



# Sub-Acute / Acute Interface Project

## Final Report

Quality And Care Continuity Branch  
Acute Health Division  
Department of Human Services

May 2001

## **Executive Summary**

The Sub-Acute / Acute Interface Project has been conducted as one component of a coordinated approach across the Department of Human Services to address the issue of ever increasing demand for health services. The goal of the project has been to investigate the boundaries and relationships between the acute and sub-acute service systems, identify efficient and effective service models and practices and recommend strategies to improve management of current and future service demand.

The project initially took the form of a service review and consultation with a wide range of clinical staff from both the sub-acute and acute sectors in metropolitan health services. Consultations concentrated on discussions of service models and options, and the identification of issues impacting on the ability of sub-acute services to operate at an optimal level.

A discussion paper summarising the findings of the consultations, and making a number of recommendations for service change, development and expansion was released for comment in February 2001. A second round of consultations then followed with larger rural centres. Valuable feedback was received from a wide range of agencies, areas and individuals. While a variety of issues were raised, feedback was broadly supportive of the findings and recommendations.

This report has incorporated the discussion paper, with updated issues and recommendations based on the feedback received. In particular two recommendations are added, particularly relevant to rural and regional areas and one related to commonwealth funded programs has been removed, as it was out of the primary scope of the project.

## **Key Findings:**

Key findings of the analysis and consultation include:

1. There is a lack of focus and coordination in referral to and provision of sub-acute services, which affects throughput and efficiency.
2. There are communication blocks between and within acute and sub-acute services, which affect patients' progress through the continuum of care.
3. There are significant numbers of patients awaiting transfer to residential care in both acute and sub-acute beds, which affect both patient management and service delivery.
4. There is lack of equitable access to home-based care and community services, which affects the ability of sub-acute services to discharge appropriately.

## **Recommendations:**

### **Changes in Service Practice**

1. Inpatient sub-acute care should be goal-orientated, patient-centred and time-limited. There should be clear definition of expected patient outcomes and length of stay incorporated into the admission process for both Geriatric Evaluation and Management (GEM) and Rehabilitation. The majority of patients should have initial goals and an estimated date of discharge defined within 5 working days of admission and clearly communicated to patients, families and carers.
2. Entry to all sub-acute services, both bed-based and community based, should be through a single referral process, involving a geriatrician and/or rehabilitationist. This would

- apply across a metropolitan or regional health service. Smaller rural hospitals may wish to set up a co-ordinating mechanism for their region where it would increase efficiency.
3. Health Services should investigate ways to make better use of sub-acute clinical expertise to assist in the management of patients while in the acute setting, rather than waiting for patients to transfer to a sub-acute facility.
  4. Until electronic records are introduced, health services should develop protocols and procedures whereby paper based medical records accompany a patient transferred to an alternative treatment site within the same health service.
  5. Sub-acute services should investigate means of accepting admissions directly from the community where there is no obvious need for acute intervention.
  6. The Sub-acute Program should work with clinicians and Divisions of General Practice to develop suites of standard tests and protocols, applicable to the presenting condition, to precede direct admission to a sub-acute facility.
  7. The Sub-acute Program should undertake a cost-benefit analysis of out-of-hours medical cover at Extended Care Centres. The investigation should focus particularly on whether this would allow an increase in direct admissions to sub-acute care from the community or from the Emergency Department, or earlier transfer from acute care. The flow on effects for nursing and allied health staff should also be considered. This may be achieved through computer modelling.
  8. The Sub-acute Program should undertake a cost-benefit analysis of increased allied health hours, particularly over the weekend. It is expected that it would result in a decrease in the length of stay and consequent increase in throughput. The analysis should involve both Acute and Sub-acute Programs. This may also be achieved through computer modelling.
  9. Where hospitals have significant numbers of patients in acute beds awaiting transfer to residential care, these patients would be better managed in a dedicated unit such as an Interim Care or Post-Acute ward. This separate area would provide a more appropriate environment and level of care, including access to nurses with aged care expertise, maintenance therapies and social work. This should be achieved through a re-organisation of existing ward areas, but to be effective would require sufficient numbers of patients to ensure a suitable ward area could be filled. This recommendation implies a change in location of existing services and does not imply any funding change.
  10. The Sub-Acute & Continuity Unit should review and define the care types of Interim Care, Post-Acute Care (WEDS) and Nursing Home Type to determine:
    - i. Whether there is a substantial difference between Interim Care, Post-Acute Care and Nursing Home Type, in terms of patient needs and care provided.
    - ii. The total costs of providing this level of care, with a view to accurately determining an appropriate funding level.
  11. The use of alternative models of care for patients waiting for residential care, including contracting of services with appropriately skilled external service providers, should be investigated.
  12. The current policy of directing future service growth in sub-acute beds into sub-acute units co-located with acute beds should be supported, pending review of service roles. Co-located specialist units should be managed by a geriatrician or a rehabilitationist and have close links with their associated Extended Care Centre.

### **Increased Flexibility**

13. Patients discharged from sub-acute services should be able to access brokered services in the post discharge period similar to those currently offered under the Post Acute Care

- program. For this to occur there would need to be expansion of the current PAC program or service substitution for other sub-acute programs.
14. All existing sub-acute home-based therapy programs should be consolidated and managed as a comprehensive therapy program for support of eligible patients either following discharge, or as an alternative to admission. The varying needs, capacity and expertise of both rehabilitation and GEM programs would still need to be maintained within the overall structure. Support services, such as personal and home care, should also be made available to these patients as part of the program.
  15. Implementation of the home based therapy program would involve establishment of an industry reference group to define the patient criteria, service guidelines, reporting definitions and guidelines and the interface between programs.
  16. The Acute Health Division should investigate a method of converting WIES funding to sub-acute funding to increase the capacity of health services to respond to changes in service needs. This should be a flexible arrangement that allowed health services to revert back to WIES if the need for increased sub-acute care was no longer required (eg: seasonal service requirements.) Conversion should be based on a regular service model review.

### **Related Issues**

17. The Acute Health Division should develop a comprehensive funding model for all sub-acute services. This should build on the basis of the CRAFT Rehabilitation funding model to include GEM. The potential inclusion of Geriatric Respite should also be investigated.
18. Patients living in isolated rural areas should be able to access therapy services closer to their home, through a regional outreach service set up and managed by the major regional sub-acute service provider.
19. The use of Care Coordinators in Emergency Departments should be evaluated and expanded to other hospitals if results prove to be positive.

The report is now presented to the Sub-Acute and Continuity Unit, to contribute to future directions and development of sub-acute services.

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For additional information about the project or a copy of this Discussion Paper visit the website:

<http://www.dhs.vic.gov.au/pdpd/edcg/subacute.htm>

The website also has further information about the total Emergency Demand Strategy and the Emergency Demand Co-ordination Unit

## **1. Background**

Progressively increasing demand for service from the Victorian health care system has resulted in pressure over and above that which the system can manage effectively. In 1999/2000 this was evidenced by system wide symptoms including increased elective surgical waiting lists, increased delays in admission of emergency patients into ward beds, subsequent blockage of emergency departments and ultimately, marked increases in occasions of ambulance bypass. There were also delays in access to sub-acute beds. Increased waiting times for access to residential care beds and community services further exacerbated the problem as patients were unable to move from the health system into either the community or residential care systems, blocking entry to those needing acute admission.

Many factors have contributed to this demand pressure, with a significant factor being socio-demographic change. This includes the increasing proportion of aged within the population and the consequent risk of older people becoming more reliant on public hospital care as they live longer with more complex health care needs. Improved public knowledge of care options within the health system and increased community expectations also contribute to an escalation in demand for a range and choice of services.

As part of a pro-active, coordinated approach to address this issue, the Department of Human Services initiated two strategies, namely the formation of an internal team known as the Emergency Demand Coordination Group and an industry group known as the Patient Management Task Force. The Emergency Demand Coordination Group's primary goal of improving access to emergency services across the Victorian public health sector included the co-ordination of a range of projects designed to explore a broad spectrum of issues that impact on the management of emergency demand. One of these projects was the Sub-Acute / Acute Interface Project.

### **The Sub-Acute / Acute Interface Project**

The aim of the Sub-Acute / Acute Interface project was to review relationships and investigate the boundaries between the acute and sub-acute service systems, identify efficient and effective service models and practices and recommend strategies to improve management of current and future service demand.

To achieve this aim the project undertook to investigate:

- how the existing sub-acute services were being used;
- how patient classification impacted on effectiveness;
- how existing service models compared for efficiency and
- to identify practical steps which could improve service utilisation and responsiveness to pressures in the acute system without compromising patient care.

This investigation commenced in December 2000 with extensive consultation with a wide range of clinical staff, from both sub-acute and acute sectors, in metropolitan health services. Consultations concentrated on discussion of service models and options, and the identification of issues impacting on the ability of sub-acute services to operate at an optimal level. A second round of consultations, including larger rural centres, followed the release of the discussion paper in February 2001. Feedback was received from a wide range of agencies and areas, with many comments and issues incorporated into the final report.

## **2. Sub-Acute Services within the Health System**

The current health system can be defined as a series of services which link and interact with one another, but each with a specific focus. All of these services are required to meet the health care needs of older people and those with chronic illness and disability across the care continuum. The sub-acute service system overlaps in part and provides a link with both the acute system and the community care service system. Sub-acute care needs to be coordinated with acute and community care through appropriate discharge and referral practices and protocols.

Aged residential care is separate from but complementary to sub-acute care. The provision of adequate sub-acute care can be instrumental in deferring entry to residential care for older people with chronic illness or severe disability. However, as with any interrelated system, it is necessary for sufficient resources to be available in all areas of the health system to prevent difficulties in any one area.

Sub-acute care is defined in the Victorian health care system as the specialised health care delivered to patients who need time rather than intensity and who require a range and mix of clinical and professional skills rather than the focussed management of a single or principal speciality. Sub-acute care is distinct from but complementary to acute care, with its focus on problems rather than diagnoses, complexity rather than intensity, extended rather than short-term care. For some patients, sub-acute care is provided when acute care is no longer needed; for others, it will be the appropriate care from admission. It may be delivered on an inpatient or outpatient basis, within the community or the home. <sup>(1)</sup>

The sub-acute program has two target groups: people who, as the result of an acute event, have a disability that is expected to respond to multidisciplinary rehabilitation, and people with a chronic illness or disability requiring extended clinical care. While the sub-acute program is not limited by age and provides services to children and younger adults, the majority of patients are aged 65 years or more. The intention is to support these people in their home or family environment for as long as possible and therefore enable them to remain within their local communities. The central objective is to provide the right service, at the right time, in the right place, to ensure optimal health outcomes for the individual; maximise restoration and recovery from illness or injury and ensure the most cost-effective service provision across the service system.

In Victoria, a mix of Extended Care Centres and sub-acute units co-located with acute services provide sub-acute inpatient services. Both these service types can also provide care in the patient's home. Each of the service types, with their internal processes and the location of the service provision has an impact on patient pathways and outcomes.

The sub-acute services referred to in this paper consist of:

- Inpatient services of Rehabilitation, Geriatric Evaluation and Management (GEM) and geriatric respite. Nursing Home Type is a related inpatient service, although considered to be non-acute so is not included in this project. Full definitions of these service types are in Appendix 1.
- Home based services including Rehabilitation in the Home, where this is funded as either inpatient substitution or through flexible community based service arrangements. This includes services funded through Continuum of Care or with specified funding such as the Unassigned GEM program.

Sub-acute services remain a small but expanding area of the health system. There are now approximately 1,700 beds funded to provide sub-acute services throughout Victoria. These services represent only a small component of total admitted patient care, with 2.4% of all separations from public hospitals and 12.4% of bed days specifically classified as sub-acute. However, this increases to 9.1% of separations and 24.6% of bed days for the major client group of multiday patients aged 65 years or more.

Significant growth was injected into the sub-acute program in 2000/2001, in the form of an additional 105 beds, together with an increase in per diem funding levels. This project does not assume a similar amount of growth in bed-based services will be forthcoming in future years, so it is essential to ensure efficient utilisation of existing services.

### 3. The Hospital Population

Older people are more extensive users of the public health care system, both acute and sub-acute, than younger people. They often require longer lengths of stay in inpatient settings before being able to return to the community. The volume and range of same-day services, which have increased significantly over the past decade, have not directly targeted older people with complex medical needs, so technological changes have not affected this group's length of stay as notably as other patient types.

The following table summarises the share of separations and bed days generated by people aged 65 years or more, compared to population. Data for 2000-2001 are available only until February 2001, but already are showing increasing utilisation by older Victorians.

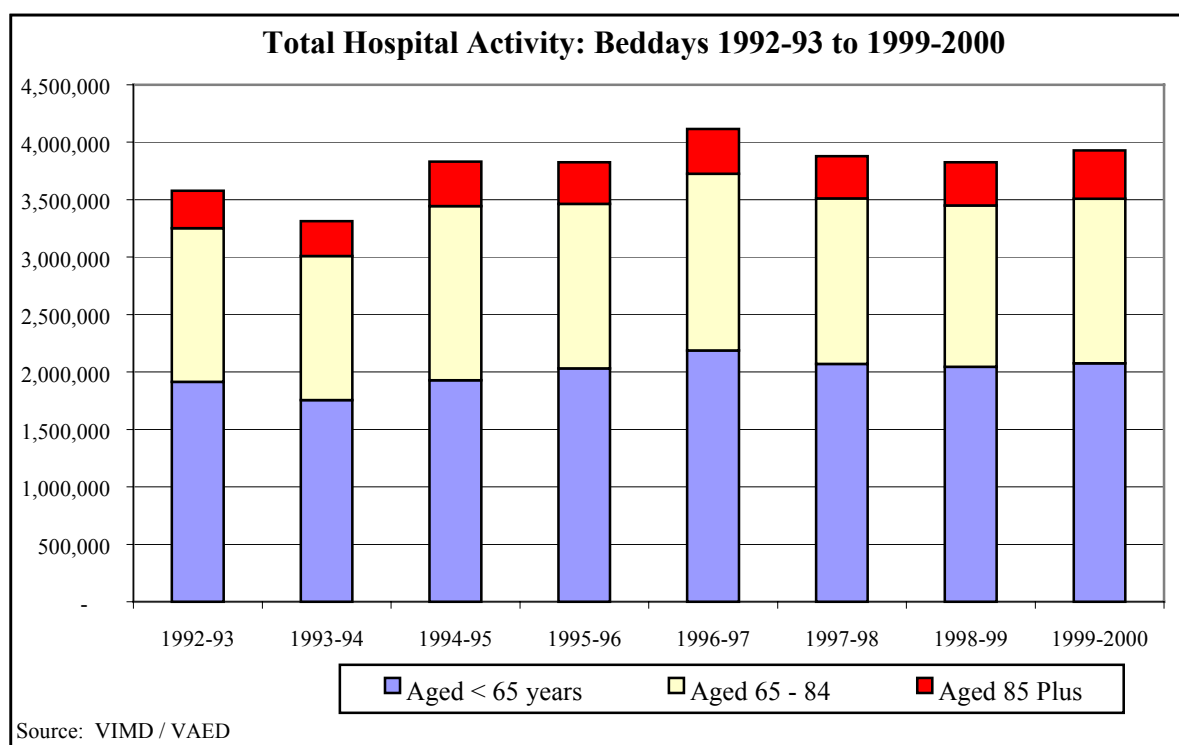
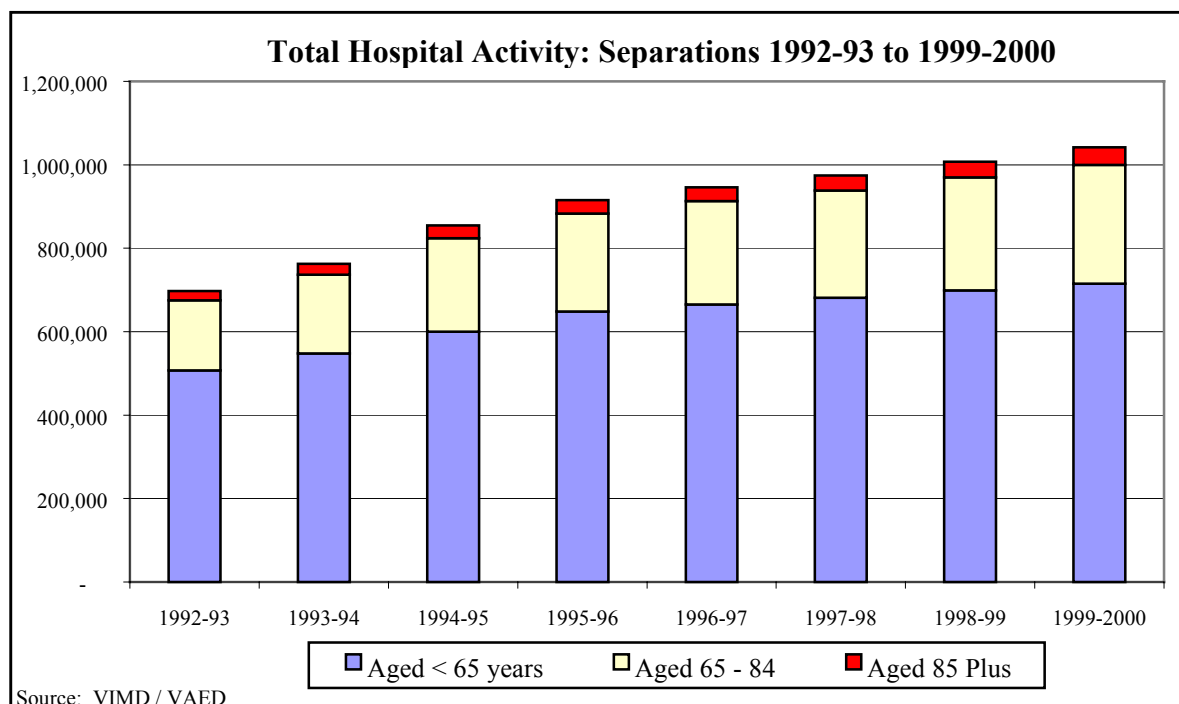
Table 1

Age Group	Share of Separations		Share of Bed Days		Population Share
	1999/2000:	YTD 2000-2001:	1999/2000:	YTD 2000-2001:	
<b><i>All Separations</i></b>					
65 years & over	31.4%	32.5%	47.2%	48.2%	12.8%
75 years & over	15.5%	16.4%	30.1%	31.3%	5.7%
<b><i>Excluding Sameday separations</i></b>					
65 years & over	31.9%	32.7%	49.6%	50.7%	12.8%
75 years & over	18.8%	19.6%	32.8%	34.1%	5.7%

Given that such a large proportion of people using acute hospitals are aged 65 years and older and use almost half the total bed days, they form part of the core business of the health system. The health industry needs to recognise this requirement for focus on the care of the aged and ensure that services are designed and targeted to meet the range of needs of the communities served.

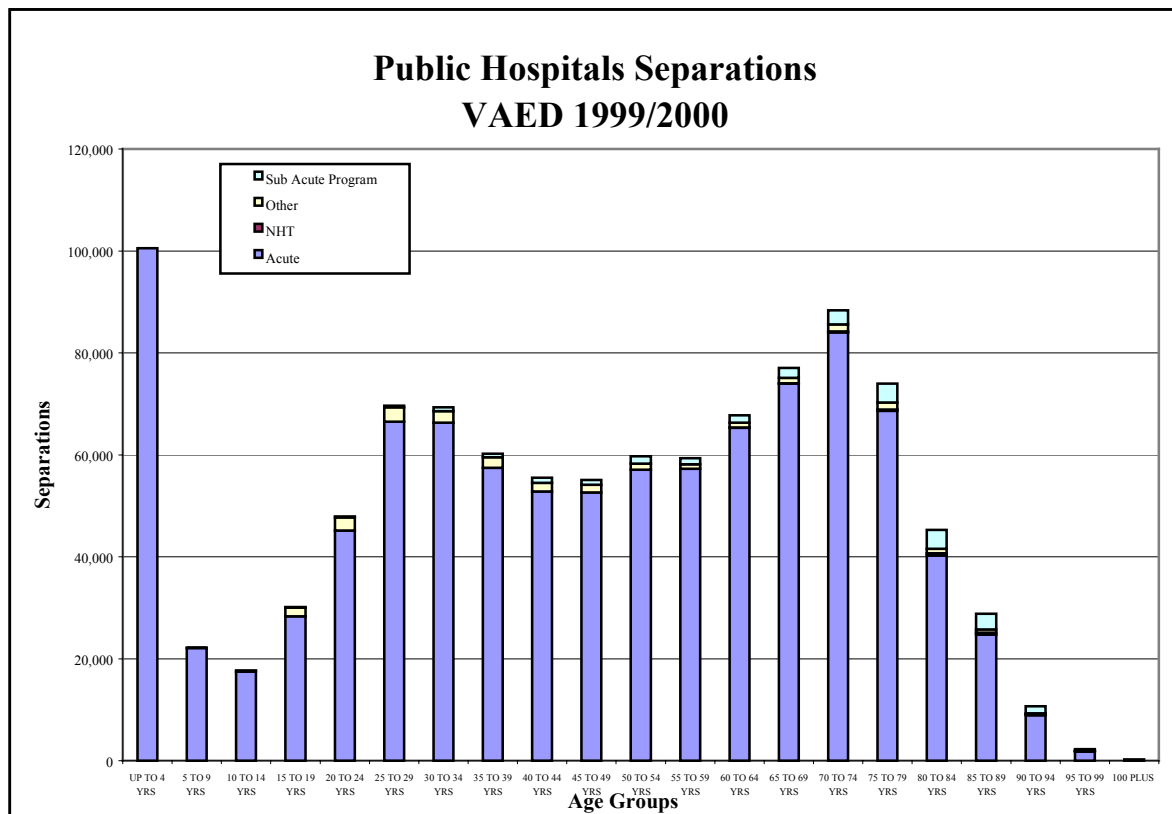
As the proportion of older people in the population continues to increase over the next decade, the impact of the utilisation of health services by this population group may be expected to increase, although this is difficult to predict with any certainty.

Figures 1 and 2 show the utilisation of all hospital services by summary age groups from 1992-93 to 1999/2000.



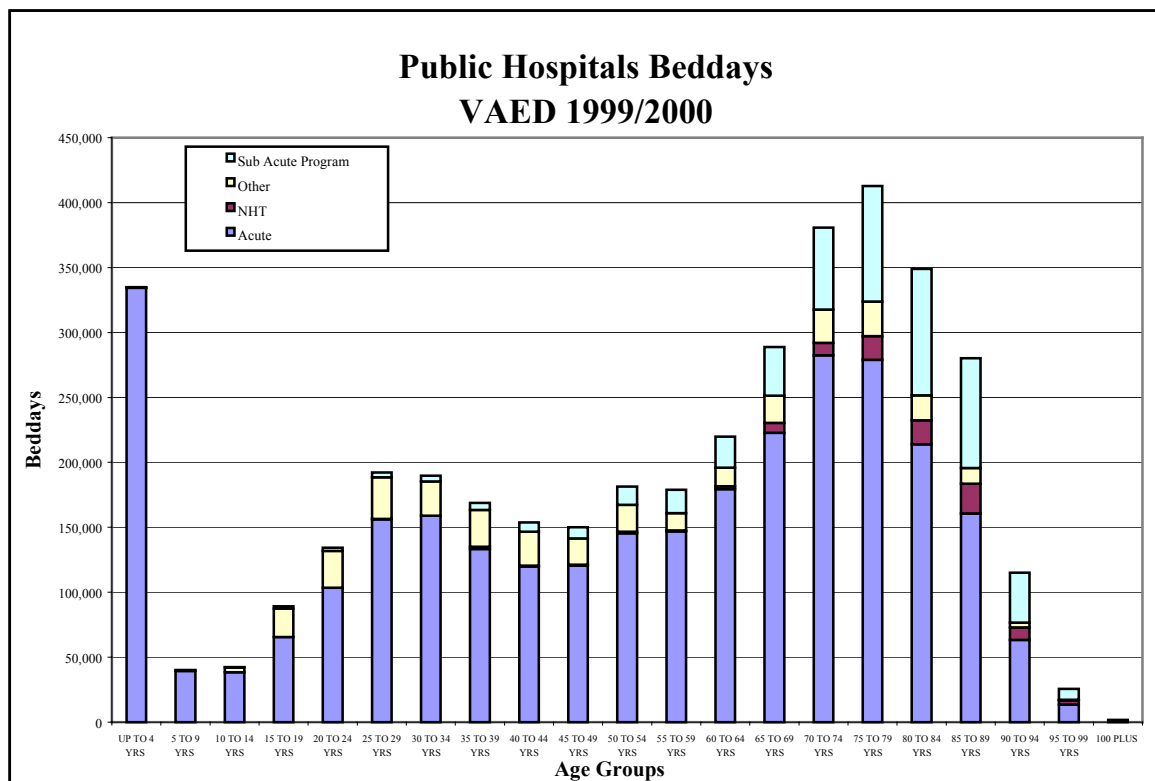
The following two figures graphically illustrate the age ranges of both separations and beddays for 1999/2000. All separations are included, as reported to the Victorian Admitted Episodes Database (VAED). In percentage terms 2.4% of all separations were from sub-acute care and the remaining 97.6% from acute or other care. Other includes psychiatric and palliative care. Figure 3 provides a summary of all inpatient separations for 1999/2000 by 5 year age group.





Note: Other includes palliative care and mental health services

Figure 4 provides the same information for patient bed days. The longer lengths of stay in the sub-acute program now become evident.



When separation type is reviewed it should be noted that the majority of older patients are successfully treated and discharged back into the community. The obvious exceptions to this are patients classified as Nursing Home Type, but these patients made up only 0.17% of total separations from the public health system during 1999/2000.

**Table 2 Separation Type 1999/2000**

Age Group	Home	Transfer to other hospital care	Transfer to Residential Care	Other (Includes death)
<i>Acute/Other Care</i>				
Less than 65 years	95.2%	3.7%	0.1%	1.1%
65 years & over	84.5%	9.9%	2.0%	3.6%
75 years & over	77.6%	13.8%	3.5%	5.2%
<i>Sub-acute Care</i>				
Less than 65 years	90.3%	7.2%	1.5%	0.9%
65 years & over	63.0%	17.9%	14.5%	4.6%
75 years & over	58.8%	18.3%	17.5%	5.4%
<i>Nursing Home Type*</i>				
Less than 65 years	25.9%	25.9%	40.5%	7.8%
65 years & over	19.7%	17.3%	50.4%	12.6%
75 years & over	18.5%	16.4%	52.3%	12.8%

\* Nursing Home Type occurs in both acute and sub-acute service settings

Age alone is not the single critical factor in determining a person's ability to manage at home. The fact that older people are more likely to be suffering from chronic health problems will have a greater influence on their ability to live independently in the community than their age. The presence or absence of a carer, and the characteristics of the carer, also play a major part in the patient's ability to manage self care in the home.

### 3.1 GEM Equivalent Separations

There are a number of patients treated within the acute health sector who could conservatively be classified as GEM equivalent patients or “sub-acute type”. The Sub-Acute Program in 1998 defined this group as being patients:

- funded as acute (WIES);
- aged 65 years or more;
- with a length of stay in excess of 5 days;
- formally separated (statistical separations excluded)
- classified by a range of AN-DRGs (Version 3.1)

Table 3

ANDRG3	Description
053	Other Disorders of The Nervous System W CC
054	Other Disorders of The Nervous System W/O CC
056	Dementia & Global Disturbances of Cerebral Function
062	Degenerative Nervous System Disorders Age>59
348	Oesophagitis, Gastroenteritis & Misc Digestive Disorders Age>74 or (Age 10-74 W CC)
446	Pathological Fracture & Musculoskeletal & Connective Tissue Malignancy Age>64
448	Connective Tissue Disorders Age>64 or W CC
453	Medical Back Problems Age>74 W CC
456	Bone Diseases & Specific Arthropathies Age>74 W CC
457	Bone Diseases & Specific Arthropathies Age>74 W/O CC
462	Signs & Symptoms, Musculoskeletal System & Connective Tissue Age>69 W CC
463	Signs & Symptoms, Musculoskeletal System & Connective Tissue (Age>69 W/O CC) or (Age<70 W CC)
506	Skin Ulcers Age>64
580	Kidney & Urinary Tract Signs & Symptoms Age>74 W CC
581	Kidney & Urinary Tract Signs & Symptoms (Age>74 W/O CC) or (Age<75 W CC)
586	Other Kidney & Urinary Tract Diagnoses W Non-Major CC
842	Paranoia & Acute Psychotic Disorders
843	Major Affective Disorders
844	Other Affective & Somatoform Disorders
939	Aftercare W/O History of Malignancy
942	Other Factors Influencing Health Status Age>79 or W CC
943	Other Factors Influencing Health Status Age<80 W/O CC

In 1999/2000 these patients represented only 0.9% of all acute separations and 3.5% of all acute beddays, but when compared by relevant age group people aged 65 years or more represented 5.1% of separations and 8.0% of beddays used. These “sub-acute type” patients were in both metropolitan and rural areas where defined sub-acute services are not adequately provided. In total these services represented 10% of acute beddays in country hospitals for patients aged 65 years or more, but in many small rural agencies this represented over 20% and up to 40% of activity. Any changes to the sub-acute service system needs to take these services into account as they may well be differentiated only by DHS classification and funding models rather than patient care or service need.

## **4. Sub-Acute Service Profile**

Until early 2000 the Aged, Community and Mental Health Division within the Department of Human Services administered sub-acute services. This separation from acute services at the administrative level reinforced the different cultures of the two service types. This difference has been further supported by a sub-acute funding system based on bed-day rates rather than the casemix system used by the acute sector, with its emphasis on rapid service throughput. The recent integration of sub-acute services within acute health, both at DHS level and through the formation of Health Services, is expected to contribute to better integration at service level, with increased efficiency throughout the entire system and a more co-ordinated approach across the continuum of care.

While sub-acute care is provided in both Extended Care Centres and sub-acute units within acute hospitals, the majority is currently in Extended Care Centres. These specialised centres offer a different environment to the acute setting, with an increased emphasis on developing independence. To foster this patient independence and self-management where possible, the pace must be tailored to the abilities and needs of the patients and the environment less hectic than in the acute setting. Purpose built and re-developed Extended Care Centres offer a less institutional environment with wider corridors, appropriate bathroom facilities and external access to gardens for outdoor mobility. In terms of staff mix, there is a higher ratio of allied health staff and less access to medical cover, so patients are generally not expected to require high levels of acute medical care. The timing of intervention is deliberately focussed on the disabled or older, frail person with the aim of maximising ability rather than treating disease.

It became evident during service review and consultation that there is considerable variation in the way in which sub-acute agencies are providing services. Admission and discharge practices varied across sites, with concomitant variation in patient throughput. Analysis of average length of stay shows significant variation between services, ranging from 16 days with a median of 13 in two agencies, to 43 days with a median of 32 in another two agencies. The differences are primarily agency specific and cannot simply be explained by variation in agency type. Sub-Acute units within acute hospitals showed similar total patterns to Extended Care Centres, meaning the differences are local rather than systemic. Table 3 in Appendix 2 provides details of sub-acute services and throughput for 1999/2000 and YTD 2000/2001.

From the consultations it would appear that a number of factors impact on length of stay. There is certainly variation in clinical practice, with clear differences between those agencies offering a targeted and goal orientated program compared to those adopting more of a 'wait and see' approach. Availability of alternative services was another factor extending length of stay, particularly the issue of lack of access to residential care or HACC services.

Another issue raised in consultation was the impact of transfers on length of stay, in particular the timing of the transfer. It may be that some acute hospitals transfer patients to sub-acute earlier in the total episode of care, with the result that the time in sub-acute appears prolonged, but when the acute admission is also considered the total episode is equitable. This detailed patient level analysis was beyond the scope of the study but would be valuable to increase understanding of the relationships between acute and sub-acute care.

An analysis of patterns of length of stay has shown that the state average for Rehabilitation is 17.6 days, which increases to 25.6 days when sameday rehabilitation is excluded. This compares to the state average of GEM of 26.6 days. However, when patterns of length of stay

are reviewed it becomes obvious that the average length of stay is being skewed by the inclusion of relatively small numbers of very long stayers. These very long stayers are also concentrated in only a small number of agencies.

Figure 5 gives a graphical representation of pattern of length of stay for 1999/2000, grouped into 5-day categories. Sameday separations are excluded. The length of stay categories for both rehabilitation and GEM multiday separations peak around the 11-15 days group.

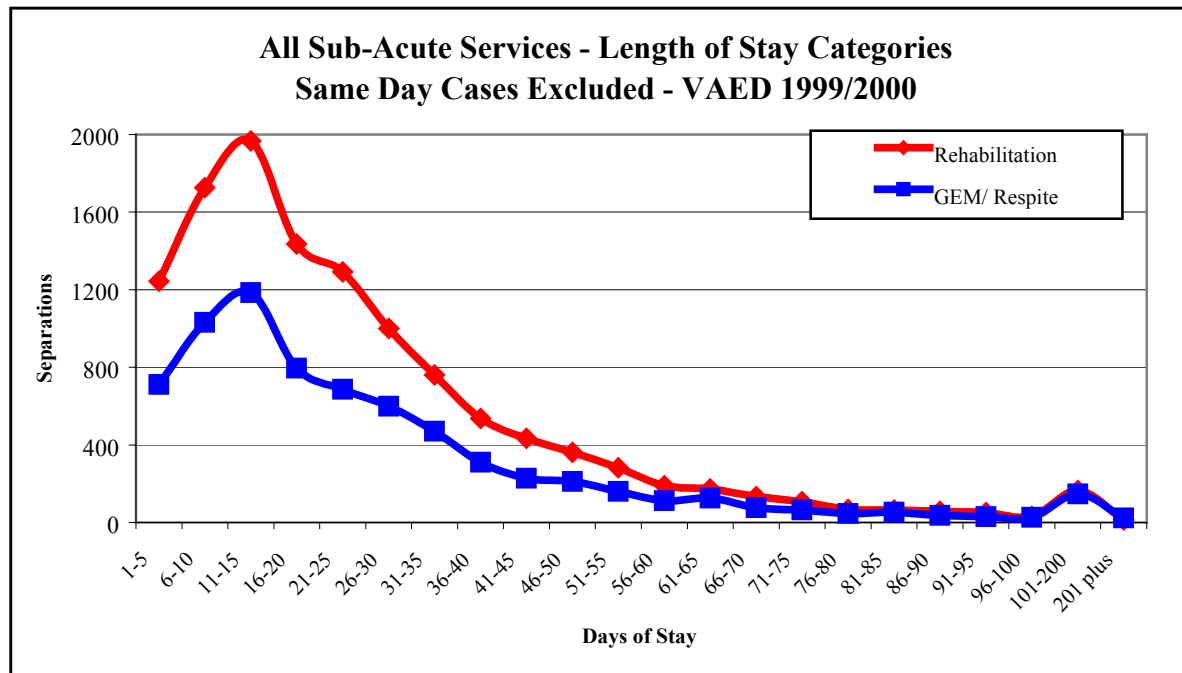
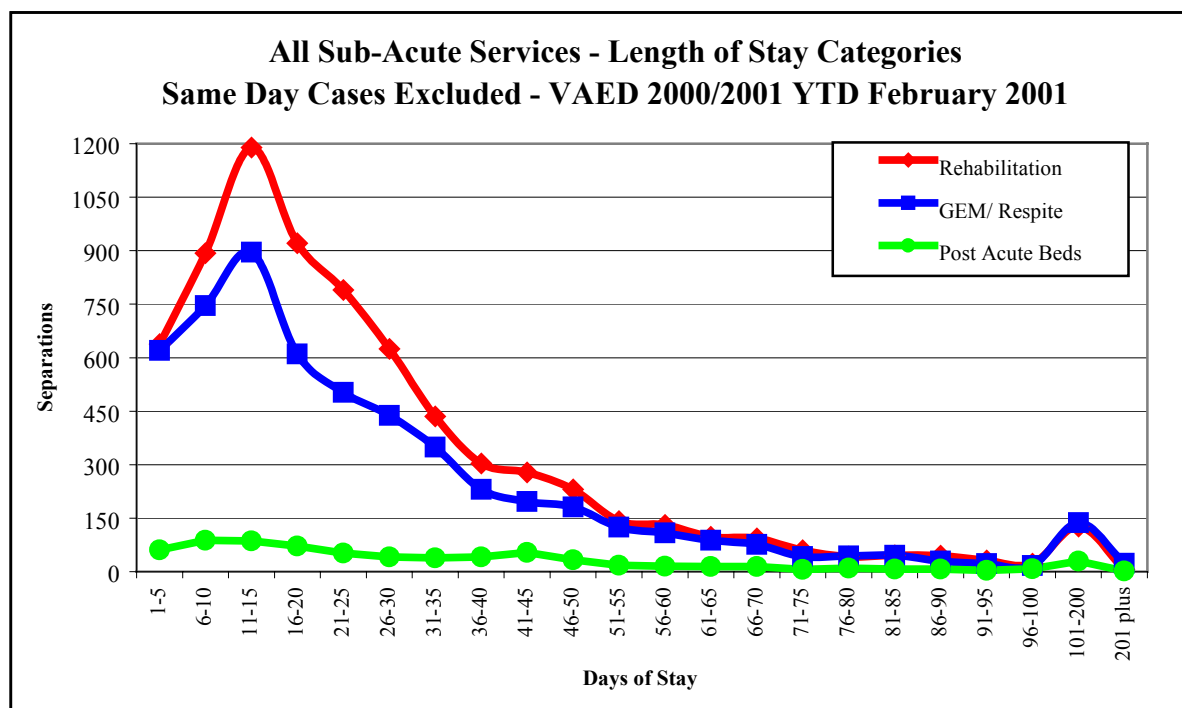


Figure 6 shows the same information for 2000-2001 YTD to end of February 2001. The patterns for both years are similar, with Post-Acute beds added for 2000-2001.



The presence of these small groups of patients with very long lengths of stay indicates service differences between agencies. This will also be caused in part by the inclusion of patients not truly representative of rehabilitation or GEM classified within the sub-acute streams of care. This includes patients who may be more appropriately classified as Nursing Home Type.

This group has two components, being either patients awaiting placement in residential care or a small number of patients with chronic conditions and complex needs making long term placement in generic residential facilities difficult to achieve. Patients with high levels of technical nursing requirements involving ventilators and tracheostomies, younger highly dependent patients, patients with obesity making transfer difficult and patient with blood borne diseases would all be included in this group. There is the need for recognition of this level of complex care within the sub-acute health system.

A detailed breakdown of numbers of hospitals with patients where length of stay exceeds 100 days is provided in Appendix 2 Table 4.

#### **4.1 Current Sub-Acute Bed Substitution Programs**

The Sub-Acute program currently funds three principal methods of bed substitution. The most developed and expanded programs include *Rehabilitation in the Home* and *GEM in the Home*. Both offer the equivalent funding to a hospital admission, but allow the flexibility to provide care either in the patient's home, or in another location of choice, where this is deemed clinically and socially feasible. These patients are considered inpatients, with all care and treatment the responsibility of the treating hospital. Patients are admitted and recorded in PRS/2 as inpatients, with funding by reported bed day equivalent to a sub-acute bed within the hospital. (P&FG 2000/01)

Patients may be admitted directly to this model of care, but in many cases will already have completed an episode of inpatient care within the hospital. The service can be provided in the home as a means of reducing length of stay in hospital and assisting the patient to achieve maximum functionality within the community.

While only five health services are currently funded for a *Rehabilitation in the Home* program, many have used other funding such as *Continuum of Care*, to set up similar programs so that most health services currently have access to some kind of home rehabilitation program. However, not all patients have equal access to the program. Some programs accept referrals from acute, sub-acute or community while others offer more limited access. Only a small number of sub-acute agencies currently provide a *GEM in the Home* model of care.

The sub-acute bed substitution program has been introduced over a number of years through either conversion of existing beds to home based services, or through service growth. Development of this service has allowed expansion of sub-acute services where capital restraints have limited the ability of the hospital to provide additional bed capacity. The current demand pressures on all sub-acute services indicate that any further conversion of existing beds would hardly be feasible.

*Unassigned GEM packages* are the second form of bed substitution but, as the name implies, are more flexible in the way the funding can be used. An amount of funding is provided to allow selected sub-acute agencies to either purchase additional community services from

existing providers, or provide services directly where no local alternative exists. These have been used in a similar fashion to the Post-Acute Care (PAC) program, but with a specific focus on the frail elderly patient with complex needs, presenting to sub-acute services. PAC services are currently focussed on patients discharged from acute beds, so *Unassigned GEM packages* provide an alternative funding stream for sub-acute. Services can be provided either to patients following discharge from hospital, or to prevent admission, where a GP or other community program has referred a patient at risk. Patients are community patients, not formally admitted to the hospital through the PRS/2 system.

Provision of services in the home can allow discharge to proceed where this would not normally be possible without further support and when access to alternative community services such as HACC is limited or delayed. However, the focus of the current program is to prevent admissions to hospital or to facilitate discharge from hospital, not to substitute for ongoing community services. Therefore resources to individual patients remain time-limited. Only limited *Unassigned GEM packages* have been made available, with access therefore restricted.

The third method of service substitution involves converting funded beddays into community services as a flexible arrangement. This is referred to as the *Continuum of Care* program, implemented following a successful trial in three agencies in 1997. The principal of this arrangement is that one bedday can be converted to equal three occasions of service in the community to a non-admitted patient. This allows the agency flexibility to convert between bed-based services and community services as required. This program is currently in place in three Extended Care Centres.

## **5. Health Service Pressures**

Consultations with Metropolitan Health Services focussed on the current service pressures and what changes could be made to relieve these pressures and increase service efficiency. The project team met with a wide range of clinical staff, with open discussions on service models and options, and the identification of issues impacting on the ability of sub-acute services to operate at an optimal level.

The consultations revealed a number of themes. It was suggested that increased levels of community support, which allow older people to remain in their own homes with complex health needs and higher levels of frailty, has had an impact on Emergency Departments and has also brought about a shift in the nature of patients being admitted to inpatient facilities. In many cases older persons appear to be presenting later in the course of their illness, often with more chronic and complex problems and in some cases as a result of their similarly older carer being no longer able to cope with care demands. The range and type of inpatient care has consequently changed over the years, with patients now being more resource intensive and challenging for staff, particularly nursing staff, to manage at the ward level. Where this has occurred in conjunction with financial and staffing constraints the problem has been exacerbated.

This is not a problem unique to Victoria, but is recognised by public health systems throughout the world. Wardrope, Kidner and Edhouse <sup>(2)</sup>, in Sheffield, England comment that “.....there are increasing numbers of frail elderly patients living alone at the margins of safety in the community. When community care fails it is easy to phone the emergency services whatever the time, whereas it is not easy to mobilise social services to provide support for elderly patients requiring emergency social care.”

Blatchford and Capewell <sup>(3)</sup> from Scotland report, “People aged over 65 account for only 15% of the Scottish population but 37% of emergency admissions. This proportion may have grown because more elderly people live alone as family groups fragment, eroding informal support. Hospitals become ‘the carer of last resort’.

The lack of available residential care beds, particularly high care, has also clearly impacted on the ability of both acute and sub-acute services to move patients through the health system. Victoria is close to the Commonwealth's benchmark for high need residential places at a statewide level, but hospitals are still experiencing difficulty in finding residential care beds for patients requiring this level of care. A complicating factor is that the benchmark levels are not uniform across the state, with some areas having more ready access to residential care than other areas. A further complication exists where Commonwealth benchmarks include approved-in-principle beds, which are yet to be built. There is a gap between the benchmark, including these ‘virtual beds’, and the number of beds actually open and accessible to people requiring that level of care. Hospitals with the most significant difficulty finding appropriate care for patients awaiting transfer to residential care, coincide with areas of the metropolitan area with the lowest numbers of actual high care beds.

This issue is the focus of a separate project focussing on the interface between acute hospitals and residential care.

With these pressures on the acute sector have come consequent pressures on the sub-acute sector. A proportion of acute patients require further management or intervention in a sub-



acute facility and access to this level of care needs to be timely for both the patient and to ensure the health system functions efficiently. This not only makes the best use of acute hospital resources, but ensures that those with complex needs have access to appropriate services, including rehabilitation or the involvement of a geriatrician and a multidisciplinary allied health team in their ongoing care.

Appropriateness of care is an important issue in this debate. A risk factor for people with chronic illnesses or impairment is that, while in an acute setting they may begin to deteriorate in physical condition or cognitive function due to the acute hospital's main focus of managing disease, not impairment, disability or handicap. There is a service risk if this is the point at which a series of tests for assessment of long term needs are undertaken. The person may then be assessed as no longer able to return to their home or community but, had more appropriate care been in place earlier, or had the person been treated in his or her own home, some of this may have been avoided. This can create a cycle of deterioration, which has wider and long-term effects on the efficiency of the health system as a whole, in particular placing increased pressure on residential facilities.

Lack of timely access to sub-acute care was raised as a problem in a number of the consultations, with widespread reports of considerable waiting lists to access both rehabilitation and GEM beds as demand has outstripped supply. The quarterly bed survey conducted in January 2001 indicated that there was 52 patients waiting transfer to rehabilitation, and these patients had been waiting an average period of 8.0 days. This was similar for geriatric evaluation and management, where 32 patients were awaiting transfer, with an average waiting time of 9.2 days.

This waiting time in acute beds, along with the far more substantial numbers waiting for transfer to residential care, has caused backlogs in the acute system further exacerbating the management of emergency demand. Pressure on the health system as a whole has meant that practices in components of the system need to change to be more responsive to demand across the care continuum.

The consultations identified a number of areas where changes in sub-acute service provision may assist in the management of demand in other areas. The issues have been summarised, with recommendations for changes or further developments, and can primarily be defined in two groups:

1. Changes to service practice
2. Increased flexibility.

## 6. Changes to Service Practice

### 6.1 Communication and time management

Although sub-acute lengths of stay are by their nature greater than those of acute patients, the internal processes and procedures of these units will still have a significant affect on throughput.

One of the outcomes of the consultation has been to identify examples of good practice that can be implemented in other health services without major cost implications. One of the most straightforward involves clear communication and time management. Sub-acute services require clear definition of treatment goals and increased focus on time-orientated care. The program goals, expected outcomes and expected date of discharge need to be clearly communicated to patients, families and carers as soon as possible following admission.

A range of practices has been adopted by sub-acute services to ensure that patients and family have a clear understanding of service objectives and discharge plans. For example the Sisters of Charity Rehabilitation and GEM teams estimate the date of discharge at the first team meeting after admission and this is recorded with a treatment timetable on the patient's bed card and actively worked towards with both the patient and family. Therapists have key performance indicators (KPIs) relevant to completion of initial assessments, and planned discharge dates are reinforced at ward rounds. Some other services appear to have a more 'wait and see' attitude, which has implications for patient and family expectations and is reflected in the differences in length of stay. Table 1 in Appendix 2 provides comparative data on average length of stay, showing significant variation between hospitals.

It is not assumed that all service variation is a result of the nature of communication and time management, but a change in service focus and stronger emphasis on clear goals and discharge planning could be expected to result in some increased throughput.

#### **Recommendation 1**

Inpatient sub-acute care should be goal-orientated, patient-centred and time-limited. There should be clear definition of expected patient outcomes and length of stay incorporated into the admission process for both GEM and Rehabilitation. The majority of patients should have initial goals and an estimated date of discharge defined within 5 working days of admission and clearly communicated to patients, families and carers.

**Responsibility:** Sub-Acute Service Providers

### 6.2 Single process of referral to sub-acute care

The referral process from acute to sub-acute care could have efficiency enhanced through the development of a centralised referral and assessment process for sub-acute care, ensuring access to the range of sub-acute services. Patients would be triaged and streamed to the most appropriate type of care by skilled and experienced clinicians who understood the range of inpatient, home based and community based sub-acute services available within their Health Service.

This process would apply across a metropolitan or regional health service, so where both an Extended Care Centre and a sub-acute unit exist within a health service, the roles and functions of both services would need to be coordinated to ensure efficient use of resources. Some smaller rural hospitals could also benefit from this approach by establishing a co-ordinating mechanism for their area.

There are a number of models currently in existence which vary in flexibility:

1. **Team approach:** This involves coordinated acceptance of referrals across the entire sub-acute service, including inpatient and home based GEM and rehabilitation. Where a referral is made to a particular speciality within the sub-acute program, for example to rehabilitation, but the rehabilitation team believes the person would be more appropriate for a geriatric evaluation & management service, the referral would be passed on without inappropriate intervention or the needless step of returning to the original point of referral. Where an assessment had been done by one team, other units or teams would not repeat the same assessment but would accept the recommendations and action them.
2. **Central clearinghouse:** In this model all referrals are sent to a central office. Sub-acute staff members representing different specialities meet regularly, usually daily, to review all referrals and designate responsibility for action.
3. **Single staff member:** A nominated staff member, with appropriate expertise, acts a single point of contact and triages all referrals to the appropriate program for action.

Whichever model is chosen, it has the advantage of preventing duplication of effort and consequent delays. It facilitates a process for cooperative determination of which sub-acute service will most benefit the patient, rather than the “scatter gun” approach used in many acute facilities, whereby the patient is referred to all possible services in search of whatever care is available. The process of triaging of referrals and subsequent assessment should occur on a daily basis with attendant KPIs to measure response times, decisions and outcomes. The consequent responsibility of ensuring that the acute hospital staff acted upon sub-acute recommendations should also be included as one of the KPIs.

Ongoing communication and provision of information to relevant clinical staff, both within the health service and externally, particularly to GPs, would be essential to ensure all service providers are aware of the referral process and the method of interface with the health service.

#### **Recommendation 2**

Entry to all sub-acute services, both bed-based and community based, should be through a single referral process, involving a geriatrician and/or rehabilitationist. This would apply across a metropolitan or regional health service. Smaller rural hospitals may wish to set up a co-ordinating mechanism for their region where it would increase efficiency.

**Responsibility:** Sub-Acute Service Providers

Feedback indicated that this recommendation should be viewed as a system streamlining process, which may be addressed by several of the current Designing Care Projects.

### 6.3 Accessing sub-acute expertise in the acute setting

Access to consultation or liaison with a geriatrician or rehabilitationist, while the patient is still on the acute ward, can assist with holistic management of older or disabled people. Acute care paths and plans should factor in a sub-acute component of care where this is applicable. Appropriate sub-acute consultation can also potentially avoid complications that delay discharge or transfer. At present there appears to be little incentive to consult the sub-acute services for advice on patient management during the acute phase, especially where the patient is expected to eventually transfer to an extended care facility or sub-acute unit.

During consultations with Health Services, it was suggested that some sub-acute admissions (usually GEM) could be avoided altogether, if the appropriate advice was sought and actioned during the acute admission. It was also suggested that, if active rehabilitation could begin in the acute setting, the overall length of stay would be shortened to allow increased throughput at both acute and sub-acute facilities.

However, access to sub-acute clinical expertise, both medical and allied health, can be a potential limitation, as not all health services would have sufficient access to such staff, nor the sub-acute staff the capacity to respond to all requests. However, the need for health services to work together to manage patients across the continuum of care was recognised.

#### **Recommendation 3**

Health Services should investigate ways to make better use of sub-acute clinical expertise to assist in the management of patients while in the acute setting, rather than waiting for patients to transfer to a sub-acute facility.

**Responsibility:** Health Services

This recommendation was added following the second round of consultation.

### 6.4 Information transfer

For those patients transferred from an acute facility to an Extended Care Centre, difficulties can exist with transfer of patient information. Distance and poor IT system linkages can complicate this. This can lead to duplication of effort and resources, with tests and other assessments repeated unnecessarily. One way of overcoming this is by coordinating health information within a health service and ensuring that when a patient transfers within the health service, the patient records are also transferred. This ensures that all test results and information regarding treatment provided at one campus is available on the subsequent site. This is already occurring in the Western Health Service, which has identified a consequent decrease in the duplication of patient X-rays and pathology.

It has been suggested that this may be applicable not just within a health service but also between different health services. Issues of confidentiality and patient consent would obviously need to be carefully considered, to comply with the Health Records Bill, Health Privacy Policy Guidelines and other relevant legislation.

As a minimum, sufficient information to allow care to continue unimpeded must be transferred with a patient between facilities. This should include clear diagnostic and procedural information and results of all relevant investigations.

**Recommendation 4**

Until electronic records are introduced, health services should develop protocols and procedures whereby paper based medical records accompany a patient transferred to an alternative treatment site within the same health service.

**Responsibility:** Health Services

Feedback indicated support for electronic medical records, but commented on the substantial cost implications of development. It was also noted that the process of completion of medical records, including coding, could impact on ability to transfer between sites.

## **6.5 Admission Direct to Sub-Acute Care**

A number of sub-acute services currently admit patients directly from the community either following an ACAS assessment or in consultation with the patient's General Practitioner, but others do not. One of the main factors cited by agencies that do not admit directly from the community was cost, and the perception that sub-acute funding was not adequate to support extensive investigations. Although there are financial risks in admitting patients to sub-acute care who may need some acute type management and investigation, some health services raised the issue that there is a group of patients who present to and utilise acute services unnecessarily. Direct admission to sub-acute care should be possible where the patient can be assessed as not needing acute intervention or extensive investigation.

Comprehensive guidelines and assessment criteria would need to be established to ensure patients are admitted to the most suitable location. This will also require close working relationships between sub-acute and other areas of the health system, particularly primary health and acute emergency departments, to ensure appropriate triage.

Direct admission to sub-acute services may have the consequence of decreasing access to sub-acute beds for individual patients waiting transfer from acute care. However, if the broader systemic view is taken, it can be seen that a patient admitted directly from the community into a sub-acute bed has avoided inappropriate use of an acute bed and also the waiting period in acute to access sub-acute care. It is a more efficient overall use of resources and of sub-acute expertise.

**Recommendation 5**

Sub-acute services should investigate means of accepting admissions directly from the community where there is no obvious need for acute intervention.

**Responsibility:** Sub-Acute Service Providers

An alternative to sub-acute services having to either perform or organise tests on admission would be for tests to be ordered by the patient's GP and be completed prior to admission. This would be particularly applicable to those older people for whom there is slow deterioration of function and increased frailty. This already occurs as part of normal practice where GPs order tests as part of primary care treatment. The process should be formalised into admission protocols where standard suites of tests, applicable to the presenting condition, would be ordered and the results supplied to the sub-acute facility on admission. The suites of tests would need to be defined by the appropriate clinicians and piloted prior to community protocols being initiated. GP consultation and education would be an important aspect of the

process. This development would involve comprehensive sub-acute and community consultation in both metropolitan and rural areas.

**Recommendation 6**

The Sub-acute Program should work with clinicians and Divisions of General Practice to develop suites of standard tests and protocols, applicable to the presenting condition, to precede direct admission to a sub-acute facility.

**Responsibility:** Sub-Acute Program DHS, with extensive consultation

Feedback indicated support for development of clinical protocols, but noted that it would be important to involve a broad range of practitioners and services in consultations and development. The possible risk of over-servicing was raised, as was the risk of impinging on clinical judgement, but despite these concerns there was general consensus to proceed.

Even though direct admission to sub-acute is appropriate, this is complicated by the current limitations and blockages in sub-acute service delivery. There are patients who present to emergency departments and are necessarily admitted to the acute facility when, were a sub-acute bed available, this would be more appropriate. Western Hospital, for example, has identified that 30% of patients over 65 admitted to an acute bed from the Emergency Department could be transferred directly to a sub-acute bed, were one available.

## **6.6 Expansion of Sub-Acute service delivery**

The inability of Extended Care Centres to provide a twenty-four hour medical service was also an issue raised by a number of health services. This means that for the majority of Extended Care Centres, admissions currently cannot be accepted after hours or on weekends and prospective patients wait longer in emergency departments or in acute hospital beds. Sub-acute beds are normally managed at high levels of occupancy, as services are not funded if the beds are left empty. Medical staff is generally not available to admit on weekends, so current practice ensures discharges do not occur either and beds are rarely left vacant over weekends.

To change this situation and provide extended services would have significant resource implications, including increased staffing costs. There would also be a flow on effect for nursing and allied health staff if medical cover were increased to allow for this change in admission practice. Despite this, the cost effectiveness of this change on the total health system should be investigated.

**Recommendation 7**

The Sub-acute Program should undertake a cost-benefit analysis of out-of-hours medical cover at Extended Care Centres. The investigation should focus particularly on whether this would allow an increase in direct admissions to sub-acute care from the community or from the Emergency Department, or earlier transfer from acute care.

The flow on effects for nursing and allied health staff should also be considered, as should possible variation between metropolitan and rural areas. This may be achieved through computer modelling.

**Responsibility:** Sub-Acute Program DHS, with consultation

Allied health services are not usually provided on weekends in either acute or sub-acute settings, with resulting gaps in patient therapy programs. It was suggested that increased access to therapy seven days a week would have benefits in decreasing length of stay. Increased and more flexible allied health hours could also contribute to faster patient assessments. For example, to allow for occupational therapy visits on weekends when carers may be available. The Austin & Repatriation Medical Centre trialed extended hours access to allied health as part of the winter beds strategy and this should be further investigated.

**Recommendation 8**

The Sub-acute Program should undertake a cost-benefit analysis of increased allied health hours, particularly over the weekend. It is expected that it would result in a decrease in the length of stay and consequent increase in throughput. The analysis should involve both Acute and Sub-acute Programs and include issues relevant to rural areas. This may also be achieved through computer modelling

**Responsibility:** Acute Division DHS

## 6.7 Post Acute / Interim Care Wards

Most, if not all, health services reported significant numbers of patients awaiting discharge to residential care. These patients care needs can be defined as *Post-Acute Care* or *Interim Care*. At present patients can be located in a range of wards where aged care expertise is not necessarily available and where these patients may be seen as a low priority compared with other acutely ill patients. There is a risk that this can lead to further deterioration in the function of the patient and can have implications for staff morale, when acute staff feel they are not equipped to provide expert care for this client group and are unable to treat the patients for whom they have appropriate expertise.

It was suggested during the consultations that reorganisation of existing acute bed stock to create a dedicated ward for these patients would improve the quality of patient care by removing patients from busy acute wards and enabling a greater focus on appropriate functional management and discharge planning. These wards would require nurses with aged care expertise; allied health input to provide maintenance therapy and social work intervention to support the patient and carers and ensure the process of transfer to residential care was actively continued. A geriatrician should oversee care of the patients, as a sub-acute related service. By bringing sub-acute expertise into the acute setting, it is hoped the patients would receive appropriate care and management. There may also be budget savings achievable with a different staff mix, but this cannot be assumed without further investigation.

The Winter Emergency Demand Strategy *Post Acute* beds have been used in this manner by a number of health services. The Eastern Health Service reported that at Maroondah Hospital this more appropriate patient management, together with increased focus on discharge planning, had resulted in improved quality of care as well as decreased length of stay for patients awaiting residential care. An added advantage noted was that patients and families gained support in an appropriate environment to work through the implications of the decision to move to high level residential care.

**Recommendation 9**

Where hospitals have significant numbers of patients in acute beds awaiting transfer to residential care, these patients would be better managed in a dedicated unit such as an Interim Care or Post-Acute ward. This separate area would provide a more appropriate environment and level of care, including access to staff with aged care expertise, maintenance therapies and social work. This should be achieved through a re-organisation of existing ward areas, but to be effective would require sufficient numbers of patients to ensure a suitable ward area could be filled. This recommendation implies a change in location of existing services and does not in itself imply any funding change.

**Responsibility:** Health Services

Feedback indicated that, while there was overall support for this strategy, there were inherent risks. The creation of a separate area may be seen as unnecessary separation of patient groups, exacerbating the perception that this is an area of 'lesser' need and therefore focus. In addition, the loss of beds from other areas could not be evenly distributed, so other general medical services may suffer from lack of available resources as a result.

Interim Care may reflect a new care type within the sub-acute service system, or it may more closely resemble the existing classification of Nursing Home Type (NHT). The NHT care type is not widely used by either acute or sub-acute services in the metropolitan area at present, but this appears to be as a result of the low per diem rate of \$133 for 2000/2001, rather than because of the definition of the care type itself. Many Health Services reported that the per diem level was insufficient to support the patients' care needs and to cover costs. This funding level is set on the assumption that these patients need less active medical care or therapy than those still requiring active intervention, but this is not necessarily the case in all instances. Many of the health services consulted reported that interim care and NHT patients require significant input from social workers and therapists to manage the discharge planning and to maintain optimal levels of independence. Due to these costing issues the care type is therefore inadequately reported, with patients instead remaining classified as acute, rehabilitation or GEM. This then makes it difficult to accurately determine the numbers of patients waiting in either acute or sub-acute facilities for residential care.

Prior to July 1999, the Aged Care Program had funded these patients at the same level as other sub-acute patients such as GEM, but this was decreased to match the level paid to acute services. As a result of this change, over time the numbers of patients coded as NHT has decreased, in fact in some facilities this care type disappeared almost overnight. This has the result of disguising the true situation with patients awaiting transfer to residential care, including from the Commonwealth, as these patients are not clearly identified as needing alternative care.

**Recommendation 10**

The Sub-Acute & Continuity Unit should review and define the care types of Interim Care, Post-Acute Care (WEDS) and Nursing Home Type to determine:

- i. Whether there is a substantial difference between Interim Care, Post-Acute Care and Nursing Home Type, in terms of patient needs and care provided.
- ii. The total costs of providing this level of care, with a view to accurately determining appropriate funding levels.

**Responsibility:** Sub-Acute Program DHS, in conjunction with health services



Other models of provision of care for patients awaiting transfer to residential care also need to be investigated. Western Health Service has raised the possibility of contracting with an existing residential care provider to provide Interim care in a currently unused ward area on the hospital grounds. When contracting with external providers, the hospital should remain responsible for the duty of care, but the patients benefit from the expertise of an aged care provider. Peninsula and Eastern Health services have also explored alternative options for people waiting residential care. Similar arrangements may also be possible in other areas.

**Recommendation 11**

The use of alternative models of care for patients waiting for residential care, including contracting of services with external service providers, should be investigated.

**Responsibility:** Health Services, in conjunction with the Sub-Acute Program DHS

## **6.8 Co-location of acute and sub-acute services**

While the majority of sub-acute services are currently provided by Extended Care Centres and are likely to remain so, in this age of fast throughput and short lengths of stay, there are distinct advantages for both acute and sub-acute care when the Extended Care Centre is complemented by a service co-located on an acute site. Service in both these agency types need to be reviewed in order to clearly define their complementary roles and ensure patients are managed in the most appropriate location.

A number of factors outlined can be enhanced by co-location with acute, although these issues are not strictly limited to this arrangement.

### **6.8.1 Medical acuity**

With sub-acute services under pressure to take patients earlier in their acute admission, patients transferred to an Extended Care Centre may have to return to the acute facility for follow-up or completion of tests. This process is expensive for the sub-acute facility, involving transport and staff escort costs, as well as being disruptive and inconvenient for patients. Co-located units have the advantage of being able to take patients who are medically more acute, or with medical conditions such as deteriorating cardiac or respiratory function. Co-located units have immediate access to acute clinical staff and services such as pathology and radiology if required.

Ideally, continuity of care is enhanced by subacute beds co-located with acute, as Geriatricians, Rehabilitationists and/or Allied Health staff could be involved in the management of patients in the acute setting prior to transfer to the sub-acute beds and acute consultants would also be able to follow-up their patients after their move to sub-acute care.

### **6.8.2 Communication and culture**

The geographical distance between the acute and sub-acute facilities of most health services can lead to difficulties in communication and effective interaction. The result may be that the cultures remain distinct with little shared understanding or 'language'. There may also be limited opportunities for the sharing of expertise, knowledge and skills. Co-location allows for education and rotation of acute staff through sub-acute units, which can raise the level of understanding about the complex issues relevant to both sub-acute and older patients throughout the health service. This is important as the older client group form a large part of the core business of all hospitals, including acute. Ideally the culture of both services can be

affected positively through greater understanding of each other's pressures, functions and complementary skills.

### **6.8.3 Waiting times**

Patients who need only a short period of intervention may be able to receive appropriate sub-acute intervention on site at the acute hospital and return directly home. Currently these patients may not access sub-acute care at all because of waiting times or they may wait inappropriate lengths of time for transfer to the Extended Care Centre for a short stay. Whilst there must be an acceptance that patients in sub-acute units will usually require a longer stay, co-location can positively affect the culture of sub-acute services by influencing the focus of the unit and its internal processes.

### **6.8.4 Increase in Sub-acute services within acute hospitals**

In line with the current DHS policy of providing a coordinated service with a focus on local community needs, new services are being co-located where possible. Considerable support was expressed through the consultations for the direction of any service growth towards the establishment of sub-acute units in acute hospitals rather than the expansion of Extended Care Centres. For many health services, this would require building new infrastructure and would not be possible without considerable investment. Other services however, may be able to convert existing wards.

For co-location to be successful however, there needs to be general acceptance within the health service that GEM and rehabilitation are specialist services in their own right and not simply another form of interim care or step-down facility for acute services. Robust admission criteria and education of acute staff are critical to this process. The process of early transfer from acute care must also be subject to firm protocols regarding the conditions under which patients are to be treated or transferred, as expensive investigations within sub-acute cannot be supported by current sub-acute funding levels.

All sub-acute beds, both in Extended Care Centres and co-located beds in acute hospitals, should work closely together and every effort should be made to share expertise, knowledge and skills, not only with acute but across the sub-acute sites. This will encourage the development of better understanding of the various components of the continuum of care across the entire health service and ensure common, or at least, complementary practices across sites. Earlier access to sub-acute expertise while the patient is still in an acute bed, would improve patient management and may decrease the overall length of stay. Early initial periods of rehabilitation by skilled multidisciplinary teams may reduce morbidity and mortality in the longer term. In particular, this applies to patients who have had a stroke.<sup>(8)</sup>

#### **Recommendation 12**

The current policy of directing future service growth in sub-acute beds into sub-acute units co-located with acute beds should be supported, pending review of service roles. Co-located specialist units should be managed or coordinated by a geriatrician or a rehabilitationist and have close links with their associated Extended Care Centre.

**Responsibility:** Sub-Acute Program DHS

## **7. Increased flexibility**

### **7.1 Access to Community Support Services**

One of the major factors reported during the consultations as contributing to a longer length of stay in sub-acute beds was the inability of the community service system to respond in a timely fashion to the needs of patients on discharge. Access problems varied between regions with some local government services still able to provide some level of Home and Community Care (HACC) services while other local government areas had closed their books to all new referrals. Some had also imposed Priority of Access guidelines or cut service levels in order to manage demand. The lack of access to HACC was seen as particularly difficult for sub-acute patients. Currently there are inequities in access to services as patients discharged from acute care can access the Post Acute Care (PAC) program, but those discharged from sub-acute cannot. Another difficult group are those patients needing services at a higher level than that allowed by the Priority of Access guidelines imposed by some local councils.

This latter group was described as difficult to discharge, as in all regions long waiting lists for formal packages of care such as Community Aged Care Packages or Linkages were cited. In one area it was identified that the Linkages program would not accept patients from hospital directly onto the program, cutting out one option for discharge for particularly complex patients. For some patients “cobbling together” a sub-optimal package via various short-term community programs was described as the only alternative, particularly when HACC services were not accessible.

A number of hospitals identified that there is increased pressure on families and carers to accept “fragile” or “trial” discharges. One geriatrician described the current situation as: “patients are now discharged when they are safe not when they are well”. This puts more pressure on families to manage frail relatives in a context of decreased access to community services.

There is very little data quantifying the numbers of sub-acute patients who could be discharged earlier were appropriate services available. Snapshots are available through the DHS bi-monthly bed survey but there is no routine data collected around this issue. Waiting lists for HACC services that would show unmet need are not kept by all community agencies and where they are, there is no uniformity in the way the data is collected.

The experience of the post acute program can be extrapolated to some extent as this program is designed to “top up” where there are issues of access to service or where there are waiting lists. This program currently purchases many services that are included in the HACC service profile, including nursing, personal and home care. During 1999/2000 these three service types made up 69% of the services purchased by the PAC program, although not all of the patients receiving these services were HACC eligible. On discharge from the program, 23% of patients remained on a higher level of service than they received prior to admission to hospital, indicating a need for ongoing support and maintenance in the community, which is a HACC role.<sup>(4)</sup>

There is no reason to expect that sub-acute patients should have a different experience in accessing service than those from acute sector, in fact a higher proportion of the sub-acute population will fit the HACC criteria. It would be expected, therefore, that an increased proportion would also require this type of service on discharge. The average length of stay on

the PAC program for 1999/2000 was 23 days. Sub-acute patients would be expected to need longer than this given the age and frailty of the client group.

Young and Turnock<sup>(5)</sup> comment that "...the exponential relation between disabling conditions and age results in older people being the most frequent users of community care. 'The hospital is full' is a more palpably demanding alarm bell than 'the community is full' – but both need adequate capacity for mutual effectiveness".

At present the capacity of the community service sector cannot fully meet the demands generated by the health sector and in the absence of reliable data, it is reasonable to assume that discharge delays occur in the sub-acute sector due to lack of available community based support services and lack of access to a compensatory program such as Post Acute Care. Potential increased access to patients discharged from sub-acute services should not involve increases in infrastructure as existing PAC services already have protocols and procedures in place for community support across geographical catchment areas.

Increasing access to post discharge services would be expected to show a consequent decrease in length of stay in bed-based services. Directing any potential additional resources into community based rather than bed-based care was seen during consultation as being a more effective use of these resources and an area where increased funds would be most effectively utilised.

**Recommendation 13**

Patients discharged from sub-acute services should be able to access brokered services in the post discharge period similar to those currently offered under the Post Acute Care program. For this to occur there would need to be expansion of the current PAC program or service substitution for other sub-acute programs.

**Responsibility:** Acute Division, DHS  
Reliant on additional resources

The Post-Acute Care Program was expanded to include patients discharged from Sub-Acute care in April 2001.

## **7.2 Rationalisation and Expansion of Sub-Acute Community therapy programs**

The plethora of small DHS funded programs was raised as an issue for hospital staff. The problem of understanding which program was appropriate for which patient and the potential for delay and duplication were seen as difficulties, as were the different targeting and reporting requirements for each program. The need for flexibility and the ability to meet individual patient needs rather than be limited by programmatic guidelines was a common theme.

Rather than expand each existing program with its individual guidelines and targets, a preferred possible alternative is to combine the current number of bed substitution programs into one program that is flexible enough in its focus to cover home based rehabilitation, home based GEM, unassigned GEM, the current Continuum of Care and similar programs. This

would ensure the patient needs were placed at the centre of the care planning process rather than trying to fit the patient into existing targets and funding criteria.

The focus of the bed substitution program would be on therapy and continuation of treatment in the community, to either reduce length of stay in hospital, or even replace the need for hospital admission in some cases. The program would need to be coordinated and managed by existing sub-acute services, and the different requirements and expertise of both rehabilitation and GEM programs would need to be maintained within the overall structure. A combined program would provide opportunities for staff to work across both inpatient wards and the community, providing continuity of care. This would be of advantage to both the patient and carer but would also afford opportunities to increase staff education and flexibility, providing a more interesting role and contributing to staff retention and morale.

The need for personal care, home care and other support services should also be addressed as part of this program. Currently many Rehabilitation in the Home programs do not provide support services, leading to increased carer burden <sup>(7)</sup> and limiting the type of patient that can be accepted onto the program. These services should be incorporated into a bed substitution program to truly reflect the care provided to inpatients and to respond to all patient needs, not just those related to their therapy. This must also include support for the carer so that the responsibility for the 24 hour care offered by a bed based service is not shifted to a single individual in a private home.

Whether the bed substitution and the post discharge community care program remain separate or are combined needs to be further explored, and may vary somewhat between health services. New infrastructure would not be supported, as it should be possible to combine post sub-acute with the existing PAC program to develop a comprehensive hospital to community transition service. Alternatively, it may be more appropriate to combine the therapy and post discharge programs to form a sub-acute service continuum based in the community.

Whichever option is selected, additional funding for this post discharge care would be required as service expansion is essential. In order to ensure appropriate targeting of patient groups, service guidelines and performance indicators specific to sub-acute care would need to be developed. If it were combined with post-acute care, sub-acute services would need to retain some capacity to direct allocation of funding, including direction within sub-acute, such as to either rehabilitation or GEM. A common method of reporting activity would also need to be developed to address the current time consuming and inefficient process whereby each small program reports different information to DHS using different programs or software. Costings to inform funding levels would also be required. An industry reference group should be convened to assist in the definitional process.

The expansion of this program should also consider funding complex patients, in both acute and sub-acute facilities, waiting access to case managed programs such as CACPs and Linkages. Provision of services and case management could allow discharge to proceed where this would not normally be possible without further support and when access to alternative community services is limited or delayed. The resources to individual patients would remain time-limited. However, they would need to reflect the actual waiting time to access the case management service, which is longer than for HACC in most cases. The numbers of patients and the possible costs incurred would need to be investigated.

Another group of patients to be considered for flexible funding programs or guidelines are those awaiting transfer to residential care. A number of health services discussed options for either supporting these patients in the community, if and where capable and willing carers are available, or in low-level care facilities with top-up funding to ensure an adequate level of care. The Aged Care / Acute Interface project is pursuing this issue in more detail.

This area is another potential service enhancement where additional resources for community-based care were seen as a more effective use of resources than an increase in number of beds.

**Recommendation 14**

All existing sub-acute home-based therapy program should be consolidated, managed and reported as a comprehensive therapy program for support of eligible patients either following discharge, or as an alternative to admission. The varying needs, capacity and expertise of both rehabilitation and GEM programs would still need to be maintained within the overall structure. Support services, such as personal and home care, should also be made available to these patients as part of the program.

**Responsibility:** Health services and the Acute Health Division, DHS  
Reliant on additional resources

**Recommendation 15**

Implementation of the home based therapy program would involve establishment of an industry reference group to define the patient criteria, service guidelines, reporting definitions and guidelines and the interface between programs.

**Responsibility:** Sub-Acute Program, DHS  
Reliant on progression of Recommendation 14

### **7.3 Conversion between WIES and sub-acute services to increase flexibility**

During the consultations, health services generally expressed interest in flexible funding models that would allow them to substitute services as required, despite the fact that this would have management issues in terms of staffing and skill base.

It was suggested that flexibility of funding was needed in the balance between WEIS and sub-acute. Health services generally found it difficult to flexibly respond to changes in need when operating at 97% occupancy. The only current option when needs cannot be met is to cancel elective surgery, as there is no room in the current system for other movement between services. Bagust et al<sup>(7)</sup> reports of similar problems in the UK and use a modelling technique to suggest that “spare capacity is essential if an emergency admission service is to operate efficiently and at a level of risk acceptable to patients...It must be recognised by the NHS that maintaining some unoccupied staffed beds is not wasteful but is a cost which must be incurred if a quality service is to be maintained.”

An alternative to this would be to be flexible about the use of beds and services. If WIES funded services could be converted to subacute service provision in times of high need for subacute care and then converted back when the need was for more acute care, this would

allow better management of patients and some flexibility to respond to changes in demand. This would have considerable implications for service configuration and staffing which would need to be considered however, if demand change was predictable, the response could be planned in advance. The lack of planning time and the speed of implementation were raised as problematic in regard to the implementation of the 2000 Winter Beds strategy. It was suggested that given more planning time, the increase in beds could have been more useful. More flexible use of funding streams could support this

At best, this will involve only small amounts of WIES funding as health services were generally operating at or near capacity. It would be a way of ensuring that hospitals make best use of all resources, rather than be limited by administrative rules.

**Recommendation 16**

The Acute Health Division should investigate a method of converting WIES funding to sub-acute funding to increase the capacity of health services to respond to changes in service needs. This should be a flexible arrangement that allowed health services to revert back to WIES if the need for increased sub-acute care was no longer required (eg: seasonal service requirements.) Conversion should be based on a regular service model review.

**Responsibility:** Acute Health Division, DHS

Feedback indicated cautious support for this strategy. While services supported the principle of service substitution and flexibility, it was noted that in fact not many hospitals would have spare WIES available.

## **8. Sub-Acute Funding**

The project has already recommended review of the Nursing Home Type funding level in regard to Interim or Post-Acute Care in section 6.6 Post-Acute / Interim Care Wards and Recommendation 9.

During consultations all health services were asked to comment on whether the current DHS funding guidelines inhibited the provision of services in any way and what would improve any blockages. Some health services commented that they ignored the distinction between Level 2 Rehabilitation and GEM with patients moving between the two funding streams according to their clinical needs at the time. It was also suggested that this might have reflected the hospitals' need to meet stream of care specific targets.

Different perspectives were received as to whether rehabilitation and GEM were separate service types or merely different stages in a continuum. Some health services saw them as separate care types requiring different expertise while others criticised the artificial barrier created by funding them separately. It was also pointed out that it was difficult to compare performance across health services, as it was perceived that the streams of care were defined locally and therefore dissimilar levels of care were given the same label.

For GEM, the current per diem funding was criticised as containing no incentive to decrease length of stay as no clear episode boundaries were defined. The need to meet occupancy targets was seen as a disincentive to provision of weekend leave or trial-at-home, as the bed had to be kept available.

In the longer term, a funding model based on a total sequence of care should incorporate both rehabilitation and GEM, both bed-based and community-based services, to increase service flexibility across the continuum of care. This would allow flexibility at the local level, to provide service as appropriate for individual patients and in the setting of choice.

Revision of funding models is the responsibility of the Acute Health Division and is included in the current work of the Division. As a precursor to this development, sub-acute service models and practices require critical review by the Sub-acute program and this work is underway.

### **Recommendation 17**

The Acute Health Division should develop a comprehensive funding model for all sub-acute services. This should build on the basis of the CRAFT Rehabilitation funding model to include GEM. The potential inclusion of Geriatric Respite should also be investigated.

**Responsibility:** Acute Health Division, DHS



## 9. Related Issues

### 9.1 Regional outreach consultancy service

Access to home based sub-acute services in isolated areas was raised as an important gap in the existing service system. Regional services report that patients are able to access home based therapy if they live close to a major regional centre but currently only limited support is available to patients from the more isolated areas. More creative ways of providing services must be considered for rural areas where there is often difficulty recruiting and retaining experienced staff.

Two possible options were suggested by the regional services to address both the individual patient needs and the education needs of staff in more isolated area that may have limited specialist knowledge in rehabilitation or general sub-acute services.

#### Option 1: Outreach Team

A more provide “hands-on” approach with an Outreach Team, available to travel to the more isolated areas of the region. The role of the team would include direct patient therapy or treatment, in addition to the training and support of isolated practitioners and carers.

Two models were also suggested for the implementation of an Outreach team:

1. Use of an expanded ward team with adequate staff to allow for a combined ward based and community based or outreach role.
2. Setting up a specialised team of experienced therapists with no ward based role.

#### Option 2: Regional Support

The provision of regular and ongoing consultancy, support and education to isolated practitioners by the major regional service. This option relies on developing strong links and good communication across the region through regular arrangements such as forums.

A significant example of proactive regional assistance is the Bendigo Health Care Group, which has established the first Rural Centre for Rehabilitation Medicine in Victoria, an academic and research centre to educate and support rural staff.

Both options would allow earlier discharge for isolated patients and increased support and knowledge for rural practitioners. The advantages and disadvantages of each option would need to be considered in light of local needs and service requirements and both would need to recognise the extra costs involved with travel in rural areas. Any outreach service would also need to consider how to provide appropriate sub-acute services to indigenous patients, particularly those living in very isolated areas.

Opportunities to utilise *Telehealth* facilities for both clinical and non-clinical services, including teaching and support, should also be investigated.

#### **Recommendation 18**

Patients living in isolated rural areas should be able to access therapy services closer to their home, through a regional outreach service set up and managed by the major regional sub-acute service provider.

**Responsibility:** Sub-acute program, DHS  
Reliant on available resources

This recommendation was added following the second round of consultation.

## **9.2 Care Coordinators in Emergency Departments**

Some health services have developed models as a component of the 2000 Winter Emergency Demand Strategy (WEDS) in which a geriatric nurse or similar practitioner is located in the emergency department to triage older patients, flag the potential need for sub-acute care later in the episode or refer patients into a home based program that more effectively meets their health needs than would an acute inpatient admission. These models have taken various forms and have yet to be formally evaluated. Anecdotal evidence suggests that they play a significant role in reducing unnecessary admissions, ensuring appropriate diversion of care onto programs such as Hospital in the Home or Post Acute Care and enhancing throughput and continuity of care.

Regional and rural hospitals were not included in the WED strategy, but possible expansion of the service should include consideration of potential needs throughout the state.

### **Recommendation 19**

The use of Care Coordinators in Emergency Departments should be evaluated and expanded to other hospitals if results prove to be positive.

**Responsibility:** Quality & Care Continuity Branch, DHS

## **9.3 Presentation of Residential Care Patients to Emergency Departments**

The presentation of patients from Residential Care Facilities (RCFs) to hospital emergency departments emerged as a significant concern of most health services during the consultations. The situation is compounded by the fact that acute hospitals are often the only possible destination for unwell residents after hours. Sub-acute facilities do not have the capacity to admit after hours under current circumstances therefore the opportunity of admission to a possibly more appropriate level of care does not exist. A number of related issues were highlighted.

The sub-acute/acute interface project has not made specific recommendations for this issue as residents of RCFs presenting to the Emergency Department has now become the focus of a separate project dealing specifically with this issue. This information has been provided to the Acute / Aged Care Project team.

## **10. References**

- (1) Ageing Well: A Policy Framework for Aged Care Services in the New Millennium. Department of Human Services (1999)
- (2) Wardrope J, Kidner N, and Edhouse J. “Bed crises are occurring almost daily in some hospitals” BMJ, 1995; 310:868
- (3) Blatchford O, and Capewell S. “Emergency admissions: taking stock and planning for winter” BMJ, 1997; 315:1322-1323
- (4) Quarterly Post Acute Care report (DHS 1999/2000 Full Year)
- (5) Young J and Turnock S. “Community Waiting Lists and Older People” BMJ, 2001; 322:254
- (6) Smith et al, Abstract: “Effective Rehabilitation – Managing Care”, 6<sup>th</sup> Annual Scientific Meeting Australasian Faculty of Rehabilitation Medicine, IAHPR Inaugural Scientific Meeting, Annual Scientific Meeting of BSRM, Sydney, May 1998
- (7) Bagust A, Plaice M and Posnett J. “Dynamics of bed use in accommodating emergency admissions: stochastic simulation model” BMJ, 1999; 319:155-158
- (8) Professor Stephen Davies, Chair Victorian Stroke Strategy Taskforce. Correspondence 7th May 2001.

## Appendix 1 Definitions of Sub-Acute Services

### Rehabilitation

Rehabilitation targets people with loss of function or ability. It is proactive and goal-orientated and offers a coordinated, multidisciplinary range of services which provide assessment, treatment, review, discharge planning and follow-up with the aim of:

- maximising independence and quality of life for people with a disabling *medical* condition,
- maximising the likelihood that they will remain or become active and productive members of the community and
- minimising the long-term care needs and community support needs of these people, thus bringing about considerable cost savings in acute health care and also in long-term social security, community care and supported accommodation.

Within this context the patient may be recovering from a recent acute illness or injury or may have a chronic condition, which is amenable to rehabilitation. Enhancement of skills of daily living may involve training a patient's primary carer/s rather than functional improvement of the individual patient.

### Geriatric Evaluation and Management (GEM)

Geriatric Evaluation and Management is the sub-acute care of chronic or complex conditions associated with ageing, cognitive dysfunction, chronic illness or disability. The conditions require review, treatment and management by a geriatrician and multidisciplinary team for a defined episode of care. The GEM client group is usually older people with complex, multiple or chronic health care conditions requiring treatment and stabilisation of those conditions and/or medical review for future treatment options or service planning.

The care provided encompasses:

- extended care to give older people time, in an appropriate environment, to recover from an acute episode before returning to the community, and thereby to reduce the burden on the acute care system;
- episodic care (both treatment and preventative care) necessary to improve and maintain the health of older people with a chronic condition living in the community. This can support their independence despite increasing levels of frailty and disability;
- maintenance therapy as an inpatient to maximise independence and quality of life for people with a disabling medical condition, and maximise the likelihood that they will remain or become active members of the community.

There is an area of overlap between rehabilitation and GEM, particularly for patients with complex conditions, where the provision of rehabilitation may be impacted on by other co-morbidities such as dementia. The rehabilitation provided to these patients may be defined as 'slow stream', as services would need to be tailored around the individual's ability to participate in the recuperative process. The selection of care type should be made based on a clinical decision about the type of care to be primarily provided.

## **Geriatric Respite**

Geriatric Respite is admission for care and support of a person in a stable, pre-assessed condition requiring accommodation, clinical and nursing care to provide relief for carers. Geriatric respite includes both planned and unplanned respite. In both cases the patient does not require assessment or clinical care over and above that which would normally have been provided in the usual place of residence.

The Commonwealth is the major provider of geriatric respite through nursing home and residential services, so this is not considered to be core business for a sub-acute facility. Geriatric respite can however be provided by a sub-acute facility when capacity allows.

## **Nursing Home Type**

This is defined as a program to maintain current levels of functional independence in patients awaiting transfer to residential care.

A Nursing Home Type (NHT) patient is defined in Section 3 of the Commonwealth Health Insurance Act 1973: after 35 days continuous hospitalisation, the patient is classified as a NHT patient unless a medical practitioner certifies under section 3B that the patient is in need of acute care. For example:

- professional attention for an acute phase of the patient's condition; or
- active rehabilitation; or
- continued management, for medical reasons as an admitted patient.

## **Appendix 2**

**Sub-Acute services and throughput  
for 1999/2000 and 2000/2001 YTD**

Table 3a: SUB-ACUTE SERVICE SUMMARY 1999-2000

	Rehabilitation					GEM / Respite				Total Separations					Multiday Separations - Excluding Sameday					
	Estimated beds	Separations	Beddays	ALOS	Sameday	ALOS excluding Sameday	Estimated beds	Seps	Beddays	ALOS	Estimated beds	Seps	Beddays	Maximum LOS	Median LOS	Average LOS	Seps	Beddays	Median LOS	ALOS
<b>METROPOLITAN AGENCIES</b>																				
<b>Ausfin &amp; Repatriation Medical Centre</b>																				
Austin Campus - Repatriation Centre	40	446	11,941	26.8	0	26.8	0	28	518	18.5	40	474	12,459	118	21	26.3	474	12,459	21	26.3
Royal Talbot Rehabilitation Centre	55	782	17,471	22.3	5	22.5	0	0	0	0.0	55	782	17,471	356	13	22.3	777	17,466	13	22.5
<b>Bayside Health</b>																				
Caulfield General Medical Centre	100	4,688	31,958	6.8	3,807	32.0	55	917	18,951	20.7	155	5,605	50,909	266	1	9.1	1,792	47,096	19	26.3
<b>Bethlehem Hospital</b>																				
<b>Eastern Health</b>																				
Angliss Health Service	31	386	8,425	21.8	0	21.8	6	118	2,670	22.6	37	504	11,095	161	15	22.0	502	11,093	15	22.1
Maroondah		0	0	0.0	0	0.0	26	375	8,069	21.5	26	375	8,069	89	18	21.5	375	8,069	18	21.5
Peter James Centre	67	971	23,128	23.8	4	23.9	33	461	10,411	22.6	100	1,432	33,539	135	20	23.4	1,427	33,534	20	23.5
<b>Melbourne Health</b>																				
Melbourne Extended Care & Rehabilitation Service	65	1,373	20,494	14.9	823	35.8	90	685	33,667	49.1	155	2,058	54,161	424	12	26.3	1,229	53,332	32	43.4
<b>Northern Health</b>																				
Broadmeadows	24	219	8,946	40.8	2	41.2	36	271	11,890	43.9	60	490	20,836	238	33	42.5	485	20,831	33	43.0
Bundoora Extended Care Centre	31	302	9,605	31.8	1	31.9	37	341	9,601	28.2	68	643	19,206	177	23	29.9	641	19,204	23	30.0
<b>Peninsula Health</b>																				
Mt Eliza Aged Care & Rehabilitation Service	81	994	29,501	29.7	1	29.7	36	406	11,478	28.3	117	1,400	40,979	137	26	29.3	1,399	40,978	26	29.3
Rosebud Hospital		0	0	0.0	0	0.0	0	66	950	14.4	0	66	950	62	10	14.4	66	950	10	14.4
<b>Sisters of Charity Health Service</b>																				
Caritas Christi		0	0	0.0	0	0.0	26	289	6,938	24.0	26	289	6,938	190	16	24.0	288	6,937	16	24.1
St George's Health Service	36	461	12,343	26.8	3	26.9	50	588	14,503	24.7	86	1,049	26,846	217	21	25.6	1,043	26,840	21	25.7
St Vincent's Hospital	26	1,356	8,527	6.3	865	15.6		9	80	8.9	26	1,365	8,607	103	1	6.3	500	7,742	11	15.5
<b>Southern Health</b>																				
Hampton Rehabilitation Hospital	33	512	11,681	22.8	3	22.9	0	7	56	8.0	33	519	11,737	158	15	22.6	516	11,734	15	22.7
Kingston Centre	74	883	24,400	27.6	5	27.8	55	642	19,171	29.9	129	1,525	43,571	256	21	28.6	1,515	43,561	21	28.8
<b>Western Health</b>																				
Sunshine Hospital	40	385	14,275	37.1	0	37.1	20	189	5,120	27.1	60	574	19,395	155	28	33.8	573	19,394	28	33.8
Williamstown Hospital		50	985	19.7	0	19.7	30	152	2,251	14.8	30	202	3,236	84	12	16.0	202	3,236	13	16.0
<b>Sub-Total: Metropolitan Extended Care Centres</b>	<b>542</b>	<b>10,966</b>	<b>180,581</b>	<b>16.5</b>	<b>4,652</b>	<b>27.9</b>	<b>417</b>	<b>4,640</b>	<b>131,593</b>	<b>28.4</b>	<b>959</b>	<b>15,606</b>	<b>312,174</b>	<b>424</b>	<b>13</b>	<b>20.0</b>	<b>10,930</b>	<b>307,498</b>	<b>21</b>	<b>28.1</b>
<b>Sub-Total: Metropolitan Sub Acute Units</b>	<b>161</b>	<b>2,842</b>	<b>53,099</b>	<b>18.7</b>	<b>867</b>	<b>26.4</b>	<b>118</b>	<b>1,208</b>	<b>31,548</b>	<b>26.1</b>	<b>279</b>	<b>4,050</b>	<b>84,647</b>	<b>238</b>	<b>14</b>	<b>20.9</b>	<b>3,177</b>	<b>83,774</b>	<b>19</b>	<b>26.4</b>
<b>Total Metropolitan</b>	<b>703</b>	<b>13,808</b>	<b>233,680</b>	<b>16.9</b>	<b>5,519</b>	<b>27.5</b>	<b>535</b>	<b>5,848</b>	<b>163,141</b>	<b>27.9</b>	<b>1,238</b>	<b>19,656</b>	<b>396,821</b>	<b>424</b>	<b>13</b>	<b>20.2</b>	<b>14,107</b>	<b>391,272</b>	<b>20</b>	<b>27.7</b>

	Rehabilitation						GEM / Respite				Total Separations						Multiday Separations - Excluding Sameday			
	Estimated beds	Separations	Beddays	ALOS	Sameday	ALOS excluding Sameday	Estimated beds	Seps	Beddays	ALOS	Estimated beds	Seps	Beddays	Maximum LOS	Median LOS	Average LOS	Seps	Beddays	Median LOS	ALOS
<b>RURAL AGENCIES</b>																				
Barwon Health - Grace McKellar	45	610	14,803	24.3	4	24.4	13	174	4,211	24.2	58	784	19,014	134	20	24.3	779	19,009	20	24.4
South West Healthcare	15	365	5,373	14.7	0	14.7	0	0	0	0.0	15	365	5,373	131	9	14.7	365	5,373	9	14.7
Ballarat HCG - Queen Elizabeth	30	520	10,354	19.9	3	20.0	30	385	8,180	21.2	60	905	18,534	136	15	20.5	900	18,529	15	20.6
Bendigo HCG - Anne Caudle	55	593	16,779	28.3	2	28.4	20	333	6,149	18.5	75	926	22,928	156	19	24.8	924	22,926	20	24.8
Mildura Hospital	8	190	2,821	14.8	0	14.8	0	0	0	0.0	8	190	2,821	125	8	14.8	190	2,821	8	14.8
Mt Alexander Hospital	12	272	6,208	22.8	0	22.8	10	55	659	12.0	22	327	6,867	102	17	21.0	327	6,867	17	21.0
Goulburn Valley Health Service	20	245	7,464	30.5	0	30.5	20	204	6,073	29.8	40	449	13,537	213	24	30.1	448	13,536	24	30.2
Wangaratta Hospital	15	249	4,967	19.9	0	19.9	0	0	0	0.0	15	249	4,967	94	18	19.9	249	4,967	18	19.9
Wodonga Hospital	10	546	3,411	6.2	231	10.1	0	0	0	0.0	10	546	3,411	73	4	6.2	315	3,180	5	10.1
East Gippsland Bairnsdale	10	170	3,074	18.1	1	18.2	6	90	1,754	19.5	16	260	4,828	109	14	18.6	259	4,827	14	18.6
Latrobe Regional Hospital	20	290	6,080	21.0	0	21.0	16	262	5,593	21.3	36	552	11,673	85	16	21.1	552	11,673	16	21.1
Sub-Total: Rural Extended Care Centres	130	1,723	41,936	24.3	9	24.5	63	892	18,540	20.8	193	2,615	60,476	156	18	23.1	2,603	60,464	18	23.2
Sub-Total: Rural Sub Acute Units	110	2,327	39,398	16.9	232	18.7	52	611	14,079	23.0	162	2,938	53,477	213	13	18.2	2,705	53,244	14	19.7
Total Rural	240	4,050	81,334	20.1	241	21.3	115	1,503	32,619	21.7	355	5,553	113,953	213	15	20.5	5,308	113,708	16	21.4
Sub-Total: All Extended Care Centres	672	12,689	222,517	17.5	4,661	27.1	480	5,532	150,133	27.1	1,152	18,221	372,650	424	14	20.5	13,533	367,962	20	27.2
Sub-Total: All Sub Acute Units	271	5,169	92,497	17.9	1,099	22.5	170	1,819	45,627	25.1	441	6,988	138,124	238	13	19.8	5,882	137,018	16	23.3
Grand Total	943	17,858	315,014	17.6	5,760	25.6	650	7,351	195,760	26.6	1,593	25,209	510,774	424	14	20.3	19,415	504,980	19	26.0



Table 3b: SUB-ACUTE SERVICE SUMMARY 2000 –2001: Year To Date February 2001

	Rehabilitation					GEM / Respite				Total Separations					Multiday Separations - Excluding Sameday					
	Estimated beds	Separations	Beddays	ALOS	Sameday	ALOS excluding Sameday	Estimated beds	Seps	Beddays	ALOS	Estimated beds	Seps	Beddays	Maximum LOS	Median LOS	Average LOS	Seps	Beddays	Median LOS	ALOS
METROPOLITAN AGENCIES																				
Austin & Repatriation Medical Centre																				
Austin Campus - Repatriation Centre																				
Royal Talbot Rehabilitation Centre																				
Bayside Health																				
Caulfield General Medical Centre																				
Bethlehem Hospital																				
Eastern Health																				
Angliss Health Service																				
Maroondah																				
Peter James Centre																				
Melbourne Health																				
Melbourne Extended Care & Rehabilitation Service																				
Northern Health																				
Broadmeadows																				
Bundoora Extended Care Centre																				
Peninsula Health																				
Frankston Hospital																				
Mt Eliza Aged Care & Rehabilitation Service																				
Rosebud Hospital																				
Sisters of Charity Health Service																				
Caritas Christi																				
St George's Health Service																				
St Vincent's Hospital																				
Southern Health																				
Hampton Rehabilitation Hospital																				
Kingston Centre																				
Western Health																				
Sunshine Hospital																				
Williamstown Hospital																				
Sub-Total: Metropolitan Extended Care Centres																				
Sub-Total: Metropolitan Sub Acute Units																				
Total Metropolitan																				

	Rehabilitation						GEM / Respite				Total Separations						Multiday Separations - Excluding Sameday			
	Estimated beds	Separations	Beddays	ALOS	Sameday	ALOS excluding Sameday	Estimated beds	Seps	Beddays	ALOS	Estimated beds	Seps	Beddays	Maximum LOS	Median LOS	Average LOS	Seps	Beddays	Median LOS	ALOS
<b>RURAL AGENCIES</b>																				
Barwon Health - Grace McKellar	45	330	7,957	24.1	0	24.1	18	119	2,652	22.3	63	449	10,609	91	20	23.6	449	10,609	20	23.6
South West Healthcare	15	189	3,351	17.7	0	17.7	0	0	0	0.0	15	189	3,351	142	8	17.7	189	3,351	8	17.7
Ballarat HCG - Queen Elizabeth	30	304	6,292	20.7	2	20.7	30	277	5,234	18.9	60	581	11,526	161	15	19.8	579	11,524	15	19.9
West Wimmera - Nhill	0	0	0	0.0	0	0	5	25	544	21.8	5	25	544	57	18	21.8	25	544	18	21.8
Bendigo HCG - Anne Caudle	55	257	8,045	31.3	0	31.3	20	223	5,162	23.1	75	480	13,207	213	22	27.5	480	13,207	22	27.5
Mildura Hospital	10	102	1,614	15.8	0	15.8	6	56	875	15.6	16	158	2,489	176	12	15.7	158	2,489	12	15.8
Mt Alexander Hospital	12	144	3,683	25.6	0	25.6	10	63	968	15.4	22	207	4,651	106	18	22.5	207	4,651	18	22.5
Goulburn Valley Health Service	20	160	5,753	36.0	0	36	20	94	3,854	41.0	40	254	9,607	142	31	37.8	254	9,607	31	37.8
Wangaratta Hospital	15	172	3,310	19.2	00	19.2	0	0	0	0.0	15	172	3,310	90	16	19.2	172	3,310	16	19.2
Wodonga Hospital	10	433	2,324	5.4	229	5.4	0	0	0	0.0	10	433	2,323	40	1	5.4	204	2,095	5	10.3
East Gippsland Bairnsdale	10	117	2,396	20.5	0	20.5	6	60	1,085	18.1	16	177	3,481	119	13	19.7	177	3,481	13	19.7
Central Gippsland - Sale	0	0	0	0.0	0	0	3	11	125	11.4	3	11	125	26	9	11.4	11	125	9	11.4
Gippsland Southern	0	0	0	0.0	0	0	2	23	339	14.7	2	23	339	44	13	14.7	23	339	13	14.7
Latrobe Regional Hospital	20	187	4,571	24.4	0	24.4	16	159	3,499	22.0	36	346	8,070	218	18	23.3	346	8,070	18	23.3
West Gippsland Warragul	0	0	0	0.0	0	0	3	14	235	16.8	3	14	235	67	12	16.8	14	235	12	16.8
Wonthaggi	0	0	0	0.0	0	0	2	9	86	9.6	2	9	86	20	7	9.6	9	86	7	9.6
Yarram	0	0	0	0.0	0	0	2	12	252	21.0	2	12	252	48	21	21	12	252	21	21.0
Sub-Total: Rural Extended Care Centres	130	891	22,294	25.0	2	25.1	68	619	13,048	21.1	198	1,510	35,342	213	18	23.4	1,508	35,340	18	23.4
Sub-Total: Rural Sub Acute Units	112	1,504	27,002	18.0	229	21.0	75	526	11,862	22.6	187	2,030	38,864	218	14	19.1	1,801	38,635	15	21.5
Total Rural	242	2,395	49,296	20.6	231	22.7	143	1,145	24,910	21.8	385	3,540	74,206	218	15	21.0	3,309	73,975	16	22.4
Sub-Total: All Extended Care Centres	676	7,995	133,024	16.6	3,421	28.3	529	3,640	105,736	29.0	1,205	11,635	238,760	457	14	20.5	8,199	235,337	21	28.7
Sub-Total: All Sub Acute Units	273	3,296	62,667	19.0	727	24.1	233	1,870	47,972	25.7	506	5,166	110,639	258	15	21.4	4,435	109,912	18	24.8
Grand Total	949	11,291	195,691	17.3	4,148	26.8	762	5,510	153,708	27.9	1,711	16,801	349,399	457	14	20.8	12,634	345,249	20	27.3

Table 4a: LONG STAY SUB-ACUTE PATIENTS 1999-2000

	Sub-Acute Multiday Separations Excluding Sameday					Sub-Acute Separations after 100 days plus					
	Separations	Beddays	Maximum LOS	Median LOS	Average LOS	Separations	Beddays	Median LOS	Average LOS	Percent Separations	Percent Beddays
<b>METROPOLITAN AGENCIES</b>											
<b>Austin &amp; Repatriation Medical Centre</b>											
Austin Campus - Repatriation Centre	474	12459	118	21	26.3	3	348	117	116.0	0.6%	2.8%
Royal Talbot Rehabilitation Centre	777	17466	356	13	22.5	23	3656	134	159.0	3.0%	20.9%
<b>Bayside Health</b>											
Caulfield General Medical Centre	1792	47096	266	19	26.3	36	4863	120	135.1	2.0%	10.3%
<b>Bethlehem Hospital</b>	303	6816	215	14	22.5	9	1217	121	135.2	3.0%	17.9%
<b>Eastern Health</b>											
Angliss Health Service	502	11093	161	15	22.1	5	635	117	127.0	1.0%	5.7%
Maroondah	375	8069	89	18	21.5	0	0	0	0.0	0.0%	0.0%
Peter James Centre	1427	33534	135	20	23.5	6	666	107	111.0	0.4%	2.0%
<b>Melbourne Health</b>											
Melbourne Extended Care & Rehabilitation Service	1229	53332	424	32	43.4	95	14882	134	156.7	7.7%	27.9%
<b>Northern Health</b>											
Broadmeadows	485	20831	238	33	43.0	33	4777	127	144.8	6.8%	22.9%
Bundoora Extended Care Centre	641	19204	177	23	30.0	15	1841	120	122.7	2.3%	9.6%
<b>Peninsula Health</b>											
Mt Eliza Aged Care & Rehabilitation Service	1399	40978	137	26	29.3	11	1299	116	118.1	0.8%	3.2%
Rosebud Hospital	66	950	62	10	14.4	0	0	0	0.0	0.0%	0.0%
<b>Sisters of Charity Health Service</b>											
Caritas Christi	288	6937	190	16	24.1	5	723	147	144.6	1.7%	10.4%
St George's Health Service	1043	26840	217	21	25.7	7	915	112	130.7	0.7%	3.4%
St Vincent's Hospital	500	7742	103	11	15.5	2	206	103	103.0	0.4%	2.7%
<b>Southern Health</b>											
Hampton Rehabilitation Hospital	516	11734	158	15	22.7	10	1286	128	128.6	1.9%	11.0%
Kingston Centre	1515	43561	256	21	28.8	43	5799	128	134.9	2.8%	13.3%
<b>Western Health</b>											
Sunshine Hospital	573	19394	155	28	33.8	13	1587	113	122.1	2.3%	8.2%
Williamstown Hospital	202	3236	84	13	16.0	0	0	0	0.0	0.0%	0.0%
<b>Total Metropolitan</b>	<b>14,107</b>	<b>391,272</b>	<b>424</b>	<b>20</b>	<b>27.7</b>	<b>316</b>	<b>44,700</b>	<b>20</b>	<b>141.5</b>	<b>2.2%</b>	<b>11.4%</b>
<b>RURAL AGENCIES</b>											
<b>Barwon Health - Grace McKellar</b>	779	19009	134	20	24.4	6	708	120	118.0	0.8%	3.7%
<b>South West Healthcare</b>	365	5373	131	9	14.7	1	131	131	131.0	0.3%	2.4%
<b>Ballarat HCG - Queen Elizabeth</b>	900	18529	136	15	20.6	6	724	119	120.7	0.7%	3.9%
<b>Bendigo HCG - Anne Caudle</b>	924	22926	156	20	24.8	8	1048	132	131.0	0.9%	4.6%
<b>Mildura Hospital</b>	190	2821	125	8	14.8	1	125	125	125.0	0.5%	4.4%
<b>Mt Alexander Hospital</b>	327	6867	102	17	21.0	1	102	102	102.0	0.3%	1.5%
<b>Goulburn Valley Health Service</b>	448	13536	213	24	30.2	14	1759	117	125.6	3.1%	13.0%
<b>Wangaratta Hospital</b>	249	4967	94	18	19.9	0	0	0	0.0	0.0%	0.0%
<b>Wodonga Hospital</b>	315	3180	73	5	10.1	0	0	0	0.0	0.0%	0.0%
<b>East Gippsland Bairnsdale</b>	259	4827	109	14	18.6	1	109	109	109.0	0.4%	2.3%
<b>Latrobe Regional Hospital</b>	552	11673	85	16	21.1	0	0	0	0.0	0.0%	0.0%
<b>Total Rural</b>	<b>5308</b>	<b>113708</b>	<b>213</b>	<b>16</b>	<b>21.4</b>	<b>38</b>	<b>4706</b>	<b>16</b>	<b>123.8</b>	<b>0.7%</b>	<b>4.1%</b>
<b>Grand Total</b>	<b>19415</b>	<b>504980</b>	<b>424</b>	<b>19</b>	<b>26.0</b>	<b>354</b>	<b>49406</b>	<b>19</b>	<b>139.6</b>	<b>1.8%</b>	<b>9.8%</b>

**Table 4b: LONG STAY SUB-ACUTE PATIENTS 2000-2001: Year To Date February 2001**

	Sub-Acute Multiday Separations Excluding Sameday					Sub-Acute Separations after 100 days plus					
	Separations	Beddays	Maximum LOS	Median LOS	Average LOS	Separations	Beddays	Median LOS	Average LOS	Percent Separations	Percent Beddays
<b>METROPOLITAN AGENCIES</b>											
<b>Austin &amp; Repatriation Medical Centre</b>											
Austin Campus - Repatriation Centre	520	15,286	216	21	29.4	10	1,511	150	151.1	1.9%	9.9%
Royal Talbot Rehabilitation Centre	403	9,868	200	14	24.5	14	1,874	126	133.9	3.5%	19.0%
<b>Bayside Health</b>											
Caulfield General Medical Centre	1173	31,415	279	1	26.8	28	4,148	132	148.1	2.4%	13.2%
<b>Bethlehem Hospital</b>	165	5,038	325	14	30.5	13	2,169	157	166.8	7.9%	43.1%
<b>Eastern Health</b>											
Angliss Health Service	301	7,399	175	19	24.6	1	175	175	175	0.3%	2.4%
Maroondah	307	6,751	83	18	22.0	0	0	0	0.0	0.0%	0.0%
Peter James Centre	742	21,307	190	23	28.7	8	981	110	122.6	1.1%	4.6%
<b>Melbourne Health</b>											
Melb Extended Care & Rehab Service	688	30,874	457	11	44.9	56	8,980	139	160.4	8.1%	29.1%
<b>Northern Health</b>											
Broadmeadows	283	11,988	258	32	42.4	21	3,027	132	144.1	7.4%	25.3%
Bundoora Extended Care Centre	389	14,478	254	28	37.2	20	2,909	130	145.5	5.1%	20.1%
<b>Peninsula Health</b>											
Frankston Hospital	129	1,735	26	14	13.4	0	0	0	0.0	0.0%	0.0%
Mt Eliza Aged Care & Rehab Service	854	27,283	307	26	31.9	20	2,503	114	125.2	2.3%	9.2%
Rosebud Hospital	151	3,273	26	14	21.7	0	0	0	0.0	0.0%	0.0%
<b>Sisters of Charity Health Service</b>											
Caritas Christi	219	5,342	147	18	24.4	3	379	117	126.3	1.4%	7.1%
St George's Health Service	754	19,168	154	20	25.4	8	990	118	123.8	1.1%	5.2%
St Vincent's Hospital	302	4,952	132	1	16.4	1	132	132	132.0	0.3%	2.7%
<b>Southern Health</b>											
Hampton Rehabilitation Hospital	271	6,907	192	16	25.5	9	1,202	122	133.6	3.3%	17.4%
Kingston Centre	1033	28,317	192	20	27.4	34	4,226	117	124.3	3.3%	14.9%
<b>Western Health</b>											
Sunshine Hospital	380	14,233	228	30	37.5	11	1,410	117	128.2	2.9%	9.9%
Williamstown Hospital	261	5,660	116	15	21.7	3	326	109	0.0	1.1%	5.8%
<b>Total Metropolitan</b>	<b>9,325</b>	<b>271,274</b>	<b>457</b>	<b>21</b>	<b>29.1</b>	<b>260</b>	<b>36,942</b>	<b>127</b>	<b>142.1</b>	<b>13.6%</b>	<b>13.6%</b>
<b>RURAL AGENCIES</b>											
<b>Barwon Health - Grace McKellar</b>	449	10,609	91	20	23.6	0	0	0	0.0	0.0%	0.0%
<b>South West Healthcare</b>	189	3,351	142	8	17.7	3	377	119	125.7	1.6%	11.3%
<b>Ballarat HCG - Queen Elizabeth</b>	579	11,524	161	15	19.9	3	369	107	123.0	0.5%	3.2%
<b>West Wimmera - Nhill</b>	25	544	57	18	21.8	0	0	0	0.0	0.0%	0.0%
<b>Bendigo HCG - Anne Caudle</b>	480	13,207	213	22	27.5	7	950	128	135.7	1.5%	7.2%
<b>Mildura Hospital</b>	158	2,489	176	12	15.8	2	280	140	140.0	1.3%	11.2%
<b>Mt Alexander Hospital</b>	207	4,651	106	18	22.5	1	106	106	106.0	0.5%	2.3%
<b>Goulburn Valley Health Service</b>	254	9,607	142	31	37.8	11	1,280	112	116.4	4.3%	13.3%
<b>Wangaratta Hospital</b>	172	3,310	90	16	19.2	0	0	0	0.0	0.0%	0.0%
<b>Wodonga Hospital</b>	204	2,095	40	5	10.3	0	0	0	0.0	0.0%	0.0%
<b>East Gippsland Bairnsdale</b>	177	3,481	119	13	19.7	1	119	119	119.0	0.6%	3.4%
<b>Gippsland Base Sale</b>	11	125	26	9	11.4	0	0	0	0.0	0.0%	0.0%
<b>Gippsland Southern</b>	23	339	44	13	14.7	0	0	0	0.0	0.0%	0.0%
<b>Latrobe Regional Hospital</b>	346	8,070	218	18	23.3	3	457	120	152.3	0.9%	5.7%
<b>West Gippsland - Warragul</b>	14	235	67	12	16.8	0	0	0	0.0	0.0%	0.0%
<b>Wonthaggi</b>	9	86	20	7	9.6	0	0	0	0.0	0.0%	0.0%
<b>Yarram</b>	12	252	48	21	21.0	0	0	0	0.0	0.0%	0.0%
<b>Total Rural</b>	<b>3,309</b>	<b>73,975</b>	<b>218</b>	<b>16</b>	<b>22.4</b>	<b>31</b>	<b>3,938</b>	<b>125</b>	<b>127.0</b>	<b>0.9%</b>	<b>5.3%</b>
<b>Grand Total</b>	<b>12,634</b>	<b>345,249</b>	<b>457</b>	<b>20</b>	<b>27.3</b>	<b>291</b>	<b>40,880</b>	<b>127</b>	<b>140.5</b>	<b>2.3%</b>	<b>11.8%</b>