richardson DB. Quantifying the effects of access block [abstract]. *Emerg Med* 2001; 13(1): A10.

(Received 27 Aug, accepted 4 Nov 2002) ❑

The Queen Elizabeth Hospital Medical Division

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THE QUEEN ELIZABETH HOSPITAL (QEH) is a 340–361-bed acute tertiary referral hospital in the western suburbs of Adelaide. Since 1999, the hospital has had difficulties coping with emergency admissions demand, especially during winter. Over the previous years, there has been a reduction in acute bed numbers from 476 to 361. Also, within the past two years, there has been the loss of 250 residential care facility (RCF) nursing home beds from the western region of Adelaide. At the same time, the activity of the hospital as measured by casemix activity has remained constant. The inpatient occupancy in winter has resulted in the emergency department (ED) requesting to go on ambulance diversion (bypass) almost daily, usually in late afternoon; however, on most occasions, this has not been either approved or possible.

Waiting times in the ED for patients to be transferred to a ward are sometimes up to several days and QEH's waiting times in the ED are the longest of South Australian hospitals. Cancellation of elective surgical and medical patients has sometimes been necessary.

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Interventions

In a progressive response to reducing access block, the hospital has adopted a range of strategies.

■ In 1996, an ***Interface Unit*** based within the Division of Medicine was developed to coordinate and facilitate early discharge from the wards and avoid unnecessary admissions from the ED by initiating treatment/management for patients with conditions that may be managed at home but require additional support. The nurses in this unit "broker" or organise external therapy or services (such as subcutaneous heparin for the treatment of deep venous thrombosis, or home supports for someone who is frail and would otherwise have been admitted to hospital) in association with the patient's general practitioner.

■ With the loss of nursing home beds from the western Adelaide region, a ***step-down unit*** was created in the hospital with a lower registered/enrolled nursing skill mix. An active multidisciplinary team facilitates placing patients in RCFs or at home, with additional resources provided through brokered community services or State-based programs, such as the Adelaide Transition Alliance (which provides respite beds in RCFs) or with the Division of Surgery's "Hospital in the Home" program (which provides post-acute home nursing services from within the division's nursing resources).

■ A ***transit bay*** of six beds for incoming (ED) and outgoing (discharge) patients has been created. In addition, overcapacity beds (ie, accepting an additional patient into a ward before a patient has been discharged) have been used, and day beds have been used for non-same-day inpatients.

- Emphasis has been placed on ***promoting appropriate admission and appropriate day stay,*** with audits conducted by senior nurses from the Interface Unit based on accepted clinical criteria.
- ***Early discharge*** remains a priority, and is reinforced at medical handover meetings held each morning to review new admissions, facilitate transfer of care, and provide clinical inservice.
- ***Home care specialist nurses*** have also helped prevent admissions (eg, heart failure nurses, home cancer therapy and respiratory care nurses). A "medical flying squad" was established to assess nursing home patients and was clinically effective in reducing transfers from the RCF to the ED, but was too costly to sustain.
- A ***GP service*** located within the ED was unsuccessful because of low numbers of triage category level 4 and 5 patients. A further issue was that it sometimes involved a GP referring to another GP.

Outcome

The impact of these interventions is difficult to measure, as ambulance diversion has sometimes not been allowed in SA. However, without the introduction of the above initiatives, a substantial further reduction in elective activity would have been necessary. One measure of the success of these programs is that in 2001 the hospital had 50 long-stay patients awaiting placement, and this is now down to an average of 25 patients.

There have been strategies undertaken to increase the capacity of the ED, but medical and nursing staffing levels have remained an issue. Changes in chronic disease management are required to minimise acute inpatient demand, especially during winter. Strategically reducing elective surgical activity during winter and subsequently increasing it during summer is difficult. The Division of Surgery has trialled weekend surgery, but this has not been widely accepted by the community.

The management of long-stay patients remains central to improving patient access. The appropriate allocation of nursing home and respite beds is needed on a regional basis. The failure of nursing home beds to become available through licensing is a major issue that must be addressed at a State and Commonwealth level.

(Received 27 Aug, accepted 4 Nov 2002) ❑

Royal North Shore Hospital

Rohan J H Hammett and Bruce G Robinson

ROYAL NORTH SHORE HOSPITAL (RNSH) is a 550-bed tertiary referral hospital serving a population of about 900 000 in the Northern Sydney Health Area.

In 1999, the RNSH executive, to deal with ongoing restricted access (RA = ambulance bypass), decided to implement various changes to the structures, policies and practices of the hospital to alleviate the blockages to patients entering the emergency department (ED) by ambulance. The extent of RA at RNSH is shown in Box 1. As expected, RA was worse during winter, with more than 100 hours per month.

Interventions

In March 1999, the clinical heads of the hospital's divisions implemented a program aimed at improving utilisation of beds in the medical and surgical wards, in the belief that solutions to restricted access lay not within the ED, but within the rest of the hospital.

The specific interventions were implemented by committed multidisciplinary teams, underpinned with significant senior medical staff involvement and executive support.

Structural changes

- ***Administrative responsibility for the ED was moved to the Division of Medicine*** so that the problems facing the ED were seen as belonging to the general ward areas.
- ***Clinical Supervisors,*** with responsibility for coordinating bed management, were appointed in the divisions of medicine and surgery, and a ***Clinical Bed Manager*** was appointed with responsibility for bed management across the entire hospital.

Team-building initiatives

- ***Daily meetings*** with divisional nursing unit managers, the clinical supervisor and the bed manager. These meetings identified patients awaiting discharge, potential delays in treatment requiring attention, delays in consultation, inappropriate admissions, and patients suitable for treatment through ambulatory care or other outpatient services.

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- ***Friday afternoon meetings*** with all medical registrars, divisional medical and nursing heads, the clinical supervisor, and the bed manager to ensure that all patients not requiring hospitalisation over weekends had appropriate discharge plans.
- ***Provision of data*** to medical staff regarding clinical practice variation (eg, variation in average length of stay for specific conditions).

Clinical initiatives

- ***Ambulatory care ward*** open every day with extended after-hours service, with referrals from all medical teams and directly from the ED. This ward currently treats more than 1400 patients each month, and is available for patients who are well enough to be at home, but require in-hospital treatment as day patients. For example, patients who require blood transfusions, joint aspirations, lumbar punctures, chemotherapy or intravenous antibiotics were all moved from inpatient beds to the ambulatory care service. Similarly, rural patients referred for multiple specialist consultations or investigations are managed in this unit.
- ***Early-morning blood collection*** for patients awaiting results before discharge, with results available by 9:00 AM for discharge by 10:00 AM.
- ***Day-only angiography.***
- ***Fax referral*** to rehabilitation beds to expedite transfer.
- ***Weekend discharge rounds*** by the divisional medical head and the clinical supervisor.

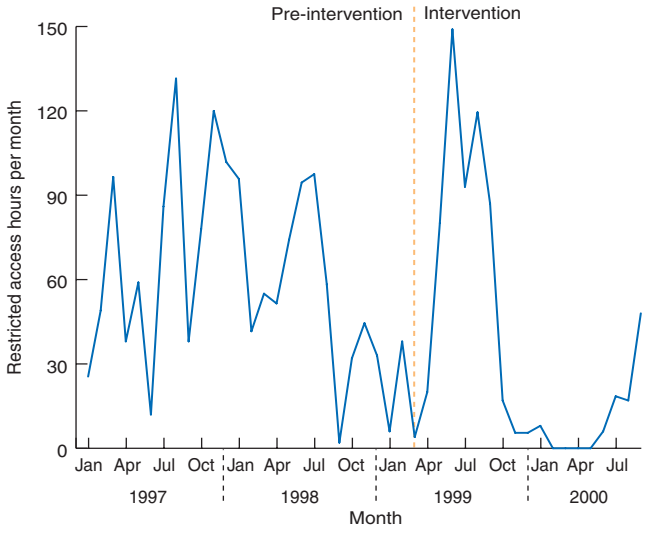
Accommodation initiatives

- ***Reconfiguration of beds*** to five-day short-stay to encourage management of elective activity from Monday to Friday.
- ***Use of off-site residential accommodation*** for patients not requiring inpatient beds for investigations.
- ***Provision of free transport*** (taxi vouchers, hospital transport) to patients to facilitate discharge.
- ***Nursing home liaison committee*** to improve communication with local residential care providers and facilitate appropriate transfer from the acute- to the residential-care sector.
- ***Leasing of 12 private hospital beds*** and attached clinical staff from Mater Misericordiae Hospital during winter.

Policy initiatives

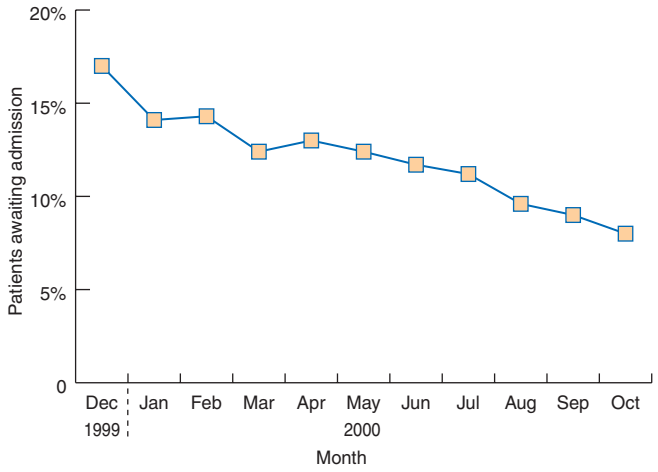
- ***Revision of the restricted access policy.*** Before activating RA, the ED Staff Specialist must contact inpatient managers to assess whether it is possible to avoid RA by hastening bed movements.
- ***Revision of the weekend leave policy.*** Ward leave greater than eight hours suggests the patient should be treated in the ambulatory centre.
- ***Development of an over-census bed policy.*** Wards to go one patient over census when the ED is considering RA and has no alternatives. This policy only needed implementation on two occasions between March 1999 and October 2000; on both occasions it prevented the hospital going onto RA.

1: Restricted access (ambulance bypass) at Royal North Shore Hospital, 1997–2000



Interventions to reduce restricted access were implemented from March 1999, and had produced a dramatic decrease in restricted access by the end of 1999.

2: Proportion of patients experiencing a delay to treatment at Royal North Shore Hospital



Outcome

The effect of these interventions was dramatic. Within six months of commencing these initiatives, RNSH had effectively eliminated restricted access to the ED (Box 1, 2000), while maintaining elective surgical activity and significantly reducing the number of patients on the waiting list for admission (Box 2). These improvements occurred with bed occupancy rates in excess of 90%.

The key contributors to the success of this program appear to be:

- significant medical leadership through visible operational roles for divisional heads and staff specialists/clinical supervisors in bed management processes;
- attention to discharge planning for ward patients;
- centralised bed management with a whole-hospital focus;
- team-building among senior nursing and medical staff;
- improved communication between ED and ward areas;
- engagement of junior medical staff in bed management processes; and
- a multifaceted implementation program that sought to correct process inefficiencies wherever they were identified.

The outcomes of the program support the hypothesis that reducing ED ambulance bypass can be achieved by interventions that address upstream blockages in the hospital rather than specific ED interventions. Maintaining organisational focus on continually questioning the appropriateness of bed management practices is a challenge that must be met to ensure the sustainability of these sorts of improvements.

(Received 27 Aug, accepted 4 Nov 2002)

Queensland

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In Queensland, access block was first observed in the peripheral urban hospitals in the Brisbane and Gold Coast area. As the absolute and relative bed capacity of public hospitals declined in the period 1999–2002, access block in Queensland's largest hospitals increased from a barely manageable average of less than 10% (Australasian College for Emergency Medicine/Australian Council on Healthcare Standards definition: proportion of admissions with total time in the emergency department longer than eight hours) to an average of about 14% in financial year 2001–02. Various administrative analyses have shown that the deleterious effects of access block start to become apparent at levels greater than 5%, and that these dysfunctional levels of access block occur when hospital occupancy consistently exceeds 95%. Other observations on Queensland data are that, generally speaking, access block is less of a problem in provincial centres than in metropolitan areas, and that hospitals with the best elective surgery performance tend to have the worst access block performance, and vice versa.

The best-performing large hospital in Queensland in relation to access block is the Royal Brisbane Hospital (RBH), which had an average 6.2% in 2001–02. RBH is believed to be one of only two major hospitals in Australia that had no requests for ambulance bypass in 2001–02.

This outcome has been achieved through considerable research and innovation and a management view that the RBH cannot go on ambulance bypass, as its emergency department (ED) is the sole department servicing a catchment area population of some 550 000, and because the other EDs in Brisbane do not have the capacity to absorb the additional workload if RBH ED closed its doors, even for a few hours.

Over the past decade the hospital has implemented many strategies aimed at optimising the efficiency of the ED, the acute care process and discharge procedures. These are summarised in the Box. All of these strategies are believed to have had some benefit, but the most significant are the ***ED Short Stay Unit*** and the ***Medical Assessment and Planning Unit.***

It is known that small improvements in bed availability (ie, 5–10 beds) can cumulatively have a very substantial impact on access block, so RBH's current focus is on precision bed management through improved information systems and processes, including geographic information systems (which map the geography of the hospital against variables such as patient numbers, staff numbers, and nurse dependency). The objective is to maximise the identification of the

Strategies to improve bed management at Royal Brisbane Hospital, 1992–2002

Emergency department

- Increased consultants (from two to eight)
- Admission policy
- ED Short Stay Unit (18 beds: 24-hour stay for minor head injuries, overdoses, renal colic, etc.)
- ED Fast Track Zone (for Australasian Triage Scale Category 3 and 4 patients)
- ED Imaging Unit (computed tomography, ultrasound, picture archiving and communication system/radiology information system)
- ED Stat Lab
- Nurse-initiated X-rays (for peripheral skeletal X-rays, according to clinical pathways)
- Extended Hours Social Work (18 hours/day)
- ED Primary Care Unit
- Transit Lounge (a separate lounge for discharged patients awaiting transfer)
- Acute Mental Health Assessment Unit (6 beds)

Inpatient departments

- Medical Assessment and Planning Unit
- Medical Day Procedure Unit
- Increased day-of-surgery admission
- Increased day-only procedural admission (no overnight stay)
- Interim Care Unit (inpatient facility for subacute and non-acute patients waiting for nursing home placement)
- Hospital-in-the-home program

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relationships and correlations that exist in separate data sources within the hospital to precisely measure and predict demand and throughput in real time and to communicate that information throughout the organisation. Once this strategy has been exhausted, access block will only be able to be avoided through greater reductions in elective surgical throughput or an increase in system bed capacity, particularly during periods of peak demand.

(Received 27 Aug, accepted 4 Nov 2002)

Royal Perth Hospital

Daniel M Fatovich

ROYAL PERTH HOSPITAL (RPH) is the largest hospital in Western Australia. The Wellington Street campus has about 600 beds and is located on the edge of the inner city. The emergency department (ED) has an annual census of around 55 000, with an admission rate of 44%. Forty-two per cent of all attendances arrive by ambulance, and data from the ambulance service indicate that RPH receives more priority one ambulances than the other major teaching hospitals combined. From 1996 to 2001, attendances increased by 14% and admissions by 16%. In the same time, inpatient bed numbers have been reduced by about a third. Before 1999, ambulance bypass was extremely rare.

In October 2000, four WorkSafe orders were issued because the ED was contravening regulations of the *Occupational Safety and Health Act 1984* (WA):

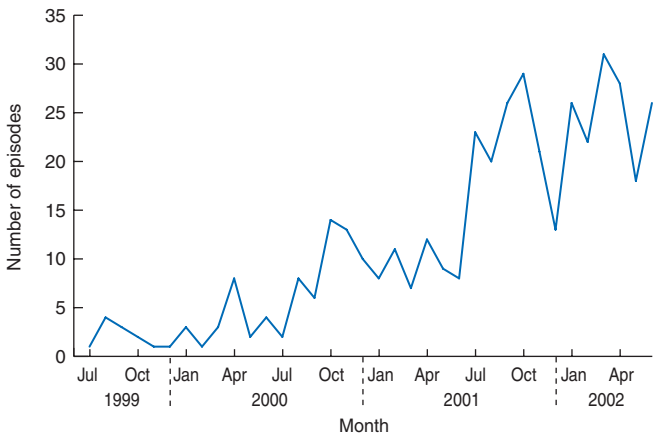
- employees were not able to move safely within the ED corridors because of obstruction from too many patient trolleys;
- patient trolleys and other equipment were blocking egress through corridors for evacuation in event of fire or other emergency;
- employees were exposed to violence hazards; and
- employees were suffering work-related stress because of excessive work demands.

On 12 December 2000, all three major teaching hospitals in Perth were on simultaneous ambulance bypass. As a result, the then Health Minister appointed an Ambulance Bypass Coordinator to prevent this event recurring.

On 17 November 2001, the cover story of the *West Australian* detailed the poor conditions for patients and staff in the ED. As a result, the Department of Health formed an Emergency Services Task Force, with broad representation from the emergency medicine and nursing community.

The Box shows the extent of ambulance bypass at RPH from July 1999 to June 2002. Analysis of the first two years indicates that the most common reason for initiating ambulance bypass was entry block (30.4%). Entry block is a result of overwhelming numbers of patients attending the ED in a short period, resulting in a functional block to the entry of the ED and ED overcrowding. This necessitates ambulance bypass, even if there are sufficient inpatient beds available.

1: Episodes of ambulance bypass at Royal Perth Hospital, July 1999 to June 2002



Interventions

A transit lounge was established in July 1999, allowing ward patients who are being discharged to await discharge medi-

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cations and collection, thus freeing up their beds earlier.

In July 2000, an ***eight-bed holding bay*** was opened next to the ED. This is designed for patients who are ready for admission, but for whom the inpatient bed is unavailable, and to relieve the stacking of patients in the ED corridor. Nevertheless, stacking of patients in the corridor still occurs.

Within the ED, a ***transfer coordinator*** has been appointed since July 2001. This is a senior nurse who readies patients for inpatient admission and organises transfer to the ward. This frees nurses for clinical duties. The transfer coordinator also identifies and coordinates admission of patients to other sites (eg, private hospitals), and can arrange direct admission to the ward, bypassing ED.

Bed management within the hospital was changed from a divisional system to a ***centralised bed management mechanism***, allowing for effective crisis management.

The hospital now has ***well-defined criteria for initiating ambulance bypass*** (involving factors such as excess patient load, environmental, staff or resource issues, excessive number of high-acuity patients, or declared disaster situation). Other options to reduce ED overcrowding include sending trolley patients awaiting admission to wait in the ward corridor. ED medical staffing was increased to address the large patient volume.

The ambulance communications room now has a ***computerised ED patient tracking system*** (EDIS) installed. EDIS is present in all EDs in Perth. This allows the ambulance service to distribute its workload between sites.

Other recommendations of the Emergency Services Task Force that have been implemented are to:

- ***increase bed capacity*** by permanently opening some closed beds if nursing staff can be found (about 40 beds);
- ***increase aged care and rehabilitation beds at a regional secondary hospital*** to allow transfer of inpatients from RPH;
- ***increase the availability of care awaiting placement beds***; and
- ***increase the bed and investigatory capacity of another secondary hospital in the region*** to allow for greater retention of patients, thus easing the burden on RPH. ED staffing was significantly increased.

The above measures have had significant clinical input and are designed to increase the capacity of the system, but the most important outcome has been the recognition at all levels of government that the problem exists and needs to be addressed. The situation is under constant review.

(Received 27 Aug, accepted 4 Nov 2002) ❑

Royal Melbourne Hospital

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ROYAL MELBOURNE HOSPITAL (RMH), a 360–390-bed acute tertiary referral hospital in inner Melbourne, began to experience an acute increase in access block from early 2000. Over the previous few years, there had been a gradual reduction in acute bed numbers and a marked reduction in subacute and nursing home beds in the area serviced by the hospital. At the same time, patient throughput, as measured in weighted inlier equivalent separations (WEIS), had not decreased. The access block was manifest by ambulance bypass of up to 150 hours per month in 2001, worsening access of emergency patients to inpatient beds, and increasing and chaotic theatre cancellations for elective patients.

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Interventions

During 2001, in response to a Victorian government initiative, RMH formed a clinician-led taskforce that developed 51 interventions. These aimed to maximise efficient use of inpatient beds and improve access for elective and emergency patients, and were generally adapted from programs tried at other institutions. The interventions were developed

over three months from April to June 2001, and were implemented over the following three months. The more important initiatives were:

- ***centralising bed management***,
- introducing a ***48-hour short-stay ward***,
- employing ***care coordinators*** in the emergency department to improve discharge and avoid inpatient admission,[1]
- ***monitoring inpatient length of stay,*** with alerts for patients staying longer than 14 days, and
- ***improving access and referral to subacute care.***

Outcome

Following the implementation of the taskforce recommendations, there was a significant improvement in access block indicators, even though hospital bed numbers actually decreased in acute and subacute sectors. The hospital's WEIS remained the same and emergency WEIS increased during the six months from implementation. Ambulance bypass was reduced to fewer than 10 episodes per month, emergency patients waiting more than 12 hours for inpatient beds were reduced by 40%, and same- or prior-day theatre cancellations were reduced to fewer than 10 per month. The elective waiting list remained static during the first six months of implementation.

Although the hospital was funded to increase bed numbers, this was not possible because of nursing shortages and rigid workforce rules.

Significant components of the success of the interventions appeared to be that clinicians were empowered to drive the changes and the focus was on maximising bed use rather than saving money. Individual interventions that had substantial effects on access block were the 48-hour short-stay ward, care coordination in the emergency department, centralised bed management, day-of-surgery admissions, and monitoring of patients staying as inpatients for more than 14 days.

Using a similar strategy, hospitals similar to RMH could function with fewer beds or treat more patients with the same number of beds. It is not possible to determine from our experience whether this would result in cost savings.

1. Moss J, Flower CL, Houghton LM, et al. A multidisciplinary Care Coordination Team improves emergency department discharge planning practice. *Med J Aust* 2002; 177: 435-439.

(Received 27 Aug, accepted 4 Nov 2002) ❑

The Alfred Hospital

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THE ALFRED HOSPITAL, in Melbourne, is a 350–390-bed tertiary referral hospital with acute medical, surgical and psychiatric services. It is one of three hospitals in Bayside Health, a major metropolitan health service, and is one of the two major adult trauma centres in Victoria. The hospital also provides a number of statewide services, including those for heart–lung transplantation, cystic fibrosis and major burns.

In 2000 and early 2001, there was a considerable increase in the occasions that the Alfred's emergency department (ED) had to implement ambulance bypass, and there were difficulties in timely access for high priority elective admissions. Several initiatives had already improved access in the hospital, such as hospital-in-the-home, pre-admission and day-of-surgery admission strategies. In addition, an integrated approach to bed management was in place. This involved daily review of priorities for emergency and elective admission, through a centrally coordinated bed assignment process, overseen by senior medical and nursing managers.

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Interventions

In financial year 2001–02, the Victorian Department of Human Services funded a number of initiatives under the Hospital Demand Management Strategy, which aimed to improve access for emergency and elective patients.

The funded initiatives in the Alfred ED include ***increased senior medical staff cover after hours*** and the ***development of fast-track***, an area of the ED where a doctor and a nurse work in partnership to fast-track the patients' care. Other hospital initiatives included a ***targeted length-of-stay strategy***, involving strategies such as additional care coordination for patients admitted to specific clinical units, and the introduction of a ***weekly ward round*** by senior medical and nursing staff to facilitate early discharge planning. A third project focused on strategies to avoid patients' presenting to the ED, such as ***multidiscipli-***

nary mobile teams working in concert with nursing homes and general practitioners.

Among the more successful strategies were the ***Medical Ambulatory Day Unit*** and the ***Medihotel***. These were designed to meet the needs of patients who required inpatient interventions, but who did not need overnight stay in an inpatient bed. These might be rural patients, patients receiving treatment over a series of days, or patients for clinical review or investigation. Previously, there was no alternative but to admit these patients to multiday inpatient beds.

The Medical Ambulatory Day Unit (MADU) and Medihotel are next to each other within the main part of the hospital's ward area. The MADU was designed to provide a range of medical interventions and consultation facilities, and patients may attend on consecutive days for their treatment or investigation. The Medihotel provides accommodation to patients of the Alfred who are ambulatory and independent who do not require clinical intervention overnight, but who need to be close to professional expertise if required.

Outcome

A review of the outcomes in late 2001 and early 2002 showed a significant reduction in ambulance bypass, from 291 episodes in 2000–01 to 158 episodes in 2001–02. However, similar improvement was not achieved in the number of ED patients waiting for more than 12 hours for an inpatient bed.

Hospital-in-the-home substitution rates, which estimate the resulting inpatient capacity, were around 11%, which compared well with similar hospitals.

Up to June 2002, there had been more than 3500 occasions of service for patients of the MADU, and more than 1900 patient-nights in the Medihotel. Nearly all clinical units at the Alfred have used the MADU/Medihotel at least once. The ability to plan for elective medical admissions without the risk of cancellation has been well received by staff.

The centralised bed allocation and coordination process is extremely effective in maximising access to multiday beds, although this requires a considerable senior medical, nursing and management commitment. Some of the improvements to bed management flows did not require extra resources, as they related to changes in process. An example was the decision to allocate the first five multiday beds that became available each morning to patients awaiting admission in the ED — this had a considerable impact on the ED, without a flow-on disadvantage elsewhere.

Other initiatives with high impact on access were increasing the number of senior staff in the ED, care coordination and ED disposition nurses, and weekly ward rounds by clinical bed management staff to identify opportunities for redesign of the processes of discharge and bed management.

(Received 27 Aug, accepted 4 Nov 2002) ❑