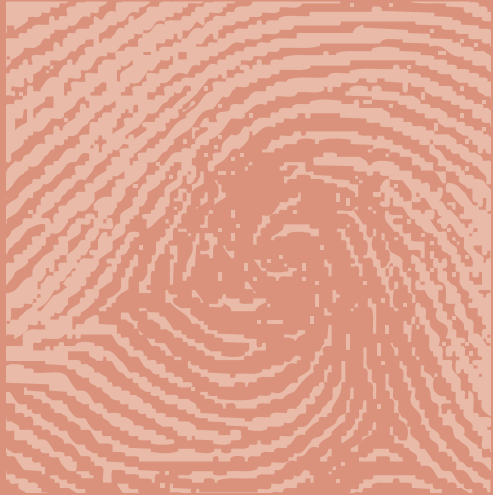


Hospital admission risk program (HARP)
Community-hospital interface
working party report



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Preface

The Hospital Admission Risk Program (HARP) was established in 2001 as the prevention component of the Hospital Demand Management (HDM) Strategy.

The HARP Reference Group, chaired by Professor John Funder, oversees the implementation of HARP, including the allocation of funds to service providers, and advises on how hospital admissions and emergency department presentations can be prevented. HARP focuses on tertiary prevention – that is, avoiding unnecessary emergency presentations and hospital admissions and readmissions. HARP targets people who have manifest health need, often where their disease or condition is chronic or complex.

In July 2002, the HARP Reference Group formed seven working parties to undertake analysis in priority areas that provide opportunities to have a significant impact on preventing the avoidable use of hospitals.

These working parties were:

- Chronic Heart Failure
- Chronic Obstructive Pulmonary Disease
- Community–Hospital Interface
- GP–Hospital Interface
- Integrated Care for Clients with Complex Needs
- Mental Health, and
- Technology.

This report presents the findings of the Community–Hospital Interface Working Party.

The working party reports build on the information presented in the HARP Background Paper and have been produced to assist in designing projects for the 2003-04 HARP funding round.

The Department of Human Services would appreciate any comments, suggestions for further work or other feedback you may have on the contents of the working party reports. These can be forwarded to the HARP Project Officers, Ian Coverdale at ian.coverdale@dhs.vic.gov.au or Paul Williamson at paul.williamson@dhs.vic.gov.au and will be considered as we further develop the evidence around preventive initiatives.

Acknowledgements

This report was produced by the Community-Hospital Interface Working Party of the HARP Reference Group, supported by Professor Hal Swerissen and Ms Kate Silburn, with assistance from Ms Jenny Macmillan from the Australian Institute for Primary Care, Faculty of Health Sciences, La Trobe University. This working party included:

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- Peter Ruzyla (Chair since Jan 2003) Eastern Access Community Health Centre
- Ms Vivien Adler Department of Human Services
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- Ms Antoinette Mertins Northern Health
- Dr Allan Paul Austin & Repatriation Medical Centre

The working party acknowledges the generous contributions made to the project by those who participated in consultations and interviews and provided information.

Contents

| | |
|--|------|
| Preface | iii |
| Acknowledgements | iv |
| Glossary | vii |
| Abbreviations | viii |
| Executive summary | 1 |
| Recommendations | 2 |
| 1. Project background | 6 |
| 1.1 The Hospital Admission Risk Program | 7 |
| 1.2 HARP Reference Group | 8 |
| 1.3 The Community–Hospital Interface Working Party | 10 |
| 1.4 The community–hospital interface | 10 |
| 2. Project methodology | 11 |
| 2.1 Literature and project review | 11 |
| 2.2 Consultation | 11 |
| 2.3 Data analysis | 12 |
| 2.4 Workshop | 12 |
| 2.5 Draft report | 12 |
| 3. The existing community–hospital interface | 13 |
| 3.1 Setting | 13 |
| 3.2 Service focus and complexity | 14 |
| 3.3 Organisation | 14 |
| 3.4 Community-based services | 15 |
| 3.5 The changing context of care | 19 |
| 3.6 Care models | 20 |
| 4. Messages from the literature and evidence | 22 |
| 4.1 Priority conditions | 22 |
| 4.2 Organising the community–hospital interface | 24 |
| 4.3 Success factors | 25 |

| | |
|--|-----------|
| 5. HARP project characteristics | 29 |
| 6. Consultation – the experience of HARP | 31 |
| 6.1 How the projects were developed | 31 |
| 6.2 Identifying the project/problem setting | 36 |
| 6.3 Developing the project/designing the model of care | 38 |
| 6.4 Implementation issues | 39 |
| 6.5 Governance and accountability | 39 |
| 6.6 Care coordination systems and management | 40 |
| 6.7 Information management | 41 |
| 6.8 Resource management | 42 |
| 6.9 Performance monitoring | 43 |
| 6.10 Consumer involvement | 44 |
| 6.11 HARP – examples of good practice | 44 |
| 7. Recommendations | 48 |
| 7.1 Community-hospital partnership development | 48 |
| 7.2 A strategic approach to proposal preparation | 49 |
| 7.3 Care models | 50 |
| 7.4 Sustainable community-hospital partnership governance | 51 |
| 7.5 Resource sharing and allocation | 56 |
| Appendix 1 Ambulatory Care Sensitive Conditions by Hospital | 58 |
| References | 80 |

Glossary

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| Ambulatory care sensitive conditions | Conditions for which hospitalisation is avoidable through prevention and early intervention delivered in ambulatory settings. |
| Brokerage | Flexible use of funding to purchase services for individuals on a case by case basis. |
| Care models | Models that identify needs, assess, plan, implement, coordinate, monitor and design individualised services to meet health and social needs across primary, acute, sub-acute and continuing care services. |
| Community-hospital interface | Organisational structures and processes including governance, resource allocations, performance monitoring and communication across community and hospital settings to facilitate integrated care across primary, acute, sub-acute and continuing services. |
| Division of general practice | Bring together general practitioners for planning, service development and workforce activities for defined catchment populations. |
| HARP | Hospital Admission Risk Program. |
| Price-volume agreements | Purchase of a target service volume at an agreed price over a specified time period. |
| Primary Care Partnerships | Bring together primary acute and continuing care agencies for planning and service development activities for defined catchment populations in Victoria. |
| Primary Care Trusts | Free-standing statutory National Health Service Bodies [UK] responsible for providing a full range of services for catchment populations of about 280,000 people. |
| Transaction costs | The costs other than the money price that are incurred in trading goods or services. These often include administration, information collection and transfer, reporting and accountability requirements, contract administration and relationship management. |

Abbreviations

| | |
|-------------|--------------------------------------|
| ACSC | Ambulatory care sensitive conditions |
| CACP | Community Aged Care Package |
| ED | Emergency department |
| HACC | Home and Community Care |
| HARP | Hospital Admission Risk Program |
| HDM | Hospital Demand Management |
| PBS | Pharmaceutical Benefits Schedule |
| PCP | Primary Care Partnership |
| PCT | Primary care type (patient) |
| RDNS | Royal District Nursing Service |
| VAED | Victorian Admitted Episodes Dataset |

Executive summary

The Victorian public health system, like others in Australia and internationally, has been experiencing unprecedented and sustained increases in demand. The increasing demand has placed added pressure on hospitals with demand for medical admissions to public hospital services in Victoria growing consistently at 3-4% per annum. The demand pressures are particularly felt within the metropolitan public hospital sector where emergency admissions have grown at 7-8% per annum. Hospital inpatient services and emergency departments (EDs) are now experiencing significant capacity constraints.

The Hospital Demand Management (HDM) Strategy is a new approach to create additional capacity and meet demand pressures through better patient management, new acute services and initiatives. Within the strategy, the Hospital Admission Risk Program (HARP) is implementing preventive initiatives to reduce the demand pressures on hospitals, by averting the avoidable use of EDs and inpatient services.

HARP focuses on people who have a manifest health need, often where their disease is chronic or complex. Although HARP is targeting demand pressures on acute public hospitals it spans the continuum of care. The emphasis is on better supporting and proactively managing people in their homes and within the community rather than reactively responding to acute exacerbations of their conditions. An effective interface between community-based services and hospitals is critical to achieving this. By strengthening the interface and ensuring a more integrated and cooperative service system, with clearer pathways and enhanced models of care, it is expected that people at risk of hospitalisation will be more effectively cared for and the rate of growth in emergency demand for targeted groups of people reduced.

For a range of social, technological and economic reasons, acute and continuing care services that were previously provided in discretely organised hospital and residential care settings are now provided in the community and at home. This has led to the development of new care models that integrate care across the service continuum.

The community-hospital interface has a critical impact on the effectiveness of prevention initiatives sponsored through HARP. Conceptually, this interface is defined by the characteristics of the setting (for example, hospitals, community health services, home), the complexity of service needs and functions (primary, acute, sub acute and continuing) and the extent to which organisational arrangements enable integrated service provision (horizontally and vertically).

Internationally, major reforms such as primary care trusts in the UK and managed care organisations in the United States have introduced new forms of horizontal and vertical integration that bring together governance, funding, service delivery activities, performance management, information and accountability across the care continuum. However, the unique features of the Australian health system make it unlikely that comprehensive reforms along these lines will be introduced here in the near future.

Instead, organisational integration across the community–hospital interface will depend on more informal and voluntary partnerships and collaborations. The considerable literature on these partnerships emphasises the importance of leadership and shared ownership of problems and issues, and the development of new forms of governance to facilitate program design, resource allocation, performance management and communication, monitoring and accountability.

This report identifies opportunities for improving the community–hospital interface in Victoria to prevent unnecessary hospital admissions and improve health outcomes through:

- targeting ambulatory care sensitive conditions, frail older people, mental illness and people with complex social and medical needs at risk of hospital admission
- implementing care models that combine integrated assessment, care planning, coordination, service delivery, monitoring, communication and follow-up across primary, acute, sub-acute and continuing care services for these priority groups
- collaborative partnerships between hospitals and community organisations to support the development of care models. These partnerships need to adopt a developmental process to address sustainable governance and accountability, resource allocation, care model design, service delivery and communication.

The findings and conclusions reported here are based on an analysis of available documents; a review of the literature on organisational relationships between community and hospital agencies; and consultations with HARP projects, peak bodies, Department of Human Services regional officers and the members of the Community–Hospital Interface Working Party.

Recommendations

This section summarises the recommendations made in the report.

Community hospital partnership development

The organisation of the community hospital interface is complex. The development of HARP projects will require the involvement of a number of hospital and community agencies.

Recommendations

Community–hospital partnerships should be formed to focus on preventive initiatives for people at risk of hospitalisation. These partnerships should include GPs, community health centers, home and community care providers, district nursing services and ambulance services in addition to hospitals and continuing care services.

Primary Care Partnerships, Divisions of General Practice, hospitals and continuing care providers in addition to DHS regions should take joint responsibility for developing community–hospital partnerships.

A process to inform, engage and consult relevant stakeholders on the HARP funding round should be convened for each community-hospital partnership.

Key stakeholders in community-hospital partnerships should agree on the convenor role early in the partnership formation process.

A strategic approach to proposal preparation

A variety of HARP projects are being implemented through previous funding opportunities. The 2003-04 funding round should emphasise the strategic integration of HARP initiatives within community-hospital partnerships. Account should also be taken of existing health and community service initiatives.

Recommendations

Proposals submitted through the 2003-04 funding round should be required to include an integrated set of projects managed through a common organisational structure and process for the community-hospital partnership. It is desirable that previously funded projects be incorporated into the community hospital partnership framework. Where this is not possible proposals should be required to outline how previously funded HARP initiatives will relate to the 2003-04 proposal.

Priorities and proposals should be based on a systematic analysis of the available demand and utilisation data for each hospital. This analysis should involve and be available to all the key stakeholders

Proposals should specify how they have considered and prioritised ambulatory care sensitive conditions, the frail elderly, frequent emergency department users, people with complex social and medical conditions, and people with mental illness

Each community-hospital partnership should develop a limited number of integrated proposals to address the key priorities identified.

Care models

Care management processes are proliferating, leading to duplication and inefficiency.

Recommendations

Proposals submitted for the 2003-04 funding round should be required to demonstrate evidence of good practice for specific priority groups and outline how they will minimise duplication in care management processes. Proposals should address:

- *Initial identification and assessment of patient needs*
- *Decision making, referral and communication between service providers for patients*
- *Care planning and service coordination*
- *Individualised and flexible service delivery*

- *Monitoring of consumer outcomes and experiences*
- *Support to encourage self management and patient support where appropriate*
Existing providers and processes for the care management elements outlined above such as the PCP service coordination model and tools should be used wherever possible.

Sustainable community hospital partnership governance

HARP proposals should include an agreement about principles for the roles and responsibilities of community and hospital providers, resource allocation, performance monitoring and governance and accountability between the participating stakeholders. The elements that should be included in agreements that underpin community hospital partnerships are outlined below.

Sustainability across the community hospital interface is important beyond the implementation of HARP. However, roles are not well defined and governance and organizational relationships are insufficiently developed.

Recommendations

Proposals for the 2003–04 funding round should be required to outline governance arrangements within community-hospital partnerships that will be maintained over time and across a broad range of functions, and target groups where key stakeholders have mutual interests to improve outcomes for patients.

Governance arrangements for community-hospital partnerships should address the following:

- *The principles and shared vision underpinning the community-hospital partnership*
- *The specific purposes and objectives to be addressed*
- *The roles and responsibilities of the partners in meeting the partnership purpose and objectives*
- *The structures and processes for governing the partnership*
- *Resource sharing principles and procedures*
- *Performance management and review procedures*
- *Communication and consultation arrangements*
- *Other matters as agreed by the partners.*

Resource sharing and allocation

Current HARP resource allocation arrangements are project based and do not take account of more generalized DHS funding arrangements for community based services.

Recommendations

Community based services for HARP should be provided by community based agencies within the context of the governance arrangements underpinning community hospital partnerships.

The 2003-04 funding round should support funding arrangements that ensure flexible, timely and responsive services to meet the needs of patients. HARP funding guidelines for resource sharing within community-hospital partnerships should be based on price volume agreements, which ensure that capacity and service planning issues can be managed by community providers. These price-volume agreements should specify:

- *unit costs for individual service types to be provided by different agencies*
- *volume performance targets specified as the number of service units and the number of patients.*

Where limited volume for community based services makes business arrangements financially unviable or marginal for individual community providers, they should be encouraged to enter into consortia with other community based providers to jointly provide services.

Unit costs for community based services should be based on existing DHS price structures where ever possible to prevent gaming and inefficiency.

1. Background

The Victorian public health system, like others in Australia and internationally, has been experiencing unprecedented and sustained increases in demand. A range of factors contribute to this demand, including:

- the ageing population
- new treatment options through advances in medical technology
- a reduction in the availability of GPs for home visits and after hours care
- the shortfall of residential aged care beds relative to demand
- workforce shortages, particularly of nurses
- societal changes that have led to a reduction in the capacity of the informal carer network in the community.

The increasing demand has placed added pressure on hospitals with demand for medical admissions to public hospital services in Victoria (and other states) growing consistently at 3-4% per annum. The demand pressures are being felt particularly within the metropolitan public hospital sector where emergency admissions have grown at 7-8% per annum.

Over time, the cumulative effect of these pressures has exceeded the capacity of the acute public health system to respond. For example, between 1999 and 2001 there were periods when access to emergency services was limited, resulting in delayed admissions for emergency patients and increased occasions of ambulance bypass. Additionally, elective surgery waiting times increased as elective surgery was reduced to accommodate greater pressure on emergency services.

In May 2001, the Victorian Government committed \$582 million over four years through the HDM Strategy to strengthen the capacity of the health system to manage the increasing demand pressures.

The HDM Strategy focuses on the service system as a whole rather than on fragmented or single organisations. It promotes appropriate pathways for people using health care services and encourages models of care that respond to current demands for health services. Collaboration between health providers is emphasised under this new approach.

Key aspects of the HDM Strategy include:

- creating extra capacity through funding growth
- relieving pressure on hospital beds and EDs by diverting people to alternative options where clinically appropriate
- working with clinicians to improving patient management practices
- implementing a prevention strategy to reduce demand pressures – HARP.

In the first year (2001–02) of the HDM Strategy, there was marked improvement in key indicators used to monitor health system pressure. Occasions of ambulance bypass at HDM hospitals decreased by 56% on the previous year while the percentage of people admitted to wards within target waiting times increased from 74–80%. The Victorian Government is building on these successes by extending the period of the HDM Strategy by two years to June 2007. In addition, the scope of the HDM Strategy has been broadened to encompass elective demand pressures¹.

1.1 The Hospital Admission Risk Program

HARP is a major component of the HDM Strategy. It was established in November 2001 with the aim of implementing a prevention strategy to reduce the demand pressures on hospitals, by averting the avoidable use of EDs and inpatient services.

HARP will target prevention initiatives that are the most likely to be effective and deliver tangible and demonstrable outcomes. These initiatives will focus on people who have a manifest health need, often where their disease is chronic or complex. Priority will be given to high volume conditions and/or frequent users of the acute public hospital system.

Although HARP is targeting demand pressures on acute public hospitals it spans the continuum of care. The emphasis is on better supporting and proactively managing people in their homes and within the community rather than reactively responding to acute exacerbations of their conditions. By strengthening the continuum of care through a more integrated and cooperative service system, with clearer pathways and enhanced models of care that are patient-centred, it is expected that patients will be more effectively cared for. This will occur through:

- supporting people's independence and capacity to live within the community
- clearer clinical pathways delivering better continuity of care
- increasing capacity within the health system to respond to the health needs of people
- creating greater cohesion between the public hospitals and the primary care and sub-acute sectors
- developing responsiveness in services and proactive management of health needs.

As an outcome of more effective management of patients across the continuum of care, the preventive initiatives implemented are expected to reduce the rate of growth in the demand for public hospital services for targeted conditions and groups of people.

Figure 1 provides an outline of HARP.

¹ Further information on the HDM Strategy can be found at <http://www.health.vic.gov.au/hdms/>

1.2 HARP Reference Group

The Department established a HARP Reference Group to bring together a range of key stakeholders with an interest and expertise in hospital use and prevention to provide advice on:

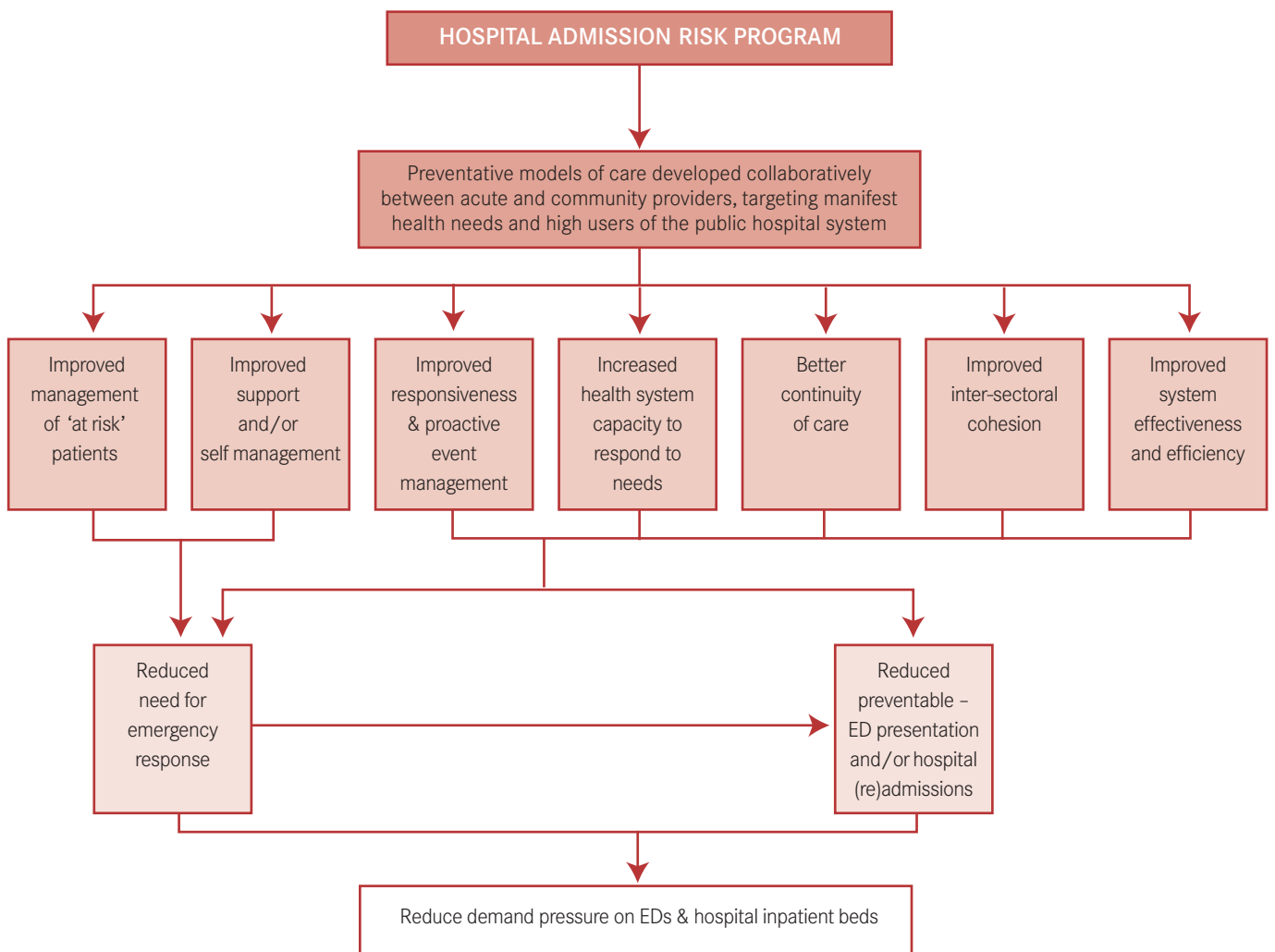
- target population groups or conditions with most potential for preventing hospitalisations
- models of care that have demonstrated efficacy
- trends in morbidity and care options
- how to evaluate programs funded under HARP
- allocation of HARP funds.

In July 2002, the HARP Reference Group established a series of working parties to undertake detailed work in priority areas that provide opportunities to have a significant impact on the health status of people at risk of hospitalisation. The working parties completed their work in February 2003 and have each produced a report to contribute to the evidence base around prevention initiatives. The release of the reports has been timed to inform the 2003–04 HARP funding round.

The seven working parties are:

- Chronic Obstructive Pulmonary Disease
- Chronic Heart Failure
- Community–Hospital Interface
- GP–Hospital Interface
- Integrated Care for Complex Needs
- Mental Health, and
- Technology.

Figure 1 Outline of HARP



1.3 The Community–Hospital Interface Working Party

The Community–Hospital Working Party was established to consider how to further develop the collaboration between hospitals and community-based services. The objectives of the working party were to:

- Identify existing formal and informal interfaces in Victoria between community-based organisations and hospitals relating to the emergency use of hospital services. In particular, the interfaces between hospitals and community health, district nursing services, local government, and providers of Linkages and Community Aged Care Packages (CACPs) were considered.
- Identify, document and assess preventive programs involving hospitals and community-based services within Victoria and from other jurisdictions. This assessment identified programs and activities that represent good practice within the Victorian context.

1.4 The community–hospital interface

An effective interface between community-based services and hospitals is critical in achieving better health outcomes and reducing the avoidable use of hospitals. However, the evidence base around effective models of care and interventions across the interface is relatively poorly developed.

Community-based care is correlated with achieving better outcomes for a range of ambulatory care sensitive conditions and groups of people who are frequent users of hospital services. In particular, community-based services are likely to be effective in responding to the frail aged, people with psychosocial needs, people with chronic and/or complex conditions² and those from lower socioeconomic groups with their association with poor health status. In addition to providing clinical services, community-based services are well placed to coordinate and provide the necessary social and community supports required by people.

Over recent years, Primary Care Partnerships (PCPs) have been developed in Victoria, bringing together primary care services within a specific community to coordinate services and ensure integrated service planning occurs. Public hospitals are members of the PCPs that operate in their communities. PCPs provide a platform for enhanced coordination of services between hospitals and community-based services.

There are good examples of hospitals and community-based services working well together. There are also gaps, deficiencies of understanding and a lack of cohesion across the interface between hospitals and the community. Within the 2002–03 HARP funding round there was evidence of strong collaborative work being undertaken in some areas between community-based organisations and hospitals.

2 For example, chronic obstructive pulmonary disease, cardiovascular disease, asthma and diabetes.

2. Methodology

The methodology for production of this report included a literature review, a review of successful project submissions, and consultation with HARP projects, peak bodies, Department of Human Services regional officers and members of the Community–Hospital Interface Working Party.

2.1 Literature and project review

Background reports prepared for the HDM Strategy and HARP and successful submissions for the 2001–02 HARP funding round were reviewed. The review considered target conditions and patient characteristics, treatment/care model characteristics, governance and management/coordination characteristics, and payment and performance management characteristics. Published literature on organisational relationships between agencies relevant to the community–hospital interface was reviewed. Factors that affect the success and maintenance of organisational relationships were also considered.

2.2 Consultation

Focus group meetings and key informant interviews were conducted with project groups, peak bodies and other stakeholders with an interest in HARP. The groups were selected to ensure that a broad representative range of projects and issues were covered. A meeting of Department of Human Services regional officers was also convened. The meetings focused on planning processes used, relationships between the agencies, treatment/care model characteristics, governance and management/ coordination arrangements, and payment and performance management arrangements. Meetings were between one to two hours in duration.

Questionnaire development

The key criteria for the focus group questions were identified through the literature review. Four questionnaires were developed to reflect the different levels of involvement of the groups interviewed. The questionnaires were for:

- health services involved in developing and implementing HARP projects
- peak bodies whose members have a role in working across the acute primary care interface
- PCPs
- Department of Human Services officers.

Participants

Health services participating in HARP projects

A sample of eight health services with HARP projects were selected by the Department of Human Services and the Australian Institute for Primary Care to represent a range of project types and project arrangements. These health services were Ballarat Health Services, Bayside Health, Sisters of Charity, Southern Health, Western Health, Eastern Health, Melbourne Health and Northern Health.

Group meetings were held with representatives from a range of agencies participating in six of these projects. Key informant interviews were conducted with representatives from acute and community health services participating in the remaining two projects.

Key peak bodies

Meetings were held with key peak bodies representing member organisations that work across the primary acute care interface. Peak bodies consulted were: the Victorian Healthcare Association Divisions 1 & 2, Community Health Victoria and the Victorian Community Health Association, the Victorian Association of Health and Extended Care, and the Municipal Association Victoria.

Other key stakeholders

Meetings were held with other key stakeholders including the Royal District Nursing Service (RDNS), PCP managers and chairs, and Network and Department of Human Services officers, including regional officers.

2.3 Data analysis

Information from meetings was tabulated and referenced back to criteria generated from the literature review. Preliminary findings were summarised against the criteria, emerging issues were identified and examples of good solutions to address them were considered.

The Victorian Admitted Episodes Dataset (VAED) for 2001-02 was used to consider ambulatory care sensitive conditions. The analysis made use of the Department of Human Services, Public Health Branches Ambulatory Care Sensitive Conditions (ACSCs) Study and presents the data for the 19 hospitals participating in HARP on the basis of separations for ACSCs by statistical local area.

2.4 Workshop

Community-based organisations, including PCPs, GP divisions, local government, aged care and community health services, were invited to a half-day seminar to address the interface between community-based and acute agencies in addressing hospital admission risk. The findings of the project were presented and implications drawn from participants. There was an opportunity for the participants to discuss the findings and to consider implications for their own agencies and context.

2.5 Draft report

The findings from the literature review, the interviews with key informants, the analysis of the secondary data and the workshop were written up in a draft report. The report was presented to the working party for discussion and comment. The draft report was revised to take account of the working party's comments.

3. The existing community–hospital interface in Victoria

This section addresses the context of the community–hospital interface in Victoria—the key services and issues involved and the changing context of care.

The Victorian community–hospital interface is unique because of the large number of autonomous agencies providing services for relatively constrained catchments. As a result, there are significant discrepancies in scale, size and capacity between different agencies, particularly between large metropolitan health services and small community-based agencies.

In most cases, one metropolitan health service will have 20 or 30 community-based health services (not including general practices) in the population catchment from which most of its patients are drawn. Typically, this includes four or five community health services, a similar number of local government Home and Community care (HACC) providers, several sub-regional alcohol and drug agencies, a number of non-government HACC and residential aged care providers, several sub-regional psychiatric disability support agencies and several divisions of general practice. They are also likely to have contact with several hundred general practitioners (GPs).

Even a cursory consideration of the interface between community and hospital services immediately throws up a number of conceptual ambiguities. Many services that were once provided in hospitals are now provided at home or in centres where overnight admission is not required. Many services for people with continuing needs (such as mental illness, disabilities), which were previously provided in congregate care institutions, are also now provided at home and in the community. As a result, the interface between hospital and community-based services has become more complex. To understand this complexity it is worth distinguishing between the **setting** in which services are provided, the **service focus and complexity**, and the **organisation** of services.

3.1 Setting

Services may be provided in home, community, hospital and residential settings. Acute and sub-acute services are largely provided in hospitals and often involve admission and overnight stay. Primary and continuing care services (apart from those provided in residential care settings) are usually provided in community settings, such as general practice surgeries and community health services or at home.

Over time, there has been a significant transfer of acute, sub-acute and residential care services to home and community settings. Congregate care services have been substantially abolished for people with mental illness and disability. ‘Ageing in place’ policies have seen a heavy emphasis on providing more intensive continuing care services at home and in the community. Innovation and demand pressures have seen acute services increasingly provided on a same day basis which does not involve an overnight stay. As well, a range of acute services are now provided at home.

Where once there was a clear relationship between setting and service focus and complexity, this is no longer the case. Hospital services are now increasingly provided at home, as are continuing care services. These changes have been driven by innovation, the introduction of new care and information technologies, and changes in social organisation which have seen the emergence of social rights for people with chronic illness, mental illness and disabilities. The trend to community-based care has also been promoted by pressure to reduce the costs of more expensive acute, sub-acute and continuing care services.

As a result, community-based service delivery has become more important and the functional organisation of services has crossed setting boundaries. Organisational distinctions are now much more based on a care continuum across primary, acute, sub-acute and continuing care rather than physical location.

3.2 Service focus and complexity

Acute services are usually focused on more complex and intensive interventions for conditions and episodes that may result in death or significant impairment and disability if left untreated. Typically, acute and sub-acute interventions involve a range of highly specialised and technical service types for a relatively brief, highly organised and intense episode of care. Consumers are usually very dependent during this phase of their treatment and often require high levels of personal care. Acute and sub-acute care are usually provided in hospital settings, but increasingly in the community as well.

Community-based services are more focused on prevention, early intervention, assessment and referral and treatment for consumers with less acute conditions. They also provide ongoing support for people with chronic and ongoing conditions during the time that they do not require complex and intensive treatment.

Primary and continuing care interventions often involve only one service type (for example, general practice or dental) and, unlike acute interventions, the consumer is usually a 'co-producer' in the intervention. When more than one service is involved or care is ongoing, the coordination, service intensity and organisation required is usually less than that required for acute episodes.

3.3 Organisation

Traditionally, the organisation of primary, acute, sub-acute and continuing services was often distinct and setting-based. Acute and sub-acute services were organised and provided in hospital settings. Similarly, residential care facilities provided continuing care through relatively large scale congregate care institutions.

Primary care services were available through a diverse range of small service specific organisations, including private, non-government and local government agencies, medical, allied health, nursing and home and community care agencies.

New forms of service organisation have emerged as more complex interventions and continuing care are more often provided in community settings. There is now considerable interest in organisational integration across primary and community services (horizontal integration) and across community and hospital services (vertical integration).

Models of horizontal and vertical integration are intended to reduce transaction costs and improve the efficiency and effectiveness of service delivery for consumers. They arise as the organisational solution for the newly emerged problems of implementing care models that span both community and hospital settings and primary, acute, sub-acute and continuing care. They arrange organisational structures and processes to address the following key functions:

- governance and accountability
- service planning and design
- resource management
- performance management
- communication and information management.

Within Victoria, criticism of current organisational arrangements focus on the lack of an organised interface between community and hospital providers. The majority of primary and community care organisations are autonomous from government, one another and from hospitals. Many are formally established as incorporated associations with their own governance bodies. They receive funding from a variety of Commonwealth and State programs and they vary considerably in their size, complexity and capacity. Some are large, sophisticated multi-site agencies providing a range of services for a defined catchment. Others are very small, single purpose services with comparatively little service delivery capacity.

Such a high level of diversity may be acceptable for the delivery of relatively straightforward and uncomplicated primary care services, but it is problematic for more intensive, complex and ongoing acute, sub-acute and continuing care services delivered in community settings. As acute, sub-acute and continuing care providers have sought to incorporate primary and community care providers in the delivery of more complex services in community settings, they have been faced with high transaction costs in the development and implementation of new care models. Equally, primary care providers find it difficult to respond to these pressures in the absence of additional resources.

3.4 Community-based services

Primary health and community care is the first point of contact with the health system. Primary care services are provided in the community and at home. They include general medical, pharmaceutical, pathology, diagnostic imaging services and Aboriginal health services funded by the Commonwealth. The Commonwealth and the states and territories jointly fund community nursing and HACC services.

The states and territories fund non-medical services including community mental health, youth health, drug and alcohol counselling and allied health services, such as podiatry, physiotherapy, occupational therapy, nutrition and social work. There is an emphasis on continuing relationships between service providers and consumers over extended periods of time.

Primary health and community care emphasise a social model of health and a comprehensive and holistic approach to prevention, treatment and support. This includes an emphasis on early detection and illness prevention services such as maternal and child health programs and population health programs including health promotion.

Primary health and community care is the most visible and commonly used part of the health sector. About 90% of Australians access services in any one year. Primary health care, and especially general practice, are an important gateway to the secondary and tertiary sectors of the health system.

The major community agencies that have an interface with hospitals relevant to the HARP program are the RDNS, community health, HACC, ambulance and general practice services.

The Royal District Nursing Service

The RDNS is the largest and oldest provider of home nursing and health care services in Australia. RDNS is a not-for-profit organisation, delivering 24-hour a day nursing care. It provides home and community-based nursing, allied health and personal care located in over 20 centres in and around the Melbourne metropolitan area. The RDNS has well established relationships with hospitals. It is heavily involved in the provision of nursing services to patients post-discharge. The RDNS has liaison officers in major Melbourne hospitals.

Community health services

There are 100 community health services operating from more than 250 sites across Victoria. Services are provided through both integrated and independent organisations. Community health services provide medical, dental, allied health, nursing, counselling, health promotion, mental health, alcohol and drug, disability and aged care services to local catchments. The relationship between hospitals and community health centres varies. Integrated community health centres have strong organisational relationships with hospital services. The relationship between independent community health centres and hospitals is less well developed.

Home and community care services

HACC services are funded through the HACC program and the Aged Care Assessment Program (ACAP) in Victoria. Funds in the HACC program of more than \$300 million a year are distributed to more than 500 non-government organisations that deliver a range of home care services to the public. Local government is the most significant provider of these services. The HACC program provides funding

for community services for frail older people and younger people with disabilities and their carers. Apart from nursing and allied health services, HACC also funds assessment and case management, respite, delivered meals, property maintenance, home maintenance, planned activity groups and volunteer coordination. However, HACC does not fund increased growth for services associated with rehabilitation, specific disability services, services for families in crisis and palliative care services.

Intensive community-based aged care services are also provided through Community Aged Care Packages (CACPs). There are well developed relationships between hospitals and continuing care services through aged care assessment services. However, these relationships are generally focused on access to residential care and CACPs. Relationships between general HACC providers (such as local government) and hospitals are less well developed.

General practice and pharmacy services

General practice and pharmacy services are funded through the Commonwealth Medical Benefits Schedule and the Pharmaceutical Benefits Schedule (PBS) respectively. Medicare and PBS funding is uncapped and universally available to members of the community, with some limited exceptions. Services are generally provided through relatively small-scale private practice, although there has been a recent trend towards corporatisation with vertical integration of hospital, pathology and diagnostic services. This sector is the subject of a separate report, although it should be noted that this is a somewhat artificial distinction. Primary medical care is a central component of community care and support.

Hospital services

Total funding for hospitals and mental health for 2001–02 was \$5 billion. Metropolitan hospital services are provided by 12 metropolitan health services. [Each of these services has multiple sites and includes acute, sub-acute and aged care facilities (for example, Northern Health includes Northern Hospital, Broadmeadows Health Service and Bundoora Extended Care). Two of these services—Southern Health and Peninsula Health—also incorporate community-based services such as community health centres and drug and alcohol services. Most metropolitan health services provide some of their inpatient care in community settings through Hospital in the Home programs, as well as providing time limited home help services for consumers post-discharge through post-acute care services.

Each of the metropolitan health services has a consumer and carer advisory committee and a primary care and population health advisory committee reporting to its board. Both of these committees are designed to increase the service focus on community needs and population health approaches.

There are approximately 72 acute care services in rural and regional Victoria ranging from large regional hospitals through to small bush nursing hospitals.

Post acute care services

There are 18 post acute care (PAC) services in Victoria. PAC services operate under a consortia agreement of key health care agencies in a designated catchment area. Catchments are based on the geographic location of the hospital patient, not on health service catchments. The composition of consortia can vary, but generally includes health services, local government agencies, community health centres and district nursing services. Funding for PAC services in 2002–03 was approximately \$18 million.

A key objective of PAC services is to provide additional home-based services to help people recuperate after hospitalisation. The program operates on a brokerage model with the main types of services purchased being personal care, home care, nursing and allied health services. PAC provides hospitals with a rapid response access to community care. It supports hospitals to manage demand by facilitating timely and appropriate discharge from both acute and sub-acute hospitals; preventing hospital readmissions; and preventing hospital admissions from ED presentations. The key relationships of PAC services are with referring public hospitals and community service providers.

Mental health services

Mental health services are provided on an area basis with clinical services mainstreamed with general hospitals. There are 21 adult mental health services in Victoria which assess and treat adults with serious mental illness, 17 aged persons' mental health services and 13 child and adolescent mental health services.

All area mental health services have access to a range of inpatient, community residential and ambulatory services as well as specialist and statewide services.

Primary Care Partnerships

PCPs bring together primary, acute and continuing care agencies for planning and service development activities for defined catchment populations. Key agencies are community health services, local government, nursing services, GP Divisions and acute and sub-acute health providers. PCPs are a point of communication and consultation between agencies and with government. However, they do not have a formal role in resource allocation, individual agency service planning and design, performance management or the governance and accountability of individual agencies and the services they provide. Their principal focus has been on horizontal integration of primary and community care providers to develop service coordination and health promotion strategies.

Divisions of general practice

Divisions of general practice, which are often participants in PCPs, fulfill a similar role to PCPs, but from a GP perspective. There are 122 divisions across Australia with 30 in Victoria and 15 in metropolitan Melbourne. Divisions bring together GPs within a defined catchment to plan and coordinate a range of service improvement

activities. These activities include developing common approaches to local health issues, participation in population health approaches and strengthening the capacity of GPs to collaborate with other primary care providers to better coordinate the care of consumers with chronic and complex needs.

3.5 The changing context of care

It is arguable that the principal factor driving interest in the integration of primary care, acute and continuing care is that demand for inpatient hospital services, particularly emergency services, is increasing beyond the funding capacity of state and territory governments. Most of this growth in demand for hospitals is due to a rise in the number of medical, rather than surgical, separations. For example, in Victoria, patients aged 70 and over make up about 40% of this growth. Over the last five years, there has been a 34% increase in emergency medical separations for patients aged 85 and over (Department of Human Services, Victoria 2002).

In the past two decades, state and territory governments have sought to manage demand within available resources by improving the technical efficiency of hospital services. However, there are limits to efficiency gains within hospital settings.

There is strong evidence that a proportion of hospitalisations can be prevented through population-based interventions (for example, smoking, nutrition, alcohol, physical activity and injuries). However, with the exception of injury prevention, these reductions in demand are often discounted because population-based interventions to prevent chronic diseases have long lead times, often decades, before results are evident.

A further proportion of hospitalisations can be prevented by early intervention in the primary care system (for example, screening and early detection, chronic disease management). Interventions to reduce these ambulatory sensitive hospitalisations have much shorter lead times to produce meaningful results than population-based interventions for chronic diseases. In many cases, improved primary care interventions have the potential to produce measurable reductions in hospital use within 12 months.

Growing pressures for demand management and reorientation throw up a number of challenges for government. The Commonwealth and the states are under fiscal pressure to contain growth in health service expenditure, particularly for technologically intensive hospital and pharmaceutical services. Greater integration of policy and funding objectives for acute, residential, sub-acute services and primary health and community care across different levels of government will, therefore, be required if effective demand management strategies are to be successfully introduced.

New systems of care and coordination across acute, continuing and primary care will be needed as the complexity and intensity of the services and support provided at home and in the community increases. Innovations, such as hospital in the home, post acute care, coordinated care trials, enhanced primary care items and brokerage

funding for aged care and disability services, have been designed to address these trends. The organisation of services and care processes across community and hospital settings and the care continuum will be critical.

The following section briefly outlines the key elements of care models that are to be in place across settings and the care continuum to reduce unnecessary hospital admissions.

3.6 Care models

The involvement of community-based, primary care professionals and agencies in more complex and intensive acute, sub-acute and continuing care services has required the development of new models of care. These are summarised in the *Hospital Admission Risk Program Background Paper* (Department of Human Services, 2002). The background paper reviews:

- coordinated care trials
- chronic disease management
- hospital in the home support trials
- specific programs for chronic obstructive pulmonary disease, congestive heart failure, diabetes, asthma and mental illness
- self-management education
- quality use of medicines
- falls prevention.

These models of care are intended to coordinate the relationship between different providers across different settings to design and implement effective, responsive and efficient integrated care for consumers with complex and ongoing needs. To a greater or lesser extent, care models address the following care functions:

- assessment and initial identification of consumer needs
- referral and communication between service providers and agencies
- care planning and service coordination
- individualised service delivery
- monitoring of consumer outcomes and experiences
- self management.

A variety of protocols, procedures, guidelines and frameworks have been developed to address these elements of care planning and coordination for different conditions. These strategies are intended to optimise the use of available community, hospital and residential care resources while ensuring the best possible outcomes for consumers by:

- preventing conditions and circumstances that might lead to the unnecessary use of more intensive and expensive acute care services
- Diverting people with primary and continuing care needs from hospital to community-based services
- substituting home-based acute care for hospital-based acute care.

Consideration of integrated care models is the focus of another report for the HARP Reference Group. However, it is important to note that there is very substantial literature which demonstrates that better care coordination can lead to reductions in unnecessary use of more costly acute, sub-acute and residential care services.

Organisational arrangements, such as governance, resource allocation, performance monitoring, communication and referral, are all important in ensuring effective care models are put in place. The following section reviews the literature on organisational relationships and processes relevant to the community–hospital interface.

4. Messages from literature and evidence

Internationally there is increasing recognition of the importance of the primary care system for improving health outcomes and managing costs. Stronger primary health systems are associated with better health outcomes and lower costs, particularly for children (Starfield and Shi, 2002).

There is good evidence that a proportion of hospitalisations can be prevented through population-based interventions (such as smoking, nutrition, alcohol, physical activity and injuries). However, with the exception of injury prevention, these reductions in demand are often discounted because population-based interventions to prevent chronic diseases have long lead times, often decades, before results are evident.

A further proportion of hospitalisations can be prevented by early intervention in the primary care system (for example, screening and early detection, chronic disease management). Interventions to reduce these ambulatory sensitive hospitalisations have much shorter lead times to produce meaningful results than population-based interventions for chronic diseases.

In many cases, improved primary care interventions have the potential to produce measurable reductions in hospital use within 12 months. In a large scale study in New Zealand, Jackson and Tobias (2001) estimate that approximately one third of hospitalisations for people aged 0-74 was potentially avoidable. Of these, approximately two thirds were potentially avoidable through more effective primary health care services.

4.1 Priority conditions

Research undertaken by the Public Health Branch of the Department into ambulatory care sensitive conditions (ACSCs) indicates that there may be significant opportunities to reduce preventable hospital admissions through targeted interventions.

Ambulatory care involves providing treatment and care for patients in community settings rather than admitting people to acute hospitals for treatment. Generally, ambulatory services rely on patients being more active in managing their conditions. ACSCs are those conditions for which hospitalisation is thought to be avoidable with the application of preventative care and early disease management, usually delivered in the ambulatory setting.

Intervention recommendations for reducing hospital utilisation for ACSCs largely centre on earlier detection and earlier and more coordinated intervention in the primary care system. A range of specific care models have been developed to address ACSCs which involve acute, sub-acute, continuing and primary care services and self-help. The evidence suggests that these intervention strategies have the capacity to reduce unnecessary utilisation of hospitals (Department of Human Services 2001b; Walker, Swerissen & Belfrage, in press). The research undertaken by the Public Health Branch is available at www.dhs.vic.gov.au/phd/acsc/index.htm.

The ACSCs data relating to the 19 hospitals currently participating in HARP is presented in table 1. The data is from the VAED 2001-02 and uses the same classification of ACSCs as the Public Health Branch study.

When considering the data, it should be noted that the classification system for diabetes complications captures all separations where diabetes complications are recorded in the first 12 ICD codes applying to that separation. This contrasts to the approach that has been used for the other ACSCs, where the principal ICD coding has been used to classify the condition.

Tables presenting the ACSC data for each of the hospitals participating in HARP are included at appendix 1. The tables show separations by statistical local areas to broadly indicate the suburbs patients live in. This information will assist community-hospital partnerships in determining priority conditions to target. Historically, HARP has targeted congestive heart failure, chronic obstructive pulmonary disease, diabetes and asthma.

Table 1: Ambulatory care sensitive conditions for the 19 hospitals participating in the Hospital Demand Management program

| Category | Separations | | | | Bed days | | | ALOS |
|---------------------------------|---------------|---------------|---------------|------------------------|----------------|----------------|---------------------|-------------|
| | MD | SD | TOTAL | % of total separations | MD | Total | % of total bed days | |
| Diabetes complications | 17675 | 8419 | 26094 | 32.6% | 165460 | 173879 | 44.8% | 6.66 |
| COPD | 6209 | 1038 | 7247 | 9.0% | 46002 | 47040 | 12.1% | 6.49 |
| Congestive heart failure | 5281 | 1037 | 6318 | 7.9% | 39910 | 40947 | 10.5% | 6.48 |
| Pyelonephritis | 3824 | 1567 | 5391 | 6.7% | 21456 | 23023 | 5.9% | 4.27 |
| Cellulitis | 3297 | 458 | 3755 | 4.7% | 18858 | 19316 | 5.0% | 5.14 |
| Angina | 5081 | 2381 | 7462 | 9.3% | 15254 | 17635 | 4.5% | 2.36 |
| Convulsions and epilepsy | 3626 | 2015 | 5641 | 7.0% | 13221 | 15236 | 3.9% | 2.70 |
| Asthma | 4852 | 1508 | 6360 | 7.9% | 12900 | 14408 | 3.7% | 2.27 |
| Influenza and pneumonia | 1225 | 128 | 1353 | 1.7% | 13465 | 13593 | 3.5% | 10.05 |
| Dehydration and gastroenteritis | 2095 | 2241 | 4336 | 5.4% | 9717 | 11958 | 3.1% | 2.76 |
| Ear, nose and throat infections | 2040 | 1430 | 3470 | 4.3% | 4139 | 5569 | 1.4% | 1.60 |
| Iron deficiency anaemia | 655 | 1491 | 2146 | 2.7% | 2958 | 4449 | 1.1% | 2.07 |
| Hypertension | 350 | 200 | 550 | 0.7% | 1222 | 1422 | 0.4% | 2.59 |
| TOTAL | 56,210 | 23,913 | 80,123 | 100% | 364,562 | 388,475 | 100% | 4.85 |

Better interventions in the primary care system for frequent users of EDs who have complex social and personal issues associated with their health needs also provide an opportunity to reduce hospital use. There is less agreement about the definition of this group or the number of people involved. They do not easily fit into the usual disease based classifications for ACSCs. Nevertheless, the available evidence suggests that people with complex needs represent a small but significant group where improvements in primary care and community support have the capacity to reduce demand on acute services (Department of Human Services, 2002).

More broadly, interventions to better address the needs of people with complex health and social support requirements through better coordination and service integration have been extensively documented. These include services for people with mental illness (team based model of mental health that integrates acute and primary care services). Effort has also focused on post acute care programs and on aged care assessment services that coordinate the relationship between primary care, community support, residential care and acute services. There is considerable evidence that more integrated assessment, care planning, coordination and service provision across the care continuum can reduce the use of unnecessary acute and residential care services without reducing the quality of outcomes (Davis, 1992; Australian Department of Health, Housing and Community Services, 1992).

4.2 Organising the community-hospital interface

The literature suggests that neither large centralised bureaucratic organisations nor fragmented, competitive, markets of autonomous agencies driven by purchasing arrangements are likely to solve the emerging issues for the hospital-community interface.

Instead, there is considerable interest in the development of network models and partnership organisations for health and community care for people with more complex needs. These reforms have generally emphasised planning, funding and regulatory mechanisms, including brokered management of services for an enrolled population, capitation payments and pooled funding across primary, acute and continuing care, the development of coordinated service pathways and the consolidation of responsibility for costs and outcomes (Swerissen 2002).

In the United Kingdom, for example, primary care trusts (PCTs) have been established. These are free-standing, legally-established, statutory National Health Service bodies that are accountable to their health authority. PCTs are responsible for providing a full range of services to populations of about 200,000 people. They have responsibility for the management, development and integration of all primary care services including medical, dental, pharmaceutical and optical services. Responsibility for the provision of services is being devolved to GPs, nurses and other health professionals working in PCTs. By 2004, PCTs will have responsibility for at least 75% of the National Health Service budget, including the commissioning of hospital services.

Managed care organisations have evolved in the United States to address many of the same issues. Consumers enroll in a managed care organisation, usually through insurance cover provided by employers. Managed care organisations contract with health care providers to provide care for the enrolled population. Consumers receive integrated health services across primary, acute, sub-acute and continuing care. Governance, information and communication, care pathways and performance management are managed through contractual arrangements and payment systems.

PCTs and managed care organisations are examples of highly integrated solutions that bring together governance and accountability, service system design, resource allocation, performance management and communication and information strategies for defined populations. However, it is unlikely that this level of integration will occur in Australia in the immediate future, given Australia's unique jurisdictional responsibilities and professional resistance to these trends.

Instead, there are a range of more loosely coupled organisational strategies that need to be considered. Walker (2000) has reviewed the literature on these approaches. She classifies organisational relationships along the continuum from the law to high integration as follows:

- referral networks
- relational contracting
- joint planning
- joint service provision
- collaborative alliances

As organisational relationships between agencies become more integrated on this continuum more of the organisational functions outlined above are shared between the parties. However, the models of collaboration she reviews do not involve the creation of single organisational entities. Agencies remain autonomous. They are held together by mutual interest in service and program provision and they depend critically on trust between the parties for their success. In Victoria, PCPs and divisions of general practice are examples of this approach.

4.3 Success factors

The literature on the development of horizontally and vertically integrated relationships for the development of health services and programs suggests that the development of voluntary relationships between health agencies presents a set of unique challenges. Unfortunately, as Mitchell and Shortell (2000) note, many of these collaborations have failed to demonstrate successful outcomes. These authors have developed a useful typology for analysing the factors that affect the success of less formalised partnerships. These include:

- The complexity of the problems and issues addressed (breadth and scope including health conditions, number of priority groups and level of disadvantage; mission and goals, including goals of change and partnership formation and timeframe for goals).
- The complexity of the composition of the partnership (size including the number of organisations, number of LGAs, number of individuals; heterogeneity including different types of organisations and funding arrangements).
- Program complexity (services provided including number of different programs and services; resource/funding mix including funding sources, types and stability).
- Community centrality (importance of the partnership in the community including key stakeholders, media, coverage of key organisations and primary care programs).
- Alignment (external including match between problems addressed and partnership composition and partnership composition and community priorities; internal including the match between the program complexity and the governance model).

The literature predicts that the effectiveness of partnerships will vary according to the context in which they develop, the purposes for which they are established, the complexity of scope and functions, the stability of the resource base, the forms of management and governance, and the accountability arrangements that are put in place.

In general, the literature is clear that joint ownership and understanding of the problems to be addressed by a committed group of stakeholders with a shared interest in improving existing relationships, services and programs is critical to success. Critical success factors are outlined in the following box.

Critical success factors for integrated relationships

- Leadership by key stakeholders through a core governance group.
- Shared vision and clear definition of the problems and issues to be addressed.
- Commitment to shared risks and benefits.
- Transparent processes.
- Development of collaboration and partnership skills and capacity.
- Provision of appropriate technical support.
- Adoption of a developmental perspective to relationship and capacity building.
- Focus on communication, resource allocation, recognition, incentives and accountability on outcomes.

(Mitchell & Shortell 2000; Mays, Halverson & Kaluzny 1998; Roussos & Fawcett 2000; Zukoski & Shortell 2001; Goodwin & Shaprio 2001).

Other important factors include the development of skills and capacities for collaboration and partnership formation (Foster-Fishman et al., 2000); the identification and use of people who are able to facilitate relationships between the potential partners (Mays, Halverson & Kaluzny, 1998); the provision of appropriate technical support during the various phases of planning, implementation and monitoring; the management of conflict and changing agendas (Zukoski & Shortell, 2001); and the importance of tying communication, resource allocation, recognition, incentives and accountability to outcomes (Roussos & Fawcett, 2000).

A strong theme that comes through the literature on voluntary partnership formation for horizontal and vertical service integration is the developmental nature of the process. Most analyses indicate that the establishment of trust, commitment and shared interests is a critical early stage of partnership formation (e.g. Walker 2000, Weiner, Alexander & Zuckerman 2000). Subsequently, partnerships move to a stage of agreement and implementation. At that point the actual implementation of the agreed service delivery model and the achievement of measurable and meaningful progress towards the shared objectives are important.

Once early implementation issues have been addressed, the institutionalisation of processes and practices becomes critical for long term sustainability, particularly if initial funding for the establishment phase is no longer available. Often partnerships fail at this point because these issues were not addressed in initial planning and implementation, a phenomenon that Goodman, Steckler, Hoover and Schwartz (1992) refer to as ‘front loading’.

A useful framework for thinking about project development amongst a set of voluntary partners has been developed by Gray (1989). This approach sets out the developmental process in three phases: problem setting, direction setting and implementation (see also Walker 2000; Walker & Adams, 1998). The table below outlines the tasks to be completed at each phase in the schema.

Table 2 The developmental process

| Phase 1: Problem setting | Phase 2: Direction setting | Phase 3: Implementation |
|--|---|---|
| <ul style="list-style-type: none"> • Identify stakeholders • Develop a commitment to collaborate • Develop a shared definition of the problem • Establish stakeholder legitimacy • Establish the role of convenor • Identify resources | <ul style="list-style-type: none"> • Establish the ground rules • Set an agenda • Establish organisational structures and processes • Engage in joint information search • Explore options • Agree on direction and decision making | <ul style="list-style-type: none"> • Build relationship with constituencies • Recruit external support • Consolidate appropriate structures • Monitor the agreement and ensure compliance |

In summary, efforts to improve integration of primary, acute and continuing care in industrialised nations have focused on planning, regulatory and funding mechanisms including brokered management of a basket of health (and sometimes community) services for enrolled populations; capitation payments and pooled funding across primary, acute and continuing care; the development of coordinated service pathways; and the consolidation of responsibility for costs and outcomes for an enrolled population with a system manager or broker. Market-based competition or funder (government) driven benchmarking and performance management are then used to drive innovation and best practice through the broker or local system manager. This trend is exemplified by the development of managed care organisations in the US and primary care trusts in the UK (Mays et al 2001).

In the short term, comprehensive systems reform of this type in Australia is unlikely. Instead, more loosely coupled collaborations and partnerships across community and hospital services will need to be explored to enable effective care management models to be implemented across the primary, acute, sub-acute and continuing care continuum.

The evidence reviewed here suggests that these organisational arrangements require a strong leadership, a joint commitment to the definition of problems, the planning to address them and implementation. They depend on trust and the ongoing achievement of mutually valued outcomes. In this process, attention needs to be given to establishing partnerships and collaborations; developing organisational functions (governance and accountability, resource allocation, performance management and information and communication) to support the care models; and the process of implementing and institutionalising change.

5. HARP project characteristics

This section reviews the characteristics of HARP projects funded in the previous round.

Projects focused on consumers with a range of conditions. People with chronic diseases such as chronic obstructive pulmonary disease, asthma, diabetes and heart disease were the most common target groups. Other patient groups included older people at high risk of admission, frequent users of EDs, consumers presenting as emergency presentations but not requiring admission and people with a mental illness (including those who had attempted suicide and those with alcohol and drug issues).

Care management models varied considerably. Some focused on diverting the target group to appropriate home and community-based services prior to presentation at the ED using strategies such as telephone triage and rapid response teams. Others concentrated on diversion at the ED using triage and rapid community coordination and response services. There were also a number of projects that identified patients who had been relatively frequent ED users and offered this group prevention programs, coordination and additional community-based services.

Care management models across projects had a number of elements including the development of protocols, telephone triage referral and advice, emergency department triage, assessment, coordination, liaison, conferencing and care planning, provision of additional community-based services and monitoring and risk management. Service activities included patient held records, self-help programs, professional education and support, rapid community response and specialist outreach teams, community centre-based prevention programs, step down supported accommodation and intensive home-based services.

Some organisational models focused on systemic change of the interface between the hospital and community-based services. These focused on comprehensive governance and project management arrangements that included a range of community providers and hospital managers. Other projects had a more limited focus on the specific target group and intervention strategies being implemented. In some cases this involved only a single community provider working with the hospital and, in a limited number of cases, the community provider had little formal linkage with the relevant hospital. In some projects hospitals had a number of HARP projects with different governance and organisational arrangements.

The majority of projects were hospital led; some had joint leadership and management arrangements with community-based organizations; and a minority were led by community providers. Organisational arrangements between providers were generally formalised through a memorandum of understanding or a statement of intent. Projects usually had a steering committee to manage implementation and sometimes included a reference or advisory committee for advice.

A range of strategies to facilitate consumer involvement were adopted. A number of projects included consumers on the steering or advisory committee. Others sought input from consumers through surveys, forums and focus groups. In some projects consumer charters were developed. Consumers were also involved through the

development of consumer complaint procedures and the provision of consumer and community information.

Resource allocation strategies for projects generally proposed shared funds allocation for staff positions across participating agencies, in line with the project coordination and service delivery model. This included staff allocation for assessment and coordination tasks and for the provision of additional services. Some projects allocated brokerage funds for flexible purchase of additional community services.

6. Consultations – the experience of HARP

This section is based on consultations with projects, peak bodies and key stakeholders. The factors that influenced success and partners to the development and implementation of HARP projects are summarised at the end of the section.

6.1 How the projects were developed

An enormous amount of time and effort was put into the development of partnerships for the 2001–02 HARP funding round by both acute and primary health care services. This work resulted in varying degrees of collaboration in project development and participants report mixed experiences of the process. Generally, the willingness of acute services to engage with primary health care providers had the greatest influence over the development of effective collaborations. Some projects had open processes and broad consultation, for others primary care providers reported having to work hard to get involved.

Time frame

The short time frame was identified by all stakeholders as a key factor limiting project and partnership development. The time available meant that acute services that had good existing relationships with primary health care providers and mechanisms to oversee collaboration were better able to mobilise to develop HARP projects. These groups appeared to experience less conflict and less anxiety about the hospital leading the project.

The short time frame also meant that only large organisations that could mobilise resources quickly could lead project development and much of the real thinking about how different agencies would work together was not worked through.

Prior history

Prior history of collaboration between the acute and primary care sectors was a critical element in enabling their collaboration for HARP. A good prior history meant that there was existing trust and often less suspicion of the motives of the acute service, especially when the service took the leading role in decision making and proposal writing. It also meant these services were able to use existing structures and committees to oversee proposal development and could build on existing work such as in disease management. Some acute services had reflected on their previous mistakes in engaging with the primary care sector and worked hard to overcome these. In one instance, the acute service acknowledged that it had greater power due to its size, history and the nature of the funding round and established an agreement which made the participants a consortium in which the hospital acted as the banker but not the key decision maker. A second acute service aimed to be open and transparent, particularly about resource allocation. In these projects participants thought that the HARP process had ‘pushed the development of improved relationships’.

For those projects where partnership development was not so successful, some thought that the HARP process had further damaged relationships, while others considered that the relationships were already characterised by lack of trust and consequently had not changed.

Policy framework

The lack of a policy framework to guide the development of collaboration across the hospital-community interface was identified as a critical issue, particularly where relationships were not working well. There was no platform to work out who should take the lead, the basis on which collaboration should occur or the roles of acute and community-based services.

Leadership

Support from chief executive officers, in particular the hospital CEO, was important in establishing and maintaining collaborations.

Clinical leadership

Several projects were the ideas of senior clinical staff or were developed with stakeholders inclusive of clinicians. However, some of these projects indicated that it was too early to tell whether clinician support would continue as the projects were implemented. A number of the projects had not involved senior hospital clinical staff and this was identified as a key area that needed development. One group was in the process of establishing a clinical reference group.

Maintaining collaboration when one partner has greater power and resources

There was a range of different trajectories for partnership initiation:

- acute dominated, primary care had to fight to be involved
- acute led with primary care invited to participate
- collaborative from the beginning with acute and primary care players getting together to work out the process for working together
- primary care led and supported by the hospital.

Following this, there were varying degrees of collaboration:

- primary care providers remained excluded
- primary care providers increased their involvement
- primary care providers were involved until some way through the process and the acute providers took over (for example, in deciding which submissions should be put up, or where the resources should go)
- collaboration continued with input from both parties.

Those groups that reported maintaining good working partnerships throughout the process tended to be those that established good processes for including the perspectives of the various stakeholders from the beginning. This included working together to identify how the different stakeholders would collaborate, rather than the hospital making this decision about how the collaboration would work and then asking primary care agencies to be involved. For example, two similar acute services sought expressions of interest from potential partners, with one service getting good engagement and one service alienating primary care providers. A key difference between the two services was that the former had engaged primary care providers in identifying the process that would be used to develop submissions (including an EOI process).

Community-based service providers that were most disillusioned tended to be those that had worked hard to engage with acute players and were then subsequently excluded from the process, or who were included up to a point and then excluded when decisions were being made about where the resources would go.

Approaches to partnership development

There were a range of approaches to partnership development but they generally included a number of meetings, workshops and forums. Some acute services called for expressions of interest from agencies and individuals. Some primary health care agencies and primary care partnerships took the lead by organising meetings and commissioning research. Existing committees and processes, such as PCP processes and forums, primary care and population health advisory committees and community provider consultative committees were often used. In the Northern Region, the Department of Human Services regional office convened a workshop on HARP at which the four acute services whose catchments took in the Northern Region met with primary care players to develop processes for developing HARP projects.

Role of Primary Care Partnerships

The role of PCPs in facilitating project development varied across projects. Even where PCPs weren't involved in project development there was often an acknowledgment of the importance of their work in facilitating the development of relevant networks and collaborations and in driving cultural change. In some projects the PCP was central to getting the players around the table and PCP processes and forums were used to facilitate project development. Several PCPs commented on their role in ensuring some of the smaller agencies were at the table (and identified that sometimes the larger primary health care agencies were less keen for the PCP to be involved). In one catchment, the PCP commissioned population-based data analysis to inform HARP project development, although this did not necessarily enhance collaboration between primary and acute sectors. One acute service, which had not engaged through a PCP, identified that it would like to do this in the future as it perceived the PCP to be a constructive and neutral vehicle for organising collaboration.

In other projects the hospital negotiated directly with the agencies it considered to be most relevant. Some groups reported tension about the role of PCPs versus the role of other agencies. In one case this was resolved by the PCP operating as the coordinating mechanism with the agencies doing most of the work in developing the submission and implementing the project.

Some acute services used other mechanisms such as primary care and population health advisory committees.

Personalities

Despite having a range of structures in place to enable collaboration, personalities were still considered to be critical in facilitating project development. This was especially the case with the acute HARP project coordinator or equivalent.

Hospital led

Most projects identified that the acute service took the lead in the development of projects primarily because of the limited time and the limited capacity of community-based services to provide the resources required for such intensive effort over a short time. In groups where there was a good existing relationship and/or the process for developing projects had been jointly decided this appeared to cause less conflict than in other groups. In one group, the community-based service providers commented that the key issue for them was that they felt like their comments were incorporated into re-drafts of projects, that is, they were heard.

Vertical integration

Some people, particularly those working within services where primary and acute health care services are vertically integrated, thought that this made it easier to collaborate, as all processes were internal. The downside of this was that players outside the integrated service found it more difficult to work with vertically integrated services because these services only wanted to work with the community-based services in their own organisation. In addition, standalone services identified that in order to develop services for their community members they needed to deal with a number of metropolitan health services and that this would be difficult to do if the organisation was part of a vertically integrated service.

General practice engagement

Engagement with general practice was difficult for many groups because they had to engage with a number of divisions of general and not all existing relationships with divisions were good. Some were able to engage successfully with divisions but were still uncertain that this would result in involvement of GPs. Payment to GPs for participating remains a big issue. Similarly, divisions report having to work on a number of different projects with different agencies (one has been asked to be involved in 16 different projects). The diversity of these projects and the different types of tools, such as assessment tools, used by each add to the complexity for divisions.

The GP–Hospital Interface Working Party specifically considered engagement between general practice and acute hospitals within the framework of HARP. For a more detailed discussion of this area, readers are referred to that report.

Engagement of community support providers

The providers of community support services reported that they generally had poor relationships with acute service providers and no mechanisms to engage in organisation of system change. Consequently, most were left out of HARP project development altogether even though their clients are often the same as those targeted by HARP projects. For them the key issues were around difficulty in establishing communication systems with acute services, a perception that their role and expertise was not valued by hospitals and duplication of the services they provided by hospital initiated services, such as post acute care, with no role delineation.

Cultural difference

There are major cultural differences between the sectors. Issues such as different paradigms for conceptualising health, illness and prevention; different models for provision of care; and lack of understanding of the roles of practitioners in different settings (and the different practitioners in the same setting) all contribute to the difficulty in partnership and project development. Significant effort is required to change the cultures of the different health care organisations for effective collaboration to occur.

Primary care providers were often sceptical about the capacity of acute services to organise preventive programs or to engage with what happened to consumers once they were out of the hospital door.

Resource requirements

All groups reported putting a lot of time into developing HARP submissions. However, those that focused on developing systems approaches thought that this was worthwhile as they had built a good framework for future collaboration that would reduce the time taken for developing similar initiatives in the future.

Agencies with a statewide focus found it difficult to engage, as they could not participate in multiple projects. Small agencies also had difficulty engaging due to limited resources.

Department of Human Services regional office engagement

Some Department of Human Services regional officers reported receiving little information about HARP and having no real role in it. Some regions had a role in facilitating collaboration between agencies but had no role in decision making about funding, despite their local knowledge of the service sector. Neither do Department of Human Services regional office staff have the resources or authority for ongoing support and monitoring of the projects. Some regions participated in identifying

existing projects and encouraging HARP projects to build on these rather than duplicate them.

Summary

A range of different relationships were developed through the HARP project development process. Some groups thought that they had never worked together like this before and the availability of resources for allocation to the primary care sector was an important factor in driving this. Others thought that the partnership was still very unequal with community-based providers perceiving they were consulted, but not at the table when things were 'really nussed out' and that acute services still did not understand what a partnership with community-based services really meant. Establishing effective inter-sectional relationships between acute and community service providers is integral to the development of HARP. While there are good examples of cooperative relationships that work effectively across this interface, this approach is relatively new. All organisations with an interest in HARP will benefit from further work in the area of partnership development.

6.2 Identifying the project/problem setting

Common ground

There is common ground on which to begin problem setting. Firstly, hospitals do not want consumers to be presenting and re-presenting to EDs where admission is avoidable and community-based services want to care for people in the community. Secondly, the establishment of a consumer oriented system is important to all service providers.

In the absence of well established processes for joint planning and problem identification and a policy framework, a set of issues emerged about who gets to determine what the problem is and how the problem is identified.

A lot of the discussion amongst groups interviewed was about partnerships, data and resource allocation. There was not a focus on identifying patient needs and using these as a means of problem identification and problem solving.

Determining the problem

Problem setting was generally acute-led with variable use of hospital and burden of disease data. There was also use of local knowledge. This was considered reasonable by primary care providers when they were involved in producing the local knowledge or when they agreed with the hospital's analysis. However, when there were differences, primary care providers thought that their knowledge (based on their work with communities about the issues contributing to avoidable hospital demand) was overlooked and that they did not have access to appropriate data to enable them to make a clear case for working on those issues. One PCP commissioned some research to assist in identifying the nature and scope of the issues. However, while this data was then used by the relevant acute services, some of the PCP member agencies were excluded from the projects and process.

In some cases there were different ideas between primary and acute care agencies about demand, the drivers of demand, and how to prevent demand.

There were a number of different approaches to problem identification:

- A joint approach where the hospital shared data with primary care agencies and workshops and meetings were held to identify key issues and target groups.
- The hospital identified the key target group/s and then worked with primary care providers to identify the model.
- The hospital identified the target group, developed a model and put it on the table as a starting point.
- The hospital called for expressions of interest either from internal organisations (in the case of Southern Health) or from internal staff members and external organisations. This was followed by a process to determine which submissions would be supported, generally overseen by a senior management group within the acute service or a hospital committee such as the primary care and population health advisory committee. In one case, this process was used to identify the interests of different players and then get those with similar interests to collaborate on the development of one submission.
- The acute service and primary care providers built on existing work.
- One or two acute providers developed the project based on their key interests or used the funding round as an opportunity to submit a previously developed project proposal.
- The project was developed by community health, RDNS or divisions of general practice and supported by an acute service.

Use of data

There was variable use of data in determining what the issue to be addressed was. The types of data used included emergency admissions data, in particular that on 'frequent flyers' and burden of disease data.

Several services indicated that while they have used hospital admissions data in identifying their target groups, they do not have a lot of clarity about what the issues really are. One service was interviewing people using the ED and undertaking case audits to further clarify this and a second service was developing an action research oriented approach to service development to find out more about the target group.

Community health thought they were compromised in participating in developing responses when they didn't have the data to identify what the issues for hospitals were. In the non-acute sector a lot of the systematic data collection is about activity rather than the health conditions of consumers, which does not help in identifying people's needs and issues. Community health needs to have improved capacity for developing an evidence base and data analysis.

There was questioning of the way the data was used to justify projects in the 2001–02 funding round with some primary care providers suggesting that some acute services tended to use the data to support their own project agendas, but that the data analysis and evidence base on which decisions were made was generally not very rigorous.

Process oriented problem solving strategies

A key decision for acute services was whether they were going to submit multiple proposals or focus on one or a few proposals. Those services that submitted multiple proposals tended to have expression of interest type processes in which key internal or external stakeholders put forward ideas based on their assessment of what the problem was. This type of process was more open to creating disappointment amongst stakeholders whose projects weren't selected for further development.

Those hospitals that supported one or a few projects tended to identify what the key issue/target group was (either alone or in collaboration with primary care partners) and focus on developing proposals that addressed systems issues. One group that had done well using this strategy noted that while the hospital CEO had selected the target group, this meant that they could focus on developing the models for care and the processes for working together.

Some of the negative consequences for those having multiple projects funded are that they risk duplication of effort, particularly in systems development and evaluation, high administration and infrastructure costs and the development of a chaotic service system. One group noted that it had multiple projects, each with their own executive sponsor and reference group and each with a different process for referral and communication between the participating agencies.

6.3 Developing the project/designing the model of care

Projects reported building on existing work, using their knowledge of existing models and understanding of the problem, and using the HARP Background Paper to develop their models of care. Some felt that not enough was known about models that work well across the primary acute care interface for model development to be evidence based. Some thought that model development was driven by the need to procure additional funds rather than by innovation.

Generally, model development involved lots of meetings, workshops and forums and emailing of draft documents. Often model development occurred as part of the submission writing process. Most submissions were written by staff of acute services and/or external consultants employed through acute services. In some cases, where partners felt their input was reflected in redrafts of the submission, this worked well. In other cases, primary care providers felt like the acute service had taken over the project development and that their primary role was to rubber stamp the proposal.

Much of the real work on model development is being undertaken now that the projects have been funded.

Most projects did not have formal conflict resolution processes, but this was done through other agreed processes such as meeting structures and development of memoranda of understanding and statements of intent. Sometimes conflict resolution involved project leaders following up with people who were unhappy. Some groups reported that conflict was ongoing and yet to be resolved.

6.4 Implementation issues

In addition to the issues identified in the previous two sections, a key implementation issue is the need to do a lot of groundwork to get models working effectively and to identify the appropriate roles for staff in different agencies. There is also difficulty in recruiting appropriate personnel to projects, which was causing delays for a number of projects in both metropolitan and rural areas. This included finding staff with project management and systems development skills as well as qualified clinical staff. Existing shortages in the workforce also mean that people are unlikely to leave permanent positions for short term project work and that different pay and conditions offered by primary and acute care agencies may not make it attractive for staff to take up short term positions in non-acute agencies.

Some groups identified that while they have had leadership of hospital CEOs in developing projects, when it comes to implementation and working with middle managers in the acute sector there is less support for collaboration. This is particularly the case where these managers are responsible for services that are provided by both acute and primary care agencies, such as allied health and case management.

There was less support for PCPs taking a role in project implementation with most groups thinking that this was an appropriate role for individual agencies.

6.5 Governance and accountability

There were varying levels of formal governance arrangements, with some projects relying on their project management structure and the governance arrangements of PCPs. Most groups developed memoranda of understanding and statements of intent as a framework for partnership development.

All projects have accountability mechanisms such as steering committees, reference groups and key stakeholder forums. Some steering committees are sub-committees of the primary care and population health advisory committee, which report to the board of the acute service. One group established a privacy agreement about the sharing of data and one developed draft service agreements for participating agencies.

6.6 Care coordination systems and management

Approaches to care coordination across the primary acute care interface are variable and in some cases very chaotic with only a few examples involving both the acute and primary care service. An example is RDNS which has liaison officers in most large hospitals and well established business relationships.

Most of the models funded under HARP have some form of decision coordination point. Flexible packages are then put together around people's needs. A number of the projects are employing case managers in acute and/or primary care agencies and making new and additional brokerage funds available for services.

Many of the projects identified that they are currently re-examining their funded projects and further developing their model for care coordination and management. Some see this as an opportunity to involve workers on the ground in building up the model. Many projects were building on the service coordination work of the PCP, including use of the PCP tools, and some projects were creating shared positions between acute and community-based services to improve care coordination. Some services have multiple projects each with a different process for referral and communication between different providers.

A key issue for a number of groups was the difficulty in identifying potential clients before they presented at the ED. Some groups were investigating whether they would be able to match client records with agencies to find out which service providers are already involved in client care so that they can build on this. Others are viewing referral as a second stage of the project and looking towards developing the capacity for electronic records through pooling of resources from a range of initiatives and projects.

Other issues include that there are currently millions of dollars going into care coordination through programs such as HACC, PAC, CACPS and Linkages. There are also extended care packages, palliative care packages and packages provided through disability services. These packages are also provided through multiple agencies such as local government, community health and RDNS and there is an increasing number of case managers and brokers working in the system. The service provision models are driven by the funding models and the services available to any one consumer depend on the region in which they live and the knowledge, skills and personality of service providers they interact with. This means that effective coordination would currently involve large transaction costs for any agency having to work with a range of different providers.

This proliferation of packages and brokerage programs produces a range of different entry points, assessments, referral mechanisms, eligibility criteria, amounts of care provided, funds available and costs for the same care provided by different agencies. Funding and program guidelines result in difficulty in combining packages and moving consumers from one package to another to reflect increasing need, managing waiting lists, maintaining contact with clients moving in and out of

hospital, and maintenance of effort issues. Consumers can be receiving care from multiple providers with no communication between them.

These types of arrangements often result in more effort being put into dealing with the relationships between agencies and administration rather than focusing on the needs of the consumer across the care continuum or on consumer outcomes.

A number of community-based providers argue that they should do assessment and/or care coordination/case management – such as local government, RDNS and community health. While most of these groups agreed that there was a need to develop a coordinating mechanism, they also agreed that developing it would be a real challenge. Some groups suggested that a way through this would be not to focus on who should do it, but rather focus first on what needs to be done.

Currently these decisions are made in an ad hoc way and can depend on acute service providers making decisions about who they can work most easily with.

RDNS has an advantage over community health and local government because it has existing relationships with acute services and liaison officers in large acute facilities. Some acute services are also employing liaison officers to organise discharge planning for consumers, which may create duplication of the services provided by RDNS. Generally, there was no support for a proliferation of liaison officers from different types of services working in the acute sector.

While some projects were using PCP service coordination tools, there was no support for PCPs undertaking the care coordination role and some suggested that if this was to occur it would add another layer of care coordinators.

In the absence of well developed business systems between providers of community support and acute care services, the latter are tending to purchase services from private providers because the cost of buying from public providers, such as local government, can be high and they are not as flexible in responding to demand. The advantage of buying from local government is that it is easier to maintain care if people need to move between packages.

6.7 Information management

A key issue for projects is being able to identify clients before they present at hospital EDs and being able to keep in contact with them across the continuum of care.

Projects are in the early stages of thinking about information management. Most identified this as a larger issue about investment in infrastructure across the state, as well as the development of statewide protocols for managing client records and establishing good links across the interfaces between services. The concept of a shared client record was identified as useful.

6.8 Resource management

There are a range of issues associated with the nature of the demand at the community-hospital interface that make determining resource allocation difficult in the current context. These include that demand outweighs supply, acute services require flexibility in delivery of services, and costing issues. While acute services might require flexible delivery of services, community-based services need to have an idea of what the demand will be and an allocation of funds to enable them to make staffing decisions.

All stakeholders identified the need for more investment in primary care services, especially in the context of consumers having shorter lengths of stay in hospital and being discharged from hospital 'quicker and sicker'. Primary care providers thought that the problem of increasing demand was being 'pushed down the care continuum' without commensurate investment in community-based providers. This issue will not be redressed by HARP funds, but against this background it is difficult for some HARP project groups to identify where resources should be allocated to impact most effectively on reduction in hospital demand. In the first phase of their projects, a number of groups were putting effort into identifying where these gaps were and where additional resources would be best targeted.

Most of the funds provided through HARP were going to hospitals, with varying levels of satisfaction. Resource allocation was a key concern amongst groups with many primary care providers nervous that acute services would claim all the money. The development of agreements that outlined how resources would be shared consolidated the partnership for a number of groups. One group said that once this had been done it was like there was a real partnership, with real trust and that this was the first time this type of partnership had occurred.

Some of the strategies adopted for organising resource management included that the acute service:

- directed the funds to the community-based executive sponsor of the project to manage
- agreed to be the banker to a consortium which acts as the decision maker about how those funds are spent
- developed a general agreement about the ratio of dollars to go to primary and acute care services
- developed a statement of intent which included that all signatories must agree on allocation of resources.

Models for distribution of funds usually include some allocation of EFT to different services and brokerage (including paying on invoice).

Generally, community health, RDNS and local government were not supportive of brokerage funding and preferred price-volume arrangements. This was in the absence of a firm projection about the level of demand; with existing resources it is

difficult for many agencies to organise staff and services (especially with current workforce issues). Those community health and community support services that had a lot of part time staff who could take on additional work at short notice reported some capacity to use brokerage funds. There are also a range of limitations of brokerage funding associated with working with some consumer groups. For example, community support providers working with homeless people said that brokerage was not an appropriate way to fund services to their clients as the success of their work was dependant on building up relationships of trust with the client and it could take a significant amount of time to do this before clients would accept services.

A key issue for community health services and other primary care agencies (except RDNS) is that they do not have good business relationships with acute services and with other primary care agencies. A related issue for community health is that, unlike HACC, services do not have a schedule of fees, which makes it difficult for acute providers to identify costs associated with providing different types of care in different time frames. From a hospital perspective, there are high transaction costs associated with working with multiple providers and a key issue for primary care providers is how to organise so that hospitals can buy services from them.

In the absence of these business arrangements, acute services often use privately provided services because publicly funded services are not available, cannot respond quickly enough or are too expensive. Some acute providers have been developing their own primary care services. As well, a range of HACC services, community health services and CACPs are available to hospital patients when they return to the community at no cost to the hospital. There is a perception that hospitals seek to maximise access to these services, but that when they purchase additional services they are not prepared to do so from the same community providers, preferring instead to purchase from the less expensive private providers.

Community health and Department of Human Services regional office staff thought that resource allocation should be underpinned by comprehensive planning (preferably at the regional level and possibly through the development of region-wide service plans which outline how services are collaborating).

A risk identified by some primary health care providers was that they would not have the capacity to respond to acute services within appropriate time frames, which would damage service provision arrangements between the two types of services.

6.9 Performance monitoring

All HARP projects understood the importance of trying to demonstrate the effectiveness of their projects. They were also concerned about their capacity to do so, given the nature of emergency demand which precludes reducing the number of people presenting to EDs in the short term. There was also concern about developing good data collection systems to improve project development for the next funding round.

Projects were concerned that they would not be able to demonstrate effectiveness in time to ensure ongoing funding for a second year. They were also uncertain about the role of the external evaluation and what they would need to do in internal evaluations to supplement it. They also identified that there was a limited number of people in the workforce experienced in evaluation and that often they have to train recruits to do this which causes some time delays.

There were a second set of issues about monitoring performance of collaborating agencies. Many groups were developing key performance indicators and some were developing processes for individual agencies to report against these indicators. One project had developed service agreements for participating agencies and will monitor performance against these; another was planning to undertake a qualitative evaluation with clients, carers and service providers.

6.10 Consumer involvement

While most projects identified that they want to involve consumers, many were unsure how to go about it. Some groups thought that it was inappropriate to involve consumers at the submission writing stage or that the timeline did not permit consumer engagement. Others had engaged with existing consumer consultative mechanisms such as the hospital, community health or PCP's consumer advisory committee. One project had a consumer representative on its project development group. Some projects were establishing consumer reference groups and some were planning to hold focus groups and interview consumers using EDs.

6.11 Examples of good practice in building HARP relationships

A role for Department of Human Services regional offices

Northern Region Office of Department of Human Services held a forum in December 2001 to bring acute and community-based services together. This forum was attended by each of the four metropolitan health services with catchments in the Northern Region (Melbourne Health, Sisters of Charity, Northern Health and the Austin and Repatriation Medical Centre), and community-based service providers such as community health, local government, the RDNS and PCPs.

The Department of Human Services presented information about the HDM Strategy and HARP and the metropolitan health services presented on their work under the first year of HARP funding. Participants then split into four groups, each one focusing on one of the metropolitan health services, to discuss the issues, identify the potential players and to develop a process for working together to develop HARP submissions. This forum enabled participants from both acute and community-based organisations to establish the framework for their collaboration.

Northern Health

The Northern Health Primary Care and Population Health Advisory Committee (PC&PHAC), which includes representatives from primary and community health services, started by identifying the key demand management issues for Northern Health’s services and documenting the programs undertaken with funds from the first HARP funding round. This was of concern to some members of the committee who had not been aware of the funding or the projects some of which could be seen to have implications for their own services. Northern Health wanted to address this with a more collaborative approach with community-based providers in the future. Northern Health utilised the forum organised by the Department of Human Services Northern Region to work with community-based providers to identify a process for developing HARP submissions. At this forum the group decided that the PC&PHAC would oversee submission development and seek expressions of interest (EOIs) from those interested in applying for HARP funding. This process was advertised through the Department of Human Services, Divisions and PCPs. The subcommittee met and identified five themes emerging from the EOIs and identified a facilitator to bring together those providers who had put in EOIs on each theme. This process enabled negotiations between those expressing interest as to the best way to pursue the theme in partnership with Northern Health. This involved some amalgamation of submissions through cooperative arrangements and/or the identification of alternative approaches or funding sources. A workshop was held where the facilitators of each group reported back to the PC&PHAC and the most promising proposals were selected for further development.

Bayside Health

Bayside Health and the Inner South East Partnership in Community and Health jointly drove the submission process for Bayside Health. There were already good relationships between Bayside Health and a number of primary health care providers. Bayside Health was committed to improving their relationships with primary health care providers and saw the HARP funding round as an important step in this process. The CEO visited a significant number of primary care providers in the lead up to the funding round to gain a better understanding of how they worked and to identify areas for further collaboration. Bayside Health and the PCP held a meeting to discuss the HARP funding round to which members of the Bayside Kingston PCP were invited. The key outcome of this meeting was an agreement to form a working group comprising key stakeholders to develop a project proposal. This group identified the focus for the project. One advantage of the PCP organising the collaboration was that one person represented each agency type – so there was one person from community health who reported to the three relevant community health centres. This group met weekly and exchanged emails and drafts of documents. When conflict arose the CEO of Bayside Health followed up with those who were disaffected. In further developing their model this group is looking at which agencies the target group/clients use to identify which service providers

need to be involved in their care. The project will fund case managers in different agencies and will also have brokerage. They have also developed a draft memorandum of understanding, privacy agreements for data sharing and draft service agreements for each participating agency.

Melbourne Health

After some preliminary internal work to identify hospital demand issues that would respond to HARP initiatives, Melbourne Health invited community service providers to discuss how together they could develop projects to address the issues. The invitation to service providers was broad. All key service providers in the health services' local catchment attended and subsequently formed a 'HARP Consortium'. In keeping with its recently developed Community Partnering Strategy, Melbourne Health was committed to a collaborative relationship with its community partners. The HARP management structure reflects this, with joint community and Melbourne Health sponsors for each project and project management teams comprising both Melbourne Health and community provider personnel. Melbourne Health, like all project partners, has one vote on the coordinating reference group.

The consortium developed a statement of intent that sets out agreed principles and project structure. This was later developed into a service agreement between all project partners, rather than the traditional principal-contractor contract model. Seventy-five per cent of staff employed with HARP funding are directly employed by community agencies.

Summary

The following table outlines the success factors and barriers for the establishment of strong community-hospital partnerships for the development and implementation of HARP projects.

Table 3

| Success factors | Barriers |
|---|---|
| <p>Partnership formation</p> <ul style="list-style-type: none"> • Good prior history • Use of existing structures • Early and ongoing engagement of key stakeholders in designing collaboration process • Right person as convener/project officer • Agreement about proposal amongst all stakeholders • Stakeholder interests represented in proposals • CEO leadership • Clinical leadership • Use of coordinating structures such as PCPs • Availability of additional funding through HARP | <ul style="list-style-type: none"> • Short time frame • Lack of policy framework to guide collaboration across hospital-community interface • Exclusion of community providers by acute provider • Divisions have difficulty engaging GPs • GP requirements of payment for participation • Lack of relationship between community support providers and acute providers • Cultural and conceptual differences between hospital and community provider about health models • Resources and time required |
| <p>Project development</p> <ul style="list-style-type: none"> • Systematic approach to data review, analysis and priority setting • Joint approach to review and priority setting | <ul style="list-style-type: none"> • Risk minimisation through multiple proposal submissions • Lack of community capacity to analyse demand data • High transaction costs |
| <p>Implementation issues</p> <ul style="list-style-type: none"> • Development of explicit resource sharing arrangements between participants • Resource security to allow staff planning • Commitment to performance monitoring | <ul style="list-style-type: none"> • Implementation issues only partially resolved at time of proposal submission • Proliferation of coordination and liaison arrangements • Lack of unique client/patient record across agencies • Proliferation of package based funding arrangements for continuing care • Inconsistent assessment, needs identification, referral and care planning processes and practices • Demand pressures in the community sector • Impact of brokerage funding on staffing and planning for community providers • Short time frame for having to demonstrate outcomes |

7. Recommendations

It is clear that delivery of more complex and intensive acute and continuing care services at home and in the community will grow with improvements in information and care technologies and pressure to reduce utilisation of EDs and inpatient beds. As a result, integration and coordination across the service continuum will become steadily more important.

Priority conditions including ACSCs, mental health, frail older people and people with complex social and medical needs have been identified as offering significant potential for prevention of unnecessary hospitalisation and improvements in health outcomes. A number of care models for these conditions have been developed. These integrate assessment, care planning, coordination, service delivery, communication, monitoring and follow-up across the care continuum and hospital and community settings. Multidisciplinary care models will become a greater feature of the service system over time.

Governance and organisational arrangements across the community-hospital interface will need to develop to support the implementation of sustainable integrated care. Over time, community-based service delivery for acute and continuing care services will become more important. New information and care technologies will become increasing drivers of this trend.

It is, however, unlikely that major systemic reforms toward horizontal and vertical integration, like that which has occurred internationally, will occur in Australia. Consequently, initiatives like HARP depend on voluntary partnerships and collaborations across the community-hospital interface. The following sections draw conclusions and make recommendations to assist in the development of guidelines to facilitate these organisational relationships for the next HARP funding round. The development of sustainable community-hospital partnerships is central to the proposals recommended here.

7.1 Community-hospital partnership development

The complexity and diversity of the relationships between primary and community providers and acute providers has to be taken into account in partnership development. HARP is an important initiative that provides the incentive and the resources for building sustainable relationships between hospital and community providers. It is important that this relationship is seen as an ongoing community-hospital partnership that will have other applications in the future, rather than a short term relationship for specific projects.

The community providers with the most important potential role for preventing unnecessary hospital admissions are community health services, the RDNS, HACC providers (particularly local government) and GPs. Although hospitals do not have defined catchment populations, they have a primary population that they serve. There is also a set of HACC, GP, community health and nursing services that provide services for this population. It is important that these providers are involved in the early phase of the development of community-hospital partnerships.

However, the current community–hospital interface is relatively complex and successful consultation and development of HARP projects requires the involvement of a number of community-based services with each acute provider. PCPs and divisions of general practice are key organisations that have been established to facilitate horizontal and vertical service integration for this purpose.

Convening and coordinating the development of the community–hospital partnership is likely to be an important determinant in the success of the partnership. Past HARP submissions have most often been led by hospitals. Consideration should be given to broadening the role of convenor to ensure greater community input and ownership.

The experience of partnership development reported in the literature and confirmed by agencies taking part in the 2001–2002 HARP funding round is that it takes considerable time and effort. This can place a heavy burden on community agencies that have less strategic and developmental capacity. PCPs and divisions of general practice provide a vehicle for pooling resources across community providers for partnership formation and submission development.

The organisation of the community–hospital interface is complex. The development of HARP projects will require the involvement of a number of hospital and community agencies.

Recommendations

Community/and hospital partnerships should be formed to focus on preventive initiatives for people at risk of hospitalisation. These partnerships should include GPs, community health centres, HACC providers, district nursing services and ambulance services in addition to hospitals and continuing care services.

PCPs, divisions of general practice, hospitals and continuing care providers, in addition to Department of Human Services regions, should take joint responsibility for developing community–hospital partnerships.

A process to inform, engage and consult relevant stakeholders on the HARP funding round should be convened for each community–hospital partnership.

Key stakeholders in community–hospital partnerships should agree on the convenor role early in the partnership formation process.

7.2 A strategic approach to proposal preparation

Past approaches to HARP proposal development have varied. Some have taken a strategic view and sought to develop a sustainable relationship between community and hospital services that has broad applicability to a range of priority groups at risk of hospital admission. Generally, this has involved a relatively systematic review of risk factors affecting preventable hospital admissions, subsequent development of an organisational partnership with community providers, and the design of a set of interventions within an overall strategic framework.

Others have developed a set of specific projects that involve particular patient groups and specific hospital and community services. This has generally occurred without the development of a strategic framework or an ongoing, sustainable community-hospital partnership.

A shared definition of the problems to be addressed is critical to the development of community-hospital partnerships. Hospital utilisation data is available through the VAED and the Victorian Emergency Minimum Dataset (VEMD). Analyses of ACSCs based on the VAED for particular hospitals provides a useful starting point for the identification of priority conditions where improvements to the relationship between primary and community services and acute services may reduce unnecessary hospital admissions. Information is also needed on the availability and capacity of primary and community services and gaps in service intake, assessment, referral and coordination processes. Department of Human Services regions have an important role in providing this information. Key stakeholders need to be involved in the analysis and interpretation of the data to ensure a shared understanding of, and commitment to, the problem to be addressed.

While it is difficult to be prescriptive, it is likely a sustainable and effective approach to reducing hospital admission risk will be facilitated by limiting the number of proposals that are generated by each community-hospital partnership to ensure they meet these criteria.

It may be argued that some community or hospital agencies have the capacity to reduce hospital admission risks on their own with little need for collaboration in a community-hospital partnership process. Proposals of this nature should not be excluded, but they have less potential for building sustainable community-hospital organisational relationships.

A variety of HARP projects are being implemented through previous funding opportunities. The 2003-04 funding round should emphasise the strategic integration of HARP initiatives within community-hospital partnerships. Account should also be taken of existing health and community service initiatives.

Recommendations

Proposals submitted through the 2003-04 funding round should be required to include an integrated set of projects managed through a common organisational structure and process for the community-hospital partnership. It is desirable that previously funded projects be incorporated into the community-hospital partnership framework. Where this is not possible, proposals should be required to outline how previously funded HARP initiatives will relate to the 2003-04 proposal.

Priorities and proposals should be based on a systematic analysis of the available demand and utilisation data for each hospital. This analysis should involve and be available to all the key stakeholders.

Proposals should specify how they have considered and prioritised ambulatory care sensitive conditions, the frail elderly, frequent ED users, people with complex social and medical conditions and people with mental illness.

Each community-hospital partnership should develop a limited number of integrated proposals to address the key priorities identified.

7.3 Care models

Proposal development is resource and time intensive and requires skills and capacity to design care processes and the organisational arrangements that need to support them across the community-hospital interface. Care model design for priority problems requires consideration of evidence, the involvement of provider expertise, the design of specific assessment, coordination and intervention strategies, staffing and resource analysis and the development of administrative, information and performance monitoring systems.

A number of care models that have considerable application to HARP priority groups have been developed and implemented in both hospital and community settings. These include the work that has been done previously for initiatives such as the Effective Discharge Strategy and the work that is currently underway through PCPs to improve service coordination. HARP projects should build on these care models.

Similarly, many priorities that are likely to be addressed through HARP require services that are already provided through other programs, such as HACC and community health. These programs fund a range of relevant services including coordination, care planning, allied health, counselling, nursing, personal care, respite, home maintenance, property maintenance and delivered meals. HARP should build on this service platform.

Existing programs, such as HACC and community health, have performance reporting requirements and minimum data sets. Performance monitoring and accountability for HARP projects should take account of these reporting systems. The service coordination work being undertaken through PCPs provides an opportunity to streamline these data reporting requirements.

Care management processes are proliferating, leading to duplication and inefficiency.

Recommendations

Proposals submitted for the 2003-04 funding round should be required to demonstrate evidence of good practice for specific priority groups and outline how they will minimise duplication in care management processes. Proposals should address:

- *initial identification and assessment of patient needs*
- *decision making, referral and communication between service providers*
- *care planning and service coordination*

- *individualised and flexible service delivery*
- *monitoring of consumer outcomes and experiences*
- *support to encourage self-management and patient support where appropriate.*

Existing providers and processes for the care management elements outlined above, such as the PCP service coordination model and tools, should be used.

7.4 Sustainable community–hospital partnership governance

The community–hospital relationship is important beyond the implementation of HARP projects; the governance model adopted for these projects therefore has potential wider application. The literature indicates that joint ownership and leadership are important to successful collaborations.

Currently, roles and relationships across the community and hospital sector are not well defined. With respect to state funded services, the most mature relationship is with the RDNS. There has also been considerable focus on GPs in post discharge arrangements and there is an emerging set of relationships associated with the development of community aged care and similar packages, which is mediated through Aged Care Assessment Services. Overall, this report found that there was considerable room for development of more systemic, coordinated organisational relationships across the community–hospital interface.

Responding to consumers who are older and frail, who experience complex social and medical conditions or who have chronic illness, ambulatory care sensitive conditions or mental health issues requires coordination of continuing care services provided by community-based agencies to prevent and substitute acute and sub-acute care. Hospitals have responded to the lack of sustainable organisational relationships across the community–hospital interface by variously integrating existing community-based providers into their own organisational structures, negotiating specific arrangements with individual community providers for specific purposes and projects and, in many cases, they have developed their own community-based outreach services and programs.

For their part, community providers are cautious about taking responsibility for preventing hospital demand through prevention and substitution because of the risk that demand pressure will be shifted to them without compensating resources. They already have significant capacity limitations in meeting primary and continuing care needs in the community. Additional unfunded demand would be difficult for them to absorb and they are concerned that it might place an emphasis on early intervention, health promotion, community development and prevention at risk.

HARP provides an opportunity to address some of these concerns and to begin the process of building more sustainable organisational and governance relationships between the community and hospital sectors through a range of strategies.

Firstly, the development of common care models and organisational systems for similar patient needs would facilitate more systemic relationships between community providers and hospitals. The appropriate management of chronic conditions such as asthma, diabetes, COPD, CHF and so on appear to have many commonalities including strategies for assessment, coordination, care planning, the provision of multidisciplinary services, self-help, monitoring and follow-up. Similar referral, care planning, coordination, patient record, communication, monitoring and feedback systems ought to be applicable. Systematic arrangements along these lines have already been developed for aged care and mental health services and are being developed for people with chronic conditions through the PCP integrated demand management pilot projects.

Secondly, the provision of community-based medical, allied health, nursing, counselling, prevention and home and community support services should be the responsibility of community-based providers. However, this requires agreement about resource allocation, monitoring, performance management, governance and accountability. Appropriate resources need to be provided to community-based services to meet additional demand that might be met through inpatient services. On the other hand, hospitals need to be assured of timely, responsive and coordinated service provision to prevent demand and substitute for inpatient and ED. Moreover, they need consistent arrangements across the community providers in their catchment. Principles to guide the development of specific proposals should be negotiated between the key stakeholders participating in HARP proposals to facilitate more sustainable relationships. These could be formalised in a memorandum of understanding or similar documents.

HARP proposals should include an agreement about principles for the roles and responsibilities of community and hospital providers, resource allocation, performance monitoring, governance and accountability between the participating stakeholders. In particular, community-based services should be provided through appropriate community-based providers, resource allocation should be tied to service provision and outcomes, and relevant community-based providers should cooperate to provide consistent, timely and coordinated services across hospital catchments.

The roles and responsibilities, resource allocation arrangements, performance monitoring, governance and accountability structures and processes included in the specific proposals that are developed should reflect these principles. The elements that should be included in agreements that underpin community–hospital partnerships are outlined below.

Principles

The shared vision and/or philosophy underpinning the relationship between community and hospital providers should be specified. This may include a commitment to working collaboratively in improving the overall health and wellbeing of communities where the participants have a shared interest. It may also articulate the importance of trust, shared commitment, openness and transparency, fair

dealing and respect for different agency perspectives and roles. It should specify that services delivery will be flexible, responsive and efficient to meet needs in the most appropriate settings possible.

Purpose and objectives

This section should specify the nature of the agreement and the intent of the parties.

It should take account of the objectives of the Hospital Admission Risk Program, including:

- Targeting conditions with high volume presentations to emergency departments that have potential for reduced utilisation through improved management in community settings.
- Designing evidence based models of good practice that will reduce unnecessary hospital use.
- Developing sustainable governance and organisational relationships between community and hospital agencies.

Roles and responsibilities

At a minimum, problem identification, project design, planning project implementation, management and coordination should be specified.

Governance

Governance structures and processes should be defined so that they:

- Specify the legal form of the organisational relationship between the participating agencies. This could include a statement of intent, memorandum of understanding or contractual agreement.
- Nominate a contact and coordinating agency that will manage the HARP relationship with Department of Human Services on behalf of the participating agencies, and agree how governance will be resourced and who will chair key decision making bodies.
- Outline the involvement of key senior managers and CEOs who will be involved in the development, management and authorisation of the organisational relationships and project implementation.
- Outline the decision making structures and processes such as steering committees and reference groups.
- Specify the membership of decision making bodies. All key agencies in HARP should be represented on the governing body. This may occur through direct agency representation or by representation of a consortium by a single representative.
- Determine the reporting and accountability requirements of the participating agencies to the governing body for the management of the HARP activities.
- Outline dispute resolution and termination processes.
- Set out the term of the agreement.

Resource allocation

Rules for the management and distribution of finances and responsibilities, including the purchase of assets, should be outlined. Resource allocation arrangements should primarily be based on price volume agreements between the participating agencies. This should include specification of funding holding responsibilities for the contact/coordinating agency. The basis for contributions made by agencies in addition to the HARP funding should be specified.

Performance monitoring and review

The parties should specify processes for monitoring:

- financial performance
- patient recruitment and selection
- patient service use
- patient outcomes.

The parties should specify processes for reviewing performance against agreed milestones and performance targets.

Communication and consultation

Processes for informing members of the community–hospital partnership about HARP initiatives and changes should be specified.

Processes for developing mechanisms to share information about clients/patients should be established and described.

Other

The agreement may also specify requirements for maintaining confidentiality, managing conflicts of interest, negotiating intellectual property and risk management.

Sustainability across the community–hospital interface is important beyond the implementation of HARP. However, roles are not well defined and governance and organisational relationships are insufficiently developed.

Recommendations

Proposals for the 2003–04 funding round should be required to outline governance arrangements within community–hospital partnerships that will be maintained over time and across a broad range of functions and target groups where key stakeholders have mutual interests to improve outcomes for patients.

Governance arrangements for community–hospital partnerships should address:

- *the principles and shared vision underpinning the community–hospital partnership*
- *the specific purposes and objectives to be addressed*
- *the roles and responsibilities of the partners in meeting the partnership purpose and objectives*

- *the structures and processes for governing the partnership*
- *resource sharing principles and procedures*
- *performance management and review procedures*
- *communication and consultation arrangements*
- *other matters as agreed by the partners.*

7.5 Resource sharing and allocation

Previous HARP proposals have generally specified the allocation of staff as the key resource requirement for funding. Community programs such as HACC and community health are generally unit cost funded. To ensure longer term sustainability, HARP budgeting should take account of these funding models and specify the outputs to be achieved and the unit price for outputs. This would also allow analysis of the comparative costs of HARP proposals against the cost of inpatient service provision if admissions were not prevented.

It is also worth noting that community agencies have capacity limitations and comparatively high levels of demand on their services. It is therefore difficult for them to respond flexibly to brokerage arrangements. Brokerage arrangements are highly discretionary and variations in demand make it difficult to manage staffing requirements for community providers. Price-volume agreements which specify a target level of service for a given time period, an agreed price and a predictable income stream give community providers greater capacity to plan their staffing and service delivery needs.

The experience arising from previous proposals suggests that many implementation issues were only addressed once funding success had been notified. This resulted in significant reworking of proposals to address these issues. Wherever possible, implementation issues should be addressed in the development of proposals prior to submission.

Current HARP resource allocation arrangements are project based and do not take account of more generalised Department of Human Services funding arrangements for community-based services.

Recommendations

Community-based services for HARP should be provided by community-based agencies within the context of the governance arrangements underpinning community-hospital partnerships.

The 2003-04 funding round should support funding arrangements that ensure flexible, timely and responsive services to meet the needs of patients. HARP funding guidelines for resource sharing within community-hospital partnerships should be based on price-volume agreements which ensure that capacity and service planning issues can be managed by community providers. These price-volume agreements should specify:

- *unit costs for individual service types to be provided by different agencies*
- *volume performance targets specified as the number of service units and the number of patients.*

Where limited volume for community-based services makes business arrangements financially unviable or marginal for individual community providers, they should be encouraged to enter into consortia with other community-based providers to jointly provide services.

Unit costs for community-based services should be based on existing Department of Human Services price structures wherever possible to prevent gaming and inefficiency.

Appendix: Ambulatory care sensitive conditions by hospital

A1s

Alfred Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 1786 | 862 | 2648 | 17197 | 18059 | 6.82 |
| COPD | 462 | 159 | 621 | 3892 | 4051 | 6.52 |
| Congestive Heart Failure | 327 | 96 | 423 | 2152 | 2248 | 5.31 |
| Influenza & Pneumonia | 112 | 8 | 120 | 1625 | 1633 | 13.61 |
| Cellulitis | 151 | 90 | 241 | 894 | 984 | 4.08 |
| Pyelonephritis | 175 | 110 | 285 | 788 | 898 | 3.15 |
| Convulsions & Epilepsy | 159 | 147 | 306 | 718 | 865 | 2.83 |
| Asthma | 136 | 131 | 267 | 443 | 574 | 2.15 |
| Dehydration & Gastroenteritis | 105 | 180 | 285 | 349 | 529 | 1.86 |
| Angina | 160 | 128 | 288 | 356 | 484 | 1.68 |
| Ear, Nose & Throat Infections | 44 | 66 | 110 | 126 | 192 | 1.75 |
| Iron Deficiency Anaemia | 28 | 73 | 101 | 70 | 143 | 1.42 |
| Hypertension | 23 | 25 | 48 | 57 | 82 | 1.71 |
| TOTAL | 3668 | 2075 | 5743 | 28667 | 30742 | 5.35 |

Austin & Repatriation Medical Centre

| | | | | | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| Diabetes Complications | 1780 | 406 | 2186 | 17568 | 17974 | 8.22 |
| COPD | 513 | 68 | 581 | 4203 | 4271 | 7.35 |
| Congestive Heart Failure | 408 | 110 | 518 | 3031 | 3141 | 6.06 |
| Pyelonephritis | 289 | 133 | 422 | 2481 | 2614 | 6.19 |
| Convulsions & Epilepsy | 376 | 180 | 556 | 1875 | 2055 | 3.70 |
| Dehydration & Gastroenteritis | 206 | 198 | 404 | 1203 | 1401 | 3.47 |
| Influenza & Pneumonia | 87 | 6 | 93 | 1265 | 1271 | 13.67 |
| Cellulitis | 150 | 37 | 187 | 933 | 970 | 5.19 |
| Angina | 290 | 240 | 530 | 712 | 952 | 1.80 |
| Asthma | 209 | 71 | 280 | 679 | 750 | 2.68 |
| Iron Deficiency Anaemia | 61 | 270 | 331 | 351 | 621 | 1.88 |
| Ear, Nose & Throat Infections | 79 | 41 | 120 | 200 | 241 | 2.01 |
| Hypertension | 29 | 30 | 59 | 96 | 126 | 2.14 |
| TOTAL | 4477 | 1790 | 6267 | 34597 | 36387 | 5.81 |

Notes

Source: VAED
Data range: 2001/02

Alfred Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|---------------------------|----------|---------------------------|----------|---------------------------|----------|--------------------------|----------|
| Port Phillip (C)–St Kilda | 1996 | Stonnington (C)–Prahran | 1658 | Port Phillip (C)–West | 1479 | Glen Eira (C)–Caulfield | 1442 |
| Port Phillip (C)–West | 665 | Glen Eira (C)–Caulfield | 555 | Port Phillip (C)–St Kilda | 455 | Stonnington (C)–Prahran | 340 |
| Glen Eira (C)–Caulfield | 326 | Port Phillip (C)–St Kilda | 312 | Stonnington (C)–Prahran | 278 | Port Phillip (C)–West | 222 |
| Port Phillip (C)–St Kilda | 255 | Stonnington (C)–Prahran | 140 | Port Phillip (C)–West | 120 | Monash (C)–Waverley West | 103 |
| Port Phillip (C)–St Kilda | 152 | Port Phillip (C)–West | 143 | Kingston (C)–North | 137 | Stonnington (C)–Prahran | 90 |
| Port Phillip (C)–St Kilda | 205 | Stonnington (C)–Prahran | 155 | Frankston (C)–West | 80 | Port Phillip (C)–West | 67 |
| Glen Eira (C)–Caulfield | 156 | Glen Eira (C)–South | 126 | Port Phillip (C)–St Kilda | 117 | Stonnington (C)–Prahran | 83 |
| Port Phillip (C)–St Kilda | 109 | Glen Eira (C)–Caulfield | 92 | Stonnington (C)–Prahran | 57 | Port Phillip (C)–West | 45 |
| Port Phillip (C)–West | 86 | Port Phillip (C)–St Kilda | 60 | Stonnington (C)–Prahran | 51 | Glen Eira (C)–Caulfield | 51 |
| Port Phillip (C)–West | 76 | Glen Eira (C)–Caulfield | 62 | Port Phillip (C)–St Kilda | 61 | Stonnington (C)–Prahran | 51 |
| Port Phillip (C)–St Kilda | 41 | Stonnington (C)–Prahran | 27 | Port Phillip (C)–West | 19 | Darebin (C)–Preston | 14 |
| Port Phillip (C)–St Kilda | 35 | Stonnington (C)–Prahran | 16 | Port Phillip (C)–West | 13 | Glen Eira (C)–Caulfield | 10 |
| Glen Eira (C)–Caulfield | 21 | Port Phillip (C)–West | 19 | Port Phillip (C)–St Kilda | 18 | Stonnington (C)–Prahran | 4 |

Austin & Repatriation Medical Centre

| | | | | | | | |
|------------------------|------|------------------------|------|--------------------------|------|--------------------------|------|
| Darebin (C)–Preston | 3335 | Banyule (C)–Heidelberg | 3265 | Whittlesea (C)–South | 1415 | Darebin (C)–Northcote | 1309 |
| Banyule (C)–Heidelberg | 1189 | Darebin (C)–Preston | 921 | Banyule (C)–North | 586 | Darebin (C)–Northcote | 267 |
| Darebin (C)–Preston | 649 | Banyule (C)–Heidelberg | 638 | Whitehorse (C)–Box Hill | 370 | Manningham (C)–West | 299 |
| Banyule (C)–Heidelberg | 843 | Darebin (C)–Preston | 650 | Manningham (C)–West | 316 | Darebin (C)–Northcote | 159 |
| Manningham (C)–West | 484 | Darebin (C)–Preston | 213 | Banyule (C)–Heidelberg | 210 | Banyule (C)–North | 126 |
| Banyule (C)–Heidelberg | 289 | Darebin (C)–Preston | 225 | Banyule (C)–North | 158 | Darebin (C)–Northcote | 130 |
| Darebin (C)–Preston | 361 | Banyule (C)–Heidelberg | 180 | Manningham (C)–West | 168 | Banyule (C)–North | 117 |
| Darebin (C)–Preston | 216 | Banyule (C)–Heidelberg | 192 | Banyule (C)–North | 83 | Nillumbik (S)–South-West | 71 |
| Darebin (C)–Preston | 222 | Banyule (C)–Heidelberg | 190 | Banyule (C)–North | 134 | Manningham (C)–West | 112 |
| Banyule (C)–Heidelberg | 191 | Darebin (C)–Preston | 140 | Banyule (C)–North | 82 | Darebin (C)–Northcote | 58 |
| Darebin (C)–Preston | 175 | Banyule (C)–Heidelberg | 137 | Whittlesea (C)–South | 47 | Banyule (C)–North | 46 |
| Banyule (C)–Heidelberg | 52 | Darebin (C)–Preston | 43 | Nillumbik (S)–South-West | 29 | Darebin (C)–Northcote | 29 |
| Manningham (C)–West | 24 | Darebin (C)–Preston | 24 | Banyule (C)–North | 23 | Darebin (C)–Northcote | 14 |

A1s

Monash Medical Centre

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 1479 | 452 | 1931 | 12563 | 13015 | 6.74 |
| Congestive Heart Failure | 353 | 117 | 470 | 2225 | 2342 | 4.98 |
| COPD | 334 | 103 | 437 | 2158 | 2261 | 5.17 |
| Pyelonephritis | 400 | 210 | 610 | 2027 | 2237 | 3.67 |
| Convulsions & Epilepsy | 407 | 244 | 651 | 1420 | 1664 | 2.56 |
| Asthma | 556 | 155 | 711 | 1473 | 1628 | 2.29 |
| Influenza & Pneumonia | 150 | 10 | 160 | 1366 | 1376 | 8.60 |
| Cellulitis | 225 | 50 | 275 | 1268 | 1318 | 4.79 |
| Angina | 353 | 326 | 679 | 968 | 1294 | 1.91 |
| Dehydration & Gastroenteritis | 148 | 161 | 309 | 712 | 873 | 2.83 |
| Ear, Nose & Throat Infections | 231 | 147 | 378 | 571 | 718 | 1.90 |
| Iron Deficiency Anaemia | 46 | 173 | 219 | 219 | 392 | 1.79 |
| Hypertension | 30 | 24 | 54 | 132 | 156 | 2.89 |
| TOTAL | 4712 | 2172 | 6884 | 27102 | 29274 | 4.25 |

Royal Melbourne Hospital

| | | | | | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| Diabetes Complications | 2043 | 560 | 2603 | 16825 | 17385 | 6.68 |
| Congestive Heart Failure | 428 | 76 | 504 | 3147 | 3223 | 6.39 |
| COPD | 366 | 80 | 446 | 2340 | 2420 | 5.43 |
| Convulsions & Epilepsy | 285 | 128 | 413 | 1600 | 1728 | 4.18 |
| Pyelonephritis | 301 | 132 | 433 | 1437 | 1569 | 3.62 |
| Angina | 391 | 98 | 489 | 1102 | 1200 | 2.45 |
| Cellulitis | 211 | 39 | 250 | 1026 | 1065 | 4.26 |
| Dehydration & Gastroenteritis | 191 | 248 | 439 | 762 | 1010 | 2.30 |
| Iron Deficiency Anaemia | 65 | 237 | 302 | 283 | 520 | 1.72 |
| Asthma | 164 | 58 | 222 | 396 | 454 | 2.05 |
| Influenza & Pneumonia | 39 | 9 | 48 | 320 | 329 | 6.85 |
| Ear, Nose & Throat Infections | 83 | 38 | 121 | 157 | 195 | 1.61 |
| Hypertension | 30 | 9 | 39 | 85 | 94 | 2.41 |
| TOTAL | 4597 | 1712 | 6309 | 29480 | 31192 | 4.94 |

Notes

Source: VAED
Data range: 2001/02

Monash Medical Centre

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|-----------------------|----------|------------------------|----------|--------------------------|----------|--------------------------|----------|
| Gr. Dandenong (C) Bal | 1581 | Monash (C)-South-West | 1471 | Kingston (C)-North | 1404 | Glen Eira (C)-South | 1200 |
| Monash (C)-South-West | 484 | Kingston (C)-North | 317 | Monash (C)-Waverley East | 267 | Glen Eira (C)-South | 253 |
| Kingston (C)-North | 422 | Gr. Dandenong (C) Bal | 331 | Monash (C)-South-West | 303 | Glen Eira (C)-South | 272 |
| Kingston (C)-North | 363 | Glen Eira (C)-South | 282 | Monash (C)-South-West | 280 | Monash (C)-Waverley West | 199 |
| Kingston (C)-North | 232 | Monash (C)-South-West | 162 | Monash (C)-Waverley West | 131 | Casey (C)-Berwick | 114 |
| Kingston (C)-North | 217 | Glen Eira (C)-South | 147 | Monash (C)-South-West | 144 | Gr. Dandenong (C) Bal | 141 |
| Kingston (C)-North | 237 | Casey (C)-Berwick | 174 | Monash (C)-South-West | 170 | Gr. Dandenong (C) Bal | 133 |
| Kingston (C)-North | 190 | Monash (C)-South-West | 186 | Glen Eira (C)-South | 171 | Gr. Dandenong (C) Bal | 138 |
| Kingston (C)-North | 206 | Monash (C)-South-West | 199 | Glen Eira (C)-South | 166 | Monash (C)-Waverley East | 121 |
| Monash (C)-South-West | 140 | Glen Eira (C)-South | 134 | Kingston (C)-North | 110 | Gr. Dandenong (C) Bal | 78 |
| Gr. Dandenong (C) Bal | 111 | Kingston (C)-North | 77 | Monash (C)-Waverley East | 58 | Glen Eira (C)-South | 49 |
| Kingston (C)-North | 105 | Gr. Dandenong (C) Bal | 54 | Monash (C)-South-West | 27 | Monash (C)-Waverley East | 25 |
| Monash (C)-South-West | 49 | Maroondah (C)-Ringwood | 18 | Casey (C)-Berwick | 11 | Kingston (C)-North | 10 |

Royal Melbourne Hospital

| | | | | | | | |
|----------------------------|------|----------------------------|------|-----------------------------|------|----------------------------|------|
| Moreland (C)-North | 1969 | Moonee Valley (C)-Essendon | 1872 | Moreland (C)-Coburg | 1639 | Hume (C)-Broadmeadows | 1592 |
| Moonee Valley (C)-Essendon | 517 | Moreland (C)-Coburg | 423 | Moreland (C)-North | 381 | Moonee Valley (C)-West | 315 |
| Moreland (C)-North | 407 | Moonee Valley (C)-Essendon | 407 | Moreland (C)-Coburg | 344 | Moreland (C)-Brunswick | 328 |
| Moonee Valley (C)-Essendon | 241 | Moreland (C)-North | 198 | Moreland (C)-Coburg | 119 | Hume (C)-Craigieburn | 113 |
| Moreland (C)-Coburg | 367 | Moonee Valley (C)-Essendon | 323 | Moreland (C)-Brunswick | 193 | Hume (C)-Broadmeadows | 116 |
| Hume (C)-Broadmeadows | 206 | Moreland (C)-Coburg | 157 | Moreland (C)-North | 125 | Moonee Valley (C)-Essendon | 123 |
| Moonee Valley (C)-Essendon | 167 | Moreland (C)-Coburg | 145 | Moreland (C)-North | 140 | Moreland (C)-Brunswick | 116 |
| Moonee Valley (C)-Essendon | 131 | Moreland (C)-North | 124 | Moreland (C)-Coburg | 115 | Moreland (C)-Brunswick | 90 |
| Moreland (C)-North | 82 | Moreland (C)-Brunswick | 66 | Moonee Valley (C)-Essendon | 65 | Melbourne (C)-Remainder | 50 |
| Moreland (C)-Brunswick | 70 | Moonee Valley (C)-Essendon | 67 | Moreland (C)-Coburg | 66 | Hume (C)-Broadmeadows | 52 |
| Mornington Psula (S)-East | 48 | La Trobe (S)-Moe | 41 | Moorabool (S)-Bacchus Marsh | 29 | Moir (S)-East | 27 |
| Moonee Valley (C)-Essendon | 29 | Moreland (C)-Coburg | 25 | Melbourne (C)-Remainder | 20 | Hume (C)-Broadmeadows | 18 |
| Moreland (C)-North | 29 | Moreland (C)-Coburg | 7 | Maribymong (C) | 7 | Darebin (C)-Northcote | 6 |

A1s

St Vincents Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 1413 | 414 | 1827 | 10976 | 11390 | 6.23 |
| COPD | 351 | 39 | 390 | 2333 | 2372 | 6.08 |
| Congestive Heart Failure | 295 | 77 | 372 | 1989 | 2066 | 5.55 |
| Convulsions & Epilepsy | 273 | 143 | 416 | 1262 | 1405 | 3.38 |
| Pyelonephritis | 157 | 67 | 224 | 967 | 1034 | 4.62 |
| Cellulitis | 172 | 23 | 195 | 812 | 835 | 4.28 |
| Angina | 180 | 113 | 293 | 673 | 786 | 2.68 |
| Influenza & Pneumonia | 70 | 2 | 72 | 777 | 779 | 10.82 |
| Dehydration & Gastroenteritis | 149 | 157 | 306 | 597 | 754 | 2.46 |
| Asthma | 111 | 36 | 147 | 490 | 526 | 3.58 |
| Iron Deficiency Anaemia | 40 | 97 | 137 | 176 | 273 | 1.99 |
| Hypertension | 44 | 12 | 56 | 183 | 195 | 3.48 |
| Ear, Nose & Throat Infections | 50 | 27 | 77 | 148 | 175 | 2.27 |
| TOTAL | 3305 | 1207 | 4512 | 21383 | 22590 | 5.01 |

Notes

Source: VAED

Data range: 2001/02

St Vincents Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|-----------------------------|----------|------------------------------|----------|-------------------------|----------|----------------------------|----------|
| Yarra (C)–North | 1153 | Darebin (C)–Northcote | 1081 | Darebin (C)–Preston | 596 | Moreland (C)–Brunswick | 566 |
| Yarra (C)–North | 448 | Darebin (C)–Northcote | 342 | Darebin (C)–Preston | 252 | Moreland (C)–Brunswick | 200 |
| Darebin (C)–Preston | 281 | Darebin (C)–Northcote | 247 | Yarra (C)–North | 227 | Yarra (C)–Richmond | 146 |
| Darebin (C)–Northcote | 103 | Boroondara (C)–Hawthorn | 73 | Yarra (C)–North | 71 | Mornington Psula (S)–South | 65 |
| Yarra (C)–North | 219 | Yarra (C)–Richmond | 90 | Manningham (C)–West | 90 | Darebin (C)–Northcote | 85 |
| Yarra (C)–North | 138 | Darebin (C)–Northcote | 126 | Boroondara (C)–Hawthorn | 64 | Darebin (C)–Preston | 55 |
| Yarra (C)–North | 142 | Darebin (C)–Northcote | 84 | Boroondara (C)–Kew | 56 | Moreland (C)–Brunswick | 46 |
| Yarra (C)–Richmond | 71 | Gr. Shepparton (C)–Pt B West | 71 | Darebin (C)–Northcote | 69 | Yarra (C)–North | 68 |
| Darebin (C)–Northcote | 86 | Yarra (C)–North | 82 | Darebin (C)–Preston | 49 | Hobsons Bay (C)–Altona | 39 |
| Yarra (C)–North | 95 | Darebin (C)–Northcote | 85 | Moreland (C)–Brunswick | 45 | Hume (C)–Broadmeadows | 44 |
| Yarra (C)–Richmond | 21 | Maroondah (C)–Croydon | 21 | Whittlesea (C)–South | 20 | Moreland (C)–North | 19 |
| Darebin (C)–Northcote | 23 | Moreland (C)–Brunswick | 21 | Darebin (C)–Preston | 18 | Melbourne (C)–Remainder | 14 |
| Yarra Ranges (S)–South-West | 28 | Yarra (C)–North | 22 | Manningham (C)–West | 15 | Boroondara (C)–Kew | 13 |

A2 and B

Angliss Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|------------|-------------|-------------|-------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 282 | 47 | 329 | 2429 | 2476 | 7.53 |
| COPD | 198 | 21 | 219 | 1253 | 1274 | 5.82 |
| Cellulitis | 211 | 15 | 226 | 1153 | 1168 | 5.17 |
| Congestive Heart Failure | 147 | 28 | 175 | 1063 | 1091 | 6.23 |
| Pyelonephritis | 140 | 31 | 171 | 646 | 677 | 3.96 |
| Asthma | 143 | 57 | 200 | 314 | 371 | 1.86 |
| Angina | 103 | 63 | 166 | 266 | 329 | 1.98 |
| Dehydration & Gastroenteritis | 88 | 46 | 134 | 239 | 285 | 2.13 |
| Ear, Nose & Throat Infections | 110 | 75 | 185 | 150 | 225 | 1.22 |
| Convulsions & Epilepsy | 86 | 51 | 137 | 170 | 221 | 1.61 |
| Influenza & Pneumonia | 20 | 3 | 23 | 174 | 177 | 7.70 |
| Iron Deficiency Anaemia | 18 | 18 | 36 | 53 | 71 | 1.97 |
| Hypertension | 5 | 4 | 9 | 13 | 17 | 1.89 |
| TOTAL | 1551 | 459 | 2010 | 7923 | 8382 | 4.17 |

Box Hill Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 887 | 428 | 1315 | 8340 | 8768 | 6.67 |
| Congestive Heart Failure | 381 | 58 | 439 | 3065 | 3123 | 7.11 |
| COPD | 301 | 34 | 335 | 2626 | 2660 | 7.94 |
| Pyelonephritis | 239 | 56 | 295 | 1320 | 1376 | 4.66 |
| Asthma | 356 | 77 | 433 | 1142 | 1219 | 2.82 |
| Cellulitis | 187 | 9 | 196 | 1137 | 1146 | 5.85 |
| Angina | 265 | 124 | 389 | 810 | 934 | 2.40 |
| Dehydration & Gastroenteritis | 152 | 177 | 329 | 741 | 918 | 2.79 |
| Influenza & Pneumonia | 95 | 3 | 98 | 873 | 876 | 8.94 |
| Convulsions & Epilepsy | 166 | 73 | 239 | 506 | 579 | 2.42 |
| Iron Deficiency Anaemia | 70 | 136 | 206 | 240 | 376 | 1.83 |
| Ear, Nose & Throat Infections | 73 | 42 | 115 | 132 | 174 | 1.51 |
| Hypertension | 10 | 9 | 19 | 24 | 33 | 1.74 |
| TOTAL | 3182 | 1226 | 4408 | 20956 | 22182 | 5.03 |

Notes

Source: VAED

Data range: 2001/02

Angliss Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|----------------|----------|-----------------------------|----------|-----------------------------|----------|-----------------------|----------|
| Knox (C)-North | 1170 | Yarra Ranges (S)-South-West | 558 | Knox (C)-South | 301 | Maroondah (C)-Croydon | 172 |
| Knox (C)-North | 655 | Yarra Ranges (S)-South-West | 257 | Knox (C)-South | 164 | Cardinia (S)-North | 66 |
| Knox (C)-North | 526 | Yarra Ranges (S)-South-West | 339 | Knox (C)-South | 106 | Maroondah (C)-Croydon | 64 |
| Knox (C)-North | 544 | Yarra Ranges (S)-South-West | 211 | Cardinia (S)-North | 84 | Knox (C)-South | 79 |
| Knox (C)-North | 396 | Yarra Ranges (S)-South-West | 108 | Knox (C)-South | 72 | Maroondah (C)-Croydon | 35 |
| Knox (C)-North | 189 | Yarra Ranges (S)-South-West | 79 | Knox (C)-South | 24 | Cardinia (S)-North | 17 |
| Knox (C)-North | 150 | Yarra Ranges (S)-South-West | 113 | Knox (C)-South | 14 | Cardinia (S)-North | 12 |
| Knox (C)-North | 115 | Yarra Ranges (S)-South-West | 64 | Knox (C)-South | 45 | Cardinia (S)-North | 23 |
| Knox (C)-North | 81 | Yarra Ranges (S)-South-West | 73 | Knox (C)-South | 15 | Maroondah (C)-Croydon | 11 |
| Knox (C)-North | 103 | Yarra Ranges (S)-South-West | 68 | Maroondah (C)-Croydon | 9 | Wellington (S)-Maffra | 7 |
| Knox (C)-North | 63 | Yarra Ranges (S)-South-West | 55 | Cardinia (S)-North | 40 | Knox (C)-South | 10 |
| Knox (C)-North | 50 | Knox (C)-South | 11 | Yarra Ranges (S)-South-West | 6 | Frankston (C)-East | 1 |
| Knox (C)-North | 15 | Yarra Ranges (S)-South-West | 1 | Maroondah (C)-Croydon | 1 | | |

Box Hill Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|------------------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|----------|
| Whitehorse (C)-Nunawading W. | 1423 | Manningham (C)-West | 1304 | Whitehorse (C)-Box Hill | 1258 | Whitehorse (C)-Nunawading E. | 723 |
| Whitehorse (C)-Nunawading W. | 565 | Manningham (C)-West | 553 | Whitehorse (C)-Box Hill | 539 | Whitehorse (C)-Nunawading E. | 392 |
| Whitehorse (C)-Nunawading W. | 744 | Whitehorse (C)-Box Hill | 579 | Manningham (C)-West | 295 | Boroondara (C)-Camberwell S. | 281 |
| Whitehorse (C)-Nunawading W. | 344 | Manningham (C)-West | 216 | Whitehorse (C)-Box Hill | 179 | Boroondara (C)-Camberwell S. | 126 |
| Whitehorse (C)-Nunawading W. | 246 | Manningham (C)-West | 198 | Monash (C)-Waverley West | 117 | Boroondara (C)-Camberwell N. | 114 |
| Boroondara (C)-Camberwell S. | 236 | Whitehorse (C)-Nunawading W. | 175 | Manningham (C)-West | 163 | Whitehorse (C)-Box Hill | 125 |
| Whitehorse (C)-Nunawading W. | 191 | Manningham (C)-West | 153 | Whitehorse (C)-Box Hill | 147 | Whitehorse (C)-Nunawading E. | 80 |
| Whitehorse (C)-Nunawading W. | 223 | Whitehorse (C)-Box Hill | 172 | Manningham (C)-West | 122 | Whitehorse (C)-Nunawading E. | 84 |
| Whitehorse (C)-Nunawading W. | 195 | Whitehorse (C)-Box Hill | 129 | Boroondara (C)-Camberwell S. | 88 | Whitehorse (C)-Nunawading E. | 86 |
| Whitehorse (C)-Box Hill | 107 | Whitehorse (C)-Nunawading W. | 84 | Manningham (C)-West | 76 | Knox (C)-North | 58 |
| Whitehorse (C)-Nunawading E. | 73 | Whitehorse (C)-Box Hill | 60 | Whitehorse (C)-Nunawading W. | 43 | Manningham (C)-West | 41 |
| Whitehorse (C)-Nunawading W. | 39 | Whitehorse (C)-Box Hill | 23 | Manningham (C)-West | 17 | Whitehorse (C)-Nunawading E. | 15 |
| Manningham (C)-West | 13 | Monash (C)-Waverley West | 6 | Whitehorse (C)-Nunawading W. | 3 | Whitehorse (C)-Box Hill | 3 |

A2 and B

Dandenong Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 839 | 285 | 1124 | 7258 | 7543 | 6.71 |
| COPD | 387 | 60 | 447 | 2550 | 2610 | 5.84 |
| Congestive Heart Failure | 312 | 58 | 370 | 2456 | 2514 | 6.79 |
| Angina | 473 | 204 | 677 | 1480 | 1684 | 2.49 |
| Cellulitis | 254 | 25 | 279 | 1658 | 1683 | 6.03 |
| Pyelonephritis | 237 | 118 | 355 | 1342 | 1460 | 4.11 |
| Asthma | 393 | 181 | 574 | 1078 | 1259 | 2.19 |
| Convulsions & Epilepsy | 196 | 179 | 375 | 496 | 675 | 1.80 |
| Influenza & Pneumonia | 84 | 20 | 104 | 514 | 534 | 5.13 |
| Dehydration & Gastroenteritis | 85 | 127 | 212 | 240 | 367 | 1.73 |
| Ear, Nose & Throat Infections | 87 | 92 | 179 | 139 | 231 | 1.29 |
| Iron Deficiency Anaemia | 35 | 27 | 62 | 155 | 182 | 2.94 |
| Hypertension | 25 | 23 | 48 | 85 | 108 | 2.25 |
| TOTAL | 3407 | 1399 | 4806 | 19451 | 20850 | 4.34 |

Frankston

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 704 | 1747 | 2451 | 6408 | 8155 | 3.33 |
| COPD | 462 | 112 | 574 | 3691 | 3803 | 6.63 |
| Congestive Heart Failure | 344 | 121 | 465 | 2715 | 2836 | 6.10 |
| Pyelonephritis | 253 | 127 | 380 | 2057 | 2184 | 5.75 |
| Angina | 456 | 363 | 819 | 1039 | 1402 | 1.71 |
| Cellulitis | 229 | 37 | 266 | 1359 | 1396 | 5.25 |
| Convulsions & Epilepsy | 248 | 184 | 432 | 798 | 982 | 2.27 |
| Asthma | 305 | 144 | 449 | 771 | 915 | 2.04 |
| Influenza & Pneumonia | 67 | 7 | 74 | 773 | 780 | 10.54 |
| Dehydration & Gastroenteritis | 124 | 148 | 272 | 505 | 653 | 2.40 |
| Ear, Nose & Throat Infections | 185 | 155 | 340 | 305 | 460 | 1.35 |
| Iron Deficiency Anaemia | 29 | 31 | 60 | 171 | 202 | 3.37 |
| Hypertension | 15 | 12 | 27 | 62 | 74 | 2.74 |
| TOTAL | 3421 | 3188 | 6609 | 20654 | 23842 | 3.61 |

Notes

Source: VAED
Data range: 2001/02

Dandenong Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|-----------------------------|----------|-----------------------|----------|-----------------------------|----------|-----------------------|----------|
| Gr. Dandenong (C)-Dandenong | 1885 | Casey (C)-Hallam | 1257 | Gr. Dandenong (C) Bal | 1122 | Casey (C)-Cranbourne | 777 |
| Gr. Dandenong (C)-Dandenong | 638 | Gr. Dandenong (C) Bal | 561 | Casey (C)-Hallam | 527 | Casey (C)-Cranbourne | 289 |
| Gr. Dandenong (C)-Dandenong | 618 | Gr. Dandenong (C) Bal | 400 | Casey (C)-Hallam | 352 | Casey (C)-Cranbourne | 295 |
| Gr. Dandenong (C)-Dandenong | 375 | Gr. Dandenong (C) Bal | 273 | Casey (C)-Berwick | 241 | Casey (C)-Hallam | 239 |
| Gr. Dandenong (C)-Dandenong | 365 | Casey (C)-Hallam | 316 | Casey (C)-Cranbourne | 290 | Gr. Dandenong (C) Bal | 229 |
| Gr. Dandenong (C)-Dandenong | 358 | Gr. Dandenong (C) Bal | 318 | Casey (C)-Berwick | 227 | Casey (C)-Cranbourne | 217 |
| Gr. Dandenong (C)-Dandenong | 229 | Casey (C)-Cranbourne | 201 | Casey (C)-Hallam | 184 | Casey (C)-Berwick | 150 |
| Gr. Dandenong (C)-Dandenong | 174 | Casey (C)-Hallam | 89 | Casey (C)-Berwick | 74 | Cardinia (S)-Pakenham | 71 |
| Gr. Dandenong (C)-Dandenong | 126 | Gr. Dandenong (C) Bal | 123 | Casey (C)-Hallam | 88 | Casey (C)-Cranbourne | 70 |
| Gr. Dandenong (C)-Dandenong | 66 | Casey (C)-Berwick | 50 | Gr. Dandenong (C) Bal | 49 | Casey (C)-Cranbourne | 47 |
| Casey (C)-Berwick | 57 | Casey (C)-Cranbourne | 55 | Gr. Dandenong (C)-Dandenong | 34 | Casey (C)-Hallam | 27 |
| Gr. Dandenong (C) Bal | 62 | Casey (C)-Cranbourne | 36 | Gr. Dandenong (C)-Dandenong | 30 | Casey (C)-Hallam | 20 |
| Gr. Dandenong (C)-Dandenong | 38 | Gr. Dandenong (C) Bal | 18 | Casey (C)-Cranbourne | 16 | Casey (C)-Hallam | 10 |

Frankston

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|--------------------|----------|----------------------------|----------|----------------------------|----------|----------------------------|----------|
| Frankston (C)-West | 2974 | Kingston (C)-South | 1358 | Mornington Psula (S)-East | 985 | Mornington Psula (S)-West | 872 |
| Frankston (C)-West | 1616 | Kingston (C)-South | 540 | Mornington Psula (S)-East | 424 | Mornington Psula (S)-South | 322 |
| Frankston (C)-West | 946 | Kingston (C)-South | 438 | Mornington Psula (S)-South | 361 | Mornington Psula (S)-West | 346 |
| Frankston (C)-West | 793 | Mornington Psula (S)-East | 388 | Mornington Psula (S)-West | 360 | Kingston (C)-South | 304 |
| Frankston (C)-West | 447 | Mornington Psula (S)-South | 241 | Mornington Psula (S)-West | 200 | Mornington Psula (S)-East | 147 |
| Frankston (C)-West | 485 | Mornington Psula (S)-East | 198 | Mornington Psula (S)-West | 180 | Kingston (C)-South | 179 |
| Frankston (C)-West | 293 | Kingston (C)-South | 185 | Mornington Psula (S)-East | 167 | Mornington Psula (S)-West | 123 |
| Frankston (C)-West | 316 | Kingston (C)-South | 136 | Mornington Psula (S)-West | 134 | Frankston (C)-East | 78 |
| Frankston (C)-West | 264 | Kingston (C)-South | 143 | Mornington Psula (S)-West | 142 | Mornington Psula (S)-South | 125 |
| Frankston (C)-West | 267 | Kingston (C)-South | 120 | Mornington Psula (S)-East | 89 | Mornington Psula (S)-South | 66 |
| Frankston (C)-West | 150 | Frankston (C)-East | 102 | Mornington Psula (S)-East | 56 | Mornington Psula (S)-West | 49 |
| Frankston (C)-West | 90 | Kingston (C)-South | 49 | Mornington Psula (S)-South | 32 | Stonnington (C)-Malvern | 10 |
| Frankston (C)-East | 36 | Mornington Psula (S)-East | 11 | Frankston (C)-West | 11 | Kingston (C)-South | 8 |

A2 and B

| Maroondah Hospital | | | | | | |
|-------------------------------|--------------------|------------|--------------|-----------------|--------------|-------------|
| Category | Separations | | | Bed days | | |
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 410 | 70 | 480 | 4248 | 4318 | 9.00 |
| COPD | 315 | 51 | 366 | 2666 | 2717 | 7.42 |
| Congestive Heart Failure | 226 | 37 | 263 | 1954 | 1991 | 7.57 |
| Cellulitis | 146 | 15 | 161 | 877 | 892 | 5.54 |
| Pyelonephritis | 142 | 48 | 190 | 814 | 862 | 4.54 |
| Angina | 237 | 89 | 326 | 745 | 834 | 2.56 |
| Dehydration & Gastroenteritis | 116 | 137 | 253 | 415 | 552 | 2.18 |
| Asthma | 134 | 44 | 178 | 439 | 483 | 2.71 |
| Convulsions & Epilepsy | 124 | 77 | 201 | 350 | 427 | 2.12 |
| Influenza & Pneumonia | 30 | 7 | 37 | 339 | 346 | 9.35 |
| Iron Deficiency Anaemia | 24 | 48 | 72 | 162 | 210 | 2.92 |
| Hypertension | 18 | 10 | 28 | 79 | 89 | 3.18 |
| Ear, Nose & Throat Infections | 32 | 22 | 54 | 58 | 80 | 1.48 |
| TOTAL | 1954 | 655 | 2609 | 13146 | 13801 | 5.29 |

| Northern | | | | | | |
|-------------------------------|--------------------|------------|--------------|-----------------|--------------|-------------|
| Category | Separations | | | Bed days | | |
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 781 | 176 | 957 | 6687 | 6863 | 7.17 |
| COPD | 378 | 53 | 431 | 2680 | 2733 | 6.34 |
| Congestive Heart Failure | 319 | 55 | 374 | 2321 | 2376 | 6.35 |
| Cellulitis | 222 | 24 | 246 | 1253 | 1277 | 5.19 |
| Angina | 275 | 126 | 401 | 1035 | 1161 | 2.90 |
| Pyelonephritis | 194 | 101 | 295 | 932 | 1033 | 3.50 |
| Asthma | 280 | 65 | 345 | 803 | 868 | 2.52 |
| Dehydration & Gastroenteritis | 104 | 105 | 209 | 408 | 513 | 2.45 |
| Convulsions & Epilepsy | 138 | 89 | 227 | 403 | 492 | 2.17 |
| Influenza & Pneumonia | 39 | 1 | 40 | 374 | 375 | 9.38 |
| Ear, Nose & Throat Infections | 87 | 67 | 154 | 184 | 251 | 1.63 |
| Iron Deficiency Anaemia | 32 | 63 | 95 | 114 | 177 | 1.86 |
| Hypertension | 11 | 2 | 13 | 26 | 28 | 2.15 |
| TOTAL | 2860 | 927 | 3787 | 17220 | 18147 | 4.79 |

Notes

Source: VAED
Data range: 2001/02

Maroondah Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|-----------------------------|----------|-----------------------------|----------|-----------------------------|----------|----------------------------|----------|
| Yarra Ranges (S)-South-West | 1255 | Maroondah (C)-Croydon | 1147 | Maroondah (C)-Ringwood | 730 | Knox (C)-North | 436 |
| Yarra Ranges (S)-South-West | 828 | Maroondah (C)-Croydon | 608 | Maroondah (C)-Ringwood | 595 | Knox (C)-North | 301 |
| Maroondah (C)-Croydon | 538 | Maroondah (C)-Ringwood | 456 | Yarra Ranges (S)-South-West | 429 | Knox (C)-North | 125 |
| Maroondah (C)-Croydon | 257 | Yarra Ranges (S)-South-West | 222 | Maroondah (C)-Ringwood | 189 | Knox (C)-North | 85 |
| Yarra Ranges (S)-South-West | 284 | Maroondah (C)-Ringwood | 214 | Maroondah (C)-Croydon | 175 | Knox (C)-North | 93 |
| Maroondah (C)-Croydon | 232 | Yarra Ranges (S)-South-West | 217 | Maroondah (C)-Ringwood | 124 | Knox (C)-North | 102 |
| Yarra Ranges (S)-South-West | 177 | Maroondah (C)-Ringwood | 122 | Maroondah (C)-Croydon | 80 | Knox (C)-North | 42 |
| Yarra Ranges (S)-South-West | 191 | Maroondah (C)-Croydon | 143 | Maroondah (C)-Ringwood | 49 | Knox (C)-North | 28 |
| Yarra Ranges (S)-South-West | 131 | Knox (C)-North | 97 | Maroondah (C)-Croydon | 67 | Maroondah (C)-Ringwood | 60 |
| Knox (C)-North | 85 | Maroondah (C)-Ringwood | 74 | Yarra Ranges (S)-South-West | 72 | Mornington Psula (S)-South | 30 |
| Maroondah (C)-Ringwood | 73 | Yarra Ranges (S)-South-West | 49 | Yarra Ranges (S)-Central | 32 | Maroondah (C)-Croydon | 24 |
| Yarra Ranges (S)-South-West | 44 | Maroondah (C)-Croydon | 16 | Maroondah (C)-Ringwood | 13 | Yarra Ranges (S)-North | 7 |
| Maroondah (C)-Croydon | 29 | Yarra Ranges (S)-South-West | 24 | Maroondah (C)-Ringwood | 12 | Knox (C)-North | 4 |

Northern

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|----------------------|----------|-----------------------|----------|----------------------------|----------|-----------------------|----------|
| Whittlesea (C)-South | 2232 | Darebin (C)-Preston | 1791 | Hume (C)-Broadmeadows | 837 | Moreland (C)-North | 559 |
| Darebin (C)-Preston | 660 | Hume (C)-Broadmeadows | 650 | Whittlesea (C)-South | 561 | Hume (C)-Craigieburn | 180 |
| Whittlesea (C)-South | 795 | Darebin (C)-Preston | 620 | Hume (C)-Broadmeadows | 311 | Moreland (C)-North | 164 |
| Whittlesea (C)-South | 307 | Hume (C)-Broadmeadows | 225 | Darebin (C)-Preston | 200 | Moreland (C)-North | 182 |
| Whittlesea (C)-South | 371 | Hume (C)-Broadmeadows | 293 | Darebin (C)-Preston | 129 | Hume (C)-Craigieburn | 120 |
| Whittlesea (C)-South | 326 | Darebin (C)-Preston | 283 | Hume (C)-Craigieburn | 106 | Moreland (C)-North | 88 |
| Whittlesea (C)-South | 310 | Darebin (C)-Preston | 185 | Hume (C)-Broadmeadows | 107 | Hume (C)-Craigieburn | 88 |
| Whittlesea (C)-South | 180 | Darebin (C)-Preston | 125 | Hume (C)-Broadmeadows | 82 | Moreland (C)-North | 39 |
| Whittlesea (C)-South | 196 | Darebin (C)-Preston | 81 | Hume (C)-Broadmeadows | 52 | Moreland (C)-North | 45 |
| Darebin (C)-Preston | 94 | Hume (C)-Broadmeadows | 74 | Darebin (C)-Northcote | 63 | Whittlesea (C)-North | 40 |
| Whittlesea (C)-South | 88 | Hume (C)-Craigieburn | 37 | Moonee Valley (C)-Essendon | 31 | Hume (C)-Broadmeadows | 28 |
| Whittlesea (C)-South | 70 | Darebin (C)-Preston | 30 | Hume (C)-Broadmeadows | 27 | Moreland (C)-North | 10 |
| Whittlesea (C)-South | 7 | Banyule (C)-North | 6 | Moreland (C)-North | 5 | Darebin (C)-Preston | 4 |

A2 and B

| Sunshine Hospital | | | | | | |
|-------------------------------|-------------|------------|-------------|--------------|--------------|-------------|
| Category | Separations | | | Bed days | | |
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 523 | 147 | 670 | 7009 | 7156 | 10.68 |
| COPD | 235 | 45 | 280 | 1513 | 1558 | 5.56 |
| Congestive Heart Failure | 183 | 35 | 218 | 1330 | 1365 | 6.26 |
| Asthma | 435 | 142 | 577 | 823 | 965 | 1.67 |
| Pyelonephritis | 180 | 87 | 267 | 809 | 896 | 3.36 |
| Cellulitis | 157 | 25 | 182 | 784 | 809 | 4.45 |
| Dehydration & Gastroenteritis | 83 | 93 | 176 | 396 | 489 | 2.78 |
| Angina | 173 | 56 | 229 | 428 | 484 | 2.11 |
| Ear, Nose & Throat Infections | 149 | 62 | 211 | 240 | 302 | 1.43 |
| Convulsions & Epilepsy | 100 | 105 | 205 | 193 | 298 | 1.45 |
| Influenza & Pneumonia | 26 | 17 | 43 | 152 | 169 | 3.93 |
| Iron Deficiency Anaemia | 20 | 14 | 34 | 73 | 87 | 2.56 |
| Hypertension | 14 | 9 | 23 | 67 | 76 | 3.30 |
| TOTAL | 2278 | 837 | 3115 | 13817 | 14654 | 4.70 |

| Western Hospital | | | | | | |
|-------------------------------|-------------|------------|-------------|--------------|--------------|-------------|
| Category | Separations | | | Bed days | | |
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 1559 | 262 | 1821 | 14536 | 14798 | 8.13 |
| Congestive Heart Failure | 521 | 71 | 592 | 3443 | 3514 | 5.94 |
| COPD | 510 | 77 | 587 | 3126 | 3203 | 5.46 |
| Pyelonephritis | 217 | 107 | 324 | 1357 | 1464 | 4.52 |
| Angina | 349 | 56 | 405 | 924 | 980 | 2.42 |
| Convulsions & Epilepsy | 163 | 85 | 248 | 777 | 862 | 3.48 |
| Dehydration & Gastroenteritis | 143 | 127 | 270 | 613 | 740 | 2.74 |
| Cellulitis | 127 | 31 | 158 | 697 | 728 | 4.61 |
| Asthma | 165 | 47 | 212 | 613 | 660 | 3.11 |
| Influenza & Pneumonia | 38 | 9 | 47 | 417 | 426 | 9.06 |
| Iron Deficiency Anaemia | 54 | 70 | 124 | 205 | 275 | 2.22 |
| Ear, Nose & Throat Infections | 44 | 22 | 66 | 98 | 120 | 1.82 |
| Hypertension | 14 | 6 | 20 | 36 | 42 | 2.10 |
| TOTAL | 3904 | 970 | 4874 | 26842 | 27812 | 5.71 |

Notes

Source: VAED
Data range: 2001 /02

Sunshine Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|-----------------------|----------|-----------------------|----------|----------------------|----------|------------------------------|----------|
| Brimbank (C)-Sunshine | 2230 | Brimbank (C)-Keilor | 1896 | Wyndham (C)-Werribee | 816 | Maribyrnong (C) | 561 |
| Brimbank (C)-Sunshine | 529 | Brimbank (C)-Keilor | 501 | Melton (S) Bal | 116 | Hobsons Bay (C)-Williamstown | 106 |
| Brimbank (C)-Sunshine | 469 | Brimbank (C)-Keilor | 408 | Maribyrnong (C) | 104 | Melton (S) Bal | 81 |
| Brimbank (C)-Sunshine | 296 | Brimbank (C)-Keilor | 240 | Melton (S) Bal | 77 | Wyndham (C)-Werribee | 61 |
| Brimbank (C)-Sunshine | 304 | Brimbank (C)-Keilor | 239 | Melton (S) Bal | 113 | Hume (C)-Sunbury | 40 |
| Brimbank (C)-Sunshine | 305 | Brimbank (C)-Keilor | 249 | Melton (S) Bal | 69 | Melton (S)-East | 49 |
| Brimbank (C)-Keilor | 208 | Brimbank (C)-Sunshine | 108 | Melton (S) Bal | 46 | Hume (C)-Broadmeadows | 25 |
| Brimbank (C)-Sunshine | 182 | Brimbank (C)-Keilor | 177 | Melton (S) Bal | 37 | Melton (S)-East | 20 |
| Brimbank (C)-Sunshine | 90 | Brimbank (C)-Keilor | 80 | Wyndham (C)-Werribee | 24 | Melton (S) Bal | 22 |
| Brimbank (C)-Sunshine | 100 | Brimbank (C)-Keilor | 87 | Melton (S) Bal | 29 | Maribyrnong (C) | 16 |
| Brimbank (C)-Keilor | 83 | Brimbank (C)-Sunshine | 31 | Melton (S) Bal | 16 | Hume (C)-Sunbury | 11 |
| Brimbank (C)-Sunshine | 52 | Brimbank (C)-Keilor | 20 | Hume (C)-Sunbury | 4 | Moonee Valley (C)-West | 2 |
| Maribyrnong (C) | 39 | Brimbank (C)-Sunshine | 18 | Brimbank (C)-Keilor | 17 | Moorabool (S)-Bacchus Marsh | 1 |

Western Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|-----------------------|----------|-----------------------|----------|------------------------------|----------|------------------------------|----------|
| Maribyrnong (C) | 3579 | Brimbank (C)-Sunshine | 3203 | Brimbank (C)-Keilor | 2246 | Hobsons Bay (C)-Altona | 1709 |
| Maribyrnong (C) | 1191 | Brimbank (C)-Sunshine | 463 | Hobsons Bay (C)-Williamstown | 410 | Hobsons Bay (C)-Altona | 388 |
| Maribyrnong (C) | 911 | Brimbank (C)-Sunshine | 618 | Hobsons Bay (C)-Altona | 461 | Hobsons Bay (C)-Williamstown | 314 |
| Maribyrnong (C) | 510 | Brimbank (C)-Sunshine | 230 | Hobsons Bay (C)-Altona | 179 | Hobsons Bay (C)-Williamstown | 162 |
| Maribyrnong (C) | 299 | Brimbank (C)-Sunshine | 150 | Hobsons Bay (C)-Altona | 114 | Brimbank (C)-Keilor | 108 |
| Maribyrnong (C) | 220 | Brimbank (C)-Sunshine | 139 | Moonee Valley (C)-Essendon | 127 | Hobsons Bay (C)-Williamstown | 86 |
| Maribyrnong (C) | 240 | Brimbank (C)-Sunshine | 152 | Brimbank (C)-Keilor | 87 | Hobsons Bay (C)-Altona | 69 |
| Maribyrnong (C) | 262 | Brimbank (C)-Sunshine | 147 | Brimbank (C)-Keilor | 64 | Hobsons Bay (C)-Altona | 54 |
| Maribyrnong (C) | 248 | Brimbank (C)-Sunshine | 178 | Brimbank (C)-Keilor | 38 | Melton (S) Bal | 37 |
| Brimbank (C)-Keilor | 90 | Brimbank (C)-Sunshine | 72 | Hobsons Bay (C)-Altona | 64 | Maribyrnong (C) | 47 |
| Maribyrnong (C) | 125 | Brimbank (C)-Sunshine | 51 | Brimbank (C)-Keilor | 25 | Wyndham (C)-Werribee | 22 |
| Maribyrnong (C) | 35 | Brimbank (C)-Sunshine | 22 | Brimbank (C)-Keilor | 16 | Melton (S) Bal | 11 |
| Brimbank (C)-Sunshine | 18 | Maribyrnong (C) | 9 | Brimbank (C)-Keilor | 8 | Melbourne (C)-Remainder | 2 |

Rural

Ballarat Base Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 496 | 636 | 1132 | 4859 | 5495 | 4.85 |
| COPD | 231 | 9 | 240 | 1740 | 1749 | 7.29 |
| Congestive Heart Failure | 179 | 4 | 183 | 1735 | 1739 | 9.50 |
| Angina | 327 | 11 | 338 | 1185 | 1196 | 3.54 |
| Pyelonephritis | 108 | 5 | 113 | 622 | 627 | 5.55 |
| Asthma | 184 | 10 | 194 | 576 | 586 | 3.02 |
| Dehydration & Gastroenteritis | 69 | 40 | 109 | 438 | 478 | 4.39 |
| Cellulitis | 93 | 2 | 95 | 455 | 457 | 4.81 |
| Convulsions & Epilepsy | 119 | 9 | 128 | 397 | 406 | 3.17 |
| Influenza & Pneumonia | 33 | 2 | 35 | 292 | 294 | 8.40 |
| Ear, Nose & Throat Infections | 85 | 23 | 108 | 191 | 214 | 1.98 |
| Iron Deficiency Anaemia | 24 | 20 | 44 | 107 | 127 | 2.89 |
| Hypertension | 8 | 0 | 8 | 34 | 34 | 4.25 |
| TOTAL | 1956 | 771 | 2727 | 12631 | 13402 | 4.91 |

Barwon Health

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 1340 | 276 | 1616 | 13271 | 13547 | 8.38 |
| COPD | 438 | 57 | 495 | 3729 | 3786 | 7.65 |
| Congestive Heart Failure | 346 | 43 | 389 | 3107 | 3150 | 8.10 |
| Influenza & Pneumonia | 155 | 12 | 167 | 1828 | 1840 | 11.02 |
| Pyelonephritis | 265 | 107 | 372 | 1522 | 1629 | 4.38 |
| Cellulitis | 246 | 14 | 260 | 1569 | 1583 | 6.09 |
| Angina | 328 | 165 | 493 | 1005 | 1170 | 2.37 |
| Asthma | 286 | 88 | 374 | 765 | 853 | 2.28 |
| Dehydration & Gastroenteritis | 111 | 108 | 219 | 549 | 657 | 3.00 |
| Convulsions & Epilepsy | 202 | 107 | 309 | 543 | 650 | 2.10 |
| Ear, Nose & Throat Infections | 209 | 111 | 320 | 414 | 525 | 1.64 |
| Iron Deficiency Anaemia | 31 | 63 | 94 | 136 | 199 | 2.12 |
| Hypertension | 15 | 5 | 20 | 100 | 105 | 5.25 |
| TOTAL | 3972 | 1156 | 5128 | 28538 | 29694 | 5.79 |

Notes

Source: VAED
Data range: 2001/02

Ballarat Base Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|----------------------|----------|--------------------------|----------|--------------------------|----------|------------------------------|----------|
| Ballarat (C)-Central | 1745 | Ballarat (C)-South | 1054 | Ballarat (C)-Inner North | 695 | C. Goldfields (S)-Mborough | 307 |
| Ballarat (C)-South | 548 | Ballarat (C)-Central | 449 | Ballarat (C)-Inner North | 328 | Hepburn (S)-West | 76 |
| Ballarat (C)-Central | 643 | Ballarat (C)-South | 444 | Ballarat (C)-Inner North | 349 | Moorabool (S)-Ballan | 103 |
| Ballarat (C)-Central | 296 | Ballarat (C)-Inner North | 250 | Ballarat (C)-South | 248 | Hepburn (S)-West | 80 |
| Ballarat (C)-Central | 271 | Ballarat (C)-South | 151 | Ballarat (C)-Inner North | 87 | Moorabool (S)-Bacchus Marsh | 29 |
| Ballarat (C)-Central | 168 | Ballarat (C)-South | 132 | Ballarat (C)-Inner North | 122 | Golden Plains (S)-North-West | 28 |
| Ballarat (C)-Central | 216 | Ballarat (C)-South | 90 | Ballarat (C)-Inner North | 41 | Golden Plains (S)-North-West | 33 |
| Ballarat (C)-Central | 153 | Ballarat (C)-Inner North | 70 | Ballarat (C)-South | 43 | Ballarat (C)-North | 41 |
| Ballarat (C)-Central | 178 | Ballarat (C)-South | 81 | Ballarat (C)-Inner North | 49 | Golden Plains (S)-North-West | 23 |
| Ballarat (C)-Central | 142 | Ballarat (C)-Inner North | 77 | Ballarat (C)-South | 43 | Hepburn (S)-East | 12 |
| Ballarat (C)-South | 70 | Ballarat (C)-Inner North | 41 | Ballarat (C)-Central | 40 | Golden Plains (S)-North-West | 11 |
| Ballarat (C)-South | 42 | Ballarat (C)-Central | 41 | Ballarat (C)-Inner North | 13 | Golden Plains (S)-North-West | 8 |
| Ballarat (C)-South | 20 | Ballarat (C)-Central | 10 | Hepburn (S)-West | 2 | Ballarat (C)-Inner North | 1 |

Barwon Health

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|--------------------|----------|--------------------|----------|--------------------------|----------|--------------------------|----------|
| Corio-Inner | 5038 | South Barwon-Inner | 1972 | Bellarine-Inner | 1397 | Greater Geelong (C)-Pt B | 1254 |
| Corio-Inner | 1116 | South Barwon-Inner | 829 | Geelong West | 396 | Bellarine-Inner | 359 |
| Corio-Inner | 1029 | South Barwon-Inner | 492 | Bellarine-Inner | 312 | Greater Geelong (C)-Pt B | 303 |
| Corio-Inner | 547 | Bellarine-Inner | 312 | South Barwon-Inner | 234 | Greater Geelong (C)-Pt B | 197 |
| Corio-Inner | 528 | South Barwon-Inner | 333 | Greater Geelong (C)-Pt B | 216 | Bellarine-Inner | 138 |
| Corio-Inner | 471 | South Barwon-Inner | 294 | Bellarine-Inner | 233 | Greater Geelong (C)-Pt B | 215 |
| Corio-Inner | 285 | South Barwon-Inner | 276 | Greater Geelong (C)-Pt B | 161 | Bellarine-Inner | 87 |
| Corio-Inner | 271 | South Barwon-Inner | 112 | Geelong West | 87 | Bellarine-Inner | 86 |
| Corio-Inner | 239 | South Barwon-Inner | 139 | Greater Geelong (C)-Pt B | 66 | Bellarine-Inner | 56 |
| Corio-Inner | 192 | South Barwon-Inner | 116 | Bellarine-Inner | 99 | Geelong West | 54 |
| Corio-Inner | 215 | South Barwon-Inner | 87 | Bellarine-Inner | 60 | Greater Geelong (C)-Pt B | 46 |
| South Barwon-Inner | 55 | Corio-Inner | 54 | Greater Geelong (C)-Pt B | 31 | Bellarine-Inner | 17 |
| Corio-Inner | 47 | Geelong | 26 | Geelong West | 10 | South Barwon-Inner | 7 |

Rural

Bendigo Health Care Group

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 456 | 190 | 646 | 6304 | 6494 | 10.05 |
| COPD | 225 | 7 | 232 | 2101 | 2108 | 9.09 |
| Congestive Heart Failure | 189 | 11 | 200 | 1704 | 1715 | 8.58 |
| Cellulitis | 113 | 2 | 115 | 1053 | 1055 | 9.17 |
| Angina | 211 | 87 | 298 | 791 | 878 | 2.95 |
| Influenza & Pneumonia | 43 | 3 | 46 | 647 | 650 | 14.13 |
| Pyelonephritis | 91 | 23 | 114 | 602 | 625 | 5.48 |
| Asthma | 141 | 13 | 154 | 393 | 406 | 2.64 |
| Dehydration & Gastroenteritis | 66 | 37 | 103 | 342 | 379 | 3.68 |
| Convulsions & Epilepsy | 91 | 10 | 101 | 324 | 334 | 3.31 |
| Iron Deficiency Anaemia | 35 | 46 | 81 | 222 | 268 | 3.31 |
| Ear, Nose & Throat Infections | 67 | 14 | 81 | 118 | 132 | 1.63 |
| Hypertension | 5 | 4 | 9 | 8 | 12 | 1.33 |
| TOTAL | 1733 | 447 | 2180 | 14609 | 15056 | 6.91 |

Goulburn Valley Base Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|------------|-------------|-------------|-------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 272 | 153 | 425 | 3098 | 3251 | 7.65 |
| COPD | 164 | 18 | 182 | 1246 | 1264 | 6.95 |
| Congestive Heart Failure | 135 | 17 | 152 | 1044 | 1061 | 6.98 |
| Angina | 262 | 50 | 312 | 852 | 902 | 2.89 |
| Cellulitis | 105 | 5 | 110 | 592 | 597 | 5.43 |
| Pyelonephritis | 72 | 35 | 107 | 408 | 443 | 4.14 |
| Convulsions & Epilepsy | 99 | 47 | 146 | 245 | 292 | 2.00 |
| Asthma | 97 | 22 | 119 | 269 | 291 | 2.45 |
| Ear, Nose & Throat Infections | 117 | 28 | 145 | 236 | 264 | 1.82 |
| Dehydration & Gastroenteritis | 45 | 53 | 98 | 163 | 216 | 2.20 |
| Iron Deficiency Anaemia | 21 | 65 | 86 | 148 | 213 | 2.48 |
| Influenza & Pneumonia | 19 | 2 | 21 | 184 | 186 | 8.86 |
| Hypertension | 13 | 7 | 20 | 46 | 53 | 2.65 |
| TOTAL | 1421 | 502 | 1923 | 8531 | 9033 | 4.70 |

Notes

Source: VAED
Data range: 2001/02

Bendigo Health Care Group

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|----------------------------|----------|----------------------------|----------|----------------------------|----------|-----------------------------|----------|
| Gr. Bendigo (C)–Inner West | 1031 | Gr. Bendigo (C)–Central | 1018 | Gr. Bendigo (C)–Inner East | 860 | Gr. Bendigo (C)–Eaglehawk | 841 |
| Gr. Bendigo (C)–Inner West | 470 | Gr. Bendigo (C)–Central | 434 | Gr. Bendigo (C)–Inner East | 213 | Gr. Bendigo (C)–Inner North | 204 |
| Gr. Bendigo (C)–Inner West | 407 | Gr. Bendigo (C)–Central | 291 | Gr. Bendigo (C)–Inner East | 289 | Gr. Bendigo (C)–Eaglehawk | 211 |
| Gr. Bendigo (C)–Inner West | 275 | Gr. Bendigo (C)–Central | 270 | Gr. Bendigo (C)–Inner East | 202 | Gr. Bendigo (C)–Eaglehawk | 171 |
| Gr. Bendigo (C)–Inner West | 146 | Gr. Bendigo (C)–Inner East | 141 | Gr. Bendigo (C)–Central | 130 | Gr. Bendigo (C)–Eaglehawk | 89 |
| Gr. Bendigo (C)–Inner East | 186 | Gr. Bendigo (C)–Inner West | 104 | Gr. Bendigo (C)–Central | 102 | Gr. Shepparton (C)–Pt A | 70 |
| Gr. Bendigo (C)–Inner West | 224 | Gr. Bendigo (C)–Central | 99 | Gr. Bendigo (C)–Eaglehawk | 71 | Gr. Bendigo (C)–Inner East | 62 |
| Gr. Bendigo (C)–Inner West | 75 | Gr. Bendigo (C)–Eaglehawk | 69 | Gr. Bendigo (C)–Inner East | 45 | Campaspe (S)–Rochester | 41 |
| Gr. Bendigo (C)–Inner West | 121 | Gr. Bendigo (C)–Central | 105 | Gr. Bendigo (C)–Eaglehawk | 45 | Gr. Bendigo (C)–Inner East | 32 |
| Gr. Bendigo (C)–Central | 80 | Gr. Bendigo (C)–Eaglehawk | 58 | Gr. Bendigo (C)–Inner East | 57 | Gr. Bendigo (C)–Inner West | 26 |
| Gr. Bendigo (C)–Pt B | 57 | Gr. Bendigo (C)–Eaglehawk | 44 | Gr. Bendigo (C)–Inner East | 38 | Gr. Bendigo (C)–Central | 36 |
| Gr. Bendigo (C)–Inner West | 30 | Gr. Bendigo (C)–Central | 20 | Gr. Bendigo (C)–Inner East | 17 | Gr. Bendigo (C)–Eaglehawk | 10 |
| Mount Alexander (S) Bal | 3 | Gr. Bendigo (C)–Central | 3 | Gannawarra (S) | 2 | Gr. Bendigo (C)–Inner East | 2 |

Goulburn Valley Base Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|------------------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|----------|
| Gr. Shepparton (C)–Pt A | 1743 | Gr. Shepparton (C)–Pt B West | 506 | Moira (S)–West | 296 | Strathbogie (S) | 205 |
| Gr. Shepparton (C)–Pt A | 646 | Gr. Shepparton (C)–Pt B West | 270 | Gr. Shepparton (C)–Pt B East | 103 | Campaspe (S)–South | 93 |
| Gr. Shepparton (C)–Pt A | 607 | Gr. Shepparton (C)–Pt B West | 156 | Moira (S)–West | 101 | Strathbogie (S) | 70 |
| Gr. Shepparton (C)–Pt A | 486 | Moira (S)–West | 116 | Gr. Shepparton (C)–Pt B West | 82 | Strathbogie (S) | 70 |
| Gr. Shepparton (C)–Pt A | 417 | Gr. Shepparton (C)–Pt B West | 92 | Campaspe (S)–South | 31 | Gr. Shepparton (C)–Pt B East | 21 |
| Gr. Shepparton (C)–Pt A | 284 | Campaspe (S)–South | 58 | Gr. Shepparton (C)–Pt B West | 51 | Strathbogie (S) | 22 |
| Gr. Shepparton (C)–Pt A | 185 | Murrindindi (S)–West | 27 | Campaspe (S)–Kyabram | 20 | Moira (S)–West | 20 |
| Gr. Shepparton (C)–Pt A | 179 | Gr. Shepparton (C)–Pt B West | 51 | Gr. Shepparton (C)–Pt B East | 23 | Moira (S)–West | 13 |
| Gr. Shepparton (C)–Pt A | 199 | Gr. Shepparton (C)–Pt B West | 15 | Gr. Shepparton (C)–Pt B East | 10 | Strathbogie (S) | 8 |
| Gr. Shepparton (C)–Pt A | 129 | Gr. Shepparton (C)–Pt B West | 26 | Campaspe (S)–South | 24 | Strathbogie (S) | 16 |
| Gr. Shepparton (C)–Pt A | 132 | Moira (S)–West | 39 | Gr. Shepparton (C)–Pt B East | 10 | Gr. Shepparton (C)–Pt B West | 9 |
| Gr. Shepparton (C)–Pt B West | 88 | Gr. Shepparton (C)–Pt A | 77 | Moira (S)–West | 9 | Campaspe (S)–South | 7 |
| Gr. Shepparton (C)–Pt A | 26 | Gr. Shepparton (C)–Pt B West | 24 | Moira (S)–West | 2 | Campaspe (S)–South | 1 |

Rural

New Latrobe Regional Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|-------------|-------------|--------------|--------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Diabetes Complications | 523 | 1296 | 1819 | 5457 | 6753 | 3.71 |
| COPD | 199 | 31 | 230 | 1475 | 1506 | 6.55 |
| Congestive Heart Failure | 177 | 23 | 200 | 1335 | 1358 | 6.79 |
| Angina | 248 | 82 | 330 | 883 | 965 | 2.92 |
| Cellulitis | 145 | 5 | 150 | 901 | 906 | 6.04 |
| Pyelonephritis | 77 | 33 | 110 | 441 | 474 | 4.31 |
| Influenza & Pneumonia | 49 | 1 | 50 | 435 | 436 | 8.72 |
| Asthma | 113 | 20 | 133 | 359 | 379 | 2.85 |
| Dehydration & Gastroenteritis | 35 | 44 | 79 | 153 | 197 | 2.49 |
| Convulsions & Epilepsy | 51 | 29 | 80 | 136 | 165 | 2.06 |
| Ear, Nose & Throat Infections | 37 | 29 | 66 | 84 | 113 | 1.71 |
| Iron Deficiency Anaemia | 14 | 29 | 43 | 59 | 88 | 2.05 |
| Hypertension | 10 | 8 | 18 | 40 | 48 | 2.67 |
| TOTAL | 1678 | 1630 | 3308 | 11758 | 13388 | 4.05 |

Notes

Source: VAED

Data range: 2001/02

New Latrobe Regional Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|------------------------|----------|------------------------|----------|------------------------|----------|-----------------------------|----------|
| La Trobe (S)–Morwell | 1952 | La Trobe (S)–Moe | 1905 | La Trobe (S)–Traralgon | 1741 | Baw Baw (S)–Pt B West | 345 |
| La Trobe (S)–Morwell | 570 | La Trobe (S)–Traralgon | 491 | La Trobe (S)–Moe | 363 | Wellington (S)–Rosedale | 15 |
| La Trobe (S)–Morwell | 543 | La Trobe (S)–Traralgon | 364 | La Trobe (S)–Moe | 361 | Baw Baw (S)–Pt A | 30 |
| La Trobe (S)–Traralgon | 391 | La Trobe (S)–Morwell | 291 | La Trobe (S)–Moe | 200 | South Gippsland (S)–Central | 29 |
| La Trobe (S)–Morwell | 321 | La Trobe (S)–Traralgon | 288 | La Trobe (S)–Moe | 256 | La Trobe (S) Bal | 14 |
| La Trobe (S)–Traralgon | 159 | La Trobe (S)–Morwell | 141 | La Trobe (S)–Moe | 120 | Wellington (S)–Rosedale | 19 |
| La Trobe (S)–Traralgon | 209 | La Trobe (S)–Morwell | 122 | La Trobe (S)–Moe | 56 | Baw Baw (S)–Pt A | 13 |
| La Trobe (S)–Morwell | 137 | La Trobe (S)–Traralgon | 117 | La Trobe (S)–Moe | 95 | La Trobe (S) Bal | 12 |
| La Trobe (S)–Traralgon | 61 | La Trobe (S)–Morwell | 61 | La Trobe (S)–Moe | 41 | Wellington (S)–Rosedale | 29 |
| La Trobe (S)–Morwell | 72 | La Trobe (S)–Traralgon | 49 | La Trobe (S)–Moe | 33 | Wellington (S)–Rosedale | 5 |
| La Trobe (S)–Traralgon | 48 | La Trobe (S)–Morwell | 34 | La Trobe (S)–Moe | 16 | South Gippsland (S)–East | 4 |
| La Trobe (S)–Traralgon | 42 | La Trobe (S)–Morwell | 29 | La Trobe (S)–Moe | 12 | Mornington Psula (S)–South | 3 |
| La Trobe (S)–Morwell | 18 | La Trobe (S)–Moe | 15 | La Trobe (S)–Traralgon | 13 | Wellington (S)–Maffra | 1 |

RCH

Royal Children's Hospital

| Category | Separations | | | Bed days | | |
|-------------------------------|-------------|------------|-------------|-------------|-------------|-------------|
| | MD | SD | Total | MD | Total | ALOS |
| Asthma | 644 | 147 | 791 | 1074 | 1221 | 1.54 |
| Convulsions & Epilepsy | 343 | 128 | 471 | 1008 | 1136 | 2.41 |
| Influenza & Pneumonia | 69 | 6 | 75 | 1110 | 1116 | 14.88 |
| Ear, Nose & Throat Infections | 271 | 369 | 640 | 588 | 957 | 1.50 |
| Dehydration & Gastroenteritis | 75 | 55 | 130 | 892 | 947 | 7.28 |
| Pyelonephritis | 287 | 37 | 324 | 884 | 921 | 2.84 |
| COPD | 140 | 14 | 154 | 680 | 694 | 4.51 |
| Cellulitis | 153 | 10 | 163 | 437 | 447 | 2.74 |
| Diabetes Complications | 102 | 12 | 114 | 427 | 439 | 3.85 |
| Congestive Heart Failure | 11 | 0 | 11 | 94 | 94 | 8.55 |
| Hypertension | 31 | 1 | 32 | 49 | 50 | 1.56 |
| Iron Deficiency Anaemia | 8 | 11 | 19 | 14 | 25 | 1.32 |
| Angina | 0 | 0 | 0 | 0 | 0 | 0.00 |
| TOTAL | 2134 | 790 | 2924 | 7257 | 8047 | 2.75 |

Notes

Source: VAED

Data range: 2001/02

Royal Children’s Hospital

Top statistics local areas (SLA) by bed days

| SLA | Bed days | SLA | Bed days | SLA | Bed days | SLA | Bed days |
|------------------------------|----------|------------------------------|----------|----------------------------|----------|------------------------|----------|
| Whitehorse (C)–Nunawading W. | 99 | Maribyrnong (C) | 76 | Moonee Valley (C)–Essendon | 71 | Wyndham (C)–Werribee | 68 |
| Moonee Valley (C)–West | 78 | Moonee Valley (C)–Essendon | 69 | Hume (C)–Broadmeadows | 62 | Darebin (C)–Preston | 54 |
| Moreland (C)–Coburg | 452 | Port Phillip (C)–West | 227 | Mount Alexander (S) Bal | 45 | Wyndham (C)–Werribee | 41 |
| Brimbank (C)–Keilor | 74 | Moonee Valley (C)–Essendon | 51 | Whittlesea (C)–South | 49 | Moreland (C)–Coburg | 41 |
| Brimbank (C)–Keilor | 602 | Brimbank (C)–Sunshine | 149 | Indigo (S)–Pt A | 16 | Melton (S) Bal | 14 |
| Darebin (C)–Preston | 98 | Hume (C)–Broadmeadows | 53 | Brimbank (C)–Keilor | 39 | Moreland (C)–Brunswick | 38 |
| Hume (C)–Craigieburn | 311 | Moonee Valley (C)–West | 26 | Maribyrnong (C) | 24 | Melton (S) Bal | 22 |
| Hume (C)–Broadmeadows | 47 | Melton (S) Bal | 34 | Moonee Valley (C)–Essendon | 33 | Moreland (C)–North | 24 |
| Nillumbik (S)–South-West | 41 | Melton (S) Bal | 31 | Whitehorse (C)–Box Hill | 28 | Brimbank (C)–Sunshine | 28 |
| Hume (C)–Broadmeadows | 32 | Whitehorse (C)–Nunawading E. | 24 | Melbourne (C)–Remainder | 19 | Darebin (C)–Preston | 8 |
| Yarra Ranges (S)–South-West | 9 | Brimbank (C)–Sunshine | 6 | Maroondah (C)–Croydon | 5 | Whittlesea (C)–South | 4 |
| Moreland (C)–North | 4 | Whitehorse (C)–Nunawading E. | 3 | Banyule (C)–North | 3 | Hume (C)–Craigieburn | 2 |

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