The NHHRC final report: view from the hospital sector

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ABSTRACT

- The National Health and Hospitals Reform Commission (NHHRC) report attempts to deal in the short term with hospital access block by funding more beds in emergency departments, while, over the longer term, reforms aim to improve hospital efficiency, transfer care of patients to non-hospital settings, optimise use of outpatient clinics, fund hospital activities on the basis of efficient cost, and improve governance and accountability.
- The single most potentially effective recommendation is the considerable investment in and expansion of subacute and non-acute services, which will free up acute-care hospital beds for urgent cases. Population-based chronic disease management driven by Primary Health Care Organisations can also reduce future hospitalisations considerably.
- What the NHHRC could have dealt with more fully is the need to: (i) prioritise clinical interventions and the need for hospitalisation using evidence of cost-effectiveness obtained from clinical trials and longitudinal patient data; and (ii) move quickly towards funding of all health care by one level of government.
- Even the most effective reforms will not have a significant impact on future bed demand if professional and public expectations remain unsustainably high and do not acknowledge the need to change the role of hospitals within a reconfigured health care system.

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The final report of the National Health and Hospitals Reform Commission (NHHRC)[1] has made timely access to quality care in public hospitals a priority for reform in the immediate future. Key to this is additional funding of up to $1 billion for hospitals to ensure bed availability for emergency presentations and more elective medical and surgical admissions.

In the longer term, the NHHRC wants to see hospitals self-improving and better able to meet emerging challenges by:

- separating the provision of elective and emergency services in public hospitals;
- more efficient use of public hospital outpatient services, which includes siting them in community settings;
- substantial investment in and expansion of subacute services, palliative care and aged care services, which reduce the need for hospital care;
- introducing "activity-based funding" for hospitals, both public and private, based on casemix classifications to increase efficiency, with the federal government funding 100% and 40% of the "efficient cost" of outpatient activity and inpatient care, respectively;
- clinical process redesign and better governance structures within hospitals, coupled with public reporting of performance indicators aimed at improving accountability.[1]

What effect will these reforms have on making hospital care more accessible, safe, efficient, effective and sustainable? One thing is certain: the reforms must ensure that the current and future supply of public hospital beds is sufficient to meet demand for inpatient care.[2,3] Over the past 20 years, hospital admissions have increased by more than 40% while the number of acute-care public hospital beds has decreased by 30%, with halving of the average length of stay (LOS) from 6.2 days to 3.3 days.[2] Advances in medical technology, a rise in the number of same-day admissions (now 50% of all admissions), the advent of casemix-based funding, and growth in postacute services have driven this extraordinary increase in productivity.

However, the curves for decline in LOS and increase in same-day admissions have levelled off over the past 5 years because of the growth in hospital services and in the numbers of patients requiring complex care.[2] Current bed occupancies in many tertiary public hospitals regularly exceed the agreed safe level of 85%, while almost a third of urgent-category patients wait beyond acceptable time limits to be seen in emergency departments (EDs).[3] Up to 4500 deaths and almost $2 billion of expenditure result annually from adverse care-related events, which affect one in 12 hospital admissions, many related to hospital overcrowding. The hospital system is clearly under stress. Demographers warn of the need for a 62% increase in hospital beds by 2050 if current trends in bed use continue, combined with the exponential rise in numbers of older patients requiring hospital care.[4] Will the reforms proposed by the NHHRC have a significant impact on this inexorable increase in demand for hospital beds?

Increasing hospital capacity and efficiency

Immediate funds aimed at opening more beds in hospital EDs will have short-lived impact. Increasing the national public hospital bed stock by 7% (3750 beds), as has been proposed,[3] will give no more than 7 years reprieve from current access block if demand continues to escalate at present rates,[4] and even less if hospital development is not closely aligned with catchment population growth and health service plans.[5]

The Productivity Commission (the Australian Government's independent research and advisory body) is cited as having estimated the gap between optimal and current efficiency levels within hospitals to be between 20% and 25% — a gap proving difficult to close. Formal re-engineering of clinical processes within hospitals using "lean thinking" principles derived from commercial industry has been applied to 60 acute-care hospitals in New South Wales, Flinders Medical Centre in Adelaide, and three tertiary hospitals in Queensland. Decreases were seen in ED access block[6,7] and elective surgery waiting lists,[6] but there was no change in average LOS or total bed-days. Other studies suggest limited effectiveness of re-engineering[8,9] amid concerns about its adverse impacts on quality of care and professional interaction.[10]

More systematic use of clinical guidelines and care pathways can safely reduce LOS,[11] as can changes in models of inpatient care, such as acute medical assessment units collocated with EDs,[12] admission avoidance and rapid-response community teams based in EDs,[13] and enhanced multidisciplinary team-based care for older patients with chronic disease[14] or patients with acute heart failure.[15]

Separating acute-care and elective patient beds and services geographically within hospitals, and moving more patients into dedicated day-therapy and procedure units,[16] all with separate funding and staffing, have potential in institutions with the procedural volume to do this. However, because the status of patients can change unexpectedly from elective to acute, freestanding, off-campus ambulatory surgical centres with limited emergency back-up should treat very selected cases and not compromise the training and efficient deployment of a limited surgical workforce. In the United Kingdom's National Health Service (NHS), up to 75% of all elective operations have been converted into day-only cases,[17] compared with 55% in Australia. Achieving a daily balance between acute and elective hospitalisations and between admissions and discharges by means of anticipatory monitoring of bed status and responsive bed management systems,[18] driven by dedicated patient flow directors and 7-day-a-week discharges, can also help avoid bed crises that are slow to resolve.

Outsourcing public hospital clinical services to private hospitals was not promoted in the NHHRC's report, despite the transfer of 15% of all elective operations in the NHS to private providers within the past 3 years.[19] A similar program in Queensland — Surgery Connect — has achieved, over 20 months, a 19.1% reduction in the overall numbers of public patients awaiting elective surgery, and whose operations were overdue, with the sharpest drop (by 46.1%) occurring in category 3 patients — that is, those whose surgery is to be performed within 365 days (Michael Zanco, Director, Hospital Access Unit, Queensland Health, personal communication). However, concerns have been raised about continuity of care, and retention and training of surgeons in public hospitals.[20]

Whether restructuring hospital management and governance, and introducing clinician-led councils and networks will improve efficiency remains uncertain;[21] similar uncertainty surrounds setting access targets relating to consultations and procedures, public reporting of hospital performance indicators[22] and pay-for-performance bonuses.[23]

Reducing the need for hospital care

Undoubtedly, the biggest gain in hospital productivity will come from relieving hospitals of patients who do not need to be there. About 70% of hospital bed-days,[24] 10% of all admissions,[25] and one in five admissions of older patients in acute-care hospitals could be avoided if we had timely access to responsive, high-quality and well structured primary and ambulatory care, subacute care and rehabilitation beds, residential care, palliative care, domiciliary care, community services and family support, most of which will now be funded by the federal government. The NHHRC recommends substantial investment in and expansion of these sectors. This includes getting people out of hospital more quickly (ie, overcoming exit block) and preventing unplanned readmissions by using early discharge programs that combine discharge planning with postdischarge home visits and telephone follow-up by nurses and community services workers.[26-28] Mandating provision of medically supervised acute care, advance care planning and palliative care in residential care facilities[29] may also prevent one in 10 acute hospital admissions involving older people.[30]

Another recommendation with real potential for avoiding future hospitalisations is enhanced population-based chronic disease management (CDM) programs, which systematically use evidence-based guidelines, personalised patient self-management and multidisciplinary care (including specialist nurses) coordinated by a central agency such as the Primary Health Care Organisations and delivered by the Comprehensive Primary Health Care Centres and Services mooted in the NHHRC report.[1] Such programs have been shown to reduce hospitalisations of patients with heart failure by up to 27%,[31] and of patients with chronic obstructive pulmonary disease by up to 87%.[32] To date, Medicare Benefits Schedule-funded CDM plans directed at individual patients supervised by individual general practitioners have not proven effective.[33] Collocating specialists with primary care providers in community settings rather than in hospital-based clinics, and getting specialists to upskill the primary care providers in CDM, can reduce the risk of future events requiring hospitalisation by a third.[34] Hospital-based specialist clinics should act more as fast-track clinics for new semi-urgent referrals that may require expeditious hospital-based investigation or other interventions, or for reviewing patients recently discharged from hospital who may require further stabilisation over one or two visits before being referred back to their GPs. Gone are the days of bringing back stable ambulatory patients for "routine" reviews.

Making hospital care more safe and effective

The patient-held electronic health record proposed by the NHHRC[1] will allow busy ED and clinic doctors to more quickly retrieve past history and investigation results and render care safer and more effective. The NHHRC report could have given more emphasis to computer-based clinical decision support systems, referral and triage algorithms, and interprovider information transfer and telecommunication systems designed to make hospital referrals more clinically appropriate and collaborative. Evaluating outcomes of hospital care at a national level using patient-level longitudinal data from various sources (hospital episode of care data, Medicare Benefits Schedule, Pharmaceutical Benefits Scheme, death registries, etc) linked by a unique identifier (Medicare number) is welcome, given the benefits of such data.[35]

Disappointingly, the NHHRC discussed only tangentially three "elephants in the room". First, the need to prioritise hospital interventions according to clinical appropriateness and cost-effectiveness, to define core care entitlements, and to determine appropriate thresholds for acute hospital admission in the minds of the public, ambulance services, the medical profession and policymakers. Currently, population ageing, unrealistic consumerist expectations, free access, the lure of new technological advances, deskilling of primary care providers, and the paucity of alternative forms of health and social care[36] have made hospitalisation appear, in the eyes of many, as the prime default form of care. The NHHRC recognised that too many tests, treatments and procedures undertaken in hospitals (and elsewhere) are unnecessary, inappropriate and sometimes even harmful. United States studies estimate that between 25% and 50% of inpatient bed-days are unnecessary as a result of clinically inappropriate procedures.[37] Growth in elective surgery funding and numbers of operations over the past decade has not had a great impact on waiting lists, as unseen demand quickly fills the gaps in the queue. How to determine care eligibility for public subsidy based on evidence is not specified, despite others having suggested the means.[38] Activity-based funding of hospital care devoid of measures of benefit or

harm to patients and timely feedback of clinical outcomes to clinicians does not ensure safe, effective practice.

Second, it made no mention of the $4 billion per year subsidisation of private health insurance, and whether this money would be better spent directly on hospitals, either public or private.

Third, the planned continuance, at least in the medium term, of state responsibility for running hospitals, while the federal government funds primary and community care, does not move us quickly towards a single level of government and pooled funding which would effectively end cost shifting and the "blame game". The 40% "efficient cost" reimbursement of hospital outlays from the federal government (based on best-hospital performance)[1] will be hotly debated by the states, as this represents no increase in the current proportionate level of federal funding for a public hospital system already substantially underfunded. Conversely, if reforms were to achieve a reduction in future hospital demand, would the federal government be keen to spend more on non-hospital care in more fiscally challenging times if hospital demand was to fall, thus benefiting state treasuries? The NHHRC alludes to the federal government eventually funding 100% of all hospital activity, which has already led to state and territory politicians voicing their resistance to any implied federal takeover of hospitals.

Where to from here?

The political sticking points will be:

- who should fund the hospital sector and by how much (and therefore, who should run this sector);
- the affordability of the reforms proposed; and
- the collective will of key stakeholders to enact transformative change.

The upfront and recurrent costs of all reforms in the NHHRC report amount to $35 billion over the next 5 years, which is to be offset by future savings of $20 billion from less waste and better population health manifesting, in good part, in considerably reduced need for hospital care. As for political will, the history of successful reform of the "strife of interests" that is health care is a chequered one and only time will tell. It is to be hoped that this historic chance for major innovation in the health care system and the role within it of hospitals will not be squandered.

Competing interests

None identified.

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