

## The future of community-centred health services in Australia: lessons from the mental health sector<sup>A</sup>

Alan Rosen<sup>1,4</sup> MBBS, FRANZCP, MRCPsych, DPM, GradDipPAS, Professorial Fellow, School of Public Health, University of Wollongong; and Clinical Associate Professor, Brain and Mind Research Institute

Roger Gurr<sup>2</sup> FRANZCP, MRCPsych, MBBS, Conjoint Associate Professor of Psychiatry

Paul Fanning<sup>3</sup> DrPH, MHA, BEd, DTN, GradCertPsychoanalysis, RPN, RGN, Associate Professor; and Program Leader Planning and Service Development

<sup>1</sup>Sydney Medical School, University of Sydney, Sydney, NSW 2006, Australia.

<sup>2</sup>Faculty of Medicine, University of Western Sydney, Pennith South DC, NSW 1797, Australia.

<sup>3</sup>Centre for Rural and Remote Mental Health, School of Medicine and Public Health, University of Newcastle, Orange, NSW 2800, Australia.

<sup>4</sup>Corresponding author. Present address: PO Box 110, Balmain, NSW 2041, Australia.  
Email: alanrosen@med.usyd.edu.au

### Abstract

- It is apparent that hospital-dominated health care produces limited health outcomes and is an unsustainable health care system strategy.
- Community-centred health care has been demonstrated to be a more cost-efficient and cost-effective alternative to hospital-centred care, particularly for prevention and care of persistent, long-term or recurrent conditions. Nevertheless, hospital-centred services continue to dominate health care services in Australia, and some state governments have presided over a retreat from, or even dismantling of, community health services.
- The reasons for these trends are explored.
- The future of community health services in Australia is uncertain, and in some states under serious threat. We consider lessons from the partial dismantling of Australian community mental health services, despite a growing body of Australian and international studies finding in their favour.
- Community-centred health services should be reconceptualised and resourced as the centre of gravity of local, effective and affordable health care services for Australia. A growing international expert consensus suggests that such community-centred health services should be placed in the centre of their communities, closely linked or collocated where possible with primary health care, and functionally integrated with their respective hospital-based services.

**What is known about the topic?** Community-centred health care has been widely demonstrated to be a more cost-efficient and cost-effective alternative to hospital-centred care, particularly for prevention and care of persistent, long-term or recurrent conditions, e.g. in mental health service systems. A growing international expert consensus suggests that such community-centred health services should be placed in the centre of their communities, closely linked or collocated where possible with primary health care, and functionally integrated with their respective hospital-based services.

**What does this paper add?** Despite this global consensus, hospital-centred services continue to dominate health care services in Australia, and some state governments have presided over a retreat from, or even dismantling of, community health services. The reasons for these trends and possible solutions are explored.

**What are the implications for practitioners?** Unless this trend is reversed, the loss of convenient public access to community health services at shopping and transport hubs and the consequent compromising of intensive home-based clinical care, will lead to a deterioration of preventative interventions and the health care of long-term conditions, contrary to international studies and reviews.

<sup>A</sup>A more detailed version of this paper was invited by Professor David Richmond, AO, then NSW Coordinator General of Infrastructure Development, NSW Department of Premier and Cabinet, and member of the Health Infrastructure Board, to stimulate discussion around the themes of integration and balance between hospital and community healthcare, as these issues confront all Australian states and Federal Government and other comparable international jurisdictions. He is currently Consultant on Infrastructure and Public Policy to NSW Department of Premier and Cabinet.

Community health is defined (as adapted from Owen *et al.*,<sup>1</sup> NSW Health<sup>2</sup>) as a range of community-based prevention, early intervention, assessment, treatment, health maintenance and continuing care services delivered by a variety of providers. In practical terms, community health services operate from both clinical and social models of health, whereby improvements in health and wellbeing are achieved by ensuring adequate short or long-term clinical care and directing efforts towards addressing the social and environmental determinants of health. In some jurisdictions, this includes the progressive shift of basic specialty medical and surgical care to day-patient or community settings. By comparison, primary health care refers to universally accessible, generalist services (e.g. general practice, community and early childhood nursing services) that address the health needs of individuals, families and communities across the life cycle. Comprehensive primary health care includes early intervention and health promotion, treatment, rehabilitation and ongoing care. For most people, these services are the first point of contact with the health care system. Fee-for-service practitioners provide the majority of primary health care services in Australia.

The primary health care and community health sectors and services are generally perceived to overlap, and ideally should form a single integrated and cohesive structure. Although both are founded on the principles of primary health care, they have differing roles and organisational structures. The primary and community health sectors have common boundaries with, and link consumers to, both the acute care hospital and population health sectors.

To maximise the health of communities, we need both hospital and community-based health care, and a balance between them. Community and hospital health care are usually most effective when fully integrated, though these components may well be best based at, and accessed from, different sites. The authors of this paper have all had extensive experience of leading unified management teams presiding over, and valuing, both hospital and community-based components of such integrated services. This is not an argument for the separate identity and provision of community-based health care, but for resetting the balance between hospital and community components of integrated health services, and shifting the centre of gravity of such services towards more accessible community health services. A growing international expert consensus, based on a promising though limited evidence base suggests that contemporary versions of community health services should be placed in the centres of their communities, closely linked to, or collocated where possible, with community-based primary health care and human services, and functionally integrated with their corresponding hospital-based services. Local community-based centres also offer better potential to develop partnerships with, and to elicit support from, local schools, community agencies, families and community volunteers to enhance recovery and promote wellness through collaborative social action. This can integrate the effort required to also tackle the social determinants of disease, such as poverty, other inequities and deprivations.

Many of our formerly integrated community and hospital health service systems are now being retracted onto hospital sites, or their community components have never been adequately devolved nor developed. This applies to some

extent to the majority of Australian jurisdictions, but probably more so in New South Wales. There are exceptions: community health centres are still relatively well developed in the Northern Territory and Tasmania, where major general hospitals are relatively few and far between. Some community health services may have improved partially due to complementary roles played by some of the best functioning Aboriginal and Torres Strait Islander-owned health services, where communities are actively consulted about their needs, and where primary and community health services are more likely to be accessibly sited in central locations within these communities. Victorian and Western Australian provision is variable, with some community health services provided by state health and community services, while others are provided historically by municipal and non-government sectors. Victorian community health centres usually have their own boards of management, which provide some protection from being downgraded, and a base for accessing a wider range of sources of project funds and other enhancements. Queensland is now developing some well appointed combined primary health and community health precincts in town centres, on separate sites from hospitals.

The development and organisation of community health services in Australian states and territories have been enormously diverse. Duckett<sup>3</sup> considers that it is extraordinary that Australia still does not have a comprehensive platform on which to build community-based health services, as the brief flirtation with a nationally mandated community health program initiated in the early 70s was undone by subsequent governments. Most organisational differences between jurisdictions are not evidence based, and having blurred the boundaries between policy direction and service delivery, most are devoting significant resources to 'crisis managing' their service systems.<sup>4</sup> The Council of Australian Governments' (CoAG) health reform initiatives have not added much hope for progress for national consistency of reform so far.<sup>4</sup> In mental health, CoAG measures have added resources, but are contributing to further fragmentation, maldistribution and worsening coordination of service provision.

### What are the issues?

*Hospitals are essential but hospital-centred care is an unsustainable strategy*

Hospitals are important, but mainly for urgent and technically complex diagnostic investigations, for managing acute trauma, for complex multisystem diseases and the stabilising and intensive treatment of acute and severe recurrent conditions, particularly when they endanger life. For most other disorders, the hospital-centred model has relied on simplistic ideas that there is efficiency and better controls in larger aggregations of services on already owned hospital sites. However, there is a growing realisation that monitoring and communications technology and many intensive treatments are more portable now, and hospitals are places where people only need to be because of acute clinical danger (e.g. in trauma and psychiatry), or where rapid assessment requires investigations of the highest technology. A plan could be then be devised and the person sent home, as most treatments (other than complex surgery) can be delivered in the community just as well, often with more safety. Both community and hospital

components of health care are usually most effective when fully integrated, though these components are often best accessed and delivered from different sites.

Hospital-centred care and unbridled demand for hospital admissions are becoming increasingly expensive and unsustainable. We should also resort to using hospitals sparingly, as they are widely considered to be inherently risky environments. A United Kingdom study found that 6–20% of emergency medical admissions were inappropriate, depending on the measure used, the sample and the specialty.<sup>5</sup> Advocates for just increasing acute hospital beds to address access block (e.g. Collignon<sup>6</sup>) may neglect to factor in the detrimental effect of inadequate or eroded community health care, causing a failure of filtering or diversion from hospital care.

### The growing role of community care

#### *Persistent, long-term and recurrent conditions*

The federal health minister has recently stated that ‘chronic’ diseases are responsible for nine out of ten deaths in Australia, and their more effective management is clearly a government priority in its agenda for health reform.<sup>7</sup> Community-based ambulatory care has been demonstrated to be a more cost-efficient (cost per occasion and episode of care) and cost-effective (least costly best outcome per episode of care, and for ongoing care) alternative to hospital-centred care, particularly for persistent, long-term or recurrent conditions, such as obstructive airways disease, diabetes, cardiovascular disease, strokes, severe psychiatric disabilities, palliative and elderly care, etc. This includes ‘Hospital in the Home’ (HITH) schemes such as Victoria’s,<sup>8</sup> the South West Sydney model,<sup>9</sup> and Western Australia’s Hospital@Home, which provides both short- (HITH) and long-term care for ongoing conditions. It is claimed that these services reduce unnecessary emergency department presentations and hospital admissions.<sup>10</sup> Many improvements in health outcomes have been demonstrated with HITH studies.<sup>11–16</sup> Introduced into Australia in 1994,<sup>17</sup> it is rarely acknowledged that most of these important initiatives were preceded by extensive research and implementation of intensive home-based models of mental health care, e.g. assertive mobile 7-day and night community-based mental health teams.<sup>18–20</sup> Further, community-based or domiciliary care<sup>21–23</sup> has been shown to be an important healing and abbreviating factor in aftercare following acute admissions for coronary care, strokes, renal dialysis, oncology, obstetrics, surgery and technical procedures of many types.<sup>24,25</sup>

#### *Health promotion, prevention, early detection and intervention*

Community Health Centres are the best local launching platform and base for health promotion, prevention and early intervention programs. Such programs, with emerging evidence for prevention of severe disease, reduction in acute hospital presentations, and minimising of development of chronic disease states, include diabetes education, obesity and eating disorder prevention, antismoking, cardiovascular risk, mental health promotion, illness prevention and early intervention strategies, provided in individual, family and group formats.<sup>26–31</sup>

Some of these programs can, and should, be run initially as special public activities in other communal venues, for example, local town halls, church halls etc. But if participants are to return for more detailed information sessions or personal advice, which are highly desirable interim outcomes, they need to be able to access a local, attractive, welcoming, well maintained community health centre, convenient to shops, transport and parking. Providing physical or psychiatric well-checks run from large regional general hospitals is a self-defeating strategy that will not attract the populations at greatest risk.

### What are the problems and how are they perpetuated?

#### *Influences of the clinical culture*

A ‘hospital as the central base’ culture has developed, as this is the only place the increasingly specialist clinicians interact with, and support, each other. There is an inherent bias towards hospitalisation by clinicians for their own sense of support and safety.

Clinicians’ anxieties about managing illness at home are passed on to the service-users and carers who, in turn, have their own inherent anxieties about getting services and support when needed. They, in turn, may feel almost obliged to be loyal to the views of their clinicians. Other private specialist clinicians are more accustomed to having their rooms in the community, often in a suburban centre, close to the general practitioners who refer most of their patients. However, few of these are prepared, or feel able, to do home visits. They are constrained by the nature of their practice and the current fee-for-service arrangements.

Hospital-centred specialist doctors had historically assumed an almost automatic right of clinical leadership over vertically organised nursing hierarchies. This model has progressively given way to the more flattened organisation of the multiskilled interdisciplinary team which can operate more flexibly from multiple sites, and which has been developed most extensively by community health teams.<sup>32</sup>

An overwhelmingly biomedical emphasis in the hospital domain is gradually giving way to wider models of care, based on mounting evidence demonstrating that there is not just mainly a biological dimension, but also psychological, social and cultural factors which contribute significantly to positive outcomes in most medical and surgical conditions.<sup>33,34</sup> Many new graduate medical school courses now recognise this. Again, community health services have usually long reflected this multimodal approach.

#### *The role of managers, media and politicians*

A crucial issue is the prevailing strategy of downsizing and rationalisation, where health economists and administrators see the amalgamation of community and inpatient services on the one site as being cost-effective and efficient (the so-called ‘one-stop shop’). Undoubtedly many of the chief executives, directors of finance and business managers see this as advantageous or convenient, but what they are really after is budget control – pooling all the resources to give them greater flexibility in the face of competing and relentless demands for resources and of insatiable community expectations. In some large, metropolitan area health services in NSW, there is fierce competition between inpatient streams to gain additional resources. It is like setting up a

de facto internal market. High-technology procedural specialists are not prevented from exceeding their budget allocations, and the shortfall has to be found from disorders, interventions and clinical disciplines that are less glamorous, more stigmatised and lower down the pecking order. This is the gravest danger for community-based services, both general and mental health.

We must also recognise the fact that politicians respond to community pressure, particularly media pressure over hospital waiting lists and technical interventions etc. They then turn up the heat on hospitals to do more and more, but budgets never grow accordingly, partly due to state–federal fiscal imbalance. Some specialists receiving fee-for-service payments in the public system for profitable interventions may have a perverse incentive to publicise waiting lists. Other procedural specialists are well intentioned and not at all short of work, but become genuinely frustrated by the inefficiencies or lack of adequate funding of the public hospitals, which do not allow them to surgically relieve the suffering and disabilities of those who languish on waiting lists in pain for years. At least this situation is brought intermittently to the public’s attention. Meanwhile, deficiencies and waiting lists in community health services are largely ignored by the media and, consequently, by politicians and health administrators. So community health, including mental health, budgets become easy prey for cash-strapped administrations which must balance their budgets, but cannot control proceduralists causing budgetary blow-outs.

#### *The federal government’s part in perpetuating the problem*

The federal government no longer dedicates protected funding to the states for community health services, as it is now pooled with general health grants to the states, so community health services are forced to compete with acute hospital care for funding.

This has been compounded by a longstanding shortfall in federal health funding to the states, prompting regional health administrations to opt to selectively restrict community health expenditure to compensate for the shortfalls in hospital budgets.

Cooperative federalism was eroded severely under the Howard coalition federal government, which adversely affected state health finances and, in turn, community health services.<sup>35</sup> Community health services were being replaced with opportunistic selective centralism, for example, the unilateral ‘rescuing’ of a regional general hospital in a swinging seat in Tasmania, which further entrenched in the public’s mind the value placed on high-technology general hospitals in every locality (J. Richardson, Monash University, interview: Life Matters, on Radio National, 18 August 2007).<sup>36,37</sup> Politicians and the media often appear to collude with vested interests to convince communities that they all need their local hospitals to provide a full range of high-technology, super-specialist services. Federal intervention could more usefully provide financial

incentives for the preserving, refurbishing and further developing of community-based health facilities in every substantial local population centre.

#### *The state governments’ roles in perpetuating the problem*

State health administrations find it difficult to resist all the above demands from clinicians, the public, the media and governments to allow acute hospital procedural intervention services to run over budget. They are too easily tempted to take funding from low-profile areas such as community health services and care for long-term conditions, especially since some state health departments transferred the funding of community health services to public hospitals (e.g. NSW Department of Health<sup>38</sup>).

State government finance and assets management strategies distort health investment decisions which should follow health priorities. Rather than prioritising clinical need or evidence-driven strategies, financial imperatives such as ‘economies of scale’ and influences derived from ‘capital charging’<sup>B</sup> theory appear to be important drivers of the state health agendas. These imperatives result in promoting the offering up of community health centres located near shopping and transport hubs as ‘surplus properties’ for sale and private development, to contribute to the rebuilding of general hospitals.

It is regrettable that just as the health services community is rediscovering the importance of developing community health services as a crucial solution to runaway hospital costs and inefficiencies, some states and areas are still dismantling what is left of devolved community health centres to serve the rebuilding and refurbishing of traditional centralised hospital sites. They will never be able to afford to repurchase such sites in the future.

#### **What are the solutions?**

*Recent best practice benchmarking reports: NHS health care plan for London, and obstacles to Australian health reform*

The current plan by the eminent surgeon Sir Ara Darzi (now Professor Lord Darzi) on the future of the National Health Service (NHS) for London,<sup>39</sup> supported explicitly by Gordon Brown and the British Government, proposes: 150 community-based polyclinics, collocated with GPs, on local shopping high streets, to provide most health, medical and surgical interventions, with a more preventive focus to replace district hospitals. Many more interventions and occasions of service for follow-up care would occur in the home, by staff from these local polyclinics. ‘The days of the district general hospitals seeking to provide all services to a high enough standard are over’, stated Darzi. These polyclinics would be backed by a network of highly specialised hospitals, regional trauma centres and academic health science. This plan would entail much more care being

<sup>B</sup>Capital charging: the essence of capital charging is that the costs of capital facilities should be rendered explicit. This transparency is intended to introduce new discipline to decisions about the acquisition, use and disposal of publicly financed assets.<sup>79,80</sup> In an environment of contestability between public and private services, there should be equitable accounting for the capital used in providing services and the cost of servicing that capital. This provides a driver for making efficiencies in the use of land, buildings, and equipment, which leads to selling off properties which may be designated as surplus to needs. In health administrations which assume the centrality of hospitals to the delivery of health care, this results in the financially penalising of area and local health services for operating from multiple sites, and forcing consolidation to fewer (and inevitably hospital) sites.

delivered in people's homes for many disorders. Darzi's team determined that 97% of outpatient appointments in London still take place in hospitals, many unnecessarily, and estimated that at least 50% of the work currently done in district general hospitals could be devolved to the local level, including much more being delivered from a high street community base into people's homes. Though the catch-cry in his report is 'localise where possible, centralise where necessary', it would be reasonable to argue for research bases for community care as well. Darzi<sup>40</sup> has since published his final report on the future vision for the NHS as a whole, entitled 'High Quality Care For All', which follows a similar trajectory. Critiques of this strategy so far have concentrated on questionable proposals to fund some of these polyclinics through involvement of the corporate private sector (G. Thornicroft, pers. comm., 2009).

A report on obstacles to Australian health reform by John Menadue<sup>41</sup> concluded in similar terms. That is, that we have a sickness model, not a wellness model; that the system is provider-driven, not client- or community-driven; that politicians only respond to vested professional interests, so we don't properly fund the Australian communities' top priorities of mental health, Indigenous health and physical risk factor prevention; and that we have too many hospitals when we need these health resources out in the community. In an interview,<sup>42</sup> Stephen Leeder stated that you did not have to be a brilliant economist to make a few rational suggestions about how to invest the (Australian) health dollar – for example, the value in preventing people from being admitted to hospital by providing adequate community care.

An NHS Modernisation Agency Report<sup>43</sup> recommending '10 High Impact Changes to effect Service Improvement', include providing necessary interventions and follow-up in more appropriate care settings, for example, making day surgery the norm for elective surgery, and providing case management, coordinating community health and social care, for persistent or long-term conditions.

A Scottish Government Executive Report<sup>44</sup> calls for the placing of most previously hospital-based specialist psychiatrists with interdisciplinary teams in combined primary care and community health centres, with regular in-reach to local hospitals. This is now being implemented widely.

A European Observatory Report on Reducing Acute Hospital Beds<sup>45</sup> reviewed evidence that acute bed reductions can occur without adversely affecting access to acute hospitalisation when required, if carefully planned with adequate provision of, and sustained investment in, ambulatory or community-based alternative facilities and services. It found that the effects of ageing populations in Western countries on acute bed usage are minimal, as the need for acute care is not related so much to age as to the resources required in the year that you die.

Evidence-based global health initiatives for both developing and developed countries are now encouraging a shift of focus from hospital-centred and institutional care to community-based care (e.g. Lancet Global Mental Health Group<sup>46</sup>), with closer linkage to primary health care.

#### *Technical advances favour community care*

The rebuilding of large hospitals has mostly been because of the new technologies – they have not been adding many extra beds,

and, in fact, the bed-base in hospitals shrank until recently. However, information, investigation and communication technologies are rapidly making such hospital-centricity less relevant. These technologies will allow greater monitoring and intervention in the home, that will align with the increasing use of much less invasive medical, surgical and investigative techniques (including imaging).

Advances increasing connectivity and portability of medical and information technologies, are making community-based monitoring and interventions even more viable alternatives to many hospital-based investigations and interventions. Technology is providing the levers to divert clinical care back to the community, while the return to the community as the centre of gravity of health care is a natural trajectory, as community tenure aids recovery, in both scientific and cultural terms.<sup>33</sup>

#### *The lessons from mental health services*

The United Nations General Assembly Principles for the Protection of Persons with Mental Illness and for the Improvement of Mental Health Care<sup>47</sup> state repeatedly that facilities for care, support, treatment and rehabilitation 'should as far as possible, be provided in the community in which they live', and that hospital-based care should only occur when such community facilities are not yet available.

For more than 40 years, mental health services have explored, implemented and rigorously studied the practicality of community bases for developing teamwork between disciplines, psychiatrists, GPs, and other care partners, and making the home the centre of care, with the hospital as a place visited for short-stay interventions or acute risk management. Since the late 1960s, several waves of randomised-controlled trials have firmly established the superiority of 24-hour mobile community-based mental health care and aftercare,<sup>18,48</sup> and have been replicated convincingly in Australia.<sup>19</sup> Twenty-four hour consistent availability of services in the community has created the confidence that has prevented admissions to hospital and shortened length of stay.<sup>19,49,50</sup> Thus, with long-term fluctuating mental illnesses, only around 3% of the patients of the public sector mental health services are in 24-hour-nursed beds.<sup>51,52</sup> So public psychiatric clientele in treatment for persistent disorders are more than 32 times more community-based than hospital-based. Therefore, it is inevitable that any erosion of community mental health resourcing will have a multiplier effect on presentations to emergency departments and inpatient facilities. These community mental health filters, ordinarily only admit high-risk presentations to hospital care, and facilitate care in more appropriate home environments. Dismantling these filters may partially explain the increase in hospital presentations. Another factor, clearly, has been the growth in acuity due to comorbidity of substance abuse with mental illness, particularly in young adult males.<sup>51</sup>

To foster convenient access, community hubs need to be close to major shopping centres, public transport and parking. Mental health services are more likely to do home visits when community based, while they are more likely to become sedentary and focused on hospital priorities if based on hospital

sites, and may revert to resembling traditional outpatient departments. Other management decisions impact on hastening this service regression, for example, hospital administrations which take away mental health vehicles, or pool them with other departments, or relocate them into remote compounds or multi-storey carparks, so that community mental health workers cannot access them easily and urgently.

Mental health services will need to continue to develop consultation–liaison services to emergency departments, and all medical and surgical specialty units, as well as managing psychiatric inpatient units. However, the present growing demand for mental health inpatient beds could be effectively filtered by consistently placing in every catchment coherent, evidence-based, 24-hour mobile community assessment and acute care teams, community respite accommodation, mental health supported residential facilities, mobile assertive case management teams and rigorously organised GP shared care.<sup>20,50,53</sup> Evidence provided to the ‘Not for Service’ Inquiry<sup>54</sup> and the Australian Senate Select Committee Inquiry on Mental Health<sup>55</sup> indicated that even in states like Victoria, where crisis services had previously been most comprehensively implemented, psychiatric assessment services have since been concentrated in emergency departments. Consequently, there has been an increasing tendency to direct new referrals ‘into these stressed environments, even during normal hours’, where waiting times can be long, and service users find it difficult to contain their distress without disturbing others and often feel they must escalate life crises into life-threatening emergencies to be seen within living memory.

The evidence base for community versus hospital location of community mental health teams is limited, yet there is a consistent trend: while there is both direct and indirect evidence that community location and mobility generates better outcomes,<sup>19,48–50,56,57</sup> no rigorous research study whatsoever favours locating community mental health services on hospital sites. Insistence by some state governments that the location of community mental health services in hospitals makes no difference to their quality, relies largely on anecdotal accounts from hospital-based managers and clinicians who presided over their retraction. There is also evidence from an award-winning Australian study that hospital-based presentations are more than three times more likely to be admitted than community presentations.<sup>58</sup> After controlling for clinical and functional severity, site of assessment accounted for most of this difference. An earlier study indicated that the closer individuals with a psychiatric episode live, or the more they present, to a hospital with a psychiatric admission unit, the more likely they are to be admitted.<sup>59</sup>

Despite this growing evidence base, some state and territory health administrations (with notable exceptions, e.g. Australian Capital Territory) are continuing to preside over the dismantling or demobilising of 24-hour mobile crisis teams and Assertive Community Treatment teams,<sup>50,60</sup> formerly operating well from community health sites, as they are expected to work more from emergency departments. Most jurisdictions are also making inadequate provision for community-based supervised residential facilities,<sup>52</sup> including 24-hour supervised community respite care. A principal bipartisan recommendation of the Senate Inquiry<sup>55</sup> was that from additional CoAG funding,

a ‘Better Mental Health in the Community’ initiative should be established, ‘comprising a large number of community-based mental health centres, the distribution primarily determined on the basis of populations and their needs. (Assuming populations of around 60 000, this would represent 300 to 400 community based mental health centres nationwide’ to be rolled out over 4–5 years). They further recommended the establishment of community respite with step up and step down accommodation options in conjunction with the federal government Better Mental Health in the Community program.

However, the CoAG enhancements were subsequently directed only to ancillary care (e.g. non-professional personal helpers and mentors), to be delivered by non-government organisations, and to Medicare Benefits Schedule (MBS) payments for allied professionals, without any real attempt at coordination, rational placement, collaborative planning or integration with public mental health services. There are insufficient incentives for teamwork between Medicare-funded and state-funded clinicians, and the relevant section of the Medicare legislation that inhibits crossovers between such services should be repealed. While generally these initiatives have been welcomed, they potentially repeat the mistakes of previous MBS fee-for-service arrangements of high out-of-pocket expenses, maldistribution of service providers favouring wealthy urban areas, serving less disabled clientele, and proliferation of individual provider-based treatments rather than collaborative care.<sup>61,62</sup>

### *Primary health care initiatives*

In proposing broad changes to the health system, the current and potential roles of primary health care in service delivery should also be considered. Keleher<sup>63</sup> distinguishes primary (clinical) care drawn predominantly from a biomedical model, from primary health care which provides a more comprehensive system response to health promotion, disease prevention and addressing disorders by also ameliorating social disadvantage and inequities via community participation and collaboration. She warns that as the former model eclipses, is given some of the resources of, and borrows the language of, the latter, it represents a more narrow, clinical and conservative policy takeover. Detailed analysis of primary health care changes is beyond the scope of this paper, but several trends should be noted briefly.

The Rudd federal government GP Super Clinic initiative<sup>64,65</sup> is providing AU\$223 million over 4 years to establish new facilities within local communities, bringing together GPs, practice nurses, allied professionals, visiting medical specialists, and diagnostic services, and allowing for collocated community health, mental health and counselling services funded by state and territory governments. This initiative is broadly consistent with the other solutions suggested here, but this initiative will only fund 31 centres nationwide until 2012, some of which may be hospital based. Consequently it is likely to only provide a limited remedy to, and in some cases an exacerbation of, prevailing trends towards the retraction of community health services to hospital sites. Early indications are that these centres will work better

where the local GP network is highly involved in planning and operating the centre, and where GPs have become more attuned to blended payments.

In South Australia, several 'GP Plus' Care Centres are being established in population nodes. They comprise outposts of many community health services, which are intended to 'complement services offered by GPs', though they will usually not include GPs on site.<sup>66,67</sup> In a service agreement with SA Department of Health, GP Divisions are required to commit to collaborate with the implementation of 'GP Plus' Health Networks.

The corresponding NSW initiative 'HealthOne'<sup>68,69</sup>, integrating care provided by general practice and community health services, may be more suited to rural or outer suburban areas, but may suffer from difficulty in attracting or consistently retaining GPs, at least to some of its more urban centres.<sup>C</sup> Both in NSW, the NT and elsewhere, there is some concern from GP networks that these Super Clinics may pose a threat to existing practices<sup>70</sup> and may not provide adequate remuneration to attract and retain enough GPs.

The essentially bipartisan federal government 'Headspace' initiative, providing early detection and intervention for mental health conditions in the context of a 'one-stop shop' youth health centre – containing GP services and offering general and sexual health, drug and alcohol, and human services – is also highly compatible with contemporary developments in community-based health care models. Twenty such centres have been funded so far.<sup>71–73</sup>

The CoAG-funded practice nurses and 'Better Access' fee for service arrangements for allied professionals (see preceding section) provide the opportunity to build informal interdisciplinary teams around GPs, which would be very useful, for example, to divert milder, higher prevalence psychiatric disorders from public mental health services, but there is no funding or provision for appropriate coordination of these services or triage between these and public services. In the present workforce market for interdisciplinary professionals, these initiatives inevitably will compete for already scarce staffing with the public sector.

Primary Mental Health Care networks are contributing to better support and training for GPs for early detection and management of mental health conditions, as the 'Can-Do' initiative also offers for managing mental health and substance use dual disorders in general practice (Australian General Practice Network, see [www.agpn.com.au](http://www.agpn.com.au)).

## Limitations of the evidence

Gaps in the evidence base include the lack of sophisticated population-based data systems on health care facility utilisation in many countries, with exceptions (e.g. Canada, UK), and the difficulty in quantifying the impact of bed reductions on the burden borne by patients' families and other care givers.<sup>45</sup> However, this has been better studied in mental health care, where comprehensive 24-hour mobile community-based alternative care has been demonstrated to lower family burden, and increase families' satisfaction with care (e.g. Hoult *et al.*<sup>19</sup>). While control studies clearly favour community-sited psychiatric services, they mainly demonstrate better quality of life outcomes (e.g. consumer satisfaction and family burden) and intervening variable results (e.g. willingness to make return visits, decreased referrals to hospital and staying in touch longer with services) (e.g. Kastrup *et al.*<sup>74</sup>). Though most clinical outcome studies also favour community- over hospital-based mental health services, with most mobile crisis and assertive teams subjected to randomised-controlled trials being mainly based squarely in the community,<sup>21,49,50,54</sup> community location is only one among a suite of variables possibly contributing to the better outcomes.

## Conclusion

### *What needs to be done?*

The balance between hospital and community health care needs reconceptualising into a new paradigm. This replaces the hospital centrality of public health care services, which provides only secondary outreach to the community to a limited extent, with a shift to community-centred services becoming the predominant public health care modality, with in-reach to hospitals only when necessary.

Hospital-based Care Navigation Units, which have been conceived to divert non-urgent, non-life-threatening clinical presentations from general hospital emergency departments, will only partially address the issue of focus of care. Perverse incentives prevail in the health system, which will continue to encourage growth in unnecessary emergency department presentations, unless the entire system of health care and its funding basis are restructured.

The current emphasis in benchmarking and budgeting, on reducing the average bed-day usage for all conditions, and abbreviating or avoiding hospital admissions is laudable, but it will only reach maximum benefit if community health services on

<sup>C</sup>Case example. A recently approved emasculated version of a 'HealthOne' integrated primary health care community health clinic at Chatswood in urban NSW, invited GP's to co-locate in a few rooms of a small community 'spoke' or 'outpost' centre which can be booked for sessions interchangeably by visiting community health workers. They are to be otherwise firmly based at a 'hub' which comprises a 9 storey 'community precinct', some kilometres away on a major general hospital site, 13 minutes walking distance from access to their community health cars. It appears unlikely to provide comprehensive service coverage, nor a critical mass of staff to sustain a viable community health service, nor a viable referral base for GPs. The Local GP Network rejected this diluted version of what otherwise could have been a sound primary and community healthcare delivery model, but only if most aspects of community health had continued to be squarely based at the Chatswood community site. This outpost centre, now being built, may be only being placed in Chatswood gesturally to 'end community speculation' (according to the Ministerial press release) concerning the shifting of a formerly large community health centre from this major shopping area onto the more distant hospital site. This will then enable NSW Health to sell most of this valuable community site to contribute to the rebuilding of the hospital. The new centre is likely to become a white elephant. The devolved community health polyclinics, proposed by Darzi for the NHS in London, in high streets near the main shops and transport interchanges, with substantial and stable staffing, or similar integrated primary and community health centres in Portugal, would be much more likely to attract a critical mass of GPs in shared or adjacent premises.

the way into hospital, on the way out, and instead of hospital care are given the investment they need to effectively do their job.

We should reconsider the planned rebuilding of large general hospitals and the consolidation of community health services on hospital sites – this model is outmoded, comparatively ineffective and economically unsustainable.

Community-centred health services should be reconceptualised as the key to effective and affordable health care, retained, refurbished and rebuilt to provide easily accessible, low-key, welcoming and contemporary facilities, near, or in, local shopping and transport hubs. They should be closely linked to, and co-located where possible, with primary care centres, and functionally integrated with corresponding hospital inpatient services.

State governments should ensure that community health services are devolved again to local facilities in the mingling centre of their communities.

The current federal government has already flagged its intention to gradually restore its share of health service funding to parity with the states, and has made its first down-payments towards this. It should raise its contribution to health resourcing further via Australian Health Care Agreement arrangements and other means, including allowing state-directed services to access other Commonwealth funding streams, to further foster cooperative federalism. It should either implement the long-anticipated recommendations of the National Health and Hospitals Reform Commission (NHHRC)<sup>75,76</sup> to take over responsibility for all primary and community health services, and then reintegrate the system by contracting hospital services as needed, or ensure formal agreement with all states to channel a much larger proportion of such enhancements to community-based alternatives to hospital-centred care. The relevant principal recommendations of the Senate Select Committee Inquiry on Mental Health should be implemented in full, with CoAG funding.

Governments should systematically implement the approach of the AHHA/TheMHS/PWC Roundtable report,<sup>77</sup> endorsed by the Interim Report of the NHHRC,<sup>78</sup> of shifting the centre of gravity of health services to community sites, and in-reaching to hospitals only as necessary, rather than persisting with hospital-based services with occasional outreach only when convenient.

Federal, state and territory governments together should provide substantial finance to provide for the capital, leasing and refurbishment costs involved, the well trained workforce and staffing levels required to do the job properly of resetting the balance towards, and redeveloping, community-based health services. This is likely to be much more cost-effective than just meeting never-ending demands for more hospital beds.

### Competing interests

The authors declare that they have no competing interests.

### Acknowledgements

We thank Richard Nafa, Anne Streeter, Julie McGarrity, Zacha Rosen and Vivienne Miller for assistance with preparing this paper, and Prue Power, Dr William Barclay, Professors Kathy Eagar and David Richmond for most helpful comments on the text.

### References

- Owen A, Thompson C, Samsa P, Grootmaat P, Fildes D, Eagar K. Community Health: the evidence base. A report for the NSW Community Health Review. Wollongong: University of Wollongong, Centre for Health Service Development, 2008.
- New South Wales Health. Integrated Primary and Community Health Policy 2007–2012. NSW Department of Health: Sydney, 2006.
- Duckett SJ. The Australian health care system: reform, repair or replace? *Aust Health Rev* 2008; 32(2): 322–9.
- Rix M, Owen A, Eagar K. (Re) form with substance? Restructuring and governance in the Australian health system 2004/05. *Aust N Z Health Policy* 2005; 2(19): 1–8.
- Purdy S, Griffin T. Reducing hospital admissions. Guidance should be evidence based and take a holistic view of patient care. *BMJ* 2008; 336: 4–5. doi:10.1136/bmj.39394.402465.BE
- Collignon P. We have 38% fewer hospital beds than in 1981: it's a scandal. 20 July 2009. Available at [www.crikey.com.au](http://www.crikey.com.au) [verified 1 March 2010].
- Roxon N. 'A case for change' in the Australian Health System. Canberra: National Press Club. 13 August 2008.
- Victoria's Hospital in the Home Program. Melbourne: Department of Human Services, 2003. Available at [www.health.vic.gov.au/archive2003](http://www.health.vic.gov.au/archive2003) [verified 1 March 2010].
- Wilson SF, Shorten B, Marks R. Costing the ambulatory episode: implications of total or partial substitution of hospital care. *Aust Health Rev* 2005; 29(3): 360–5.
- Government of Western Australia, Department of Health. Healthy@Home: Hospital in the home, chronic disease service. Available at <http://www.health.wa.gov.au/healthyathome/hith/index.cfm> [verified 1 March 2010].
- Caplan G, Ward J, Brennan N, Board N, Coconis J, Brown A. Hospital in the home: a randomised controlled trial. *Med J Aust* 1999; 170: 156–60.
- Caplan GA, Coconis J, Sayers A, Board N. Does home treatment affect delirium? A randomised controlled trial of rehabilitation of elderly and care at home or usual treatment (The REACH OUT Trial). *Age Ageing* 2006; 35: 53–60. doi:10.1093/ageing/afi206
- Caplan GA. Does Hospital in the Home treatment prevent delirium? *Ageing Health* 2008; 4(1): 69–74. doi:10.2217/1745509X.4.1.69
- Leff B, Burton L, Mader S, Naughton B, Burl J, Inouye SK, *et al*. Hospital at home: feasibility and outcomes of a program to provide hospital-level care at home for acutely ill older patients. *Ann Intern Med* 2005; 143: 798–808.
- Garling P. Final Report of the Special Commission of Inquiry: Acute Care Services in NSW Public Hospitals. Sydney: NSW Government, 2008.
- Board N, Brennan N, Caplan G. A randomised controlled trial of the costs of hospital as compared with hospital in the home for acute medical patients. *Aust N Z J Public Health* 2000; 24: 305–11. doi:10.1111/j.1467-842X.2000.tb01573.x
- Tran A, Taylor D. Medical model for hospital in the home: effects on patient management *Aust Health Rev* 2009; 33(3): 494–501.
- Stein LI, Test MA. Training in community psychiatry: one year evaluation. *Am J Psychiatry* 1976; 133: 917–8.
- Hoult J, Rosen A, Reynolds I. Community oriented treatment compared with psychiatric hospital orientated treatment. *Soc Sci Med* 1984; 18(11): 1005–10. doi:10.1016/0277-9536(84)90272-7
- Rosen A, Mueser KT, Teeson M. Assertive community treatment – issues from scientific and clinical literature with implications for practice. *J Rehabil Res Dev* 2007; 44(6): 813–25. doi:10.1682/JRRD.2006.09.0110
- Dykes S, Patton M, Tinling P. Community treatment: an alternative to hospitalization. *Commun Mental Health N Z* 1990; 5(2): 64–76.



- 22 Gómez-Batiste X, Tuca A, Corrales E, Porta-Sales J, Amor M, Espinosa J, *et al.* Resource consumption and costs of palliative care services in Spain: a multicenter prospective study. *J Pain Symptom Manage* 2006; 31(6): 522–32. doi:10.1016/j.jpainsymman.2005.11.015
- 23 Leff B, Burton L, Guido S, Greenough WB, Steinwachs D, Burton JR. Home Hospital Program: a pilot study. *J Am Geriatr Soc* 1999; 47(6): 697–702.
- 24 Harris R, Ashton T, Broad J, Connolly G, Richmond D. The effectiveness, acceptability and costs of a hospital-at-home service compared with acute hospital care: a randomized controlled trial. *J Health Serv Res Policy* 2005; 10(3): 158–66. doi:10.1258/1355819054338988
- 25 Larsen T, Olsen TS, Sorensen J. Early home-supported discharge of stroke patients. A health technology assessment. *Int J Technol Assess Health Care* 2006; 22(3): 313–20. doi:10.1017/S0266462306051208
- 26 Thompson JR, Horton C, Flores C. Advancing diabetes self-management in the Mexican American population: a community health worker model in a primary care setting. *Diabetes Educ* 2007; 33: 159S–65S. doi:10.1177/0145721707304077Suppl. 6
- 27 Liebman J, Heffernan D, Sarvela P. Establishing diabetes self-management in a community health center serving low-income Latinos. *Diabetes Educ* 2007; 33(Suppl. 6): 132S–8S. doi:10.1177/0145721707304075
- 28 Jilcott SB, Keyserling TC, Samuel-Hodge CD, Rosamond W, Garcia B, Will JC, Farris RP, Ammerman AS. Linking clinical care to community resources for cardiovascular disease prevention: The North Carolina Enhanced WISEWOMAN project. *J Womens Health* 2006; 15(5): 569–83. doi:10.1089/jwh.2006.15.569
- 29 Chatterjee N, Blakely DE, Barton C. Perspectives on obesity and barriers to control from workers at a community centre serving low-income Hispanic children and families. *J Community Health Nurs* 2005; 22(1): 23–36. doi:10.1207/s15327655jchn2201\_3
- 30 Pbert L, Ockene JK, Zapka J, Ma Y, Goins K, Oncken C. A community health center smoking-cessation intervention for pregnant and postpartum women. *Am J Prev Med* 2004; 26(5): 377–85. doi:10.1016/j.amepre.2004.02.010
- 31 Walker EA, Engel SS, Zybert PA. Dissemination of diabetes care guidelines: lessons learned from community health centers. *Diabetes Educ* 2001; 27(1): 101–10. doi:10.1177/014572170102700112
- 32 Rosen A, Callaly T. Interdisciplinary teamwork and leadership. *Australas Psychiatry* 2005; 13(3): 234–40.
- 33 Rosen A. Destigmatizing day-to-day practices: what developed countries can learn from developing countries. *World Psychiatry* 2006; 5(1): 21–4.
- 34 Rosen A. The community psychiatrist of the future. *Curr Opin Psychiatry* 2006; 19(4): 380–8. doi:10.1097/01.yco.0000228758.18109.22
- 35 Twomey A, Withers G. Australia's federal future: delivering growth and prosperity. Federal Paper 1. Canberra: The Council for the Australian Federation, 2007.
- 36 Epstein T, Lynch A. Selective centralism no answer to federal problems. *Sydney Morning Herald*, 3 August 2007; 15.
- 37 Hartcher P. Fiddling at the margins – and more to come. *Sydney Morning Herald*, 4–5 August 2007; 25.
- 38 New South Wales Department of Health. Health Administration Act, Clause 2 (1), Schedule 3.
- 39 Darzi A. Future framework for healthcare for London. London Strategic Health Authority and the National Health Service UK, July 2007.
- 40 Darzi A. High quality care for all, and our vision for primary and community care. Department of Health and National Health Service, UK, August 2008. Available at [www.dh.gov.uk/en/Healthcare/OurNHSourfuture/index.htm](http://www.dh.gov.uk/en/Healthcare/OurNHSourfuture/index.htm) [verified 1 March 2010].
- 41 Menadue J. Obstacles to health reform. Sydney: Centre for Policy Development, 31 July 2007. Available at <http://cpd.org.au/article/obstacles-to-health-reform> [verified 1 March 2010].
- 42 Coultan M. Politicians must change 'cheaper sandwiches' attitude. *Sydney Morning Herald*, 5 March 2008.
- 43 National Health Service (NHS) Modernization Agency. 10 high impact changes for service improvement and delivery: a guide for NHS leaders. Leicester: National Health Service, 2004.
- 44 Scottish Government Executive & Royal College of Psychiatrists in Scotland. New ways of working for psychiatrists: Scottish Report. Edinburgh: 2007.
- 45 McKee M. Reducing hospital beds: what are the lessons to be learned? European Observatory on Health Systems and Policies, Policy Brief No. 6. Copenhagen: WHO Regional Office for Europe, 2004.
- 46 Lancet Global Mental Health Group. Scale up services for mental disorders: a call for action. Global Mental Health Series 6. *Lancet* 2007; 370: 1241–52. doi:10.1016/S0140-6736(07)61242-2
- 47 United Nations General Assembly. Principles for the protection of persons with mental illness and for the improvement of mental health care. New York: United Nations Organization, Resolution 119, 46th session, Meeting 75, Report: A/46/721. 17 December 1991.
- 48 Stein LI, Test MA. Alternative to mental hospital treatment: I Conceptual model, treatment program and clinical evaluation. *Arch Gen Psychiatry* 1980; 37: 392–7.
- 49 Geller J, Fisher W, McDermit M. A national survey of mobile crisis services and their evaluation. *J Psychiatr Serv* 1995; 46(9): 893–7.
- 50 Rosen A, Newton L, Barfoot K. Evidence-based community alternatives to institutional psychiatric care. *Med Today* 2003; 4(9): 90–5.
- 51 Gurr R. Drugs and Australasian Government policies have created a crisis in public mental health services. Canberra: Senate Select Committee on Mental Health, Proceedings, 2005; 893–7. [Submission representing Comprehensive Area Service Psychiatrists' (CASP) Network]. Available at [http://www.aph.gov.au/Senate/committee/mentalhealth\\_ctte/submissions/sub108\\_attach1.pdf](http://www.aph.gov.au/Senate/committee/mentalhealth_ctte/submissions/sub108_attach1.pdf) [verified 4 March 2010].
- 52 Andrews G. The crisis in mental health: the chariot needs one horseman *Med J Aust* 2005; 182: 372–3. [editorial].
- 53 Rosen A, Teesson M. Does case management work? The evidence and the abuse of evidence-based medicine. *Aust N Z J Psychiatry* 2001; 35: 731–46. doi:10.1046/j.1440-1614.2001.00956.x
- 54 Mental Health Council of Australia. Brain & Mind Institute, University of Sydney, & Human Rights & Equal Opportunity Commission. 'Not for Service': experiences of injustice & despair in mental health care in Australia. Canberra: Mental Health Council of Australia, 2005.
- 55 Department of the Senate. Parliament of Australia. Senate Select Committee on Mental Health Inquiry. Interim Report 30 March. Final Report 28 April. Canberra: Commonwealth of Australia, 2006.
- 56 Murray G, Judd F, Jackson H. Rurality and mental health: the role of accessibility. *Aust N Z J Psychiatry* 2004; 38: 629–34.
- 57 Kent S, Fogarty M, Yellowlees P. A review of heavy users of psychiatric services. *Psychiatr Serv* 1995; 46(12): 1247–53.
- 58 Hugo M, Smout M, Bannister J. A comparison in hospitalization rates between a community-based emergency service and a hospital-based emergency service. *Aust N Z J Psychiatry* 2002; 36(4): 504–8. doi:10.1046/j.1440-1614.2002.01042.x
- 59 Mellsoop GW. The effect of distance in determining hospital admission rates. *Med J Aust* 1969; 2: 814–7.
- 60 Rosen A. Australia's national mental health strategy in historical perspective: beyond the frontier. *International Psychiatry* 2006; 3(4): 19–21.
- 61 Hickie IB, McGorry PD. Increased access to evidence-based primary mental health care: will the implementation match the rhetoric? *Med J Aust* 2007; 187: 100–3.
- 62 Senate Standing Committee on Community Affairs. Mental health services in Australia. Canberra: Department of the Senate, Parliament of Australia, Commonwealth of Australia, June 2008.

- 63 Keleher H. Why primary health care offers a more comprehensive approach to tackling health inequities than primary care. *Aust J Primary Health* 2001; 7(2): 57–61. doi:10.1071/PY01035
- 64 Rudd K, Roxon N. New directions for Australia's health. Delivering GP Super Clinics to local communities. Canberra: ACP, Policy Document, 26 August 2007.
- 65 Department of Health and Ageing. GP Super Clinics program. Australian Government, 2008. Available at [www.health.gov.au/internet/main/publishing.nsf/Content/portal-gpsuperclinics](http://www.health.gov.au/internet/main/publishing.nsf/Content/portal-gpsuperclinics) [verified 1 March 2010].
- 66 South Australian Department of Health. GP plus: a new model for GP Plus Health Networks. Report, January 2008. Available at [www.health.sa.gov.au](http://www.health.sa.gov.au) [verified 1 March 2010].
- 67 Burgess T, Beilby J. Integrated primary health care and community care in South Australia. Final report. University of Adelaide, Department of General Practice, 2003.
- 68 New South Wales Health. Health in our communities: *HealthFirst: Primary health care in NSW 2010–2015*. Sydney: NSW Department of Health, 2009.
- 69 New South Wales Department of Health. HealthOne NSW Framework, Sydney, 2008. Available at <http://www.health.nsw.gov.au/initiatives/HealthOneNSW/framework/index.asp> [verified 5 March 2010].
- 70 Katekar L. Editorial. The Echo, Bulletin of the Top End Division of General Practice 2008; 3: 1. Available at [www.tedgp.org.au](http://www.tedgp.org.au) [verified July 2008].
- 71 McGorry P, Tanti C, Stokes R, Hickie IB, Carnell K, Littlefield L. Headspace: Australia's National Youth Mental Health Foundation—where young minds come first. *Med J Aust* 2007; 187(7 Suppl.): S68–70.
- 72 Headspace: National Youth Mental Health Foundation. Establishment report. Melbourne: Australian Government Promoting Better Mental Health – Youth Mental Health Initiative, 2007. Available at [www.headspace.org.au](http://www.headspace.org.au) [verified 1 March 2010].
- 73 Headspace: Australian Youth Mental Health Network. 2008. Available at [www.headspace.org.au](http://www.headspace.org.au) [verified 1 March 2010].
- 74 Kastrup M, Dupont A, Bille M, Nielsen JA, Nielsen J. A comparative study of psychiatric outpatient treatment in two geographically defined populations. *Compr Psychiatry* 1978; 19(2): 103–8. doi:10.1016/0010-440X(78)90053-6
- 75 National Health and Hospitals Reform Commission. Beyond the blame game; accountability and performance benchmarks for the next Australian Health Care Agreements. Canberra, April 2008.
- 76 National Health and Hospitals Reform Commission. A healthier future for all Australians. Final Report. Australian Government Department of Health & Ageing, July 2009. Available at [www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/content/nhhrc-report-toc](http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/content/nhhrc-report-toc) [verified 1 March 2010].
- 77 Australian Healthcare and Hospitals Association. The Mental Health Services conference of Australia & New Zealand, Inc. Mental Health Funding Methodologies and Governance, National Roundtable discussion paper. Sydney: PriceWaterhouseCoopers, 2008. Available at [http://www.aushealthcare.com.au/publications/publication\\_details.asp?sr=0&pid=169](http://www.aushealthcare.com.au/publications/publication_details.asp?sr=0&pid=169) [verified 1 March 2010].
- 78 National Health and Hospitals Reform Commission. A healthier future for all Australians. Interim Report. December 2008. Available at [www.health.gov.au/nhhrc/publishing.nsf/content/interim-report-december-2008](http://www.health.gov.au/nhhrc/publishing.nsf/content/interim-report-december-2008) [verified 1 March 2010].
- 79 Heald D, Dowdall A. Capital charging as a VFM tool in public services. *Financial Accountability & Management* 1999; 15(3–4): 209–28. doi:10.1111/1468-0408.00083
- 80 Pollock AM, Chaoul J, Vickers N. Private finance and 'value for money' in NHS hospitals; a policy of a rationale. *BMJ* 2002; 324: 1205–9. doi:10.1136/bmj.324.7347.1205

Manuscript received 28 January 2009, accepted 21 October 2009