

5. Restoring people to better health and independent living

Key messages

- Sub-acute care is a vital element of the patient journey, often providing the connection between acute care in hospitals and care in the community and in people's homes. It can help to improve functioning and independent daily living, reduce or slow further decline in health status, reduce unnecessary visits to hospitals, reduce the amount of time people spend in acute hospitals, and prevent premature admission for older people to residential aged care facilities. Sub-acute services are used by people of all ages.
- Sub-acute care includes services such as rehabilitation, geriatric evaluation and management, new programs such as Transition Care and other 'step-up' or 'step-down' programs. These services need to work hand-in-glove with other services such as respite care, community nursing, and home and community care support services. Sub-acute services are, and should be, a 'broad church'. They will often involve multidisciplinary teams, with strong input from a range of specialist allied health staff.
- Many sub-acute services should be community-based (that is, outside hospitals) to promote improved access. This is also consistent with the different philosophy and treatment approach of sub-acute services which focus on improving independent functioning in the context of people's daily lives and health conditions.
- Many parts of Australia have limited or poorly developed sub-acute care services. The inability of many patients to access a comprehensive range of sub-acute services represents a significant 'missing link' in the care continuum. This service gap seriously erodes the effectiveness of other services, such as acute hospital care, as well as causing poorer outcomes for patients. An ageing population and increasing chronic disease will further strain our already under-developed sub-acute services.

Our reform directions

- 5.1 We want to increase the visibility of, and access to, sub-acute services through more directly linking funding to the delivery and growth of sub-acute services. A priority focus should be the development of activity-based funding models for sub-acute services (including the cost of capital), supported by improvements in national data and definitions for sub-acute services.
- 5.2 We support a dual approach to funding of sub-acute services, comprising a mix of activity-based funding with the use of incentive payments related to improving outcomes for patients.
- 5.3 We propose that clear targets to increase provision of sub-acute services be introduced by June 2010. These targets should cover both inpatient and community-based services and should link the demand for sub-acute services to the expected flow of patients from acute services and other settings. Incentive funding under the National Partnership Payments could be used to drive this expansion in sub-acute services.
- 5.4 We propose that investment in sub-acute services infrastructure be one of the top priorities for the Health and Hospitals Infrastructure Fund.
- 5.5 We need to ensure that we have the right workforce available and trained to deliver the growing demand for sub-acute services including in the community. Accordingly, we support the need for better data on the size, skill mix and distribution of this workforce including rehabilitation medicine specialists, geriatricians and allied health staff.
- 5.6 We recognise the vital role of equipment, aids and other devices in helping people to improve health functioning and to live as independently as possible in the community. Ensuring affordable access to such equipment will be considered under reform direction 1.3.4 that foreshadows further work on the development of integrated safety nets.

Sub-acute services are sometimes known as the 'invisible services' or the 'missing link'

- Sub-acute services are sometimes known as the 'invisible services' or, as described to us during our consultations, 'the missing link'. When we think of the continuum of care needed by some people, sub-acute services provide the 'glue' that connects acute care provided in hospitals with community care provided in people's homes.

*While sub-acute care is a crucial investment for an integrated health system, it is largely absent from the national discourse about health policy. Utilisation and financial data for sub-acute services are rolled up into acute care statistics and thus invisible in national data sets.*¹

*Rehabilitation medicine has long been the poor cousin of the medical world. A few hours of life saving neurosurgery is nearly always given media and administrative precedence over the six or nine month rehabilitation program.*²

*With the bed access issue we need access to more rehabilitation beds and we also need better community services. But better community services won't do away with the need for the sub-acute beds.*³

Another defining feature of sub-acute services is that the best results are achieved when there is a shared partnership between the individual (and their family and carers) and health care professionals. Rehabilitation is not something that is 'done' to 'patients'. It requires the active participation and responsibility of the individual to work towards improving their health and ability to function as independently as possible.

1 Australian Healthcare and Hospitals Association (2008), Submission 35 to the National Health and Hospitals Reform Commission.

2 Australasian Faculty of Rehabilitation Medicine (2008), Submission 21 to the National Health and Hospitals Reform Commission.

3 Rehabilitation specialist (18 June 2008), National Health and Hospitals Reform Commission consultation meeting with frontline health workers in Brisbane.

Or, in the words of the Australasian Faculty of Rehabilitation Medicine:

*By encouraging newly disabled people to take control of their own destiny, rehabilitation medicine ensures that the person is the 'hero' of their rehabilitation program, not the doctor, therapist or nurse.*⁴

5.1 Defining and scoping sub-acute care

Sub-acute services are hardly the stuff of animated conversations over a Sunday barbeque. If an opinion pollster were to ask ten people for their views on sub-acute services, it is highly unlikely that even one of them could correctly define what the term means, let alone identify the issues impacting on this important part of the health service care continuum.

Even within the health sector and between states and territories, there are quite different understandings and language used to describe sub-acute services. To cut through this bureaucratic Babel tower of definitions, we began by specifying the outcomes that we were seeking to achieve for people and their families from sub-acute services. These outcomes include:

- to improve the functional capacity or the ability of people to live their lives as healthily and as productively as possible;
- to slow the decline in health status or reduce complications arising from an illness or injury;
- to reduce unnecessary admissions to hospital that could be avoided if people had better access to services that slowed the progression of their condition or dealt more proactively with their symptoms;
- to allow older people time and space to recover from health problems so that they are not admitted prematurely to a residential aged care facility. This is the case both for older people in the community and older people in hospitals, where high levels of so-called 'nursing home type' patients may actually signal gaps in sub-acute services; and
- to ensure that the care that comprises sub-acute services is provided in the most suitable setting (usually not an acute hospital ward) with the right mix of staff and other resources.

The scope of services that might help to achieve these better outcomes for people includes at their core rehabilitation and geriatric evaluation and management services. Sometimes such care may be known colloquially as 'low dependency' or 'step-up' and 'step-down' care. Transition Care is the formal name for one relatively new Commonwealth/state program that helps support older people through providing flexible packages of care for up to 12 weeks following an acute episode in hospital. Sub-acute services are characterised by the use of multidisciplinary teams, with strong reliance on specialist allied health staff and medical specialists including rehabilitation medicine specialists and geriatricians.

Sub-acute services may be provided on an inpatient basis, but are also commonly available on an ambulatory or non-admitted basis (for example, weekly cardiac rehabilitation programs for patients recovering from a heart attack). In some states, inpatient sub-acute services are provided in separate facilities to acute hospitals, while in other states they may be provided in the same or separate wards of acute hospitals. Sub-acute care may also be provided directly in people's homes. Sub-acute services cover the full gamut of physical and mental health conditions, although sub-acute services related to mental health are discussed later in Chapter 10. Similarly, examination of palliative care services (often viewed as one type of sub-acute service) has been held over until Chapter 7 which considers issues relating to end of life care.

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⁴ Australasian Faculty of Rehabilitation Medicine (2008), Submission 21 to the National Health and Hospitals Reform Commission.

Finally, we have not included in our above working definition of sub-acute services some other services that may frequently be provided in association with sub-acute services. Respite care, community nursing and home and community care support services are all vital elements in 'connecting care' for patients and their families. But they differ from sub-acute services that take a more active role in working with patients to restore health and they use a different mix and intensity of specialist and allied health staff.

5.2 Building on our strengths

In recent years, governments have been working to lift the policy focus on, and investment in, sub-acute services. The three most significant national developments have been:

- From 2003 onwards, the Commonwealth Government provided \$253 million under the 2003–2008 Australian Health Care Agreements Pathways Home program so that states and territories could expand the provision of step-down and rehabilitation services through investing in capital and infrastructure support for these services.
- In 2004, all governments committed to a National Action Plan⁵ to improve the care of older people across the acute-aged care continuum. This included agreement to developing planning guides to define adequate levels of services including rehabilitation, geriatric evaluation and management and other specialised health services.
- In 2004, the Commonwealth Government introduced the new Transition Care Program with an expected annual budget of \$150 million to achieve better integration between acute hospitals and the aged care sector. This program is intended to improve the functional capacity of older patients to keep them at home as long as possible.

However, a hard-nosed assessment would suggest that progress has been disappointingly slow, with little in the way of measurable improvements for patients in terms of better access to sub-acute care arising from these efforts. In part, this may reflect the size of the gap, given historical underinvestment in sub-acute services. But, it may also reflect that the additional investment has not been clearly tied to additional service delivery and that governments have not been held fully accountable for their commitments under the National Action Plan.

There are now good data available that demonstrate that rehabilitation services are improving outcomes for patients receiving such care

- A more positive development has been the establishment of the Australasian Rehabilitation Outcomes Centre in 2002 (see Figure 5.1). While there is an absolute dearth of published data on the level and provision of sub-acute service delivery, there are now good data available that demonstrate that rehabilitation services are improving outcomes for patients receiving such care (see Figure 5.2).

⁵ Information on the National Action Plan, including annual reports, is available at: <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-hcoasc.htm>

Figure 5.1: National data on health service outcomes can be collected through collaborative non-government arrangements

The Australasian Rehabilitation Outcomes Centre (the Centre) is a joint initiative of rehabilitation providers, funders (governments, private health insurers, and transport and accident insurers), regulators and consumers. The Centre collects and releases data on the outcomes of care for most patients receiving rehabilitation services in public and private hospitals across Australia.

Eschewing the usual government-led model for collecting and reporting health system performance data, the Centre was established by the Australasian Faculty of Rehabilitation Medicine and operates as a not-for-profit organisation. It is a rare working model in the Australian health system of a data collection that:

- *covers both public and private health care providers; and*
- *provides benchmarking data back to individual hospitals to allow them to understand (and improve) their performance on clinical rehabilitation outcomes relative to their peers; and*
- *includes robust data on the actual outcomes for patients through the use of the Functional Independence Measure (FIM) that was developed with strong clinical input; and*
- *is currently developing performance data for the ambulatory (non-admitted) setting as well as continuing to report outcomes of rehabilitation services provided to hospital inpatients*

Although the Centre is voluntary in nature and partly funded through a user-pays model, the clear benefits of this data collection have meant that over 90 per cent of public and private inpatient rehabilitation services are members and submit data.

Source: Australasian Rehabilitation Outcomes Centre, About AROC, at: <http://chsd.uow.edu.au/aroc/>

Our primary focus in highlighting the example of the Australasian Rehabilitation Outcomes Centre is to showcase one innovative model of encouraging the collection and use of health outcomes data. Of course, a single model does not necessarily meet all of the reform directions that we canvass elsewhere in this report around better information for people. For example, we are proposing the publication of benchmarking data that allows the community to assess the relative performance of individual health services in improving health outcomes for people. We also want to encourage the creation of more 'person-centred' data that consolidates information on health status and health service use of an individual across all settings. But, the Australasian Rehabilitation Outcomes Centre does highlight the value of working with clinicians to develop and use outcomes data.

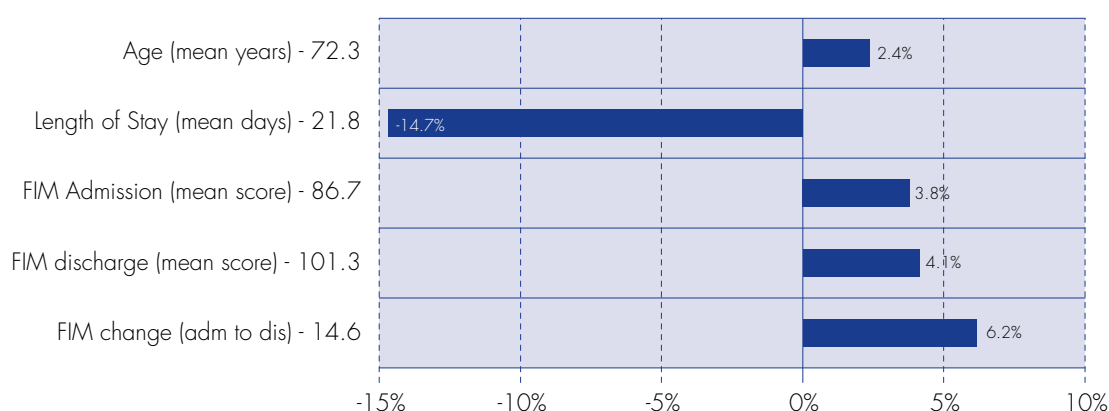
Figure 5.2: Patient outcomes, following use of rehabilitation services, have improved in recent years

The Australasian Rehabilitation Outcomes Centre (the Centre) is now reporting annually on the outcomes for patients receiving rehabilitation services.

The outcome measure used is the Functional Independence Measure (or FIM). This measures a person's ability to carry out an activity independently, versus the need for assistance from another person or device. The FIM comprises a mix of elements related to motor skills (such as bathing, dressing, walking, use of stairs) and cognitive skills (such as problem solving, memory and social interaction).

The Centre collects data on the FIM score when people are admitted to rehabilitation (admission score) and discharged from rehabilitation (discharge score). The FIM change measures the change (improvement or deterioration) in functional independence during the period of rehabilitation.

The data collected by the Centre for 2007 comprises about 50,000 rehabilitation episodes provided that year and it covers 90 per cent of inpatient rehabilitation facilities. In its analysis of trends since 2000, the Centre has identified that the average time spent in rehabilitation has declined by almost 15 per cent (from 21.8 days in 2000 to 18.6 days in 2007). However, more importantly, the outcomes for patients have improved with a higher change or positive score on the Functional Improvement Measure, once rehabilitation has been completed.



Source: Unpublished data provided by the Australasian Rehabilitation Outcomes Centre in November 2008.

5.3 Identifying the case for change

A major challenge in identifying what needs to improve in the sub-acute services area is the woefully inadequate data that are available. Hence, this is the first issue we have targeted for reform.

5.3.1 Improving access to information on sub-acute services

The best available national data on sub-acute services are now six to eight years old. These data were collected as part of a series of one-off surveys and research projects commissioned under the Care of Older Australians Working Group (the Working Group), a joint Commonwealth and state committee that reported to all Australian health ministers.

The data commissioned by the Working Group identified that:

- Over the 1990s the number of rehabilitation and assessment beds had declined relative to population growth, falling from 3.2 beds per 1000 population aged 70 years and over in 1992 to only 2.4 beds per 1000 population in 2001. However, it was also reported that access to these services had not been adversely affected, with waiting times to access rehabilitation and assessment services equivalent or better in 2001 than they were in 1992.⁶
- The majority of older people (80 per cent) receiving care in public hospitals were considered to be in the appropriate setting and receiving the right type of care. Among the remaining 20 per cent of patients, it was determined that about two-thirds had been recommended and should have been receiving residential aged care, while about one-third should have been receiving another type of hospital care such as rehabilitation or geriatric evaluation and management.⁷

The authors of one of these studies cautioned in 2002 about the 'substantial challenges of undertaking a national project in the context of limited available routine data' and expressed the hope that another one-off project would 'not need to be repeated' in the future.⁸ Unfortunately, it appears that this situation remains unchanged in 2008.

In 2004, Australian health ministers signed up to the previously mentioned National Action Plan (the Plan) to improve care across the continuum of hospitals and aged care services. The Plan identified actions which were the responsibility of state and territory governments and actions that were the responsibility of the Commonwealth Government. Specifically in relation to sub-acute services, the Plan committed states and territories to the following actions:

- first, to define by June 2005, what the standards or planning guides should be for the required level and type of sub-acute services; and
- second, by June 2008, to introduce measures to progressively meet the required levels of sub-acute services identified through these planning processes.

Yet, as of October 2008, there is almost no information available on the planning guides (if any) being used by states and territories to determine the required levels of sub-acute services, nor has the Commonwealth Government set any national benchmarks which states are required to meet in providing sub-acute services. The release of Annual Reports that identify progress under the National Action Plan has ceased, or at least slowed to a snail's pace (the most recent report is for 2005–06). No government – whether state or Commonwealth – is being held accountable for non-performance against their previous commitments.

■ No government – whether state or Commonwealth – is being held accountable for non-performance

This situation is clearly at odds with the views we expressed in our first report, *Beyond the Blame Game*. There is little chance of improving access to any type of service unless we can, first, measure whether the service is actually being provided and, second, set benchmarks for improved performance.

5.3.2 Expanding access to sub-acute services

In this data vacuum it is clearly difficult to be definitive. But the expert consensus among health professionals working in our health services, and governments and hospitals involved in funding and managing patient care, is that there is a need to expand significantly the provision of sub-acute services.

6 L Gray, M Dorevitch, R Smith and colleagues (2002), Service provision for older people in the acute-aged care system, Final Report, at: [http://www.health.gov.au/internet/main/publishing.nsf/Content/health-minconf.htm/\\$FILE/1bfinalreport.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/health-minconf.htm/$FILE/1bfinalreport.pdf)

7 Aged Care Evaluation and Management Advisors (2003), Examination of length of stay for older persons in acute and sub-acute sectors, Final Report, at: [http://www.health.gov.au/internet/main/publishing.nsf/Content/health-minconf.htm/\\$FILE/pr2report.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/health-minconf.htm/$FILE/pr2report.pdf)

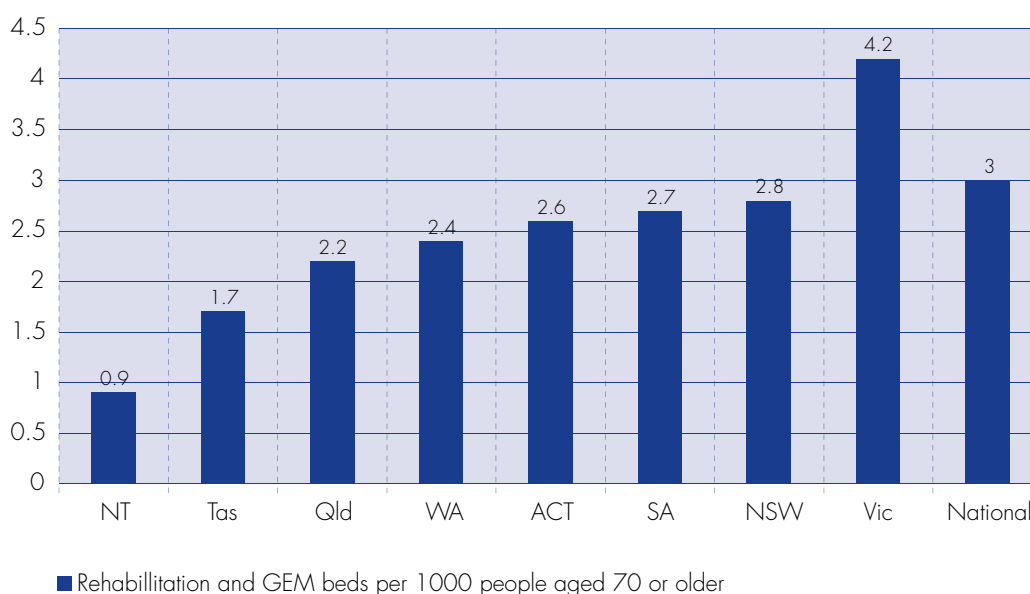
8 L Gray, M Dorevitch, R Smith and colleagues (2002), Service provision for older people in the acute-aged care system, Final Report, at: [http://www.health.gov.au/internet/main/publishing.nsf/Content/health-minconf.htm/\\$FILE/1bfinalreport.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/health-minconf.htm/$FILE/1bfinalreport.pdf)

The Australasian Faculty of Rehabilitation Medicine (the Faculty) has estimated that the number of rehabilitation beds needs to increase by 43 per cent, equivalent to an extra 1870 rehabilitation beds.⁹ We note that the Faculty's benchmarks may be conservative as they not adjust for population ageing, nor do they attempt to measure the need for ambulatory rehabilitation services or other types of sub-acute services such as geriatric evaluation and management or transition care.

Where you live is likely to influence whether you get access to necessary sub-acute services

■ Data on the distribution of rehabilitation and geriatric evaluation management beds indicates that where you live is likely to influence whether you get access to necessary sub-acute services. Victoria has at least 50 per cent more beds adjusted for population than the next best performing jurisdictions (New South Wales, South Australia and the Australian Capital Territory) and a huge 150 per cent more beds than its southern neighbour, Tasmania (see Figure 5.3). The Faculty has also identified even greater disparities in access to rehabilitation medicine specialists across Australia. Western Australia and Queensland have a particularly low supply of rehabilitation specialists, with most of these specialists being found in New South Wales, Victoria or the Australian Capital Territory.¹⁰

Figure 5.3: There is unequal access to sub-acute services across states and territories



Source: Derived from Table 4.3 in: Flinders Consulting (2008), National Evaluation of the Transition Care Program, Final Evaluation Report, at:

[http://www.health.gov.au/internet/main/publishing.nsf/Content/13539979243E2556CA2574BB00152A2E/\\$File/TCPEvaluReport.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/13539979243E2556CA2574BB00152A2E/$File/TCPEvaluReport.pdf). Note: GEM is geriatric evaluation and management.

We have also been alerted to potential disparities in access to sub-acute services between patients using public and private hospitals.

Older patients in private hospitals do not generally have access to the sub-acute, post-acute and transition care services that are funded through public hospitals or the Commonwealth aged care program.¹¹

However, the evidence on this question is not clear-cut. The Australasian Rehabilitation Outcomes Centre has reported that in 2006 more patients using sub-acute services were actually being

⁹ Australasian Faculty of Rehabilitation Medicine (2008), Submission 21 to the National Health and Hospitals Reform Commission.

¹⁰ Australasian Faculty of Rehabilitation Medicine (2008), Submission 21 to the National Health and Hospitals Reform Commission.

¹¹ A Howe (2008), Submission 222 to the National Health and Hospitals Reform Commission.

managed in the private sector than the public sector. But, the public sector 'tended to treat a greater percentage of the most impaired patients'.¹²

Other submissions highlighted access gaps for particular types of sub-acute services. In their joint submission, the National Heart Foundation of Australia and the National Stroke Foundation identified major gaps in use of effective sub-acute services for patients after a heart attack or a stroke¹³. They found that:

- The World Health Organization and the Heart Foundation recommend that all patients who have had a heart attack, heart surgery or have other heart or blood vessel disease are routinely referred to a suitable cardiac rehabilitation and prevention program. But a study in one Australian state found that 70 per cent of such patients did not get access to a cardiac rehabilitation program.
- About one-quarter of people hospitalised after a stroke need inpatient rehabilitation, but there is a lack of comprehensive stroke services providing both hospital and ongoing community rehabilitation. Moreover, only 16 per cent of hospitals surveyed in 2007 could provide access to early discharge and comprehensive home-based rehabilitation services which have been shown to be clinically effective for certain patients after a stroke.

Similarly, the Australian Lung Foundation has suggested that the approximately 200 pulmonary rehabilitation programs across Australia are likely to be much less than what is needed to improve the quality of life for patients with chronic obstructive pulmonary disease. It identified that such programs are not provided in rural locations outside the larger regional centres, while a single pulmonary rehabilitation program services the whole of the Northern Territory.¹⁴

It is noteworthy that all these conditions – coronary heart disease, stroke and chronic obstructive pulmonary disease – are part of what is often referred to as the tsunami of chronic disease. And yet our health services are not even meeting the existing demand for effective rehabilitation services for today's patients with chronic diseases.

■ Our health services are not even meeting the existing demand for effective rehabilitation services for today's patients with chronic diseases

5.3.3 Providing new models of sub-acute care – the right mix and the right setting

To date, we have examined traditional bed-based sub-acute services and we have focused mainly on rehabilitation services. We want to stress, however, that we believe that sub-acute services can and should comprise a very broad array of services to provide care in many settings.

The approach being developed in Victoria to providing care for patients needing a hip replacement provides one such example of more sub-acute services being available in the community (see Figure 5.4). Victoria is already recognised as having a very well-developed public sub-acute services system. In addition to comparatively high access to rehabilitation beds, Victoria has an extensive network of sub-acute ambulatory services including:

- community rehabilitation centres – facilities that are usually separate from acute hospitals where people can participate in rehabilitation programs;
- home-based rehabilitation; and
- a range of early intervention, assessment and management clinics – these include clinics where people can be assessed for dementia, receive support in helping to reduce the risk of falls and improve mobility, or learn to better manage chronic pain while living in the community.

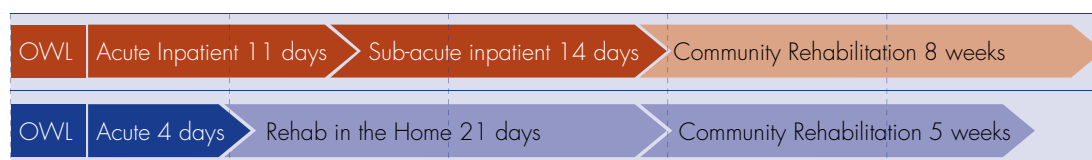
12 F Simmonds and T Stevermuer (2008), 'The AROC annual report: the state of rehabilitation in Australia 2006', Australian Health Review, 32(1): 85–110.

13 National Heart Foundation of Australia and the National Stroke Foundation (2008), Submission 402 to the National Health and Hospitals Reform Commission.

14 Australian Lung Foundation (2008), Submission 39 to the National Health and Hospitals Reform Commission.

Within this network of ambulatory services, Victorian patients needing a hip replacement now typically may have 11 days as an acute hospital patient, 14 days as a sub-acute inpatient, followed by an eight week community rehabilitation program. Victorian health services are beginning to test new models of care involving much greater provision of rehabilitation in the patient's home. This has the potential to not only achieve better outcomes, but to do so with a more effective use of resources and with a greater emphasis on care in the community.

Figure 5.4: Victoria is developing new care pathways for people needing a hip replacement



■ Usual pathways: 25 inpatient days; \$24,500 ■ Better care pathways: 4 inpatient days; \$19,500

Source: Information provided to the National Health and Hospitals Reform Commission by the Victorian Department of Human Services, October 2008

Note: OWL is the Orthopaedic Waiting List project that involves a prioritisation tool and greater use of the allied health workforce in assessing the need for orthopaedic surgery.

A second issue relates to the better assessment and care of frail, older people. This is 'core business' for sub-acute services. The challenge is not just to manage and support older people once they have an acute episode, but to intervene early and provide good structures that support older people in their homes. We were very encouraged, in our consultations and in the submissions, by the many examples shared with us about better ways to provide care and support for older people (see Figure 5.5). A critical element of many such programs is the use of evidence-based assessment tools to better identify problems and options for future care. Another important feature is the use of multidisciplinary teams with strong use of generalist staff. This is vital in being responsive to the multiple health problems of older people and taking a holistic approach, rather than a single-disease approach.

Figure 5.5: Health and aged care services across the country are developing better ways to care for and keep older people healthy

In Queensland, staff at the Gold Coast Hospital have developed the Aged Care Early Intervention and Management Program. This involves a close working relationship between the hospital and 60 residential aged care facilities. Older patients who are admitted to the hospital are intensively case-managed, with these staff acting as the 'sons and daughters' to actively manage the care of very frail and vulnerable patients during their hospital stay. There is extensive use of standardised assessments to monitor health outcome and functioning. However, this program also works to actively intervene and reduce hospital admissions or visits to the emergency department for this population. Hospital staff provide outpatient care to residents living in aged care facilities, while the hospital has also provided extensive training and support to nurses working in these 60 aged care homes. This program has reduced by 83% the number of visits to hospital emergency departments by older people.

In the Australian Capital Territory, the RADAR (Rapid Assessment of the Deteriorating Aged at Risk) program is also working to intervene early in caring for older people. GPs are able to refer at-risk older people to a team comprising two nurse practitioners and a geriatrician who assess and manage them before they need a hospital admission. Close liaison occurs with the patient's GP to maintain continuity of care. While this model is still being trialled in the ACT, it has resulted in fewer and more appropriate admissions to hospital, with less time in hospital for those who are admitted.

Sources: Gold Coast Hospital Early Intervention Management (2008), Submission 7 to the National Health and Hospitals Reform Commission.

The Australian Nurse Practitioner Association (2008), Submission 14 to the National Health and Hospitals Reform Commission.

5.3.4 Ensuring the right resources to deliver high quality, effective sub-acute services

A key part of all health service delivery is having a high quality, well trained workforce and the right infrastructure and support in which health services can be provided to people.

We do not have very good information on the workforce that delivers sub-acute services, nor on future workforce needs to respond to both the growing demand for sub-acute services and a likely shift to more community-based provision of service.

The Australasian Faculty of Rehabilitation Medicine argues that there is a ‘significant mal-distribution problem’.¹⁵ The number of rehabilitation medicine specialists varies from about 1 for every 46,000 people in New South Wales to about 1 for every 344,000 people in Western Australia. The Faculty suggests that there is a need for national workforce planning and the development of national service planning standards for rehabilitation. Geriatricians are another critical group involved in the provision of sub-acute services. There is very limited information on the availability and distribution of geriatricians, either in hospitals or in community-based settings.

Two other critical elements of effective sub-acute services are our allied health workforce and access to necessary aids and equipment. Both these elements are obviously relevant to effective service delivery across the whole of the care continuum. But, they are especially vital for effective sub-acute services as they enable and support more care to be provided in the community and help people function independently at home.

■ Two other critical elements of effective sub-acute services are our allied health workforce and access to necessary aids and equipment

Like sub-acute services, the allied health workforce suffers from a low visibility and does not attract the same policy spotlight as the medical and nursing workforce. The Australian Health Workforce Advisory Committee has identified that further work is necessary ‘to clearly define the allied health workforce and the professions that constitute that workforce’.¹⁶ We note with interest the work being undertaken by Services for Australian Rural and Remote Allied Health, in developing a framework that identifies a range of groupings within the allied health workforce.¹⁷ This framework seems to capture the breadth of the allied health workforce including clinical and therapeutic allied health professionals, public health professionals, health workers and therapy assistants and the complementary health workforce.

Submissions¹⁸ identified a range of issues about our knowledge of the allied health workforce including:

- Workforce data collection is largely limited to professions which are registered nationally. Some allied health professions are registered in only some states (such as occupational therapy, dietetics, speech pathology) and this poses major challenges in building a comprehensive picture of the allied health workforce.
- Much data on the allied health workforce is quite dated. For example, the most recent data available on physiotherapists is based on data collected in 2002–03.

Aids and equipment are a core element of many sub-acute services and are required on an ongoing basis by some people to allow them to live independently. This includes a very wide range of items such as wheelchairs, walking frames, lifting devices, shower chairs, home modifications, as well as items that are used regularly by some people, such as feeding tubes, oxygen, and compression bandages. But, access to aids and equipment is highly variable across

15 Australasian Faculty of Rehabilitation Medicine (2008), Submission 21 to the National Health and Hospitals Reform Commission.

16 Australian Health Workforce Advisory Committee (2006), The Australian allied health workforce – an overview of workforce planning issues, Report 2006.1, at: <http://www.nhwt.gov.au/documents/Publications/2006/The%20Australian%20allied%20health%20workforce.pdf>.

17 S Lowe, R Adams and A O’Kane (2007), A framework for the categorization of the Australian health workforce – a discussion paper, Services for Australian Rural and Remote Allied Health.

18 For example: Australian Rural Health Education Network (2008), Submission 43 to the National Health and Hospitals Reform Commission.

Australia, with many people missing out.¹⁹ Not only are there different programs and eligibility rules between states, but the 'rules' also vary across different programs and groups of people (such as people accessing services under the Home and Community Care program, veterans, and people whose care is being funded under accident- or work-related compensation schemes). We will return to this issue later in Chapter 13 where we examine the impact on families of the often high costs associated with aids and equipment.

In addition to items that may have been partially funded under 'traditional' aids and equipment programs, we also note the growing potential of assistive technology to make an important contribution to the care of some people, including the elderly or those with a disability.

*New developments in assistive technology are likely to make an important contribution to the care of elderly people in institutions and at home. Video-monitoring, remote health monitoring, electronic sensors and equipment such as fall detectors, door monitors, bed alerts, pressure mats and smoke and heat alarms can improve older people's safety, security and ability to cope at home.*²⁰

The area of assistive technology is one where our technological capabilities (see Figure 5.6) may quickly outpace our existing service and funding arrangements. The need for evidence-based introduction of new technologies, driven by cost-effectiveness, is also further considered in Chapter 13.

Figure 5.6: Assistive technology has the potential to improve independent living

In its submission, Independent Living Centres Australia argues that a national Assistive Technology Program is needed to take a holistic approach to people's needs, including both physical and psychosocial wellbeing.

Assistive technology is rapidly changing and sometimes it may seem closer to the stuff of science fiction or our imagining of the future. But, according to a report commissioned by Alzheimer's Australia South Australia, the 'future is now' with robotics and new devices already available to help with independent living. Some examples cited in this report include:

- *A GPS tracking device has been developed specifically to help manage the 'wandering' that is a common symptom of some people with dementia. Apart from the usual features of being able to locate the position of the person carrying (or in this case wearing) the device, this model also has a 'breadcrumbing' feature. This allows the ability to identify favourite routes that the person may follow. An automatic locate feature can be scheduled to see where the person is at any given time.*
- *Japan is a leader in so-called 'smart toilets'. According to one of the companies involved:*

You may think a toilet is just a toilet, but we would like to make a toilet a home health measuring centre.

Devices or measuring instruments that are being fitted to toilets include:

- *a toilet seat equipped with electrodes that sends a mild electric charge through the person's buttocks to measure their body-fat ratio;*
- *a small spoon with a retractable, mechanical arm can be used to collect urine and measure the level of sugar present; and*
- *voice prompts and speech recognition to prompt the person through the various steps involved in home health monitoring.*

19 Motor Neurone Disease Australia (2008), Submission 114 to the National Health and Hospitals Reform Commission.

20 F Miskelly (2001), 'Assistive technology in elderly care', *Age and Ageing*, 30: 455-458.

Figure 5.6: Assistive technology has the potential to improve independent living

- *Another product helps people with short-term memory loss manage their medications. It can be programmed with 60 medication cups that can be dispensed 1–6 times per day. It includes verbal prompts with a calendar clock triggering an alarm when it is time for the person to take their medication. The medication is only dispensed or released when the person presses the button on the sounding of the alarm. If the person does not press the button, the device can be programmed to contact a nominated carer via the internet. As medication can only be accessed according to the programmed alarms, it also helps reduce problems associated with over-medication when people forget they have taken their medicines already.*

Sources: Independent Living Centres Australia (2008), Submission 469 to the National Health and Hospitals Reform Commission;

Tim Wallace (2005), Life enhancing technology: Assistive technology for people living with dementia, at: <http://www.alzheimers.org.au/upload/LifeEnhancingTechnologyWallace.pdf>

5.4 Creating a better future

We believe that the critical challenge is the need to improve access to a range of effective sub-acute services. The underpinnings of how to achieve this require significant shifts in how we fund, organise and manage the delivery of sub-acute services. In other words, we cannot continue with a ‘business as usual’ approach.

Existing funding arrangements between governments provide no clear accountability, nor set desirable levels, for the delivery of sub-acute services. This is also currently true for acute hospital services, but these services (such as elective surgery or cancer treatment) are often the subject of public reporting by governments and the media. They are also more likely to be the beneficiary of new funding initiatives.

In contrast, sub-acute services generally fly under the radar. Even within individual jurisdictions, funding and reporting arrangements for sub-acute services are less well-developed than for acute hospital services. States currently use a variety of approaches to how they fund sub-acute services including:

- block grants (with no relationship between the level of funding provided and the level of sub-acute services delivered);
- bed day payments (for each day in a sub-acute inpatient facility);
- casemix type payments (with a variety of casemix classifications used across states); and
- other funding arrangements such as payment for outpatient visits, or the number of allied health staff.

Governments have recently agreed to move towards the use of activity-based funding (such as casemix) for acute hospital services under the next Australian Health Care Agreements. There is a risk that these new funding arrangements may not extend to sub-acute services due to the lack of agreed classification and funding systems for sub-acute services. If this happens, the need for a growing investment in sub-acute services is likely to be threatened.

Reform direction 5.1

We want to increase the visibility of, and access to, sub-acute services through more directly linking funding to the delivery and growth of sub-acute services. A priority focus should be the development of activity-based funding models for sub-acute services (including the cost of capital), supported by improvements in national data and definitions for sub-acute services.

■ The critical challenge is the need to improve access to a range of effective sub-acute services

The development of activity-based funding models for sub-acute services is critical in ensuring that there is a transparent 'value for money' relationship between spending and the delivery of services that can help restore health and independence. However, we see activity-based funding for sub-acute services as only the first step in funding reform to improve access to sub-acute services.

The existence of a data collection on patient outcomes after rehabilitation provides a real opportunity to introduce funding related to better outcomes (so-called 'pay for performance' funding which is further discussed in Chapter 13). This could occur through providing incentive payments that recognise a successful outcome (better functioning for patients). It could also drive 'bundling' together of all necessary services to provide a successful outcome for patients. That is, the product or outcome paid for by governments (and by private payers such as health insurers) might be 'better mobility for patients with hip problems' with the payment covering all the required services on this care continuum (assessment, surgery, rehabilitation, aids and equipment and community care). Such payment reforms should, of course, be driven by clinical evidence and guidelines (including relevant national service improvement frameworks) on effective models of care to improve patient outcomes. We note, for example, the evidence on the efficacy of stroke units which are currently underprovided across Australia and could play a major role in early assessment and long-term rehabilitation of people suffering from a stroke.²¹

Reform direction 5.2

We support a dual approach to funding of sub-acute services, comprising a mix of activity-based funding with the use of incentive payments related to improving outcomes for patients.

Over and above greater transparency in how sub-acute services are funded, there is a need for additional investment, on both a recurrent and capital basis, to expand the provision of sub-acute services. Decisions about the level of such additional funding should be guided by clear targets that indicate the required level of sub-acute services. The development of planning standards (that could inform targets) should have occurred under the National Action Plan and is now three years overdue. Our advice is that at least two states (Victoria and New South Wales) have commissioned work on planning frameworks and demand models for sub-acute services. However, there is no imperative to drive national agreement or implementation of a common set of planning standards and benchmarks on the level of sub-acute services.

Reform direction 5.3

We propose that clear targets to increase provision of sub-acute services be introduced by June 2010. These targets should cover both inpatient and community-based services and should link the demand for sub-acute services to the expected flow of patients from acute services and other settings. Incentive funding under the National Partnership Payments could be used to drive this expansion in sub-acute services.

21 National Heart Foundation of Australia and the National Stroke Foundation (2008), Submission 402 to the National Health and Hospitals Reform Commission.

We would expect additional funding for expanded sub-acute services to be closely linked to the use of clear benchmarks and activity-based funding. This required focus on performance and outcomes would appear to be compatible with the framework being negotiated for the National Partnership Payments.

We have already mentioned that activity-based funding should include the cost of capital. As discussed later in Chapter 13, these capital costs are essentially about the replacement of existing infrastructure and equipment. However, this approach is not sufficient to meet the cost of new capital investment in sub-acute services. It is evident from Figure 5.3 that there has been substantial under-investment in sub-acute inpatient beds in many states and territories. There will also be a need for capital investment in ambulatory or community-based rehabilitation in other centres or facilities close to where people live.

■ It is evident that there has been substantial under-investment in sub-acute inpatient beds in many states and territories

Reform direction 5.4

We propose that investment in sub-acute services infrastructure be one of the top priorities for the Health and Hospitals Infrastructure Fund.

Investment in additional infrastructure for sub-acute services must be tied to the ability to clearly measure the additional capacity and/or improved access to sub-acute care arising from such funding. The unpublished evaluation of the \$253 million Pathways Home capital investment program under the last Australian Health Care Agreement is likely to provide useful lessons to improve the design of future capital investment in sub-acute services. We note, as further discussed in Chapter 13, that additional capital expenditure may be sourced from either governments or the private sector.

In addition to funding, sub-acute services need a skilled workforce and access to suitable equipment to support people in their restorative journey to better health and functioning.

Reform direction 5.5

We need to ensure that we have the right workforce available and trained to deliver the growing demand for sub-acute services, including in the community. Accordingly, we support the need for better data on the size, skill mix and distribution of this workforce including rehabilitation medicine specialists, geriatricians and allied health staff.

Reform direction 5.6

We recognise the vital role of equipment, aids and other devices, in helping people to improve health functioning and to live as independently as possible in the community. Ensuring affordable access to such equipment will be considered under reform direction 13.4 that foreshadows further work on the development of integrated safety nets.