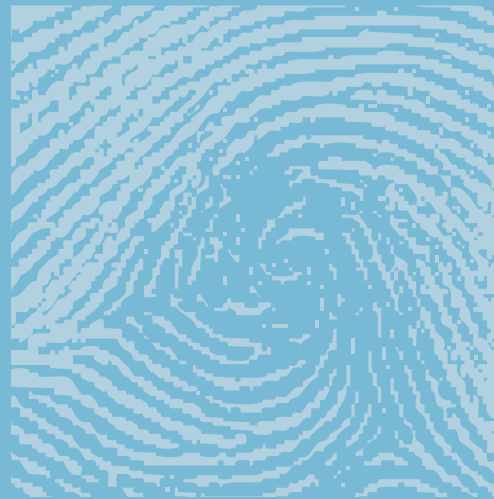


Hospital admission risk program (HARP) GP-hospital interface working party report



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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 GP-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 GP-hospital Interface Working Party of the HARP Reference Group, supported by Lenora Lippman, General Practice Divisions Victoria. This working party included:

- Dr John McEncroe (Chair) General Practice Divisions Victoria
- Ms Vivien Adler Department of Human Services
- Dr Terry Ahern Australian Medical Association
- Mr Phillip Bain Northern Division of General Practice
- Dr John Balla Western Health
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- Ms Karen Large Department of Health and Ageing
- Dr Peter Waxman Department of Human Services

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The report was greatly assisted by the advice and support provided by Mr Ian Coverdale who managed the project for the Department of Human Services. In addition David Gardner's assistance with statistical information and Paul Williamson's support in organising the GPLO workshop is gratefully acknowledged. I would also like to thank Dr Peter Waxman who very ably co-convened the GP Liaison Officer (GPLO) workshop and made an invaluable contribution through the HARP GP-hospital Interface Working Party.

Thank you also to all the members of the GP-hospital Interface Working Party, which formed the steering committee for this report. We also wish to acknowledge the Chair of the working party, Dr John McEncroe, who provided invaluable support as did our colleagues at GPDV especially Bill Newton, Louise Willis, Nicole Petterson and Peter Larter.

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Glossary

AH	After Hours. There are a number of definitions of ‘After Hours’ as it relates to general practice. However the most common definitions include all day Sunday, all public holidays, and Saturdays after 1 pm. On weekdays after hours is normally considered to be 6pm - 8am.
AHMAC	Australian Health Minister’s Advisory Council.
AHPMC	After Hours Primary Medical Clinic.
AIHW	Australian Institute of Health and Welfare.
Ambulatory care sensitive conditions	Conditions for which hospitalisation is avoidable through prevention and early intervention delivered in non-bed based settings.
APCL	Acute Primary Care Liaison. A number of APCL positions have been funded by the Department of Human Services through HARP within metropolitan public hospitals. The various projects are aimed at improving communication between hospitals and the primary care sector.
CGPIS	Centre for General Practice Integration Studies, University of NSW.
CHF	Chronic Heart Failure.
COPD	Chronic Obstructive Pulmonary Disease.
DHAC	Department of Health and Aged Care (Commonwealth) Name from October 1998–November 2001.
Division of general practice	Local organisations of general practitioners, funded primarily by the Commonwealth Government, to improve health outcomes for patients by encouraging general practitioners to work together and with other health professionals to upgrade the quality of health service delivery at the local level.
DoHA	Department of Health and Ageing (Commonwealth) Name from November 2001 to current.
ED	Emergency Department of a hospital.
EDS	Effective Discharge Strategy. A Victorian initiative to improve discharge planning and practice.
EPC	Enhanced Primary Care.
GPs	General Practitioners.
GP-hospital interface	Organisational structures and processes that link GPs with aspects of the hospital’s functioning and/or that link hospital units or services with GPs.
GPDV	General Practice Divisions Victoria. The peak organisation for divisions of general practice in Victoria.

GPLOs	General practice liaison officers. In Victoria these positions have primarily been established to improve the communication between a hospital and the relevant GPs in the area served by the hospital.
HARP	Hospital Admission Risk Program.
HITH	Hospital in the Home.
IT	Information Technology.
MBS	Medicare Benefits Schedule.
MoU	Memorandum of Understanding.
NDHP	National Demonstration Hospitals Program. This is a Commonwealth funded program to improve the functioning of hospitals. There have been three completed phases each with a different focus. NDHP3 focussed on integration. Currently the fourth phase is in progress with an emphasis on aged care.
PCT	Primary Care Type. This is used in relation to people attending EDs who might otherwise be responded to within a general practice environment.
PIP	Practice Incentives Program.
PCPs	Primary Care Partnerships bring together coalitions of primary, acute and continuing care agencies for planning and service development activities for defined catchment populations in Victoria.
RACFs	Residential Aged Care Facilities. These facilities include nursing homes and hostels.
Transitions of Care	The transfer of patient care and information between settings, health professionals and services.

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 being felt within the metropolitan public hospital sector where emergency admissions have grown at 7-8% per annum. Within these demand pressures, primary care type presentations to emergency departments (EDs) have been increasing and now constitute 37% of presentations in metropolitan EDs while at the larger provincial cities participating in Hospital Admission Risk Program (HARP) they are estimated to average just over half of all ED presentations.

As part of an integrated demand management strategy HARP is developing preventive initiatives to reduce the demand pressures on hospitals, by averting the avoidable use of emergency departments and inpatient services. GPs are the most frequent point of first contact with the health care system and have a crucial role to play in the treatment, care and maintenance of people in the community.

While the interface between GPs and hospitals is extremely important with regards to better care for patients, there has been a strong sense across both general practice and hospitals that it has not worked as well as it should. With the burden of illness increasingly being felt in chronic conditions and ambulatory care sensitive conditions it is essential that the best interface possible be achieved. The HARP Reference Group established the GP-Hospital Interface Working Party to better understand this interface from a preventive perspective, to identify both barriers and opportunities, and with the 2003-04 funding round in mind, identify opportunities from the range of incentives that do exist.

The Working Party relied heavily on the GP Hospital framework developed by the Centre for General Practice Integration. This conceptualised the interface in terms of four key purposes, including to:

- foster the relationship between GPs and hospitals
- improve the transitions of care for patients
- shift the care of patients to the most appropriate setting, and to
- prevent the need for acute care.

With respect to these purposes the Working Party concluded the following:

Fostering relationships between GPs and hospitals

The fundamental building block for all GP hospital interfaces is the fostering of relationships between GPs and hospitals. However a consistent theme from the consultations conducted for this project was that a cultural divide exists between GPs and hospitals. At an operational level liaison positions are clearly important in facilitating communication across the interface and bridging the gap created through the cultural differences between GPs and hospitals. It is evident though that liaison positions and other initiatives will flounder unless there is clinical leadership and executive support from within hospitals, and leadership from within general practice to improve the interface and support the changes required through strategic, resourced and specific structures and processes.

The HARP funded Acute Primary Care Liaison projects provide an impetus to foster this level of communication. However, the Working Party considers that a stronger conceptual and governance framework is required to take full advantage of the opportunities that these roles present.

Managing transitions of care

Qualitative data from the consultations identified a number of positive developments around the transfer of information between hospitals and GPs. While the evidence points to the significance of sharing information about patients in preventing admissions and reducing length of stay in hospital, the timely receipt of legible discharge summaries continues to be of concern as does the lack of information from EDs to GPs regarding treatment of patients. Ongoing work is required to roll out and expand the areas of good practice that do exist.

Shifting care to the most appropriate setting

The literature shows that shifting care to the most appropriate settings has the most demonstrated health and economic benefits, but there are constraints to capitalising on the opportunities that this presents. Shared care, Hospital in the Home (HITH) and post acute care all provide opportunities for shifting care to the most appropriate setting. Within a prevention framework there are constraints in remuneration arrangements for general practice in some areas as a consequence of the division of Commonwealth-State funding responsibilities. This is evidenced in the payments for after hours primary medical clinics (AHPMCs) located in hospitals or managed by hospitals.

While there is scope for increasing the implementation of community based or shared care involving GPs, the consultation identified that general practice is currently overwhelmed with demand and has not got spare capacity to provide preventive services to those at risk of hospitalisation. Practice nurses do provide additional scope within general practice but there are workforce issues limiting their utilisation.

Preventing the need for acute care

The literature highlighted the opportunity for case management as an intervention to prevent hospitalisation of those at risk. There have been a number of initiatives utilising this approach developed under HARP and while there are some indications of their broad effectiveness they have not engaged general practice in a systematic way. It is important that future case management and disease management models developed under HARP actively engage with general practice. This will require that projects understand the opportunities to develop integrated models of care through capitalising on Commonwealth priorities and initiatives.

Recommendations

The Working Party identified that the key to driving and supporting GP hospital collaboration is to look for areas of mutual gain. In considering the four key purposes of the GP-hospital interface, the Working Party developed the following recommendations.

Better working relationships between GPs and hospitals

Communication between hospitals and GPs is not as effective as it could be.

It is recommended that:

The HARP Reference Group with the Department of Human Services provide the lead in facilitating hospitals and relevant divisions to assess the efficacy of their current communications structures and processes with a view to ensuring strategic, resourced and specific structures and processes are in place.

General practice should be included as a key stakeholder in the community-hospital partnerships which are formed to respond to the 2003-04 HARP funding round (see the Community-Hospital Interface Working Party report for a description of these partnerships).

Acute Primary Care Liaison initiatives represent a significant investment of HARP funds on a recurrent basis and while there are individually strong models as a cluster of projects they lack an adequate framework. Consequently outcomes are inconsistent and activities undertaken within initiatives are not necessarily well targeted to the objectives of HARP.

It is therefore recommended that:

The HARP Reference Group and the Department of Human Services establish and implement a framework for Acute Primary Care Liaison initiatives. The framework should build on the good models that currently exist and should:

- *identify the objectives and scope of this funding*
- *encourage governance arrangements that incorporate both hospital and GP participation in the initiative*

- *mandate executive and clinical leadership from the hospital as being necessary aspects of the design of APCL initiatives*
- *determine good practice and promote its implementation across the initiatives funded.*

The 2003-04 funding round should not consider the development of further Acute Primary Care Liaison initiatives. Additional funding for Acute Primary Care Liaison initiatives should not become available until the framework recommended above has been established.

Managing transitions of care

For better management of people at risk of hospitalisation good quality discharge information, discharge communication and discharge planning is essential to facilitating GPs being able to provide effective care across the hospital-general practice interface.

It is therefore recommended that:

The Department of Human Services should consider implementing an effective discharge collaborative that targets the smooth transition of care between the hospital and general practice interface.

Hospitals recognise their responsibility in providing safe discharge and demonstrate a commitment through executive leadership to implement resourced strategies that ensure effective infrastructure and operational procedures to support good discharge planning. This should explicitly include protocols and procedures for effective transfer of agreed clinical and pharmaceutical information.

The Department of Human Services coordinate with hospitals the development of protocols for providing timely notification to GPs, of treatment provided to their patients within ED, subject to privacy principles.

Hospitals and the Department of Human Services continue to audit the discharge indicators and the Department of Human Services to provide publicly available comparative reports.

Shifting care to the most appropriate setting

General practice requires additional capacity to provide preventive services to people at risk of hospitalisation.

It is recommended that the 2003-04 HARP funding round should promote submissions for targeted initiatives which shift care to the most appropriate setting for those at risk of hospitalisation. In particular initiatives should be encouraged that support GPs to better manage patients and may involve the wider use of practice nurses.

The development of adequate business and service models for after hours treatment of primary care type patients is constrained by the lack of clarity as to the Medicare funding arrangements applying to After Hours Primary Medical Clinics provided in hospital environments or managed by hospitals.

It is therefore recommended that:

The 2003-04 HARP funding round exclude submissions for After Hours Primary Medical Clinics.

The Department of Human Services identify and work towards a resolution on this issue in the negotiations with the Commonwealth on the Australian Health Care Agreement and progress targeted solutions in a strategic manner.

Preventing the need for acute care

HARP and Commonwealth initiatives should be linked to ensure that integrated management practices for the care of people at risk of hospitalisation are encouraged.

It is recommended that:

Targeting of HARP initiatives should be informed by the Commonwealth priorities and initiatives, particularly in relation to general practice.

The 2003-04 HARP funding round should promote the development of initiatives which utilise the Medicare Schedule Benefit items under the Enhanced Primary Care, Chronic Disease Management categories and Home Medication Review to enhance the capacity of general practice to prevent hospitalisation of those people at risk.

1. Background

The Victorian public health system, like others in Australia and internationally, has been experiencing unprecedented and sustained increases in demand. There are a range of factors that are contributing 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 and
- 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 particularly felt 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. Particularly 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 has been reduced to accommodate greater pressure on emergency services.

In May 2001 the Victorian Government committed \$582 million over a four year period through the Hospital Demand Management (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 are:

- Creating extra capacity through funding growth
- Relieving pressure on hospital beds and emergency departments through diverting people to alternative options where clinically appropriate
- Working with clinicians to improving patient management practices and
- Implementing a prevention strategy to reduce demand pressures – Hospital Admission Risk Program (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% to 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.

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 emergency departments and inpatient services.

HARP targets prevention initiatives that are the most likely to be effective and deliver tangible and demonstrable outcomes. These initiatives focus on people who have a manifest health need, often where their disease is chronic or complex. Priority is 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 maintain their health status 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 and
- 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/>

HARP Reference Group

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

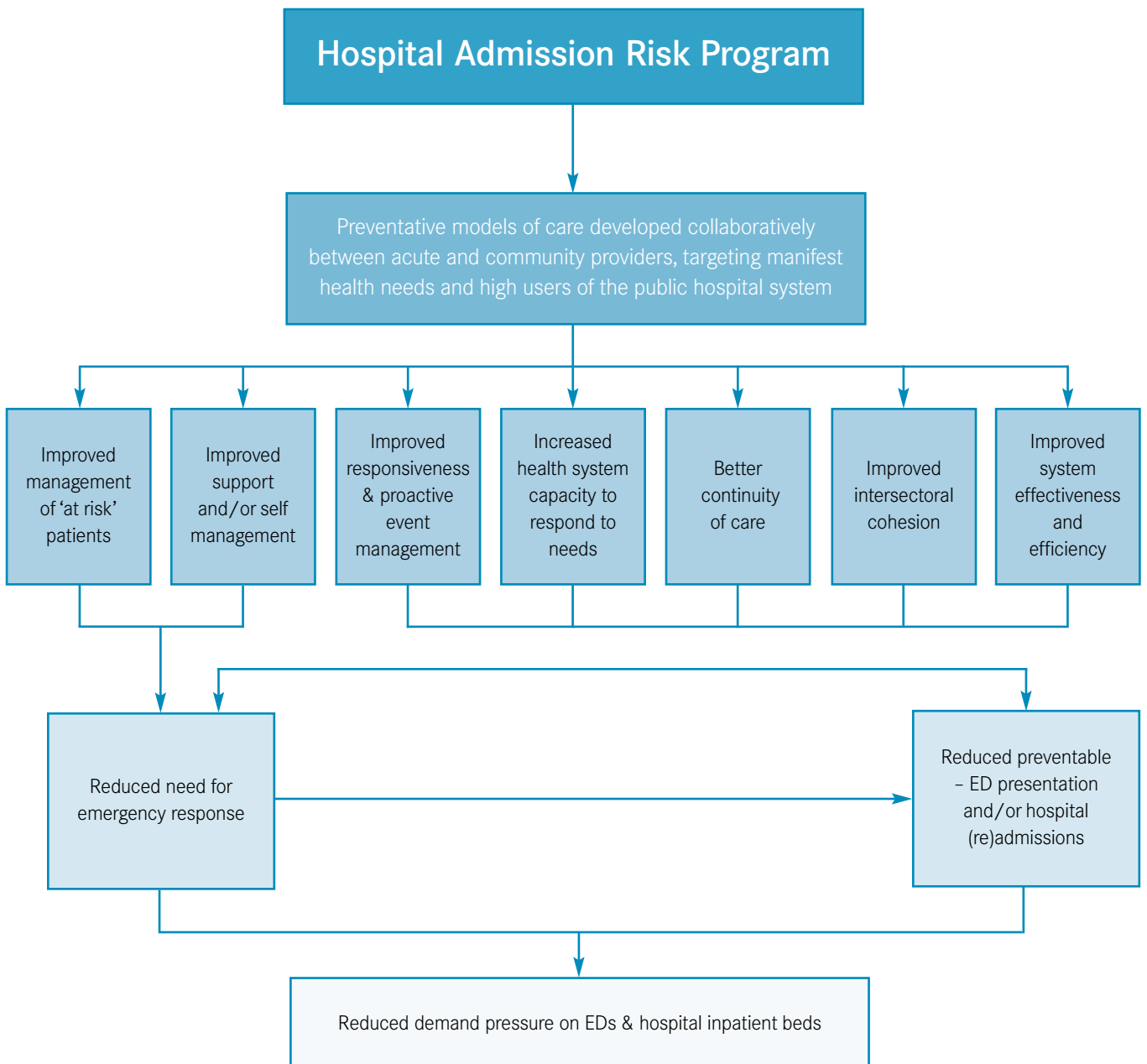
- Target population groups or conditions with most potential for preventing hospitalisations
- Models of care that have demonstrated efficacy
- Trends in morbidity and care options
- How to evaluate programs funded under HARP and
- Allocation of HARP funds.

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 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 clients with complex needs
- Mental Health and
- Technology.

Figure 1 Outline of HARP



The GP-hospital interface

In Victoria approximately 85% of the population see a GP at least once a year. This makes GPs the most frequent point of first contact with the health care system. GPs have a crucial role with respect to continuity of care for people and as gatekeeper to other services within the health care system. GPs are particularly well placed to take a key role in the treatment, care and maintenance of people in the community, thereby preventing the need for people to use hospital services.

A range of systemic and other changes over time, however, have impacted on the clinical and business practices of operating GP clinics such that practice boundaries have become more constrained. One such constraint has been the funding models applied to GP services, which until recently, have not provided incentives for proactively managing patients care.

The division of responsibility between the Commonwealth and States for the funding of GPs and hospitals respectively has reinforced these constraints. Whilst being mindful of the systems issues, at an immediate operational level there are a range of incentives, models of care, interventions and structural arrangements being enacted that do enhance the continuum of care between GPs and hospitals and provide better ways to manage peoples' health.

2. Methodology

The methodology used to produce this report involved a literature review, analysis and interpretation of relevant data, and a consultation process with key stakeholders involved in projects spanning the GP hospital interface.

Literature review

The literature review focussed on recent evidence regarding effective models of GP-hospital collaboration primarily from Australia with some examples from Canada and New Zealand. The literature included in this review targeted two themes:

- 1) the models of GP-hospital care and their effects, and
- 2) the factors that promote effective GP-hospital collaboration and barriers to effective collaboration.

It was beyond the scope of this project to undertake a detailed critical review of the literature and source original research.

Data analysis

The data analysed for this report involved:

- The Victorian Emergency Minimum Dataset (VEMD) for the 2001–02 year. The analysis focussed on people presenting to EDs who may have been able to be managed in a primary care setting ie primary care type patients (PCTP). As there is no definitive agreement on what a primary care type patient is, an indicative set of characteristics was used as a basis for estimating the primary care type demand on EDs.
- The Victorian Admitted Episodes Dataset (VAED) for the 2001–02 year. The analysis utilised the Departments Public Health Branches Ambulatory Care Sensitive Conditions (ACSC) Study and presents the data for the 19 hospitals participating in HARP on the basis of separations for ACSCs by statistical local area.

It had been anticipated that Health Insurance Commission data would also give some indication of trends in after hours primary medical care. However, this data was not available as considerable after hours care is billed at the standard consultation rate due to Medicare regulations and cannot be disaggregated from the available data.

Consultation with key stakeholders

The purpose of the consultations with key stakeholders was to capture their perceptions of the structures and processes involved in facilitating preventive practices across the interface between general practice and hospitals.

The consultations focussed on what these structures and processes were, what supported them, what the barriers to them were and what the opportunities for further development are.

Group consultations were held with eight of the sites where HARP funded Acute Primary Care Liaison initiatives are operating. The consultations involved senior staff and representatives from both hospitals and divisions of general practice.

A structured questionnaire was also used to collect information from those hospitals and the divisions of general practice that are involved in HARP initiatives that have an interface with GPs, but were not included in the face to face consultations.

Structured telephone consultations were held with the executive sponsors of three HARP funded projects that were identified as having innovative approaches.

To capture the experience of people who are working as Acute Primary Care Liaison Officers or GPLOs a GPLO workshop was also held.

3. Literature review

In examining the literature relevant to the GP-hospital interface in relation to HARP, two broad themes were identified:

- The models and outcomes of the attempts to strengthen the interface, and
- The factors that were identified as achieving effective collaboration.

The Centre for General Practice Integration Studies (CGPIS), at the University of New South Wales, has recently produced the major Australian contribution to enhance understanding of the GP-hospital interface in their publication entitled “GP-Hospital Integration, What have we learnt?” (2001). This report provides a framework for considering the models available, a collation of the available literature on the outcomes of implementing a range of different models, and material on the emerging factors in effective collaboration. The literature review undertaken for this project utilised the CGPIS framework and supplemented it with materials that have become available since publication of their report.

3.1 The range of GP-hospital interfaces and their effects

CGPIS (2001) define the four main purposes of GP-hospital integration as:

- Building better working relationships between GPs and hospitals
- Improving transitions of care
- Shifting care to the most appropriate setting and
- Preventing the need for acute care.

The Centre suggests that the range of GP-hospital integration models or program types can each be assigned to one of these main purposes, although a model, such as shared care, may impact on more than one purpose.

Building better working relationships between GPs and hospitals

The evidence for the effects of relationship building activities is difficult to gather. However CGPIS (2001) suggest that the main outcome is ‘enhanced collaboration’, and ‘improved integration of services.’ According to CGPIS (2001) the evidence suggests that how these relationship-building activities are conducted is as important as what model is chosen. The evidence can be summarised as follows.

Model	Outcomes
Memorandums of Understanding (MOUs)	Valuable, if hospital commitment and representative of GPs. Communication between people (especially face to face) is more important than written agreements.
GPLOs	Implementation of other initiatives, if focus is on organisational relationships and systems change.

CGPIS (2001) conclude ‘there is increasing evidence that the simple fostering of connections and relationships between GPs and hospitals is a fundamental building block in the development of good working partnerships and successful integration initiatives’.

Improving transitions of care

The following table produced by CGPIS summarises the results of studies examining attempts to improve transitions of care between GPs and hospitals.

Model	Outcomes
GP hospital communication	Increased provider satisfaction May reduce adverse events Reduced service duplication Increased communication between providers Improved community based follow-up
ED-GP notification	Improved follow-up and continuity of care Higher provider continuity leads to lower ED use
Discharge planning	Increased patient satisfaction Reduced length of stay Reduced re-admissions Improved community based follow-up
Pre-admission planning	Cost effective Increased patient satisfaction Reduced service duplication Reduced day of surgery cancellations Improved community based follow-up Increased GP skills
Shared care (eg cancer, mental health)	Cost effective in some programs (Increased patient/carer satisfaction) Increased provider satisfaction Reduction in hospital admissions Reduction in length of stay Increased communication between providers

The evidence indicates the transitions of care models have the strongest track record with improving satisfaction and achieving better service utilisation (CGPIS).

Shifting care to most appropriate setting

The following table outlines the outcomes from studies examining attempts at shifting care to the most appropriate setting:

Model	Outcomes
Hospital diversion from ED	Reduced hospital admissions through social intervention Difficult to demonstrate cost effectiveness
Hospital in the Home	Some improved health and functional status (Rehabilitation, stroke, older medical) Less hospital related iatrogenic complications Increased patient satisfaction Some decreased carer satisfaction Increased hospital bed availability No increased incidence of adverse events Mixed evidence re cost effectiveness
Home rehabilitation	More effective than hospital based Increased patient satisfaction
Post acute care	Increased patient satisfaction Less hospital related iatrogenic complications Cost effective for some conditions Reduced length of stay Reduced re-admissions
After hours	No increased incidence of adverse events Cost savings compared to ED care
GPs in ED	Utilise some or more resources as well as usual ED staff
Shared care	See above

CGPIS conclude that the shifting care to the most appropriate setting has the most extensively demonstrated health and economic benefits.

Preventing the need for acute care

This table sets out the reported outcomes from studies examining attempts at preventing the need for acute care.

Model	Outcomes
Shared care (diabetes, cardiovascular disease, drug and alcohol, aged care)	Improved health status (diabetes, cardiovascular disease) Improved functional status (aged care) Reduction in hospital admissions
Case management	Increased patient satisfaction Reduced service use but resource intensive No reported cost savings

While the models aimed at preventing the need for acute care have the lowest number of demonstrated outcomes they are the least common area for programs to be developed in and the hardest to evaluate. Case management and shared care are both reported as having both had some success.

Conclusions

CGPIS conclude that benefits have been associated with a range of models, but that evidence is limited on how to best target activities. It is also clear that the different stakeholders each value different outcomes and that the consumer view is barely considered. The CGPIS report hints that outcomes for projects may not translate into ongoing outcomes for system change particularly given the high levels of demand both on hospitals and general practice. To achieve sustained outcomes 'the boundaries between general practice and hospital care (may need to) become semi-permeable', 'allowing more flexible responses to health issues as they arise'.

3.2 Factors in effective collaboration

Developing a stronger interface between GPs and hospitals will clearly involve effective collaboration. For this reason the literature was examined to identify key lessons to support collaboration across different sectors of the health system.

Walker et al (1997) provided a definition of collaboration as "the process in which several agencies make a formal, sustained commitment to work together to accomplish a common mutually enhancing mission". Walker found that the success of collaborative relationships is contingent on mutual gain and varied benefits between the parties involved. Identifying the potential gains and the drivers at different levels is seen as a fundamental step to effective collaboration.

Harris et al (1995) outlined six conditions for effective intersectoral action.

The sectors or organisations need to have:

- Identified the necessity to work together to achieve their goals
- Opportunities in the environments in which they are operating for action to occur
- The capacity to take action
- Developed a relationship to enable them to take action
- Planned, implemented and evaluated the action to the satisfaction of each and
- Achieved sustainable outcomes.

Each of these conditions can be affected by factors at the different levels of government and at the local level.

At the local level Lippmann (2000) delineated the motivators for GPs and hospitals to communicate. In short, to reduce demand and shorten length of stay, hospitals need a responsive primary care sector that is accessible and provides comprehensive services. To better manage people with chronic illnesses and co-morbidities who may be bouncing back and forth from acute care, GPs need

a responsive acute care sector that is accessible and can effectively communicate.

CGPIS (2001) suggests that all parties have a financial motivation to improve the interface. Consumers also need a better GP-hospital interface to have access to high quality health care, with a coordinated and timely approach to care delivery, that avoids repeat investigations, and provides opportunities for them to actively participate in their own care (Alexander 2001a).

CGPIS notes that a major structural barrier to collaboration and integration is the Commonwealth/State division of responsibility in health in Australia, with the Commonwealth largely responsible for general practice and pharmacy, while hospital care is the domain of State and Territory Governments. Thus no one authority is responsible for bringing together common functions between GPs and hospitals or general continuity of care, and there is no common funding system to underpin the commitment to a common goal.

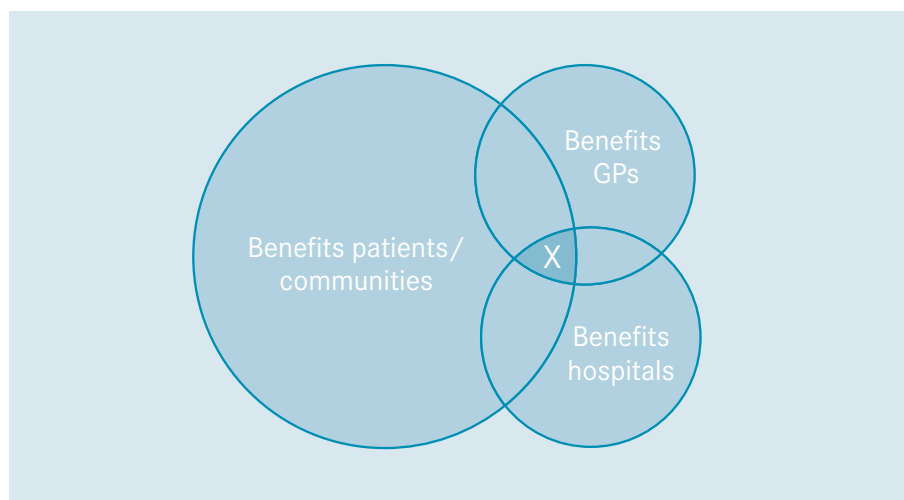
This barrier is manifest in the inadequate or unclear incentives and fee structures for GPs to participate in models such as shared care, HITH, case management, pre admission assessment, after hours care; and insufficient incentives for hospitals to participate in acute care prevention.

At the local level, barriers are created by issues of capacity such as an inadequate community based allied health and community support workforce, and the limited access to specialist diagnostic services. Variability in GP practices, capacity and interest is also a barrier. At the hospital level inadequate information technology (IT) and privacy infrastructure impedes external communication, as does limited hospital commitment to GP hospital communication (CGPIS 2001 p35-42).

As Lippmann (2000) notes, the pressures on hospitals mean that they have become increasingly highly specialised with each ward and each program operating in a way that suits their area of specialisation, providing 'brief, high level and intensive health care' (CGPIS 2001 p 6). This has created difficulties in the relationships with the wider community served. The pressure on hospitals is evident in studies showing that hospital practices often do not match hospital policy, for example in discharge planning (CGPIS 2001).

On the other hand the pressures on GPs have been to incorporate a broader range of skills and to become more generalist. Thus, for example, in addition to dealing with sick people, GPs are encouraged to be involved in health promotion, population health, and the social aspects of health, and to be immediately and financially accessible most of the time to most people (Lippmann 2000). With these markedly different drivers and competing interests it is not surprising that GP interest in communication with hospitals is highly variable.

CGPIS (2001) suggests that within this scenario there is a small area of overlapping interest or 'necessity' where current and future GP-hospital integration activity lies. It is within the area marked by X on the figure below where the overlap of interest occurs and provides the opportunity for collaboration.

Figure 2 GP-hospital integration

Numerous authors have noted general barriers to collaboration between health service providers in developing coordinated approaches to patient care. Often they are issues of opportunity and capacity. Thus in a Canada Transition Fund project in Ottawa, barriers to collaborative practice included the fee for service funding model; the lack of training in collaborative practices in current education programs; and the lack of clarity regarding medico-legal issues associated with interdisciplinary decision making (Mable and Marriott 2002).

In another Canadian Transition Project in Alberta “time and geographic restraints were challenges to a collaborative arrangement to improve care for patients with diabetes or osteoarthritis” (Mable and Marriott 2002). Lewis (2002), taking an overview of the Canadian Health Transition Fund projects, noted that “cross-sectoral care poses challenges regarding the collection and sharing of information across traditional organisation and professional boundaries without undermining consumers’ sense of privacy and confidentiality”.

Based on all three phases of the National Demonstration Hospitals Program (NDHP), Alexander concludes that a consistent barrier to implementing innovation has been a lack of efficient information systems capable of producing valid reliable data. NDHP3 clearly identified that information is vital to implementing any change management program (Alexander 2001 b).

Findings from the Australian Coordinated Care Trials (Commonwealth Department of Health and Ageing 2001a) indicate other capacity barriers to effective implementation of collaborative activity such as:

- a collaborative activity, such as a trial, is a peripheral activity for each of the stakeholders and, as such, each party’s investment in governance is necessarily

small. A steering committee may not necessarily have the expertise and resources to provide good governance processes and

- both the depth of resistance and the time it takes for change to be implemented is underestimated.

The Coordinated Care Trial work also found that relationship barriers were a major factor such that:

- sustainable change cannot occur where there is unequal control over decision making or with one party ‘bullying’ the smaller players, and
- in implementing substantial change, role confusion and conflict often arise.

Strategies to strengthen the interface – higher level

CGPIS identifies that a number of strategies are being implemented to address the barriers. It notes Commonwealth policy initiatives such as; the GP Strategy, the Divisions program, Divisions and Hospitals Integration Program, Coordinated Care Trials, National Demonstration Hospitals Program, private sector discharge and HITH trials, After Hours Primary Medical Care Trials, and the introduction of the EPC MBS items for GP participation in discharge planning. Of these initiatives Australian integration commentators agree that the primary factor assisting the objectives of GP-hospital integration has been the establishment of Divisions of General Practice to enable a formal mechanism for interaction with GPs (CGPIS 2001). Divisions have been a major contributor to the capacity of GPs to constructively participate in change strategies.

Reports outlining the NDHP3 experience in integrating health services are very positive, particularly in regard to shifting organisational culture to create an active interest in collaboration across services (Alexander 2001 b).

CGPIS (2001) also outlined some State and Territory policies and funding programs to address GP-hospital interface problems such as GP policy, GP Liaison Officers, IT communication strategies, HITH, discharge strategies, pre and post acute care programs, elective care management strategies. The results of some of these programs are outlined in Appendix 3: Examples of effective models of GP hospital collaboration from the literature. In general terms the findings suggest that such statewide strategies encourage effective collaboration from the highest level but are patchily implemented. They create opportunities but are not necessarily supported in terms of relationships or capacity.

Looking internationally Lewis (2002) noted the lessons from the Canadian Health Transition Fund projects include the value in contributing to planning, implementation and evaluation by including research centres in the development of large and complex projects, taking 3-5 year time frames, and providing a staged approach to health service improvements.

The need for substantial timeframes is also affirmed in the NDHP3 recommendations (Alexander 2001 b) as is the fact that dedicated resources are required to effectively implement change. Leutz (1999) in documenting the lessons from integrating services in the USA and the UK suggested there were at least three types of essential costs associated with integrating services:

- Staff and support systems costs including clinicians' time in deciding how to work together, staff training and clinical information systems to support this
- Service costs being new service funding designated for the purpose and
- Start-up costs for demonstration projects and for replication.

Thus the Government role is essential in delineating the necessity to work together in terms of policy directions, and in providing the opportunities and capacity to undertake effective intersectoral action.

Strategies to strengthen the interface - local level

CGPIS (2001) conclude from the range of literature they reviewed that the key success factors in effective GP hospital collaboration focus on capacity, relationships, planning and evaluation as follows.

Key success factors in effective collaboration

- Involve all stakeholders
- Incorporate managerial and clinical leadership
- Ensure stakeholders and change agents have a sense of local ownership
- Engage GPs well (often through personal communication)
- Work to a well developed plan with some flexibility and adequate time
- Identify possible outcomes at the start and put evaluation processes in place
- Establish communication structures
- Use evidence based models and tools
- Utilise strategies to embed change and ensure sustainability
- Share tools and findings
- Have supportive high level policies and
- Have infrastructure and investment to support the innovation.

Failure occurs where there is a lack of stakeholder involvement, failure to engage GPs and unsuccessful methods of communication.

CGPIS (2001) indicate that the key minimum success factors are to [create a guiding coalition, communicate the change vision, and generate short-term wins.](#)

The NHS Centre for Reviews and Dissemination (1999) affirms the CGPIS findings and add the need for incentives for change such as financial reward, resource reallocation, education and training, performance feedback and empowerment. The NHS document notes that successful strategies are likely to have significant costs attached to them and will need to be adequately resourced.

In Australia several Coordinated Care Trials experienced difficulties in achieving effective collaboration (CDHAC 2001a). The following lessons to reduce difficulties in collaboration are provided from that experience:

- the organisational change aspects of collaborative efforts need to be given prominence. Change should be introduced in smaller components over a longer time
- there is a fundamental need for effective communication strategies to ensure mutual understanding
- where possible existing mechanisms should be used particularly when it comes to engaging GPs
- incentives for GP participation need to be built in, whether this is in terms of clear patient benefits or other personal rewards for GPs and
- the Division's involvement in and leadership is fundamental to GP engagement in a collaborative activity.

Internationally in a successful large scale capitation project in regional Canada, Mable and Marriott (2002) report that effective collaboration resulted from the establishment of a planning forum under medical leadership, doctors being paid for time spent on organisational and management activities, nurses being hired to work in medical centres, and the development of a communication system for transmitting clinical information between practitioners and institutions. Preliminary results indicate an improvement in continuity and less use of hospital resources.

From the experience of NDHP Phases 1,2 and 3, Alexander (2001 b) identified a number of key features of successful and sustainable project management of which the following add to or affirm those identified above:

- Strong executive support is maintained
- Clinicians lead change management that directly affect patient care, and act as champions to continue motivation
- Consumers actively participate in the development and evaluation of projects
- Organisational culture is identified, and ongoing commitment to cultural change is supported
- An experienced project manager is appointed
- Project education is incorporated into the project plan
- Project sustainability is continuously reviewed and
- All participants are rewarded and recognised for the project's achievements.

In terms of GP Divisions' experience of collaboration, Walker et al found that a key success factor was a high level of face to face negotiation. They also found that sustained commitment was more likely to be achieved when there were structures and processes to foster commitment at the strategic level, the operational level, and the practitioner level (Walker et al 1997). Thus at the local level the issues of relationship, capacity, and planning need to be teased out in some detail in order to achieve effective collaboration.

3.3 Summary

Most metropolitan and regional models of GP-hospital collaboration fit within four main purposes of GP-hospital collaboration:

- Building better working relationships between GPs and hospitals
- Improving transitions of care
- Shifting care to the most appropriate setting and
- Preventing the need for acute care

The evidence from the literature shows that:

- fostering relationships between GPs and hospitals is a fundamental building block in the development of good working partnerships and successful integration initiatives
- the transitions of care models provide the strongest track record of improved satisfaction and service utilisation
- the area of shifting care to the most appropriate setting has the most extensively demonstrated health and economic benefits and
- the models aimed at preventing the need for acute care have the lowest number of demonstrated outcomes probably reflecting that this is the least common area for programs to be established in and also the hardest to evaluate.

Governments play a key role in providing the policy imperative, the opportunities, and the financial capacity to undertake effective collaboration. At the local level the divisions of general practice and hospitals have a key role in defining the local necessity to act in partnership strategically, operationally and clinically, and in nurturing the relationships required to carefully plan, implement and evaluate actions to produce sustained outcomes.

The literature identifies the following key success factors for effective collaboration:

- clinical leadership
- engagement of GPs
- communications and negotiation
- attention to issues of capacity and reward for all concerned and
- time and resources to build relationships and sustainable solutions.

4. Data analysis

4.1 Emergency department presentations

The Working Party was interested to consider the patterns of people using EDs who may have been able to be managed in a primary care setting. While there is no definitive measure of these primary care type patients, an approach initially suggested by GPDV² was followed which gives an indicative measure of the scale of these types of presentations. The Victorian Emergency Minimum Dataset for 2001-02 was used and patients with the following characteristics identified as primary care type patients:

- did not arrive by ambulance
- were not referred by a GP
- were classified as triage category 4 or 5
- were not admitted and
- had a total ED length of stay less than 12 hours.

The data analysis was undertaken on all hospitals participating in HARP. Due to the different characteristics of metropolitan compared to major rural EDs the results are presented separately. The Royal Children's Hospital was also analysed separately due to the unique age characteristics of its patients.

Major metropolitan EDs

Table 1 shows the numbers of people and percentage of presentations for primary care type patients at each of the major metropolitan EDs. It is apparent that there are significant differences in patterns of use by primary care type patients across these hospitals. The A1 hospitals, with the exception of the Royal Melbourne Hospital, are consistently experiencing that about one third of their total presentations are primary care type patients.

The pattern amongst the other metropolitan hospitals is considerably different with all the other hospitals with the exception of Frankston having primary care type patients make up far more of their presentations³. It is noticeable that outer suburban EDs have significantly higher proportions of their patients who have the characteristics of primary care type patients. Angliss Hospital with 56% of patients being in this category, Sunshine (49%) and Maroondah (43%) have particularly high rates.

² GDV Policy Issues Paper No. 16, April 2002: GP Clinics and Hospital Emergency Departments

³ It is likely that the data from Frankston is impacted on by the existence of an after hours primary medical service operating within the hospital grounds.

Table 1 Primary care type patients by metropolitan hospital

	Hospital	PCT patients	% of all	PCT out of hours
A1	Alfred	12,091	33%	7,501
	ARMC Austin	12,358	33%	8,266
	MMC Clayton	16,706	33%	11,564
	RMH	18,123	38%	10,917
	St Vincents	9,773	32%	6,300
A1		69,051	34%	44,548
A2 & B	Angliss	19,389	56%	11,662
	Box Hill	12,105	34%	7,981
	Dandenong	15,711	37%	11,464
	Frankston	8,327	21%	5,798
	Maroondah	13,302	43%	8,250
	Northern	17,052	38%	12,292
	Sunshine	23,505	49%	15,162
	Western	11,648	37%	7,331
A2 & B		121,039	39%	79,940
All		190,090	37%	124,488

Data on the individual metropolitan EDs participating in HARP are presented in appendix 4.

Table 2 shows the 20 highest volume primary diagnoses attributed to primary care type presentations.

Table 2 Top 20 primary diagnoses for PCT presentations

Diagnoses	Diagnosis descriptions	Presentations
Z099	FOLLOW UP EXAM AFTER UNSPEC RX FOR OTH COND	7,447
B349	VIRAL INFECTION UNSPECIFIED	5,921
S619	OPEN WOUND OF WRIST & HAND PART NOS	5,732
R104	OTHER AND UNSPECIFIED ABDOMINAL PAIN	5,584
S628	FRACTURE OTH/UNSPEC PARTS WRIST & HAND	3,905
A09	DIARRH & GASTROENTERITIS PRES INFECTIOUS	3,848
S0180	UNSPEC OPEN WOUND OF OTHER PARTS OF HEAD	3,812
S9340	SPRAIN AND STRAIN OF ANKLE NOS SITE	3,431
R69	UNKNOWN & UNSPEC CAUSES OF MORBIDITY	3,324
J069	ACUTE URTI UNSPECIFIED	3,067
L989	DISORDER SKIN & SUBCUTANEOUS TISSUE NOS	3,028
N390	URINARY TRACT INFECTION SITE NOT SPEC	2,748
S019	OPEN WOUND OF HEAD PART UNSPECIFIED	2,137
H669	OTITIS MEDIA UNSPECIFIED	1,978
M7919	MYALGIA SITE UNSPECIFIED	1,792
L039	CELLULITIS UNSPECIFIED	1,773
K529	NONINFECT GASTROENTERITIS & COLITIS NOS	1,693
K590	CONSTIPATION	1,608
R074	CHEST PAIN UNSPECIFIED	1,527
R11	NAUSEA AND VOMITING	1,494
	NOS - NOT OTHERWISE SPECIFIED	

This data indicates that 7,447 patients return to the ED for follow-up after unspecified treatment for a condition that is not classified elsewhere. Other conditions that involve more than 5,000 presentations include viral infections, open wound of the wrist or hand, and unspecified abdominal pain.

Table 3 demonstrates the variation in primary care type patients across different days of the week. The number of presentations for non-primary care type patients is constant across the days of the week with primary care type patients accounting for the variation observed. The major impact of primary care type patients occurs

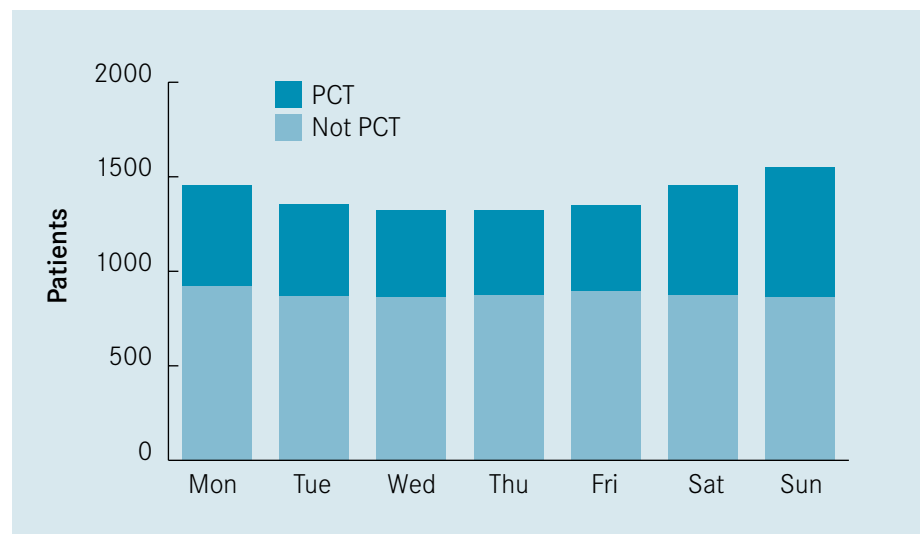
on Saturdays, Sundays and Mondays. Compared to the number of presentations occurring on Tuesday-Friday:

- Sundays have 48% more PCT patients presenting
- Saturdays have 25% more PCT patients presenting
- Mondays have 15% more PCT patients presenting.

This spike associated with the weekend is thought to be attributable to the diminished access to general practice over this period of time. When time of day of presentations is examined there is also a prominent spike in primary care type presentations from 6pm to midnight on weekdays, with 21% more of these patients being seen per hour than during the 9am to 6pm weekday period.

Table 3 Primary care type patients by day of the week

Average daily presentations, 2001-2002							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	923	871	863	874	894	876	865
PCT	532	484	460	447	455	579	685
Total	1,454	1,355	1,324	1,321	1,350	1,455	1,549



When age is examined it is evident that children younger than 15 years of age present far more frequently with primary care type characteristics (25%) compared to when they present with non primary care type characteristics (14%). People over the age of 64 are less likely to present with primary care type characteristics (10%) than non primary care type characteristics (31%). Table 4 outlines this data.

Table 4 PCT Patients by age group and hospital

	0-14	15-64	65-69	70-84	85+
Alfred	161	10,498	354	881	197
Angliss	7,123	11,278	284	582	122
ARMC Austin	2,393	8,329	453	1,018	165
Box Hill	2,888	7,827	392	826	172
Dandenong	4,923	9,944	262	524	58
Frankston	1,870	5,921	137	351	48
Maroondah	2,793	9,370	320	709	110
MMC Clayton	7,441	8,375	276	544	70
Northern	4,671	11,170	377	755	79
RMH	46	15,884	716	1,310	167
St Vincents	58	8,658	305	667	85
Sunshine	13,105	9,730	222	405	43
Western	303	9,776	467	988	114

Table 5 All patients by age group, PCT vs not PCT

	0-14	15-64	65-69	70-84	85+
Not PCT	44,940	178,200	16,595	59,881	21,859
PCT	47,775	126,760	4,565	9,560	1,430
Not PCT	14%	55%	5%	19%	7%
PCT	25%	67%	2%	5%	1%

There are marked differences in the patterns of presentation for primary care type presentations for those under the age of 15 with the following hospitals having significant above average rates of primary care type presentations for this age group:

- Sunshine Hospital with 56% of PCT presentations
- Monash Medical Centre - Clayton with 45% of PCT presentations
- Angliss Hospital with 37% of PCT presentations and
- Dandenong Hospital with 31% of PCT presentations.

Major regional EDs

Table 6 outlines the presentations of primary care type patients at the major regional hospitals participating in HARP. Overall within these EDs, patients with primary care type characteristics comprise 52% of all presentations. Ballarat Hospital with 64% of all presentations had the highest rate of primary care type presentations while Geelong Hospital at 38% had the lowest rate. The overall rate of primary care type presentations for major regional EDs is considerably higher than the overall rate for major metropolitan EDs at 37%.

Table 6 Primary care type patients by hospital

Hospital	PCT patients	% of all	PCT out of hours
Ballarat Base	21,210	64%	11,834
Bendigo	16,552	51%	9,846
Geelong	14,911	38%	10,434
Latrobe Regional	15,251	56%	9,349
Shepparton	14,865	55%	8,231
	82,789	52%	49,694

Table 7 provides the 20 most common diagnoses for primary care type presentations.

Table 7 Top 20 primary diagnoses for PCT presentations

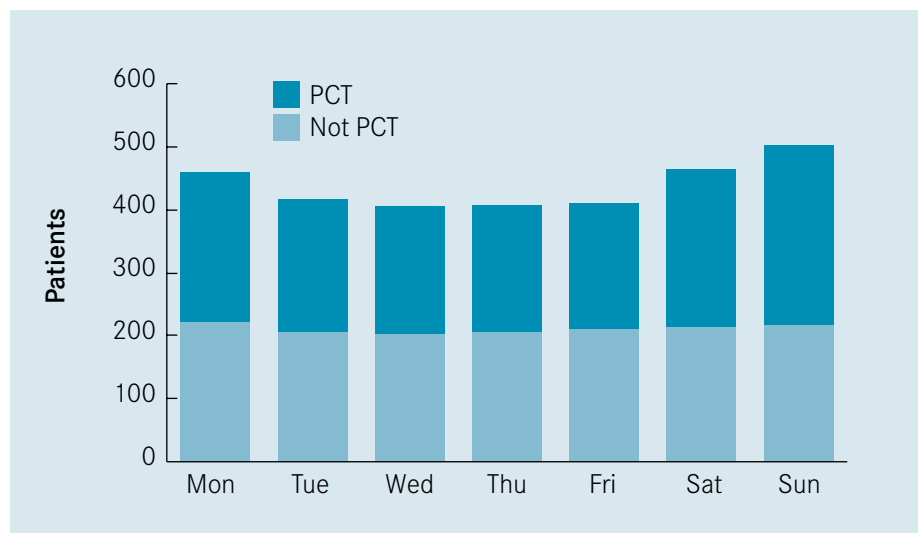
Diagnoses	Diagnosis descriptions	Presentations
Z099	FOLLOW UP EXAM AFTER UNSPEC RX FOR OTH COND	4,988
B349	VIRAL INFECTION UNSPECIFIED	2,890
S619	OPEN WOUND OF WRIST & HAND PART NOS	2,100
J069	ACUTE URTI UNSPECIFIED	2,012
L989	DISORDER SKIN & SUBCUTANEOUS TISSUE NOS	1,997
R69	UNKNOWN & UNSPEC CAUSES OF MORBIDITY	1,930
R104	OTHER AND UNSPECIFIED ABDOMINAL PAIN	1,907
S9340	SPRAIN AND STRAIN OF ANKLE NOS SITE	1,644
T159	FOREIGN BODY ON EXTERNAL EYE PART NOS	1,442
S628	FRACTURE OTH/UNSPEC PARTS WRIST & HAND	1,403
M7999	SOFT TISSUE DISORDER NOS SITE UNSPEC	1,317
H669	OTITIS MEDIA UNSPECIFIED	1,294
N390	URINARY TRACT INFECTION SITE NOT SPEC	1,292
S0180	UNSPEC OPEN WOUND OF OTHER PARTS OF HEAD	1,230
J039	ACUTE TONSILLITIS UNSPECIFIED	1,159
K529	NONINFECT GASTROENTERITIS & COLITIS NOS	1,036
S609	SUPERFICIAL INJURY OF WRIST & HAND NOS	1,016
Z480	ATTENTION TO SURG DRESSINGS & SUTURES	816
S637	SPRAIN & STRAIN OF OTH/UNSPEC PARTS HAND	806
Z711	PERS W FEARED COMPLAINT NO DX MADE	806
	NOS - NOT OTHERWISE SPECIFIED	

The profile of high volume PCT conditions presenting to major rural EDs is similar to that of the metropolitan EDs.

The number of presentations across days of the week is presented in table 8. This table indicates a similar pattern as for the major metropolitan EDs. Non primary care type presentations were constant across the days of the week with the variability in demand being attributable to presentations of a primary care type nature. Equally, primary care type presentations at the major regional EDs demonstrated the same day of the week peaks as the major metropolitan EDs, that is Saturdays, Sundays and Mondays.

Table 8 Primary care type patients by day of the week

Average daily presentations, 2001-2002							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	222	205	203	206	211	213	217
PCT	237	212	203	200	199	251	285
Total	459	417	406	406	410	464	502



The age patterns of primary care type presentations at the major rural hospitals is outlined in table 9. There is some minor variation from the major metropolitan hospitals with a slightly higher rate of presentations being under the age of 15 while there is a decrease in the rate of presentations of people who are over 64 years of age (6.1% for the major rural EDs compared to 10.2% for the major metropolitan EDs).

Table 9 Primary care type patients by age group and hospital

	0-14	15-64	65-69	70-84	85+
Ballarat Base	6,137	13,956	354	660	103
Bendigo	4,661	10,794	284	692	121
Geelong	4,323	9,519	302	653	114
Latrobe Regional	5,005	9,277	257	632	80
Shepparton	4,628	9,519	207	470	41

Table 10 All patients by age group, PCT vs not PCT

	0-14	15-64	65-69	70-84	85+
Not PC	13,497	40,687	3,944	14,219	4,636
PCT	24,754	53,065	1,404	3,107	459
Not PCT	18%	53%	5%	19%	6%
PCT	30%	64%	2%	4%	1%

Royal Children's Hospital

The pattern of presentations for primary care type patients at the Royal Children's Hospital are unique given that it provides services for children. The data is presented in Appendix 4.

4.2 Ambulatory care sensitive conditions (ACSC)

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 own conditions. The sharing of responsibility between patients and health services often also allows greater involvement of GPs.

ACSC are those conditions for which hospitalisation is thought to be avoidable with the application of preventive care and early disease management, usually delivered in the ambulatory setting. The Public Health Branch of the Department of Human Services has undertaken considerable analysis of the impact of these conditions on the Victorian health system. The consolidated report on this work is available at www.dhs.vic.gov.au/phd/acsc/index.htm. The study has indicated that there may be significant opportunities to reduce preventable hospital admissions through targeted interventions.

The ACSC data relating to the 19 hospitals currently participating in HARP is presented in table 11 based on data from the Victorian Admitted Episode Dataset from 2001-02 and utilising the same classification of ACSC 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 any ICD code field applying to that separation. This contrasts to the classification system, which has been used for the other ACSCs where the primary ICD coding has been used to classify the condition. Thus the number of diabetes related admissions is very much higher than that for any other condition.

Table 11: Ambulatory care sensitive conditions for the 19 hospitals participating in HARP

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%	6.7
COPD	6209	1038	7247	9.0%	46002	47040	12.1%	6.5
Congestive Heart Failure	5281	1037	6318	7.9%	39910	40947	10.5%	6.5
Pyelonephritis	3824	1567	5391	6.7%	21456	23023	5.9%	4.3
Cellulitis	3297	458	3755	4.7%	18858	19316	5.0%	5.1
Angina	5081	2381	7462	9.3%	15254	17635	4.5%	2.4
Convulsions & Epilepsy	3626	2015	5641	7.0%	13221	15236	3.9%	2.7
Asthma	4852	1508	6360	7.9%	12900	14408	3.7%	2.3
Influenza & Pneumonia	1225	128	1353	1.7%	13465	13593	3.5%	10.1
Dehydration & Gastroenteritis	2095	2241	4336	5.4%	9717	11958	3.1%	2.8
Ear, Nose & Throat Infections	2040	1430	3470	4.3%	4139	5569	1.4%	1.6
Iron Deficiency Anaemia	655	1491	2146	2.7%	2958	4449	1.1%	2.1
Hypertension	350	200	550	0.7%	1222	1422	0.4%	2.6
TOTAL	56210	23913	80123	100%	364562	388475	100%	4.9

MD- multi day SD - same day

Tables presenting the ACSC data for each of the hospitals participating in HARP, have been included as an appendix in the HARP Community-Hospital Interface Working Party Report. These tables show separations by statistical local areas to broadly indicate the suburbs that relevant patients reside in.

5. Stakeholder views on current interfaces

This section presents the views of stakeholders within the CGPIS framework and includes the recommendations determined by the Working Party in relation to the issues that were identified.

Within the consultation process, hospitals and divisions were asked to outline the range of current interfaces between hospitals and GPs. The results were compared to documentation undertaken by GPDV in 1999 on the extent and type of GP-hospital interfaces in Victoria. This comparison of the two “audits” suggests that the range of interfaces between GPs and the HARP designated hospitals have more than doubled over the last three years⁴. In particular, there appear to be substantially more activities focussing on both building better relations between hospitals and GPs, and preventing the need for acute care. The majority of this additional activity has been funded through the Hospital Demand Management Strategy.

The range and depth of the interaction between hospitals and GPs is decidedly variable. In some instances there is a lot of interaction, but it is mutually frustrating ie conversations without outcomes. In other instances the hospital has good relations with some individual GPs, but the logistics of working through divisions with different boundaries and capacity makes systematic interaction very difficult. Some divisions have found that the hospitals they try to work with seem uninterested in the GP role.

A key issue regarding the general GP Hospital interface is the scope of the interface that is relevant to HARP. Respondents suggested that at the local level there were different understandings. As one respondent said *“I am not sure what the timeframe for hospitalisation prevention is - next week, next year? Do we start with the hospital, or the GP?”* (GP respondent) From the hospitals’ point of view emergency demand is pressing and affects the functioning of the whole hospital. Many of the structural problems in the rest of the health system produce problems, which the hospitals have to pick up. HARP cannot address these structural problems but must focus on more immediate solutions to the growing demands on ED. From the GPs’ perspective significant emergency demand growth pressures could be addressed through hospitals’ recognition of the primary health care sector and the development of a partnership in caring for patients. At the same time the acute sector experiences problems with engaging GPs to collaboratively address this issue. Currently the public see the hospital as the solution for many aspects of health care that could be dealt with elsewhere. Solutions to the emergency demand problem therefore rest with ‘turning the ship around’ so that hospitals and the primary health care sector work together at a number of different levels and the public get a clearer message about what setting is appropriate for each aspect of health care.

⁴ See GPDV(1999): Integration Project Paper No.1 - Audit of Current Practice. It should be noted that this is an indicative measure only as the responses depended on the knowledge of participants in the consultations rather than a rigorous taxonomy of what activities constituted the interface.

Table 12: Activities involving GPs in HARP designated Victorian public hospitals 2002

	Activities to build relationships					Activities to manage transitions of care				
	Paid GPLO	Heads of agreement	Hospital meetings	GP admitting rights	Other	Elect/Fax discharge info to GPs	Info to GPs re ED presentations	Protocols for GP info to & from OP	Pharmacy liaison to GPs	Other
Alfred		✓	✓			✓	▲			
Angliss	✓		✓	✓						
Austin	✓	✓	✓		✓✓	✓	✓	✓	✓	
Ballarat	✓	✓	✓			✓	✓	✓		
Bendigo	✓		✓	✓	✓	✓	▲			✓✓
Box Hill	✓	✓								
Dandenong	✓		✓		✓	▲				
Geelong	✓		✓	✓		✓		✓		✓✓
La Trobe	✓						▲			
Monash MC	✓		✓			▲				
Mornington		✓	✓	✓	▲	▲			▲	
Northern	✓✓		✓		✓	▲				✓✓
Royal Melbourne			▲			▲				
St Vincents	✓		✓			✓				✓
Western/Sunshine			▲	✓		✓		▲	▲	▲
Total Activities	12	5	12	5	5.5	9.5	3.5	4.5	2	7.5

✓ = One major activity ✓✓ = Two different activities ▲ = Planned, not quite implemented

Table 13: GP involvement in HARP designated Victorian public hospitals 2002(cont.)

	Activities to shift care appropriately			Activities to prevent acute care				Total per hospital
	GPs involved in HITH	GP AH clinic in/near ED	Other	Case management	GP education	Shared care	Other	
Alfred			✓				✓	5.5
Angliss	✓							4.0
Austin			✓		✓	✓	✓	13.0
Ballarat	✓					✓		8.0
Bendigo			✓	✓	✓	✓	✓	13.5
Box Hill			✓	✓	✓	✓		6.0
Dandenong			✓					4.5
Geelong	✓		✓	✓	✓	✓		12.0
La Trobe	✓	✓						3.5
Monash MC			✓					3.5
Mornington	✓	✓	✓		✓	✓		9.5
Northern		✓		✓	✓	✓		10.5
Royal Melbourne				✓	✓			3.0
St Vincents	✓			✓	✓	✓		8.0
Western/Sunshine						✓		5.0
Total Activities	6	3	8	6	8	9	3	101.5

✓ = One major activity ✓✓ = Two different activities ▲ = Planned, not quite implemented

5.1 Building better working relationships between GPs and hospitals

Both hospitals and divisions repeatedly affirmed that the relationship between the hospital and GPs is the key to working together to *“produce real benefits for both sides”* (Hospital spokesperson). Where the relationship is most effective, it has been built up over time and reinforced by first one initiative and then another and another, creating increasing understanding and trust. *“The culture here is to collaborate, it is the way we work, including the hospital board and their attitude. There are long established relationships and many people overlap in different roles... There is a collective enthusiasm for solving problems and creating working relationships... Senior staff lead by example.”* (Hospital spokesperson). *There is an acknowledgment here by hospital staff that the GP work is incredibly important.”* (GP spokesperson)

Several respondents suggested analogies with marriage in which substantial direct communication and time to build understanding and trust are required. For some parties a courtship should be followed by marriage (or in this case, a formal Memorandum of Understanding) whereas for others the relationship is more important than the piece of paper. All parties are very conscious of the cultural divide between the sectors, a cultural divide that can only be dealt with by constant efforts at communication at different levels. From the GPs view the key to the relationship is recognition by the hospital management, senior clinicians and other staff of the GP's role and expertise. From the hospital's point of view they need ways to work with the variability in what GPs are able and/or willing to do.

Meetings

One of the main avenues for building the relationship between GPs and hospitals is the involvement of GP representatives, often through the division, in various hospital convened meetings focussing on continuity of care issues. Both hospitals and divisions distinguish between general liaison meetings such as the Population Health Committees of the Metropolitan Health Services with a broad membership and mainly information functions, and more clinically focussed meetings, for example, those involving all medical staff or dealing with pharmacy issues. GP representatives are generally part of the broader forums but find the smaller clinical meetings more relevant to general practice and provide more opportunities for input into decision making. Those hospitals with a broader range of engagement with general practice are more likely to involve GP representatives in such clinically focussed meetings, and to find a way of paying them for such involvement. Respondents indicated that the GP presence on hospital committees was more effective if the person was linked to a division.

Another effective strategy is the hospital establishment of regular GP Liaison meetings often as a structure underpinning a written memorandum of understanding, a GP focussed project, or jointly overseeing the functioning of the GPLO or Acute Primary Care Liaison (APCL) personnel. Given the demands on all

participants these meetings need clear terms of reference and means for setting the agenda, and senior management and clinical representation on both sides.

Acute Primary Care Liaison (APCL) and GP Liaison Officers (GPLOs)

Up until mid 2001 there were 7 part-time GPLOs located in public hospitals in Victoria. In most instances positions are filled by GPs working between four and eight hours per week. In recognition of the opportunities to develop greater collaboration between GPs and hospitals in July 2001 through the Hospital Demand Management Strategy, 6 Acute Primary Care Liaison (APCL) initiatives were announced with total recurrent funding of \$1.08 million per year across 7 metropolitan hospitals. The conditions placed on use of the funds were minimal to ensure that innovative projects reflecting the local arrangements between GPs and hospitals were able to be developed. In 2002 the funding was extended with the establishment of two more initiatives across 3 acute hospitals and two sub-acute sites with an additional recurrent cost of \$395,000 per annum.

During the consultation it became evident that several hospitals had struggled to identify and plan initiatives relating to “Acute Primary Care Liaison”. This has led to significant delays in some hospitals implementing the initiatives and in some instances projects had to be reconceptualised after their commencement. In a number of cases communication by hospitals with divisions was not well developed with divisions unaware of the funding and who was responsible to provide leadership in relation to developing and implementing the initiative.

From the GPLOs experience it was noted that achieving change in hospital practices is slow, and that it was important to focus on areas where change was possible.

There were also a number of examples where the APCL initiatives were reported as working effectively. See the tables below for a description of two of these initiatives. Key factors in the success of APCL initiatives identified in the consultation were:

- executive and senior clinical leadership within the initiative
- providing a focus to the initiative through identifying specific objectives linked to strategies and activities to realise these objectives
- identifying issues and opportunities that are shared between both hospitals and GPs
- utilising divisions of general practice in communicating with GPs and
- building on existing structures, processes and projects.

The GPLO consultation revealed a number of findings that provide useful learnings, which are documented at appendix five.

Memorandum of understanding/heads of agreement

Within Victoria there has not been particularly wide use of MoUs between hospitals and divisions. Opinion from the consultations was divided as to whether a MoU between the hospital and the division(s) is valuable in promoting collaboration.

The two opposing views were characterised by statements such as: *“It’s a nice photo opportunity, but not necessary as it doesn’t drive anything. Its engagement and relationships, which are more productive... MoUs can be restricting – it may be important for the beginning of a relationship but its not operational”* (GP spokesperson) contrasted with *“The MoU is the foundation of the relationship at a high level. It lays out how we are going to work together and creates an extremely mature working relationship. We have signed again recently, made a recommitment.”* (GP spokesperson)

Where a hospital and division had recently developed an extensive MoU signed off by both Boards, both parties were pleased that the relationship had developed to that point, but noted that to take collaboration further required resourcing of specific projects within the framework of the MoU. On balance it seemed that a MoU can be used to take a relationship to its next stage of development, but that it requires agreed action steps that are feasible for both parties within available resources and it should specify formal means for checking progress on the agreements made.

During the consultation another formal mechanism for documenting the respective roles of the division and the hospital that was referred to was a service agreement where there was a joint project or service between the hospital and division. A service agreement provides an operational outline as to how hospitals and GPs will jointly work together in providing a discrete service or a joint project. The consultation indicated that service agreements have not been widely used but there was a sense that they may be of value in providing rigour to collaboration between hospital and general practice.

Conclusions

The Working Party affirmed the findings by CGPIS that the fundamental building block for all GP hospital interfaces is the fostering of the relationship between GPs and hospitals. A constant theme in the consultations was the cultural divide between GPs and hospitals. Both the literature and the consultation suggested that the appointment of GPLOs makes a substantial difference to this relationship. Additional conceptualisation is required on the more generic Acute Primary Care Liaison (APCL) positions with some indication that hospitals have found these difficult to direct. To strengthen the functioning of GPLOs and/or APCL positions both the literature and the consultation suggest that:

- there should be joint hospital and division guidance of these positions
- process indicators and outcomes specified and
- attention given to the support of these positions at the senior level of both the hospital and division and by cross fertilisation through network meetings.

The consultations identified the importance of governance arrangements in initiatives across the interface. In progressing this issue the Community-Hospital

Interface Working Party were charged with considering governance across the broader hospital primary care interface. Their conclusions and recommendations are included in the report they have produced and readers are referred to the Community-Hospital Interface Working Party report for a consideration of better governance arrangements in relation to the interface.

Recommendations

Communication between hospitals and GPs is not as effective as it could be.

It is recommended that:

The HARP Reference Group with the Department of Human Services provide the lead in facilitating hospitals and relevant divisions to assess the efficacy of their current communications structures and processes with a view to ensuring strategic, resourced and specific structures and processes are in place.

General practice should be included as a key stakeholder in the community-hospital partnerships which are formed to respond to the 2003-04 funding round (see the Community-Hospital Interface Working Party report for a description of these partnerships).

Acute Primary Care Liaison initiatives represent a significant investment of HARP funds on a recurrent basis and while there are individually strong models as a cluster of projects they lack an adequate framework. Consequently, outcomes are inconsistent and activities undertaken within initiatives are not necessarily well targeted to the objectives of HARP.

It is recommended that:

The HARP Reference Group and the Department of Human Services establish and implement a framework for Acute Primary Care Liaison initiatives. The framework should build on the good models that currently exist and should:

- *identify the objectives and scope of this funding*
- *encourage governance arrangements that incorporate both hospital and GP participation in the initiative*
- *mandate executive and clinical leadership from the hospital as being necessary aspects of the design of APCL initiatives*
- *determine good practice and promote its implementation across the initiatives funded.*

The 2003-04 funding round should not consider the development of further Acute Primary Care Liaison initiatives. Additional funding for Acute Primary Care Liaison initiatives should not become available until the framework recommended above has been established.

5.2 Managing transitions of care

The timely receipt of legible, meaningful discharge summaries was reported by GPs to be their top priority with respect to their interface with hospitals. GPs see this as vital to the prevention of unplanned re-admissions and their ability to provide continuity of care. Hospitals also acknowledge the value in the transmission of this information however the systems and practices to support this communication have not been adequate. While most divisions cited recent improvements in the transfer of patient information it was clear that there is considerable work yet to be undertaken.

The consultation indicated a number of positive developments including the development of information technology links to enable secure transmission of a range of patient information. Some hospitals reported streamlining access to outpatient departments, HITH, day procedures and tests so that GPs can more easily refer in rather than patients having to go through ED. It was also reported that pilot projects had been established to ensure liaison occurred in relation to the pharmaceutical needs of patients on large numbers of medications. Some hospitals were also planning with divisions around the recent Commonwealth initiative, the Domiciliary Medication Management Review (DMMR)⁵, as a means of reducing the likelihood of medication related adverse events.

Another area where there were reports of good practice in managing the transition of care was case conferencing or care planning with GPs for patients with chronic and complex needs. While the Enhanced Primary Care items available for GPs to claim under the Medicare Benefits Schedule are cumbersome to use as they require patient consent, specific paperwork, and finding mutually convenient times, GP responses to the conversations entailed in care-planning or case conferencing were very positive. They particularly valued the opportunity to let the hospital know of other factors that may affect the patient's care both in hospital and at home. They also valued being made aware of information about the other non-medical services involved in a patient's care on returning home. Hospital staff reported that care planning and case conferencing increased their confidence of appropriate care when discharging complex chronically ill patients home.

Despite funding through the Effective Discharge Strategy over the last four years, the consultation heard that there are significant systems problems around inadequate procedures and insufficient communication technology infrastructure to transfer legible discharge summaries to GPs. Details of the Effective Discharge Strategy including performance indicators are available at: www.health.vic.gov.au/discharge.

During the consultations, the issue of the relative lack of information going from EDs to GPs regarding presentations by their patients was identified. The lack of feedback to GPs does not support the continuity of care of patients nor does it promote their care occurring in the most appropriate setting. The Working Party consider that this is an area that could readily be improved upon if the issue was clearly identified and

⁵ Also now known as Home Medication Management Review (HMMR)

clinical leadership was taken in establishing communication systems to feed this information back to GPs.

The consultation identified a range of factors that supported good transitions of care, these included:

- a GPLO who over time has identified the opportunities for improving the transfer of information
- an ongoing champion with seniority and operational staff to drive the implementation of changed practices
- a good relationship with the relevant division(s) of general practice
- IT staff who have a clinical background
- IT infrastructure in wards and adequate training in how to use it
- a health information department that sees itself as part of the team
- capacity for different hospital departments to work together and
- GPs who have secure fax machines.

Conclusions

The evidence shows that improving the transfer of information to and from GPs provides the strongest opportunity for improved satisfaction and service utilisation. For example, evidence shows that discharge planning produces reduced length of stay and reduced readmissions. This accords with the GPs view that the receipt of timely meaningful discharge summaries is the key to continuity of care and preventing unplanned readmissions and complications. This is an area that many hospitals still need to address. In Victoria, little attention has been given to informing GPs of their patients' ED presentations which the literature suggests is a very effective means of improving follow-up and continuity of care which correlates with lower ED use.

Recommendations

For better management of people at risk of hospitalisation good quality discharge information, discharge communication and discharge planning is essential to facilitating GPs being able to provide effective care across the hospital-general practice interface.

It is recommended that:

The Department of Human Services should consider implementing an effective discharge collaborative that targets the smooth transition of care between the hospital and general practice interface.

Hospitals recognise their responsibility in providing safe discharge and demonstrate a commitment through executive leadership to implement resourced strategies that ensure effective infrastructure and operational procedures to support good discharge planning. This should explicitly include protocols and procedures for effective transfer of agreed clinical and pharmaceutical information.

The Department of Human Services coordinate with hospitals the development of protocols for providing timely notification to GPs, of treatment provided to their patients within ED, subject to privacy principles.

Hospitals and the Department of Human Services continue to audit the discharge indicators and the Department of Human Services to provide publicly available comparative reports.

5.3 Shifting care to the most appropriate setting

There are a range of areas to consider in relation to the shifting of care to the most appropriate setting. A factor that was raised in a number of ways in considering this issue was the capacity of general practice to provide additional levels of care to patients.

It was noted that there is a shortage of GPs generally. This is being most acutely felt in the outer urban areas and rural areas. This shortage partly explains the increases in primary care type patients who are attending EDs. Anecdotally it was reported that another factor in the increasing numbers of primary care type patients attending EDs is the significantly fewer GP consultations, which are bulk billed.

There are also changes in the expectations of GPs from government. The Commonwealth incentives are geared to providing more pro-active care for the chronically ill which requires more time than reactive care, and the State is encouraging community based care for vulnerable populations that were previously hospitalised or institutionalised.

As one GP said “more and more is being asked of GPs ... practices are providing less after hours, and closing at weekends... GPs right across the region are moving away from all the extra... We now refer a lot more patients than we used to as well as testing because we are practising defensive medicine. We would not think of doing many treatments we used to provide in the past- we cannot take on more... there is always the threat of being sued. GPs don't have the time, infrastructure, or professional back-up to carry out these procedures.” (GP respondent)

Even where there is goodwill and agreement on both sides that a shift in care is appropriate and feasible, participants in the consultations were aware that logistical difficulties need to be negotiated. In considering hospital based after hours primary care type clients GP remuneration is one such issue. Can the GP be paid through Medicare? What are the relevant rules if Medicare is used? Should they get a unit payment or an hourly rate from the hospital? If an hourly payment, should the rate match division rates, other clinicians' rates, AMA rates? Such difficulties are most easily overcome when the service is payable under Medicare.

The other difficulty identified by consultation participants was how to make arrangements with GPs. In some instances hospitals were uncertain whether the division had a mandate from its members to negotiate on their behalf to expand their clinical role. This left the hospital with no organisation to negotiate with and

therefore the daunting prospect of needing to make arrangements with individual GPs. In other settings this difficulty did not arise because the division/hospital relationship was built up over time and a feeling of partnership based on mutual interest was established.

Due to the wide ranging nature of the information arising from the consultation and the scope of this report the remainder of this section will focus on two aspects of the transitions of care most pertinent to the HARP framework. These aspects are After Hours Primary Medical Clinics (AHPMCs) and practice nurses.

After hours primary medical care

The consultations for this project supported the findings of the various needs studies undertaken through Commonwealth funding, suggesting that the after hours issue is complex and multi-layered.

Respondents to the consultation saw after hours primary care demand as an extension of the public's general difficulties in accessing general practice due to workforce shortages. However the obligations of GPs and financial factors also play a part in GPs' decisions regarding their provision of after hours care. These three factors affect the willingness and the feasibility of GPs undertaking more after hours care.

The Commonwealth has identified this as an area that should be explored. A significant number of grants have been available to understand the need and to examine the feasibility of different models. The following table outlines the grants relevant to hospitals participating in HARP.

Table 14: After hours care activity of Victorian divisions and hospitals

Hospital/division	Have after hours GP clinic	Received 2001 Commonwealth AH seeding or development grant	Applied for HARP AH service 2002
Angliss/Knox		x	
Austin/NE Valley		x	
Ballarat/Ballarat		x	
Barwon/Geelong			x
Bayside Health/Central Bayside		x	
Bendigo/Bendigo		x	
Box Hill/ Whitehorse	x	x	
Goulburn/Goulburn Valley	x	x	
La Trobe/Central West Gippsland	x	x	
Northern/Northern		x	x
Peninsula/Mornington	x		x
RMH/ North West Melbourne		x	
Southern/Dandenong		x	x
Western/Western & Westgate		x	x

The data relating to primary care type presentations at EDs was considered under section 4. While acknowledging that there are differences of opinion about who is properly described as a primary care type patient it seems clear that there is considerable pressure being placed on EDs at times when GPs are generally not available. The impact varies from hospital to hospital but seems to be felt most by the major regional hospitals and outer suburban EDs on weekends and on week nights after 6pm, presumably as GPs close their surgeries. This is placing a significant and growing pressure on the hospital system.

AHPMCs were identified by hospitals, and to some extent by divisions, as a model to explore in responding to this demand pressure. Under the 2002-03 HARP funding round there were four proposals for AHPMCs. One model was funded, a consortium involving Northern Health and the Northern Division of General Practice, to establish an AHPMC within the Northern Hospital. Following the selection by the consortia of an organisation to provide and manage the AHMC the project has stalled on the issue of the eligibility of payments under the Medicare Benefits Schedule.

There have however, been successful AHPMCs established which have had as a component of their objectives the aim of relieving some of the pressure on ED of seeing primary care type patients. Two of the models that the consultation investigated are briefly summarised in the following boxes.

Mornington Peninsula Private GP Co-operative

- Independent GP owned organisation operating for 15 years as an after hours service. Local GPs participate on a rostered basis
- Operates in offices adjacent to ED, paying minimal rent
- Open in evenings 6-11 pm, Saturday 12- 10.30pm, and all day Sunday
- Sees approximately 15,000 patients a year
- GPs pay a percentage for running costs of clinic
- In May 2002 moved from bulk-billing to private billing as local general practices were moving away from bulk billing and patients were using the after hours service as a cheap alternative to normal general practice rather than a real AH service
- Individual GP billing arrangements to meet Australian Competition and Consumer Commission (ACCC) requirements
- Informal arrangements with ED mean there is cross referral, effective triage, and an understanding of the movement of patients between ED and the AHPMC
- The AHPMC is able to use hospital radiology and pathology services
- ED triage nurse channels patients to the GP Clinic if the patient is willing to be treated by a GP.

Maitland After Hours Primary Medical Clinic

- A consortia arrangement administered by the Hunter Division of GP with an Advisory Board and a consumer advisory group
- A telephone nurse triage service is provided Mon-Sat 6pm-7am, Sat 1pm – Mon 7am covering AH service and ED
- A co-located AHPMC clinic operates Mon-Fri 6-11pm, Sat 1-11pm, Sun 9am-11pm with access to ED facilities
- Home visit service by the on call GP
- Funded transport service
- Credentialling process and service agreement for GP involvement
- Service agreements between practices and service
- Hourly rate for GPs
- Funded through the Commonwealth cashing out projected Medicare payments along with contributions from Maitland Hospital and the NSW Government
- After hours triage categories 4 & 5 have decreased by up to 61%
- High consumer and professional satisfaction.

In both these models participants needed to ensure ED support, economic viability, and a sufficient GP workforce. ED support was driven by necessity, and progressed by seeing some benefit for ED and being assured of a quality service at the GP clinic. The economic viability was assured in one case via public subsidy and in the other by patient co-payment and minimal rent. The lack of alternative services encouraged the GPs to participate.

The Working Party considered the implications for the forthcoming 2003-04 HARP Funding Round and concluded that with the lack of clarity around Medicare funding arrangements applying to clinics either located within hospitals or managed by hospitals, the viability of developing a business model for AHPMC is problematic. It has therefore recommended that AHPMC not be considered within the HARP 2003-04 funding round, but that this issue be considered further at a strategic level outside of the funding round.

Practice nurses

Practice nurses have been recognised as a means of increasing the capacity of general practice. In recognition of this, in December 2001 the Commonwealth introduced subsidies for general practices to employ practice nurses. The subsidies were confined to rural and remote practices and a few practices in urban areas deemed to have both low socio-economic status and low GP to population ratios.

Where the Commonwealth incentives apply, 63% of eligible practices have taken up the incentive to employ a practice nurse (November 2002). The main barrier to the employment of practice nurses in such areas is recruitment difficulties. Practices are better off employing a Division 1 registered nurse who has the authority to perform a wider range of functions than a Division 2 registered nurse⁶, but Division 1 registered nurses are in demand from all sectors.

The opportunities for undertaking preventive care with people at risk of hospitalisation was evidenced in two HARP funded initiatives that have recently commenced. In both projects additional capacity had been provided within general practice with core aspects of this additional capacity being provided by practice nurses. The projects target chronic diseases, one diabetes and the other asthma. The nurses undertake an education role with patients, along with facilitating the GP to coordinate the care of the patient. One of these projects, the Melbourne Division of General Practice - Diabetes Clinical Co-management in General Practice/the Community is summarised in Table 15.

At a broader level, divisions have been funded by the Commonwealth to support a range of chronic disease management initiatives. This includes supporting and educating local networks of practice nurses. Disease specific organisations, the Royal College of Nursing Australia, and General Practice Education Australia

6. Known as an "enrolled nurse" in all other states and territories

have also developed courses for practice nurses which divisions are helping to deliver. This investment in practice nurse workforce will, over time, increase the opportunities for innovative ways of expanding the capacity of general practice.

Conclusions

The literature shows that while shifting care to the most appropriate settings has the most demonstrated health and economic benefits there are constraints to capitalising on the opportunities that this presents. Shared care, HITH and post acute care all provide opportunities for shifting the care to the most appropriate setting. With respect to AHPMC there are constraints in remuneration arrangements for general practice, which are complicating the development of viable business models.

While there seems to be scope for increasing the implementation of community based or shared care involving GPs with adequate supports and back-ups, the consultation clearly identified that general practice is overwhelmed with demands and does not have spare capacity to provide preventive services to those at risk of hospitalisation. Practice nurses do provide additional scope within general practice, but there are also workforce issues limiting their utilisation.

Recommendations

General practice requires additional capacity to provide preventive services to people at risk of hospitalisation.

It is therefore recommended that:

The 2003-04 funding round should promote submissions for targeted initiatives which shift care to the most appropriate setting for those at risk of hospitalisation. In particular initiatives should be encouraged that support GPs to better manage patients and may involve the wider use of practice nurses.

The development of adequate business and service models for after hours treatment of primary care type patients is constrained by the lack of clarity as to the Medicare funding arrangements applying to After Hours Primary Medical Clinics provided in hospital environments or managed by hospitals.

It is recommended that:

The 2003-04 HARP funding round exclude submissions for After Hours Primary Medical Clinics.

The Department of Human Services identify and work towards a resolution on this issue in the negotiations with the Commonwealth on the Australian Health Care Agreement and progress targeted solutions in a strategic manner.

Table 15 Diabetes Alliance Group – diabetes co-management in general practice

- Staffing comprises a part time GP Director, an operations manager and part time assistant, and 5 credentialled diabetes nurse educators
- Melbourne Division of General Practice is the fundholder
- Clinical Diabetes Nurse Educators working with GPs and all diabetes patients in those practices
- Will expand to 8-15 practices and a maximum of 50 GPs
- Implementing best practice diabetes screening and management guidelines, utilising the diabetes annual cycle of care, and implementing register and recall/reminder systems
- 24 hour 7 days per week care is provided
- patient empowerment strategies and promoting self management are essential components of the model and
- Links to Domiciliary Medication Management Reviews and EPC careplans are made where appropriate.

Successes:

- Reaffirming central importance of general practice as a local health unit
- Model is integrated into GPs current practice rather than a parallel initiative
- Accessing GPs and patients easily
- Accessing interpreter service where required
- GP satisfaction improved because of enhanced services to their patients and ease of access
- Patients provided with appropriate and adequate education, support, crisis management, and follow up and
- Patient satisfaction improved because accessing health services locally and conveniently.

Difficulties:

- Uncertain how to influence the way hospitals deal with patients
- Want the GP or Diabetes Nurse Educator to be involved in pre admission planning when admission unavoidable
- Need to work with clinicians across wards
- No GPLO at either hospital to assist
- Collection of data will be a large task by nurses and asking GPs to use Diabetes International Classification system and
- Governance arrangements need further development.

Auspiced by the Diabetes Alliance Group (DAG) comprised of 5 divisions of general practice, Diabetes Australia - Victoria and Royal Melbourne Hospital.

5.4 Preventing the need for acute care

Since 1999 there has been a substantial increase in GP Hospital activity that is intended to prevent the need for acute care. In many settings GP education is an accepted and long standing part of the hospital's role. There are examples of shared care which both prevents admissions of those at risk of hospitalisation in addition to shifting care to the most appropriate setting.

This consultation found that there had been significant increases in chronic disease management activities around specific illnesses such as heart disease, COPD, CHF and diabetes, with some of these funded through HARP.

During the consultation it was noted that the disease management projects led by hospitals tend to negotiate directly with individual GPs with divisions often having little knowledge about them. This may inhibit broader take up by GPs.

In addition to the hospital initiated efforts to prevent admissions, there are two division auspice HARP projects funded in 2002 which focus on providing additional capacity in general practice to prevent admissions. One of these projects is focussed on people with asthma aged 4-65 years presenting at Northern Hospital. The other is focussing on patients with diabetes who utilise targeted GP practices across a north-western geographic area of Melbourne. In both cases expert educators are provided to work with patients supporting the care plan developed by the GP with the patients.

Some GP respondents suggested that it was difficult to manage competing Commonwealth and HARP priorities in relation to specific diseases. *"For example, the Commonwealth's Chronic Disease Management targets asthma not COPD; HARP targets COPD not asthma...If HARP chooses different conditions it is difficult to work together."* (GP respondent) Another GP suggested that disease specific projects are *"too small a proportion of what GPs do to be worth spending time on."*

On the whole, it appears that hospital initiated specific disease management approaches provide patients with additional supports and means the GP is better informed but may not impact greatly on what GPs do. Unless there are links made between HARP and Commonwealth disease management initiatives integrated approaches to disease management may suffer. In considering the implications of this for the 2003-04 HARP funding round the working party identified that additional capacity within general practice to prevent hospitalisation of people at risk could be effected through utilisation of relevant Medicare Benefits Schedule items. The Working Party has recommended that the funding round should encourage respondents, where appropriate, to utilise items under the Chronic Disease Management and Enhanced Primary Care categories to deliver care through GPs to patients who are targeted within these initiatives.

Conclusions

The literature highlighted the opportunity of case management as an intervention to prevent the hospitalisation of those at risk. There have been a number of initiatives utilising this approach developed under HARP and while there are some indications of their broad effectiveness they have not engaged general practice in a systematic way. It is important that future case management and disease management models developed under HARP actively consider how they will collaborate with and engage general practice. This will require that projects take cognisance of the opportunities to develop integrated models of care through capitalising on Commonwealth priorities and initiatives.

Recommendations

It is recommended that:

Targeting of HARP initiatives should be informed by the Commonwealth priorities and initiatives, particularly in relation to general practice.

The 2003-04 HARP funding round should promote the development of initiatives which utilise the Medicare Schedule Benefit items under the Enhanced Primary Care, Chronic Disease Management categories and Home Medication Review to enhance the capacity of general practice to prevent hospitalisation of those people at risk.

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Appendix 1: Examples of effective models of GP-hospital collaboration from the literature

Building relationships

GPLOs

Reynolds, F et al (2002)

The main focus of GPLOs is on building better relationships and better managing transitions of care. There is strong evidence that GPLOs in place for longer periods are integral to the implementation of complex programs such as shared care and GP involvement in HITH.

GPLOs did not see themselves making a big contribution to either reducing the need for acute care or shifting care.

Reynolds et al recommend that divisions and hospitals should take joint responsibility for GPLO positions.

According to divisions reported barriers to GPLO effectiveness are:

- Insufficient time
- Culture change in hospitals is slow
- Hospital lack of interest in GPs
- Lack of funds

According to hospitals the main barriers to GP hospital integration are:

- Different accountabilities and responsibilities
- Poor communication
- Lack of commitment by GPs
- Lack of understanding of each other.

Reynolds et al quote the WA Hospital Liaison GP kit recommendations that:

- The hospital should not directly employ the GPLO but instead contract with the division
- The GPLO should be located within a strategic development unit of a hospital
- The GPLO must be given administrative support
- The GPLO should be employed for a minimum of 2 sessions each week (6 hrs)
- GPs should be represented on clinical directorates of hospitals and coordinated through the GPLO.

Improving transitions of care

GP hospital communication

Commonwealth Department Health and Aged Care (2001 b)

In NDHP3 St George Hospital (NSW) aimed to improve GP hospital communication by the use of a GP directory and a pre-admission clinic trial. The project improved continuity of care for patients upon discharge. The results were

- Substantially increased the number of GP:ED contacts pre patient arrival
- Substantially increased % of discharge summaries faxed to GPs within 24 hours of discharge
- Substantially increased % of medical records with full GP data recorded on front sheet at discharge
- Substantially increased % of ED or elective patients that hospital arranges ongoing care for by discharge to GP or other service provider.
- Slightly reduced length of stay

Commonwealth Department Health and Aged Care (2001 b)

In NDHP3 the Womens and Childrens Hospital Adelaide undertook an Emergency Community Liaison Project which utilised a standard referral letter for paediatric emergency, and the development of a GP/WCH forum. The major outcomes were:

- improved timeliness of health care delivery
- development of an information brochure for GPs about the Paediatric Emergency Department
- improved sharing of information between primary health care providers, and
- communication and relationship building with the divisions of general practice.

Shifting care to the most appropriate setting

Hospital diversion from ED

Mable and Marriott (2002)

A project in 10 hospitals in Quebec introduced a preventive program designed to instruct asthma sufferers in self-management. Referrals to Asthma Education Centres were made through Emergency Departments. However only 8% of patients followed up with appointments at the Centres.

Commonwealth Department Health and Aged Care (2001 b)

In NDHP3 at Swan Health Service (WA) one project aimed to reduce the rate of non-urgent attendances at the ED by encouraging patients to go to GP surgeries for routine medical matters. This involved liaison with GPs and other community providers to increase community awareness about the role of the ED; provide information about the availability of GPs and payment systems, provide information about other health and community services, and provide information about specific health issues. Results over 18 months were:

- ED attendances grew 5% overall
- ED attendances by those in non urgent Triage 5 reduced by 60% overall, with
- Greatest impact being felt in GP hours (reduction of 69% of triage 5 attendees).

Commonwealth Department Health and Aged Care (2001 b)

In NDHP3 the Integrated Aged Care Program at Rockhampton (Queensland) coordinated health care and support for people aged 65 years and over presenting at ED. Target groups were identified by the ED or by their GPs. Coordination could occur pre or post possible hospitalisation and involved the GP and community providers. The outcomes over 18 months included:

- 0 re-presentations to ED within 28 days
- Re-admission rates below 3%
- High GP satisfaction
- Growing rate of GP referrals and
- Some use of GP MBS health assessments, and case conference items.

HITH

Macintyre et al (2002)

A study of randomly selected medical records across Victorian hospitals found that the cost of episodes of acute care containing a HITH component were overall 9% less expensive than in-hospital care for matched patients, while pure HITH was 38% cheaper than matched in-hospital care. Pure HITH was associated with shorter length of stay, whereas mixed HITH and hospital care was strongly associated with longer length of stay.

Shared care (mental health)

Mable & Marriott (2002) p36

In a Canadian project the family physician was the initial contact and remained the primary care-giver, supported by a multi disciplinary mental health team.

The results showed that the family physicians felt more effective and confident. Patients suffering from anxiety or panic before the treatment showed the highest

level of functioning after it. Those with chronic pain, fibromyalgia, or migraine showed the least improvement.

Mable & Marriott (2002)

In Nova Scotia a shared care model entailed the deployment of mental health staff to primary care practices with salaried physicians and a comparison with fee for service family physician practices. The results showed the shared care model improved patient access to services, reduced visits to emergency, and elicited high rates of patient satisfaction. The patients' mental health outcomes were improved and there was improved collaboration between health service providers.

After hours

After hours primary medical services

The Commonwealth Government has funded five trials in the provision of After Hours Primary Medical Care, a number of local seeding grants and some service development grants. Reports of the evaluations of the trials and a number of the seeding grants indicate the complexities entailed in the provision of after hours services and the need to find a solution that matches local circumstances.

Economic viability is a major issue with successful services either privately billing or being subsidised by government funding. GP workforce is another major issue with rural and provincial GPs being more likely to be committed to work in co-operative arrangements as a means of reducing their on-call shifts. ED support was also found to be crucial with one service closing because this support was lacking. Community education and support was also found to be vital if the service was to be viable and the public to be diverted from ED.

Wood & Carter (2002)

Two State Based organisations of Divisions of General Practice define nine models of cooperative After Hours Primary Medical Care Provision and their advantages and disadvantages as shown in the table below.

The key success factors for any after hours model of service provision appear to be:

- that it suits the local circumstances
- community knowledge and acceptability including waiting times, costs, responsiveness to in-home needs
- GP commitment and adequate remuneration
- hospital commitment
- levels of community demand and payment arrangements that provide economic viability and
- quality is sufficient to gain community, GP, and hospital confidence.

Model of AHPMC Provision	Advantages	Disadvantages
Medical Deputising Services (eg MMLS, ALMS)	<ul style="list-style-type: none"> • Includes home visits • Accreditation exists 	<ul style="list-style-type: none"> • Only participating practices • Home visits inefficient use of time • Difficulty attracting workforce • Inconsistencies in service • Complex and costly to establish
Shared Practices Roster (eg Bayside Division, Qld)	<ul style="list-style-type: none"> • Low administrative pressure • Continuity of care for patients • GP autonomy in billing and clinical practice • On call GPs can triage calls • Access to After Hours MBS and PIP 	<ul style="list-style-type: none"> • Only participating practices • GPs not remunerated for phone calls/sleep lost • GPs in practices next day • GPs not well remunerated • Low public profile, does not ease pressure on ED • Inconsistencies in service
Public Hospital organised roster (eg Esperence District Hospital, WA)	<ul style="list-style-type: none"> • Open to all • Secure working environment • Good back-up facilities • Guaranteed income (hourly rate) 	<ul style="list-style-type: none"> • Cannot be supplemented by MBS funds
GP cooperative clinic collocated with a public hospital using Medicare (eg Macarthur GP After Hours Service, Frankston Medicentre, Vic)	<ul style="list-style-type: none"> • Open to all • Secure working environment • Good back up facilities • Convenient alternative to public ED • Significant impact on reducing demand on ED 	<ul style="list-style-type: none"> • Cannot receive free overheads from the hospital • Upfront fees deter patients • Excludes patients with transport difficulties • Must charge as much as possible and maintain throughput to remain viable • Flat hourly rates unsustainable except in busiest periods, GPs risk low remuneration from evenly split takings • Continues to encourage primary care type patients to present to hospital after hours
GP cooperative clinic collocated with public hospital utilising State or Commonwealth funding (eg Maitland After Hours GP Service, NSW)	<ul style="list-style-type: none"> • Open to all • Secure working environment • Good back-up facilities • Convenient alternative to ED • Has significant impact on ED • Over time builds relationship between ED and GP cooperative 	<ul style="list-style-type: none"> • Expensive • Excludes patients with transport difficulties • Concern by some GPs of losing fee for service, no incentive to be efficient • Continues to encourage primary care clients to present to hospital after hours
GP Cooperative Based in Clinic (eg Ipswich, Qld)	<ul style="list-style-type: none"> • Retains autonomy • Continuity of care • Quality service with high patient satisfaction 	<ul style="list-style-type: none"> • Only patients from participating practices • Overheads need to be covered by income • Security an issue • Reliant on pharmacies to be open • Limited hours

Model of AHPMC Provision	Advantages	Disadvantages
Nurse/GP telephone triage (eg Health Direct WA; Central Grampians)	<ul style="list-style-type: none"> • Shields GPs from unnecessary calls, more nights on roster • Community has rapid access • Open to all consumers • Meets information needs • Potential for reduced demand on ED 	<ul style="list-style-type: none"> • Significant cost to administer • Intensive training of staff, strict protocol development, anticipated medico-legal problems could be significant barriers
Private Hospital Organised Roster (eg Rockhampton, Qld; Epworth, Vic)	<ul style="list-style-type: none"> • Open to all • Secure working environment for GPs • Good back-up facilities • GPs usually well remunerated • Access to After Hours MBS and PIP 	<ul style="list-style-type: none"> • Viability hinges on increase in specialist referrals and admissions • GPs feel pressured to attend patients when unnecessary
GP co-operative clinic collocated with a private hospital (GP After Hours Perth, Shepparton)	<ul style="list-style-type: none"> • Open to all • Secure working environment for GPs • Good back-up facilities • Strong relationships with diagnostic services, ambulance etc • High quality with high satisfaction 	<ul style="list-style-type: none"> • Upfront fees deter patients of lower socio economic circumstances • Unable to access MBS so need throughput and charges • Excludes patients with transport problems • Flat hourly rates unsustainable except in busiest times so may restrict hours • If evenly split takings GPs risk low remuneration

Preventing the need for acute care

Case management

Richards (2000)

In 1999 Pegasus Independent Practitioner Association in Christchurch, New Zealand entered into a financial agreement with the Health Funding Authority which involved Pegasus holding the budget and the risk for all medical admissions from June 2000 in Christchurch. The Acute Care Project was one of a number of initiatives piloted prior to June 2000. In this pilot GPs were provided with extra funding to purchase a range of practice based, community and diagnostic services for up to 3 patients to prevent hospital admission. These extra services fell into three groups - treatment, monitoring, and logistical assistance. During the pilot 203 patients were provided with these services at an average cost of \$213.84(NZ). Seventy six per cent of patients were managed without requiring admission. This gives an estimated cost of \$281.36 per admission avoided. The most common principle diagnosis was pneumonia/chest infection. In general the project benefited those with chronic disease and the elderly, with a high proportion belonging to lower socio-economic groups. Patient and GP satisfaction were high. Enabling access to diagnostic and monitoring services in the

community for acute patients was the most used and valued service.

The evaluation recommended:

- the instigation of a service coordinator,
- specific contracting with service provider organisations including consultation about procedures and protocols,
- further exploration of an enhanced role for practice nurses in outreach,
- more use of the transportation subsidy for diagnostic testing and treatment, and
- the addition of a follow-up at one week after the episode of care.

Commonwealth Department of Health and Aged Care (2001)

The Commonwealth Department of Health funded nine Coordinated Care Trials throughout Australia for a 2-year period. The summary of the national evaluation of the trials shows that:

- those receiving coordinated care derived no direct health benefits compared to the control groups
- many trial participants noted an improved sense of well being derived from the security entailed in having a care coordinator
- GPs were consistent in their view that coordinated care benefited some patients by improving their access to services
- GPs preferred to work with fewer rather than more care coordinators and found working with a large number of them confusing, frustrating, and time consuming
- GPs with only a small number of patients in the trial and/or with patients who required minimal care coordination were more likely to view coordinated care as a nuisance
- for many GPs the trials began too quickly, there was insufficient time to clarify roles and expectations, and there were too many demands with respect to paperwork
- from the care coordinators' view, interacting with a large number of GPs made it difficult for coordinators to develop strong relationships. Linking care coordinators with GP practices rather than clients, ensuring face to face contact, could have promoted closer relationships
- care coordinators experienced isolation, variations in pay rates and caseloads, excessive paperwork, and problems with role descriptions.
- GPs appeared to be in an excellent position to evaluate 'the capacity to benefit' from coordinated care
- service providers felt that care coordination may have delayed hospitalisation or nursing home care for a few clients. However the data showed that "the anticipated reductions in MBS, PBS and hospitalisation were not apparent in the analysis". The evidence indicates there was an increase in HACC expenditure.

Gilbert et al (2002)

In Counties Manakau in South Auckland the hospital services developed an Acute Demand Management initiative with a range of strategies many of which were developed with the local GP association. One of these is the Primary Options for Acute Care (POAC) Service allowing GPs to access investigations, care or treatment for their patients in the community at short notice to prevent admissions. ED can also access this service. Common conditions being managed include uncomplicated pneumonia, asthma, cellulitis and COPD. After 12 months over 50% of the GPs are now using the service. The results show that an average 150 admissions per month were prevented.

Another service is the COPD Integrated Care project in which four care coordinators with specific skills in COPD and CHF were appointed to improve hospital processes to more effectively manage a patient through the hospital and to enhance the support and linkage to general practice. The target patients are in the Top 1500 and the coordinators are alerted automatically whenever one of the targeted patients enters the hospital. The results indicate that there is a 60% reduction in hospital bed days used by moderate to severe patients enrolled in the programme. Average length of stay was reduced from 6 days per patient per year to 2.5 days per year⁷.

Mable & Marriott (2002)

A Canadian project provided community based teams of physician, pharmacist and nurse to selected high-risk patients with poor health status. The results showed that the patients accessed home care services more and increased their compliance with medication regimes. There was a trend towards fewer physician and hospital visits although this was not significantly different.

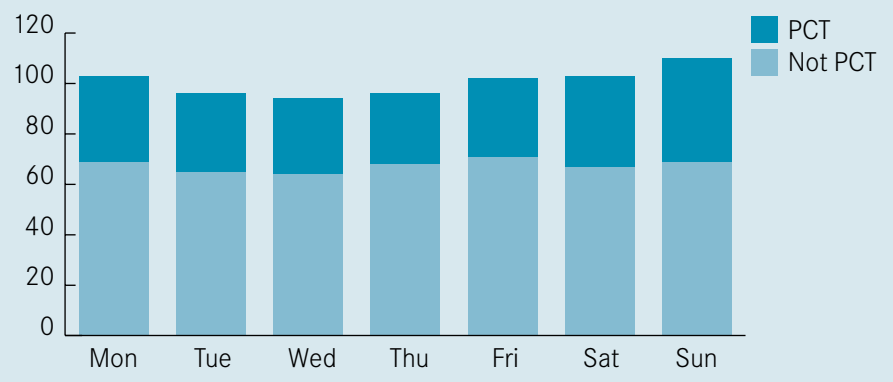
⁷ Results in e-mail to Ian Coverdale, DHS, from Paul Roseman, Procure Health Limited, Auckland. April 2002.

Appendix 2: Primary care type patients by individual metropolitan emergency departments

Alfred Hospital

Average daily presentations, 2001-2002

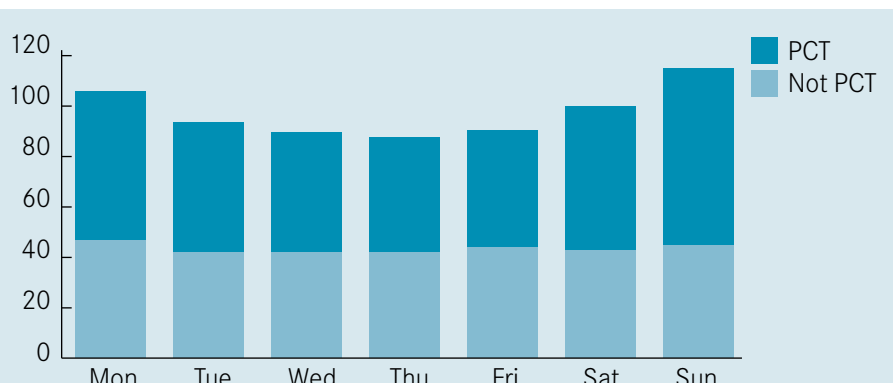
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	69	65	64	68	71	67	69
PCT	34	3	30	28	31	36	41
Total	103	96	94	96	101	104	110



Angliss

Average daily presentations, 2001-2002

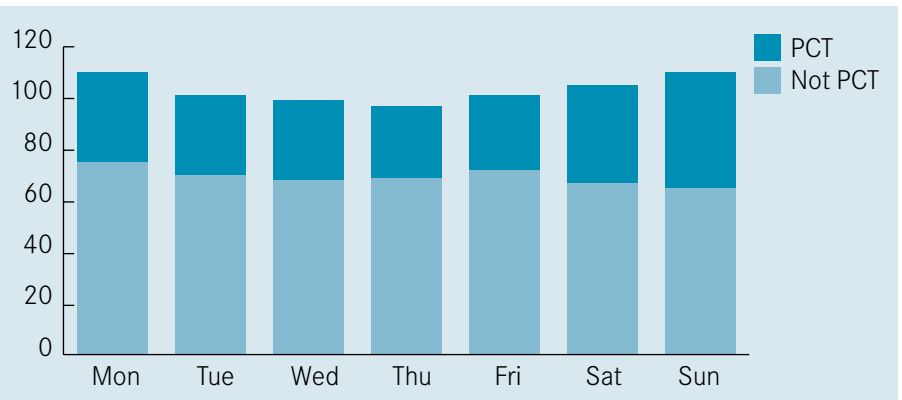
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	46	41	41	41	43	42	44
PCT	58	51	47	45	46	56	69
Total	104	92	88	86	89	98	113



ARM&C

Average daily presentations, 2001-2002

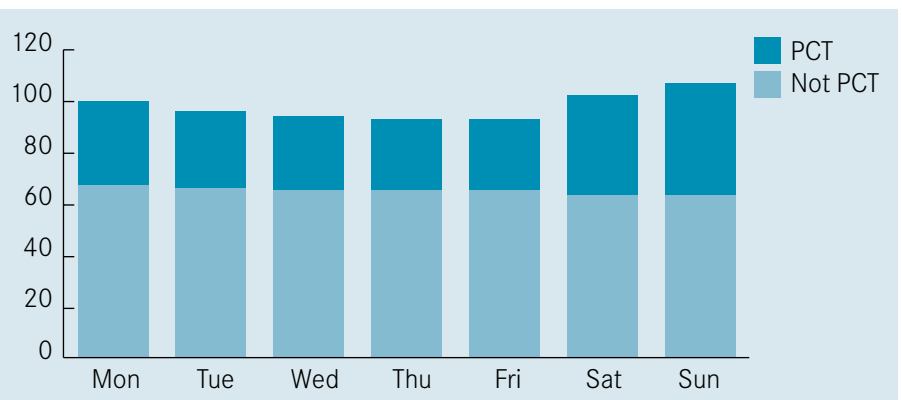
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	75	70	68	69	72	67	65
PCT	35	31	31	28	29	38	45
Total	109	101	99	98	101	104	109



Box Hill Hospital

Average daily presentations, 2001-2002

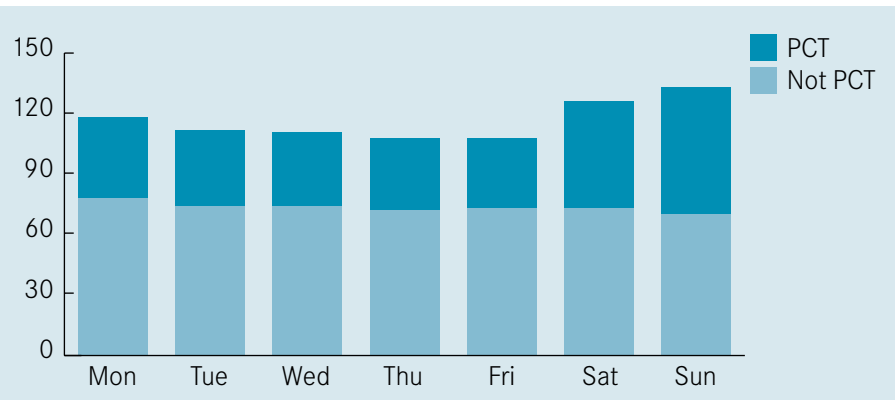
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	67	66	65	65	65	63	63
PCT	33	30	29	28	28	39	44
Total	101	95	94	93	93	102	108



Dandenong Hospital

Average daily presentations, 2001-2002

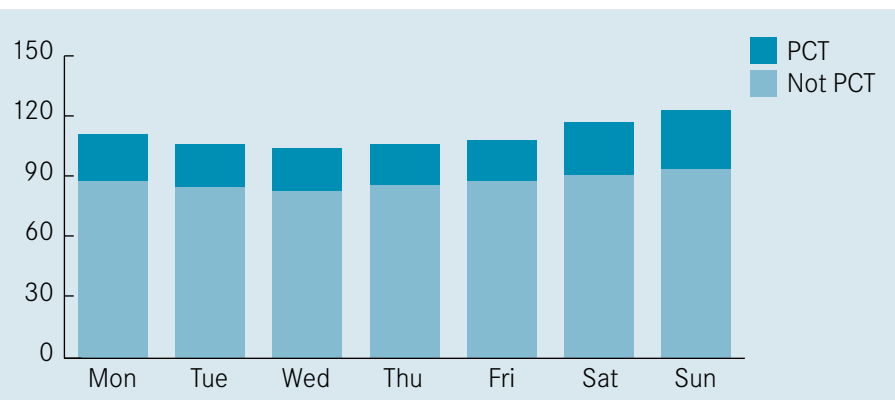
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	78	74	74	72	73	73	70
PCT	40	38	37	36	35	53	63
Total	118	112	111	108	108	126	132



Frankston

Average daily presentations, 2001-2002

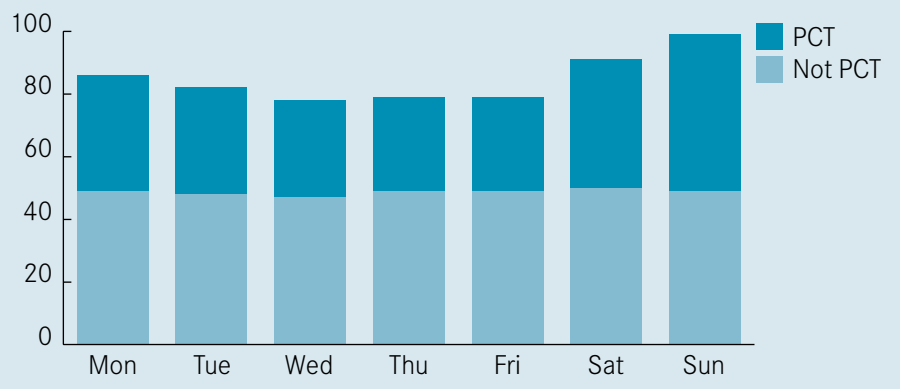
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	88	85	83	86	88	91	94
PCT	23	21	21	20	20	26	29
Total	111	106	105	107	108	117	123



Maroondah Hospital

Average daily presentations, 2001-2002

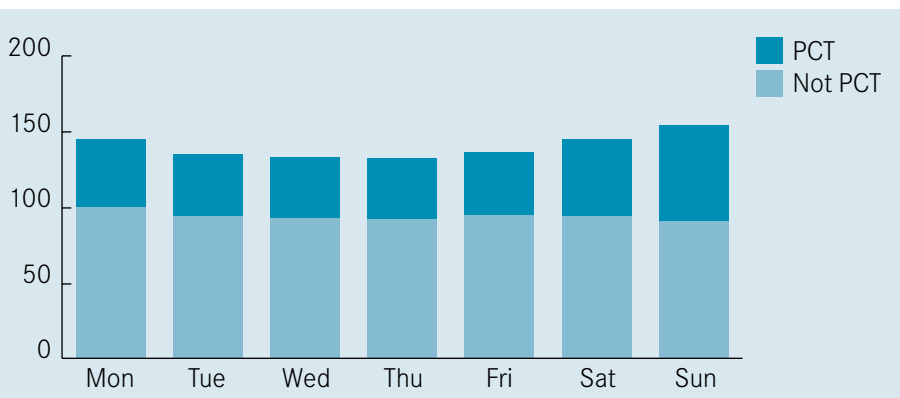
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	49	48	47	49	49	50	49
PCT	37	34	31	30	32	41	50
Total	86	82	78	79	81	91	99



Monash Medical Centre – Clayton

Average daily presentations, 2001-2002

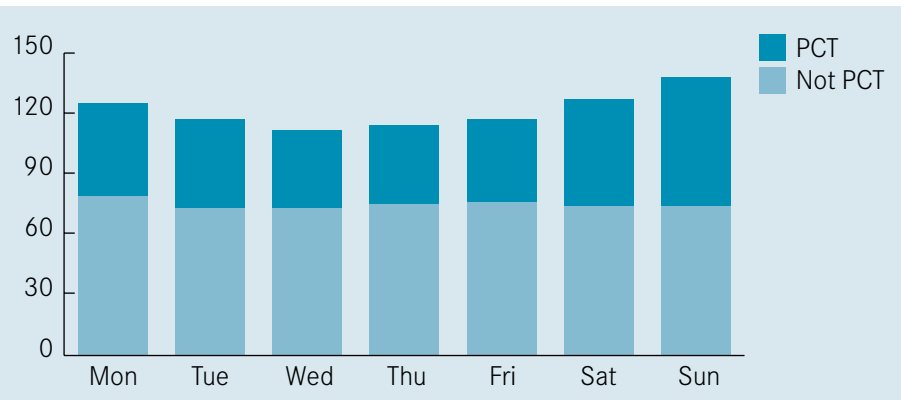
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	100	94	93	92	95	94	91
PCT	45	41	40	40	41	51	63
Total	144	135	134	131	135	145	154



Northern Hospital

Average daily presentations, 2001-2002

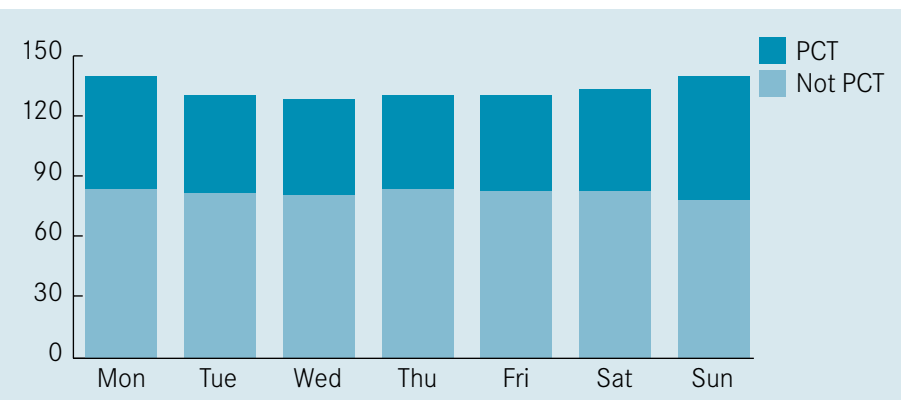
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	79	73	73	75	76	74	74
PCT	46	44	39	39	41	53	64
Total	125	117	112	114	117	128	139



Royal Melbourne Hospital

Average daily presentations, 2001-2002

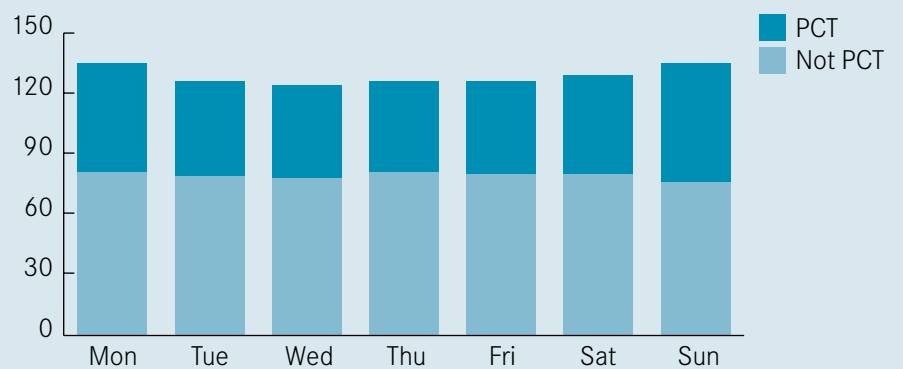
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	81	79	78	81	80	80	76
PCT	54	47	46	45	46	49	59
Total	136	126	124	126	126	129	136



St Vincent's Hospital

Average daily presentations, 2001-2002

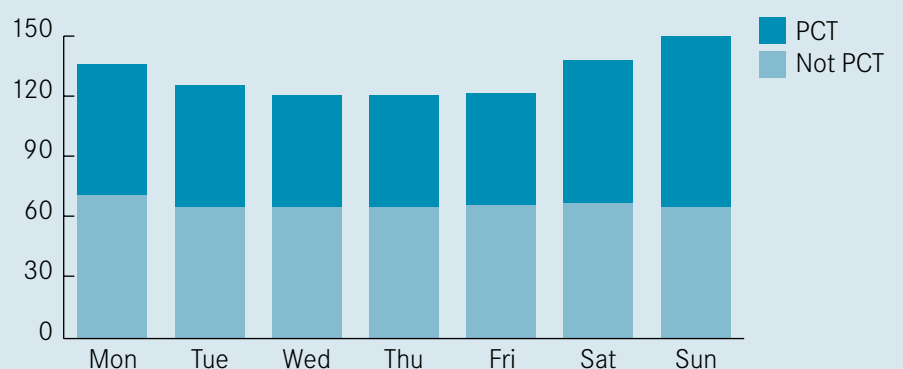
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	62	58	58	58	63	56	53
PCT	27	24	24	23	25	30	34
Total	89	82	82	81	87	86	87



Sunshine Hospital

Average daily presentations, 2001-2002

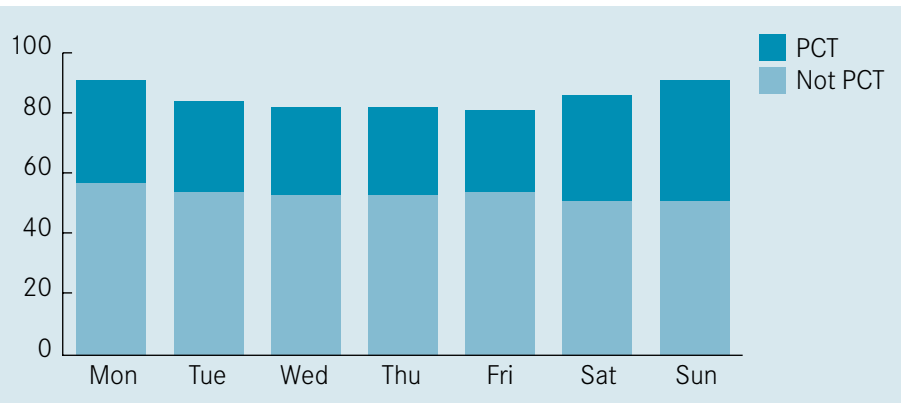
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	71	65	65	65	66	67	65
PCT	65	61	56	56	56	71	85
Total	136	127	122	120	122	138	150



Western Hospital

Average daily presentations, 2001-2002

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	57	54	53	53	54	51	51
PCT	34	30	29	29	27	35	40
Total	91	85	82	81	81	85	90

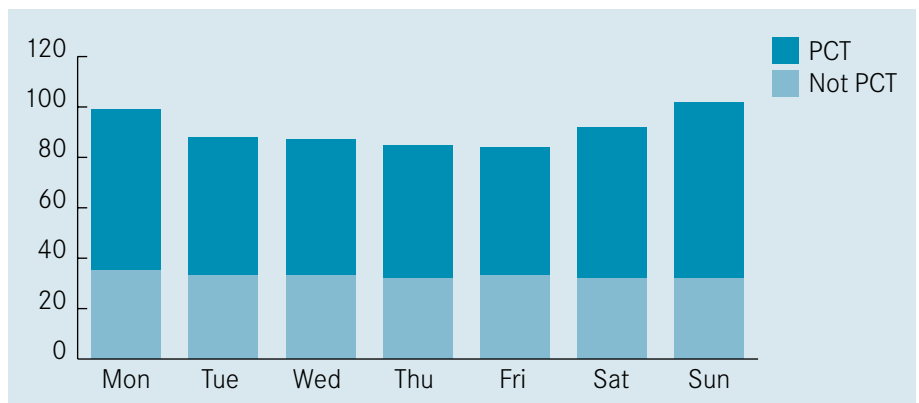


Appendix 3: Primary care type patients by individual major rural emergency departments

Ballarat Base Hospital

Average daily presentations, 2001-2002

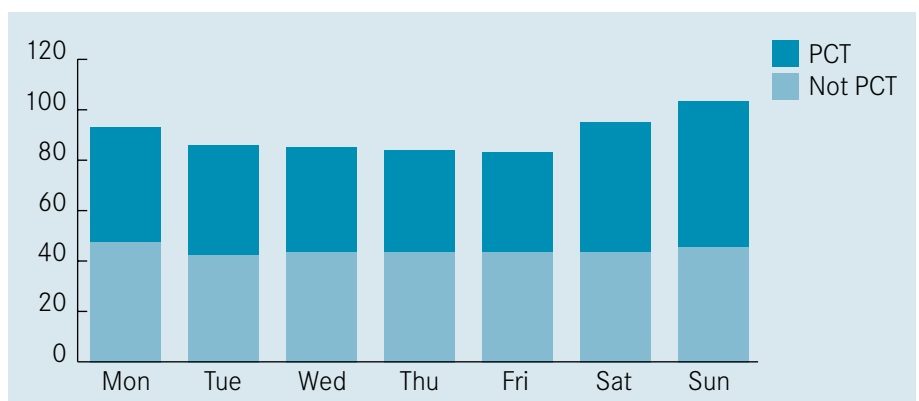
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	35	33	33	32	33	32	32
PCT	64	55	54	53	51	60	70
Total	99	88	86	84	84	92	102



Bendigo Hospital

Average daily presentations, 2001-2002

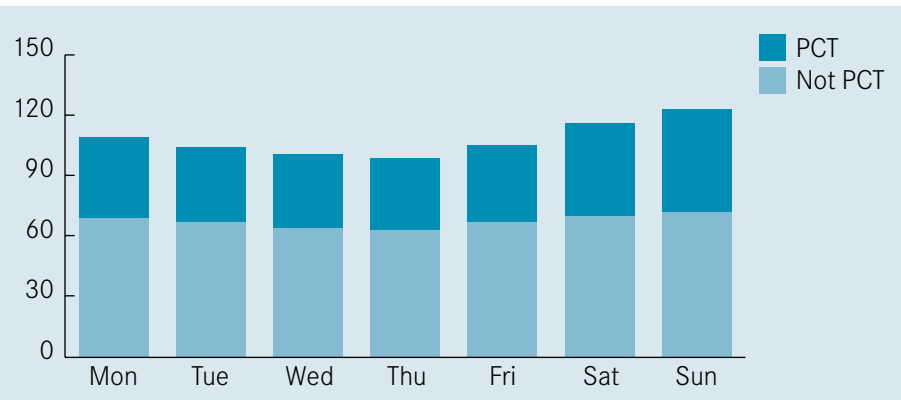
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	47	42	43	43	43	43	45
PCT	45	43	41	40	39	51	57
Total	93	84	84	83	83	94	103



Geelong Hospital

Average daily presentations, 2001-2002

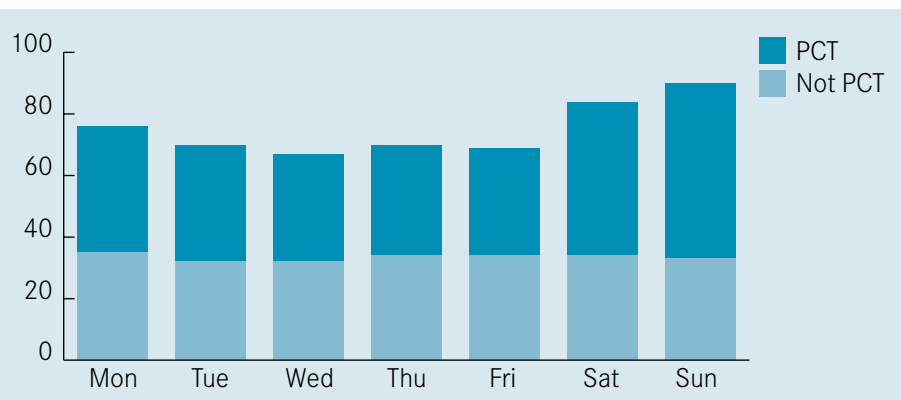
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	69	67	64	63	67	70	72
PCT	40	37	37	36	38	46	51
Total	110	104	101	99	105	116	123



Latrobe Regional Hospital

Average daily presentations, 2001-2002

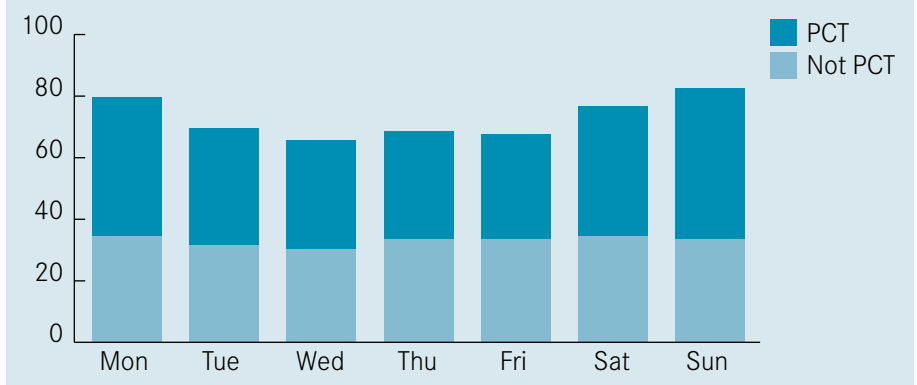
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	35	32	32	34	34	34	33
PCT	41	38	35	36	35	50	57
Total	76	70	67	70	69	84	90



Shepparton Hospital

Average daily presentations, 2001-2002

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	35	32	31	34	34	35	34
PCT	46	39	36	36	35	43	50
Total	81	71	67	70	69	77	84



Appendix 4: Primary care type presentations at the Royal Childrens Hospital

Table 1 Primary care type patients

Hospital	PCT patients	% of all	PCT Out of Hours
RCH	34,190	61%	21,756

Table 2 Primary care type patients by day of the week

Average daily presentations, 2001-2002							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Not PCT	64	60	59	60	61	59	61
PCT	97	83	84	85	82	98	125
Total:	161	143	143	145	143	157	186

Royal Children’s Hospital

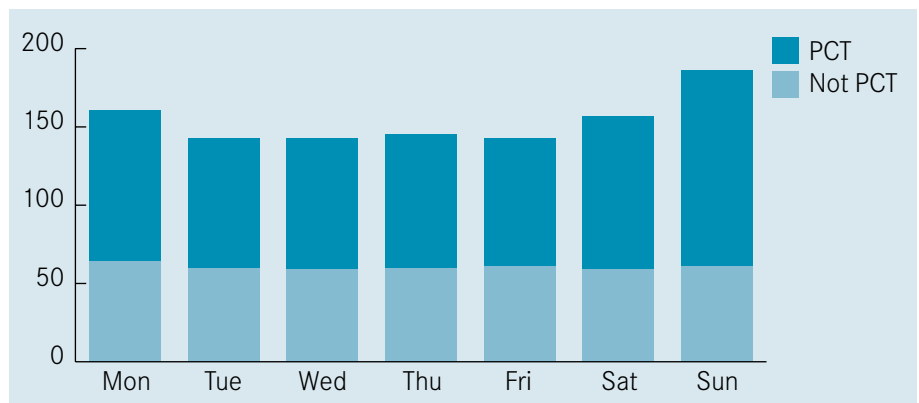


Table 3 Top 20 primary diagnoses for PCT presentations

Diagnoses	Diagnosis descriptions	Presentations
B349	VIRAL INFECTION UNSPECIFIED	4,409
J069	ACUTE URTI UNSPECIFIED	2,478
A09	DIARRH & GASTROENTERITIS PRES INFECTIOUS	2,342
J050	ACUTE OBSTRUCTIVE LARYNGITIS [CROUP]	1,018
H669	OTITIS MEDIA UNSPECIFIED	945
R104	OTHER AND UNSPECIFIED ABDOMINAL PAIN	855
K590	CONSTIPATION	719
J450	PREDOMINANTLY ALLERGIC ASTHMA	683
S0180	UNSPEC OPEN WOUND OF OTHER PARTS OF HEAD	664
J039	ACUTE TONSILLITIS UNSPECIFIED	641
Z099	F/U EXAM AFTER UNSPEC RX FOR OTH COND	548
J219	ACUTE BRONCHIOLITIS UNSPECIFIED	547
R11	NAUSEA AND VOMITING	506
R05	COUGH	471
B09	VIRAL INFECTN NOS W SKIN & MUCOUS LSN	456
N390	URINARY TRACT INFECTION SITE NOT SPEC	455
R509	FEVER UNSPECIFIED	418
L509	URTICARIA UNSPECIFIED	405
R69	UNKNOWN & UNSPEC CAUSES OF MORBIDITY	391
S628	FRACTURE OTH/UNSPEC PARTS WRIST & HAND	274

Appendix 5: Outcomes from the GPLO consultation

The GPLO role differs from hospital to hospital accordingly an overview of the role was developed:

Overview of GPLO role

Scope the issues with hospital personnel and GPs

Identify the hospital and division decision making structures

Establish a GP liaison meeting to decide priorities and provide guidance

Possible priorities:

- Legible timely discharge summaries
- Improve medication management
- Education for interns, RMOs & consultants re: GP role, discharge information and medication
- Improve GP and patient access to specialist advice and services (eg Outpatients, pathology, day surgery, etc)
- Community education re: having a GP
- Patient education re: role of GP
- Increase GP input re new services, program redevelopment, or mutual problems such as aged care

Process improvements:

- Increased % patient records with GP name
- Increased % wards using statewide GP registry for sending out discharge information
- Increased % patient education materials that outline GP role
- One entry point and form for GP referrals/queries for Outpatients
- GP role included in hospital education program for RMOs
- Discharge information to GPs includes current medications and instructions
- GP representatives included in discussions with nursing homes re preventing admissions.

The outcomes are:

- GPs are perceived as part of the care team,
- Patient transitions in and out of hospital are made easier and more appropriately, and
- GPs, in conjunction with and supported by others, manage sicker patients effectively at home.

Requirements for a successful GPLO

The discussion indicated that successful GPLOs take a problem solving approach, are persistent, have the capacity to relate to all players at all levels, and have clinical credibility regarding general practice and what can or cannot be done outside the hospital setting. An example that was given was a GPLO participating in Grand Round demonstrating how a GP would work with the patient at home.

The GPLOs identified that they need a range of supports including at least one senior champion in hospital management and one senior clinician who is actively supportive of the GP role. The GPLOs also noted that the divisions are vital to their success as they provide support and are a vital conduit for contacting GPs. They additionally are able to act as an advocate for the GPLO and are able to influence the perspectives of hospital management.

GPLOs recommended joint accountability for the functioning of the GPLO between the hospital and division based on shared goals and a willingness to modify practice for patient benefit. This circumvents the difficulty of being pulled between the hospital's agenda and that of the division. GPLOs noted the importance of being linked to a division or having a strong background in divisions so they can be supported by the division and know how to work with it.

