The Role & Achievements

of

Victorian Public Sector GP Liaison Officers

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EXECUTIVE SUMMARY

Context

In Victoria the Department of Human Services (DHS) funding has led to an increase in the number of General Practice Liaison Officers (GPLOs) in major public hospitals from seven in 2001 to 33 in 2005, and this funding is likely to be maintained. Yet hospitals, GPs, divisions of general practice and policy makers are unclear what GPLOs do and what they can and have achieved.

Methodology

In this small qualitative study the research questions were:

1. What is the role of the GPLO?
   What are they meant to do and what do they actually do?

2. What are their perceived achievements?

3. What are the key factors in their effectiveness?
   What are the key barriers to their effectiveness?

Throughout the study the definition of a GPLO employed by the Centre for General Practice, University of New South Wales (UNSW) was utilised.

Semi-structured interviews were conducted with 9 GPLOs (5 GPs and 4 project officers), 12 division leaders, and 6 senior hospital representatives in five Victorian settings where there are GPLO positions and a current Memorandum of Understanding between the major public hospital and the local division(s) of general practice. These settings were geographically dispersed, had different employment arrangements for the GPLOs, and had varying GPLO hours available so provided a cross section of the Victorian public sector GPLO experience. The only major hospital type missing was a state-wide specialist hospital. The RE-AIM comprehensive evaluation framework was utilised to assess the five dimensions of reach, efficacy, adoption, implementation, and maintenance (Glasgow, Vogt et al. 1999).

Findings

The GPLO positions in these setting had existed for between one and seven years, and the total GPLO hours worked in each setting ranged from 8.5 to 52 hours a week. The divisions of general practice and hospital representatives were very positive about the GPLOs' achievements regardless of the number of GPLO hours worked per week. The problem the GPLOs were addressing was not primarily that of people with chronic and complex conditions but the structural issue of continuity of care between primary and secondary care as it affects a wide range of health service users.

The Victorian GPLO role was found to be similar to the Danish model described by Olesen et al (Olesen, Jensen et al. 1998) in that the GPLOs provide a link between the hospital and the local GPs, and they encourage and improve the exchange of information, co-operation, efficiency, and quality of communication between hospitals and general practice in relation to patients and in relation to services provided by the hospital. In addition, in the Victorian settings some role was taken in shifting care to the most appropriate setting and preventing the need for acute care through shared care, GP education, facilitation of GP involvement in the Hospital Admission Risk Program (HARP), and some involvement in the arrangements for after-hours care.

The actual role taken by the GPLOs reflected and, in some cases, exceeded the initial expectations of both hospitals and divisions of general practice. Exceeding the initial expectations occurred where the expectations were low or general to start with, and occurred both for divisions and for hospitals. There was also acknowledgement that some of the specific 'wants' may not have been fully addressed yet (eg assistance in dealing with medical workforce problems, 'no shows' at outpatients, and timely legible useful discharge summaries) but were still being worked on by the GPLOs in conjunction with the divisions and hospitals.

How powerful were the GPLOs? While in two settings they were accountable to hospital executive directors and in two settings the GP GPLOs were on the division committee of management the GPLOs did not see themselves as part of the hospital management structure. Rather they identified as people who were sufficiently senior to go across hospital departments and the division, and to influence the work of others, not direct it. They described bringing people together, particularly through a GP liaison meeting, offering solutions and suggestions to units seeking to improve their communication with GPs, creating opportunities for mutual understanding, ensuring follow through on commitments, and promoting collaborative ways of working. These methods of operation exactly match Williams' description of the roles of boundary spanners as networker, entrepreneur and innovator, cultural broker, trust builder, and leader (Williams 2002). The GP GPLOs on low hours, employed by divisions, appeared to have less effect than those on more hours employed by hospitals. This would suggest they were less powerful.

The REACH of the GPLOs was perceived as extensive. GPLOs were seen to have affected most GPs using the relevant hospital through the provision of hospital and patient information, and in every setting the GPLOs were seen to have affected five major hospital departments. Furthermore some respondents in three settings perceived that the GPLOs had affected every unit in the hospital.

In terms of EFFECTS, in all five settings the relationship between the division(s) and the hospital improved from the time the GPLOs started until the time of the interviews in mid 2005, and in some instances substantially improved. The stakeholders perceived that the GPLOs contributed to the strengthening of the relationship both directly and indirectly. In two settings the stakeholders suggested there was now a partnership between the hospital and the division(s), and collaborative planning and implementation was a result of that partnership.

In assessing the partnership between the hospital and the divisions concerned the stakeholders across the five settings suggested there was '*willingness to share ideas and resolve conflict',* and*' improved access to resources'*. There was some *'achievement of mutual and individual goals'*, and some '*shared accountability of outcomes'*. In every setting at least one division respondent did not quite trust the hospital to be as interested in the linkage with general practice as the divisions were, and noted that the inequalities in resources were too marked for a real shared agenda and accountability. These findings reflect the lack of natural 'partner compatibility' between divisions and hospitals (Brinkerhoff 2002), which is an argument for the ongoing insertion of a boundary spanner to create and sustain an alliance. In four of the five settings there was general '*satisfaction with relationships between organisations'*. These ratings suggest that a major effect of the GPLOs was the building of partnership between the hospitals and divisions concerned.

As to ADOPTION of new attitudes and IMPLEMENTATION of new approaches there was little hard data being collected at the local level on the utilisation of GPLO generated service and patient information mechanisms. However in most of the settings the senior division and hospital personnel met regularly, the hospitals had access to GP contact information that they didn't have previously, GPs had access to hospital information they did not have previously, and the quality and quantity of patient information coming in and out of the hospitals had improved. Some evidence showed that usage of these improved mechanisms was substantial, demonstrating full implementation of new approaches.

In four out of the five settings the divisions felt any changes made in outpatient and emergency department information processes and the cultural shift in attitudes towards general practice would be

MAINTAINED without the GPLOs should that be necessary. However in the fifth setting all respondents felt the changes were not sufficiently embedded to be maintained without a constant driver.

This study revealed a range of limits to the effectiveness of GPLOs – particularly related to the fact that linkage to general practice is not hospitals' core business. The lack of IT linkage between hospitals and general practice and the limited GPLO time available were commonly cited limitations to the GPLOs' effectiveness. However participants also noted numerous aids to the effectiveness of GPLOs – at the state-wide level, in the hospitals, in the divisions, and especially in the GPLOs themselves. This reflects a Victorian health environment where there is widespread active interest in improvements in the continuity of patient care.

Conclusions

GPLOs in Victorian public hospitals are an effective means of improving GP hospital communication, which hopefully affects patient continuity of care.

Sustainable changes and partnership appear more likely where the hospital employs the GPLO, and the GP GPLO works 12-16 hours a week with a skilled project officer working longer hours. These hours allow for recognition of the GP role through a greater range of hospital units and in the hospital culture. A specific focus for GPLOs' work is advisable when the GP GPLO hours are low (six hours a week or less), to demonstrate success. Divisions need to be the GPLO employer where the level of hospital commitment and interest in continuity of care is not trusted by the division. However this arrangement does create difficulties in accessing the hospital and engaging senior level support to empower the GPLO.

In recruiting GP GPLOs criteria should include proven ability to communicate well and experience in medical education. For credibility the GP GPLO should be a division member, understand divisions, and be a practising GP. The GPLO project officer role is not very visible to the stakeholders but is vital to the effectiveness of the GP GPLO as they can provide the follow through and project management the GP GPLO cannot exercise in their limited hours.

Structures that assist the effectiveness of the GPLOs include workshops and an email network at the state-wide level, and GP hospital liaison meetings of senior hospital and division personnel at the local level. The State Health Department's commitment to an emphasis on continuity of care and to hospitals' partnership with general practice is essential in influencing the hospitals' attitude and in supporting the GPLO role. Active senior division and hospital commitment is vital to the effectiveness of the GPLOs.

Future Directions

To validate stakeholder perceptions it would be valuable to measure continuity of care in some systematic way and determine the impact on patients, on referrals, on GP skills, and on health service provider and patient satisfaction. It would be helpful to develop common performance indicators for Victorian hospitals to measure their relative contribution to continuity of care. This would complement performance indicators for divisions developed by the Australian Government.

KEY IMPLICATIONS FOR PRACTICE

1. GPLOs improve the relationship and communication between hospitals and divisions. They improve the flow of information about hospital services to GPs; they improve the flow of useful patient information between GPs and hospitals, which allows better care as patients move between different healthcare settings. They help emergency departments and outpatient departments to improve their processes so they are more efficient and safer, and less frustrating for the public.

2. BUT GPLOs are only as effective as the support they get from divisions, hospitals and DHS. This support needs to be financial and in terms of attention from the three parties.

3. Hospital and division senior personnel should recognise the interdependence between the hospital and general practice – they should back each other up for the benefit of safe and effective patient care.

4. Where GPLOs are most effective the hospital senior personnel meet regularly with the division leaders, provide resources to help the GPLOs influence the hospital IT systems and Hospital Medical Officer (HMO) training, and actively encourage a variety of senior consultants and hospital units to

    a) engage with the GPLOs and the division, and
    b) change their processes to provide safer and better care into and out of hospital.

5. Where GPLOs are most effective divisions and their GP leaders communicate with a variety of senior hospital people regularly and understand the drivers and constraints affecting the hospital, provide GP input into proposals to improve patient care, and provide different types of opportunities for the GPLOs and the hospital to communicate with GPs about the hospital's services and needs in relation to providing safer and better patient care.

6. GP GPLOs working a small number of hours (six hours or less per week) are only a foot in the door that can open up communication. This small investment can demonstrate the potential of more cooperative arrangements between general practice and a major public hospital.

7. DHS can make a difference to the effectiveness of GPLOs by

    a) continuing to fund GPLOs through earmarked arrangements;
    b) asking hospitals to establish and report on continuity of care targets;
    c) funding a GPLO website to help GPLOs learn from each other, and
    d) funding regular GP Hospital Communication workshops.

    This would build on current hospital strategic directions in reducing hospital demand, the Patient Flow Collaborative, the Clinical Risk Management Strategy, and the work of the GPLOs.

CHAPTER 1: CONTEXT

With the advent of targetted funding from the Department of Human Services (DHS) under the Hospital Demand Management Strategy, Victoria experienced substantial growth in the number of GP Liaison Officers(GPLOs) in major public hospitals from seven in 2001 to 25 in 2003. From mid 2005 DHS provided metropolitan public hospitals with recurrent funding for these positions thus indicating their continuance. Not only are GPLO positions in Victoria relatively new roles but these officers have various titles, various position descriptions, various hours of work, and different employment arrangements. Thus it is not surprising that DHS, divisions of general practice, GPs, and hospitals are still unsure what GPLOs do, and what they can and have achieved.

Furthermore some other state health departments and individual hospitals in Australia fund or employ GP liaison officers and there are over 200 people on the national GP Liaison listserve. Over the last ten years the Australian government has funded a variety of GP/hospital projects and, through key performance indicators, is currently encouraging divisions of general practice to improve the communciation between hospitals and general practice. Thus there is a broader constituency interested in GP/hospital liaison and the role GPLOs play in improving communication between secondary and primary care. So there is interest and uncertainty, and now in Victoria there is a sufficient body of experience to begin to assess this relatively new GP role in the Victorian context. This study aimed to analyse the role of Victorian public sector GP liaison officers and their achievements in relation to the initial expectations of hospitals and divisions.

The following definition of a GP liaison officer has been utilised throughout this study and covers positions that are called acute primary care liaison, GP consultant, GP communications, and general practice liaison officer: *'A GPLO may be defined as anyone, regardless of their professional background, who is employed specifically for the purpose of improving communication and transfer of information between General Practitioners and Hospitals, for the ultimate benefit of patient care'* (Lissing and Powell Davies 2000)

Measuring achievements

GPLOs in Australia, meeting nationally for several years, have struggled with how to evaluate their work. Glasgow et al provide a comprehensive evaluation framework appropriate for complex change programs, such as public health programs, where there are multi level interventions. This model, termed RE-AIM, entails the assessment of five dimensions - reach, efficacy, adoption, implementation, and maintenance (Glasgow, Vogt et al. 1999). This framework is employed in this study as a tool to assess the various dimensions of complex organisational change in which GPLOs are involved.

The research questions

Based on the uncertainties in the field the research questions for this study were as follows:

1. What is the role of the GPLO?
   What are they meant to do and what do they actually do?

2. What are their perceived achievements?

3. What are the key factors in their effectiveness?
   What are the key barriers to their effectiveness?

CHAPTER 2: METHODOLOGY

Given the previous work on Australian GPLOs providing an overview of their role and the literature about partnership and the role of boundary spanners (See *Appendix 1: Literature Review*) it was decided that a qualititative approach focussed on a few representative settings would provide some depth of understanding of the role of Victorian GPLOs as integration mechanisms.

There are five Victorian locations where there is a Memorandum of Understanding (MoU) between the hospital and the relevant division(s) of general practice. In each of these geographic areas one or more GPLO(s) are employed by either the hospital or the division. These MoUs provide a documented context for the developments in the relationship between the hospital and the division, setting out broad expecations between the two types of organisations. The five areas represent a range of different geographic settings and hospital types. All five are teaching hospitals; one has some state-wide services, three are community hospitals, and one is a regional centre hospital. The only major hospital type missing is a state-wide hospital. Unfortunately there is no current MoU between a Victorian state-wide hospital with a GPLO and a division organisation.

In these five locations the hospital medical director or their representative, the CEO and the GP chair of the involved divisions, and the GPLOs were separately interviewed based on a semi structured format.The interviews were thematically analysed in terms of agreement between the three players at each site and across the sites by type of respondent.

In total there were 19 interviews with 27 interviewees. The GPLOs interviewed consisted of five GPs and four project officers (one position was vacant). The division representatives consisted of six CEOs and six GP chairs or board members from seven divisions. The hospital representatives included one medical director, two heads of medicine, two executive directors of ambulatory & nursing services, and one director of medical governance & patient safety. The divisions suggested these representatives as the appropriate senior hospital representative likely to know something about the work of the GPLOs. There were no interview requests refused. Table 1 below provides a summary of the number of interviews with each type of respondent.

Table 1 : Number of interviews with each type of respondent associated with each setting

	GPLOs	Division representatives	Hospital representatives	TOTAL
Setting 1 (748 acute beds)	1	3	2	6
Setting 2 (559 acute beds)	2	4	1	7
Setting 3 (418 acute beds)	2	2	1	5
Setting 4 (344 acute beds)	2	2	1	5
Setting 5 (220 acute beds)	2	1	1	4
TOTAL	9	12	6	27

CHAPTER 3: RESULTS

The results below have been divided into four sections. Section (a) provides introductory information about some characteristics of the GPLOs and their positions, sections (b),(c) and (d) provide data relevant to the three research questions: the expected and atual role of the GPLOs; their perceived achievements; and the aids and barriers to their effectiveness.

(a) Characteristics of the GPLOs and their positions

The GPs performing the job of GPLO were all members of a division and, apart from one person, they were all practising GPs. There were one male GP GPLO was interviewed and the remainder of GPLOs in this sample (eight), both GPs and project officers, were female. The GPLOs had been working in the positions for between six months and five years, with most having had two years in the position. This pattern reflects the broader population of GPLOs in Victoria where the majority of both GP and project officer GPLOs are female, and most of the GPs working as GPLOs are practising and are members of divisions. See Table 2 below.

Table 2: Some characteristics of GPLOs interviewed

	Gender	Years in position	Practising GP?
Setting 1: GP	M	2	Yes
Setting 2: GP **Project Officer**	F F	2 2	Yes
Setting 3: GP **Project Officer**	F F	1 2	Yes
Setting 4: GP **Project Officer**	F F	3 1	Yes
Setting 5: GP **Project Officer**	F F	5 0.5	No

As can be seen from Table 3 below, the amount of GPLO time available in each setting varied markedly. The GPs engaged as GPLOs worked between two and 16 hours a week in that capacity while project officers worked between four and 38 hours a week. In two settings total GPLO time was only eight to 10 hours a week, whereas in three other settings total GPLO time was 42-54 hours a week. The setting with the fewest total GPLO hours did not receive any DHS funding for primary care liaison whereas each of the other four settings did. However the amounts received varied, as did the way the employer spent the allocation.

The length of time the positions have existed varied between one and seven years, and most have existed for two to three years when acute primary care liaison funds became available. In two settings the GPLO positions predated DHS funding. In one of these settings the division had a long standing commitment to fund some GPLO hours, and in the other setting the hospital had funded some GPLO hours for a couple of years prior to the advent of DHS funding.

In two settings a division employed the GPLOs and in the other three the GPLOs were employed by a hospital. Thus we have a sample that reflects the range of hours Victorian GPLOs work, the two different types of employment arrangements they work under, and the varied length of time the positions have existed.

Following Ashkenas and Francis (Ashkenas and Francis 2000) we wanted to explore where the GPLOs were in the power structures of both divisions and hospitals. In two settings the GPLOs were responsible to the division CEO, in two settings they were accountable to a member of the hospital executive, and in one setting they were accountable to a hospital director below executive level. In all settings the GPLOs could nominate at least one senior clinical champion at the hospital committed to improving the linkage with general practice and in two settings five to six senior consultants were seen as very supportive.

The GP GPLOs employed by a division were also on the division's committee of management. A hospital-employed GP GPLO was also on two division working committees. So in three settings GP GPLOs were members of division committees.

All five GP GPLOs were on a number of hospital committees, such as the senior medical staff group and HARP committees. One GP GPLO had another paid responsibility with the hospital focussed on HMO education and support. Only one of the project officer GPLOs was on a number of hospital committees.

In the three settings with low GPLO hours the GPLOs reported no contact with the hospital CEO in the last three months. In two of those settings they also reported no contact with the hospital medical director. However in the other three settings the GPLOs reported fairly regular contact with the hospital medical director. The level of contact with the medical director did not seem correlated with whether the GPLO was employed by the hospital. In comparison GPLO contact with the division CEOs or GP chairs was weekly for most settings.

In sum, it was noticeable that the GP GPLOs, despite their fewer hours, were more substantially linked to both hospital decision influencing bodies and division decision-making bodies than the project officer GPLOs. In three settings the GP GPLOs appeared well linked to the hospital hierarchy. The frequency of contact with the divisions was consistently high across all sites bar one where the GPLOs worked a low number of hours.

Table 3: Some Characteristics of the GPLO Positions

	Hours a week	**Number of years position existed**	**Employer**	**Number of contacts with medical director in last 3 months**	**Number of hospital committees sits on**	**Number of contacts with division CEO/GP in last 3 months**
Setting 1 (748 acute beds)	16 (GP) 38 (PO)	2 3	Hospital	3-4	5	10
Setting 2 (559 acute beds)	12 (GP) 32 (PO)	5 3	Hospital	Twice in few weeks (New MD)	8	12
Setting 3 (418 acute beds)	2 (GP) 8 (PO)	1 2	Hospital	0	1	3+
Setting 4 (344 acute beds)	4 (GP) 38 (PO)	3 3	Division	0	1	12
Setting 5 (220 acute beds)	4.5 (GP) 4 (PO)	7 7	Division	8+	7	12

All interviewees were asked to assess how supportive the hospital was to the GPLO positions. Were the positions regarded as marginal to the hospital's business (0 out of 10) or were they regarded as of vital importance (10 out of 10)? Unfortunately the hospital representatives mostly answered in general descriptive terms. Nevertheless it was clear that most stakeholders thought the level of hospital support for these positions had risen from low priority to the top half of priorities. A common comment was that the challenge now was to get the level of senior support reflected in practices at unit level so that communication with general practice was part of day-to-day patient care. It did appear that the perceived level of hospital support was lower where the GPLO hours were lower. See Table 4 below.

Table 4: Assessments of levels of hospital support for GPLO positions by types of respondents
(Score out of 10 when 0 = marginal, 10 = of vital importance)

	GPLO Hours a week	GPLOs	Hospital representatives	Division representatives
Setting 1 (748 acute beds)	16 (GP) 38 (PO)	6-7 at executive level; Diluted at unit level	7 at executive level; Few resources to follow through.	7 reasonable; Not quite rolled out in processes
Setting 2 (559 acute beds)	12 (GP) 32 (PO)	7-8 valued but not core business	NA	8 better than any other public hospital we deal with; rare for a unit not to use GPLO for GP input
Setting 3 (418 acute beds)	2 (GP) 8 (PO)	Token/marginal	NA	Well supported. One facet of hospital liaison
Setting 4 (344 acute beds)	4 (GP) 38 (PO)	6-7	NA	5-6
Setting 5 (220 acute beds)	4.5 (GP) 4 (PO)	6-7	NA	7 for verbal support, 3 for on the ground changes

(b) Expectations and actual role of GPLOs

There was a surprising amount of agreement between the GPLOs, the hospital representatives and the division representatives on the main issues they perceived hospitals wanted GPLOs to address. All parties in all settings suggested that the hospitals wanted GPLOs to improve communication with GPs in general terms so that there was better mutual understanding about what the hospital could and couldn't do, and what GPs could and couldn't do. One hospital representative noted that the hospital should be there as a back-up to GPs, and another said '*We wanted to ensure that GPs are satisfied with what the hospital is providing and that we have a good working relationship with them. From our point of view we can't operate in a vacuum,we have to operate in concert with the GPs and the community.'*

The limited mutual understanding created by the structural separation of general practice and hospitals was seen by all interviewees to be affecting the flow of patient information both into and out of the hospital such that it was creating clincial risk for patients and contributing to congestion and inefficiencies particularly in the emergency department (ED) and outpatients. Examples of such inefficiences were high levels of 'no shows' at outpatients, and patient bounce back through the ED.

In addition some hospitals had specific local issues they wanted addressed such as improving the attractiveness of hosptial and GP registrar positions in the area, losing patients out of the catchment, GP assistance in dealing with medical workforce problems, getting discharge summaries to GPs, linkage with Primary Care Partnerships (PCPs) to improve referrals, reducing GP complaints, and working on obstetrics shared care so responsibilities were understood.

There was also substantial agreement between the the stakeholders on the main issues they felt divisions wanted GPLOs to address - divisions wanted communication between the hospital and GPs to improve. All parties perceived that divisions wanted improved access to hospital specialists for their GPs' patients, particularly through outpatients (OP) and the emergency departments (ED), and better recognition of and respect for GP skills and role. The interviewees all noted that divisions wanted more and better patient information to go to GPs, particularly timely legible discharge summaries. As one division representative said '*Certainly the information flow was always a problem, particularly where a patient had come into the hospital without the GP's knowledge and come out again. So the patient will come back to the GP and have hospital based issues and the GP knows nothing about it. And decent access to the hospital - points of referral, where do I get a bed? Who do I talk to? Access to consultants as opposed to registrars; just the frustration with the communication process.*'

At the local level there were specific issues divisions wanted addressed by the GPLOs such as an up-to-date service directory and a port of call for issues with the hospital, relocation/redevelopment of the hospital to provide a comprehensive range of sevices, and, in a couple of settings, better information going from GPs to the hospital about patients.

So the shared expectation was that GPLOs would improve GP hospital communication, mututal understanding, and efficient use of and access to ED and Outpatients. What did GPLOs actually do to meet these expectations? What did the stakeholders think they did? In all five settings the GPLOs reported that they were currently involved in:

1. Helping the hospital and division plan together
2. Providing information to GPs re hospital processes and services through newsletters, the hospital website, and/or service directories
3. Facilitating hospital involvement in GP education
4. Facilitating ED to GP communication

In addition in four of the five settings the GPLOs reported they were currently involved in

5. Facilitating notifications to GPs of admissions, births, deaths
6. Improving GP referrals to hospital
7. Facilitating the delivery of timely quality discharge summaries to GPs
8. Facilitating GP involvement in HMO education

The stakeholders saw the GPLOs involved in a similar but broader range of activities because they took a broader time view - they were not necessarily sure what was current and what was in abeyance. So hospital representatives agreed with the GPLOs self report and in four of the settings said the GPLOs were also involved in:

- Helping to engage GPs in HARP projects
- Other activity to shift care to the appropriate setting (eg shared care, aged care)

> The division representatives had a very similar perspective to that of the hospital representatives in that, compared to the GPLOs themselves, they were more likely to cite a broader range of GPLO activities and to include GPLO involvement in engaging GPs in HARP projects.

The stakeholders were also more likely than the GPLOs themselves to comment on the broader role of the GPLOs. Thus in three settings the divisions emphasised that the GPLOs were only one element in a range of GP hospital communication strategies. This was particularly the case in one setting with low GPLO hours, where the division's collocation with the hospital facilitated regular meetings between the division executive and individual hospital unit directors, swapping and co-employment of division and hospital staff, and program collaboration between division and hospital staff in relation to issues such as heart disease and aged care, without the involvement of the GPLO. In another setting

the shared governance structure established to oversee the GPLOs provided the avenue for a range of communication between the division and different hospital unit heads. As one division representative said : *'The GPLO is part of a broader strategy and that's the strength of it. Put it in by itself it might not do anything but as part of a broad strategy it can be effective and create a range of linkages.'*

In two settings both the divisions and the hospital saw the GP GPLO as the consistent point of contact for hospital units and for GPs who wanted to improve some specific aspect of cooperation between the hospital and the GPs. One division GP chair said *'If there's a problem there's a consistent contact person who's prepared to follow it through…If I want to discuss something with a senior manager they [the GPLO] can usually arrange it fairly quickly.'*

In three settings the hospital representatives noted that the GPLOs performed an important role in raising everyone's awareness of the GP role. This seemed to correlate with the GP GPLO having an educational orientation or role with HMOs, and was noted even where the GP GPLO hours were few. One hospital director said '*Her presence throughout the hospital has raised awareness of the importance of GPs. She's proven to be motivational.'*

In all five settings both the hospital and the division representatives agreed that the GPLOs' role was to make change happen. The representatives suggested that at their executive level they could provide the goodwill to create a Memorandum of Understanding (MoU) but without a body or a pair of bodies to act as a driver it was difficult to get any outcomes. Thus the GPLOs, particularly the project officers with more hours and more hands-on work, could solve problems and get change in processes.

Thus the GPLO roles were perceived to be as outlined below:

GPLO Roles

= One element in a range of strategies
= Consistent contact person
= Awareness raiser/motivator
= Problem solver/change enabler/driver

(c) Perceived achievements of GPLOs

Reach

All stakeholders agreed that all GPs referring to or using the hospitals concerned had been affected by the GPLOs work. The GPLOs themselves were more modest in suggesting that while all GPs would have received more information about the hospital and its services (through the division newsletter and specially prepared resources such as guidelines, or a service directory) not all would have received patient information such as admission notifications or discharge summaries. The lowest perceived direct reach to GPs with patient information was in the setting that did not receive DHS funding for a GPLO function.

Most stakeholders agreed that the emergency department and the outpatients department were affected by the work of the GPLOs. Health information services were also affected by the GPLOs according to at least one respondent in each of the five settings, as was general medicine. In four settings most respondents suggested that aged care was affected by the GPLOs. In three settings at least one respondent suggested that the GPLOs had affected every unit of the hospital concerned, and in another three settings at least one respondent suggested that the hospital medical officers were affected by the GPLOs. So the most common parts of the hospital affected by the GPLOs were perceived to be:

Emergency Department	5 settings
Outpatients Department	5 settings
Health Information Services	5 settings
General Medicine	5 settings
Aged Care	4 settings
Hospital Medical Officers	3 settings
Every Unit	3 settings

Efficacy

While numerous factors can and do affect a relationship, and GPLOs were seen as one of a range of strategies utilised to improve working relations between GPs and hospitals, stakeholders did want GPLOs to contribute to a better relationship between the hospital and the division(s) representing GPs in the catchment area.

According to the division representatives in three settings the relationship between the hospital and the division(s) was poor when the GPLOs started. The division representatives felt the hospitals were indifferent to the GPs and, in one setting, the division felt the hospital saw the GPLO role as a bit of a nuisance.The division representatives in these three settings used words like *doubtful, cynical, strained, sceptical, angry* to describe their GPs'attitude towards the hospital. It is not surprising then that in two of these three settings the division became the GPLOs' employer as the divisions were the dissatisfied party who wished to improve the relationship.

In the other two settings the divisions suggested that when the GPLOs started the relationship was good but there was a lack of follow through on the part of the hospital.

The hospital representatives agreed with the division assessments of the relationship in all bar one setting where the division thought the hospital's relationship with their GPs was very strained whereas the hospital thought that '*this has always been a reasonably warm hospital in relation to GPs'*.

The hospital representatives were very positive about the GPLOs' effect on the relationship with the divisions. One hospital representative from a setting starting from a low base said: '*It's heaps better. The division is regarded as a partner now.'*

From the divisions'point of view in the settings starting from a low base there was ageement that the relationship was much better, and particularly so in the setting where more GPLO hours had been allocated. One division representative from this setting noted that the relationship was '*more substantial, more open, a lot more responsive, and there was now the maturity to do things directly without the GPLOs'*. In the other two low-base settings the divisions noted that there was now '*accomodation on both sides'*, and the hospital was '*more receptive'*.

At the other end of the scale in one setting which started from a positive base the divisions suggested that the relationship had grown ' *in depth, breadth, and maturity ..such that a cultural change has happened in the hospital and an extensive range of units had been affected'*. The other setting in which there was a good relationship when the GPLO started had relatively few GPLO hours available and so the improvement in the relationship was seen to be moderate going from '*good but lack of follow through*' to '*good and willingness on both sides to work together.'*

These views can be summed up as follows:

Poor relationship → Much better relationship	54 GPLO hours
Poor relationship → Accommodation on both sides	42 GPLO hours
Poor relationship →More receptive relationship	8.5 GPLO hours
'Good but' relationship → Relationship grown in every way	44 GPLO hours
'Good but' relationship → Good and willing	10 GPLO hours

In each setting there were distinctive achievements. Thus in the largest setting all three parties noted that there was substantially more information going to GPs about hospital processes and services so that GPs could access them more easily, and that the quality of GP referrals to the hospital had improved. In the other large hospital setting all three parties agreed that the GPLOs had achieved increased communication with GPs throughout the hospital and had improved the range of processes for coming in and going out of the hospital.

At the three medium sized hospitals with relatively low GP GPLO time the three stakeholders agreed that discharge summaries had improved markedly in one setting, antenatal shared care guidelines had been produced in another, and in all three communication between the division and the hospital had improved with increased '*awareness throughout the hospital of GPs' major role in health care.*'

Across the five settings the hospitals and the divisions were more likely than the GPLOs themselves to note the improved relationship between divisions and the hospital, and between the specialist staff and the GPs. The division respondents were more likely to note a change in hospital attitude to GPs towards a greater willingness to work together. As one GP chair said *'Previously when you rang the ED about a patient they treated you with disdain and you would feel like it almost prejudiced the patient's treatment…whereas now they are more likely to pay attention, and take it seriously if a GP is sending someone in... You get notifications of ED attendances and if follow up is needed you usually get a short typed note within a day or two.'*

The hospital representatives were most likely to credit the GPLOs with increased notifications to GPs of patient admissions, births and deaths, improved discharge summaries, and helping with shared care.

In summary the stakeholders saw the GPLOs' main achievements as:

• Improved relationships between the division(s) and the hospital	5 settings*
• Improved communication between the hospital and GPs/ cultural change in attitude to importance of general practice	5 settings*
• Increased notifications to GPs of admissions, births, and/or deaths	4 settings*
• Improved discharge summaries	4 settings*
• Increased information to GPs about hospital services and processes	3 settings*
• Improved outpatient access and information	3 settings*
• Improved GP referrals to hospitals	2 settings*
• More hospital involvement in GP education	2 settings*

= Cited by at least one respondent in setting

Adoption and Implementation

While respondents were very positive about the GPLOs' achievements other stakeholders also want to know if there is any evidence of new attitudes adopted and new behaviours implemented by the hospital and /or by the GPs as a result of the intervention of the GPLOs. However the data for assessing attitudes and behaviours is very limited and lacking baselines measures.

1. *Communication between hospital and division leaders:* The current level of contact between the division leaders and the hospital CEO was:
   - low (about once a year) in the two settings where the division employed the GPLOs,

- moderate (4-6 times a year) in two other settings, and
- very regular (monthly) in one setting.

Only in this latter setting did the meetings with the hospital CEO include one directly focussed on the relationship between the hospital and GPs.

The contact between the division leaders and the hospital medical director was generally more frequent than with the hospital CEO, although in two settings the divisions reported no contact with the hospital medical director in the previous three months. These two settings had low GP GPLO time available. It was noticeable that the level of senior contact between the hospital and the division was the most substantial in the two settings with the most GPLO hours, both of which are large hospitals; and fairly frequent in two settings where the GPLO hours are low but where the division and hospital are co-located or in close proximity. See Table 5 below.

Table 5: Frequency of contact between division and hospital senior personnel in last three months by number of GPLO hours

	GPLO Hours a week	Number of contacts between hospital CEO and division CEO/GP	Number of contacts between hospital Medical Director and division CEO/GP	Number of contacts between hospital person responsible for GPLO and division CEO/GP	Total number of contacts between hospital and division
Setting 1 (748 acute beds)	16 (GP) 38 (PO)	3	1	3	7
Setting 2 (559 acute beds)	12 (GP) 32 (PO)	2	2	3+	7+
Setting 3 (418 acute beds)	2 (GP) 8 (PO)	1-2	0	3	4-5+
Setting 4 (344 acute beds)	4 (GP) 38 (PO)	1	0	1	2
Setting 5 (220 acute beds)	4.5 (GP) 4 (PO)	0	3	3	6

2. *Service related communication for hospitals:* In three hospital settings the GPLOs made an appropriate GP database usable in different units so GP contact information is available when required. This reflects an allocation of resources from hospital IT and health information services, the allocation of time for training, and the support of managers. It also reflects divisions' commitment to keeping the GP data up to date. Given the input required from both parties this is an example of effective attitude and behaviour change.

3. *Service related communication for GPs:* In three settings the GPLOs provided comprehensive hospital service information through a GP access section of the hospital website. In another setting this information was provided in an information pack to GP practices. In the fifth setting waiting list information for all outpatient clinics was regularly included in the division newsletter and all practices received antenatal shared care guidelines. The provision of hospital service information in the five settings reflects cooperation from all the units and services included in these information resources, and,

in some instances, collaboration with GPs to develop useful resources such as the antenatel guidelines. No implementation data was available on the use of the resources.

4. *Patient related communication for hospitals:* In three settings a GP referral form to outpatients and ED was developed or revamped to encourage better patient information from GPs to hospitals. This reflected a collaborative effort in coming to an agreement about what information was required by the hospital and what was feasible for GPs to provide. Implementation data was only available in one setting where the new form was being used for approximately 60% of GP referrals to Outpatients.

5. *Patient related communication for GPs:* All respondents perceived an increase in the number of patient notifications going to GPs, and most suggested there was an improvement in the quality of information. This reflects a change in attitude and behaviour on the part of hospital medical and non medical personnel. However in only one setting was implementation quantified. In this setting 27,000 patient discharge summaries had been sent to GPs in the previous year and 90% of them were typed. This level of transfer of information reflected substantial resource allocation from the hospital for the IT system and training for staff, and effort from the general practices to enable the electronic transfer of information to be received consistently and securely. This outcome required sustained and detailed collaboration over three years.

Maintenance

Stakeholders in settings which had the most GPLO hours per week were optimistic that some system changes made in the two largest hospitals would be sustained even if the GPLO positions ceased. Respondents in the two settings that had few GPLO hours but a focussed approach (one on discharge summaries, the other on antenatal shared care) also were optimistic that these changes were sustainable even without the GPLOs. However in the remaining setting all three stakeholders felt that not much would be sustained if the GPLO positions were to terminate. As one person from this setting noted '*You can't light a fire and leave it*'.

In four out of the five settings at least one respondent felt the notifications to GPs were sustainable without the GPLOs. In three settings at least one respondent felt the changes made in outpatient systems were sustainable, and in two settings the divisions felt the culture change within the hospital would be maintained.

The hospital representatives were more optimistic that the changes made were more than a foot in the door, whereas some divisions felt that, without the GPLOs, they could maintain a committee for dialogue but any changes would slowly be eroded by the changeover in personnel and the lack of a driver. As one GP leader said '*I think it would take it backward, it would mean slowing down. I don't think it's been going long enough for it to be embedded within the whole culture. Without that annoying person there….*'

Table 6: Stakeholders views on which changes made by the GPLOs would be sustained if the GPLO positions ceased

	GPLO Hours a week	GPLOs	Hospital Representatives	Division Representatives
Setting 1 (748 acute beds)	16 (GP) 38 (PO)	• O.P. changes • Notifications to GPs • Medical education	• O.P. changes • Notifications to GPs	• Would slide back • O.P. changes • ED changes • Medical education
Setting 2 (559 acute beds)	12 (GP) 32 (PO)	• Relationship	• Would be sustained but not developed	• Liaison committee/culture • Notifications to GPs • O.P. changes • E.D. changes • Palliative care and Renal care
Setting 3 (418 acute beds)	2 (GP) 8 (PO)	• Discharge summaries • Medical records • Subacute	• Discharge summaries	• Would slow down because of staff turnover
Setting 4 (344 acute beds)	4 (GP) 38 (PO)	• Not much • GP liaison meeting	• Requires support. - would go downhill • O.P. changes	• None - maintenance required even for automated processes • Meetings would narrow to complaints
Setting 5 (220 acute beds)	4.5 (GP) 4 (PO)	• GP on committees • Antenatal shared care • Notifications to GPs	• Discharge planning • Antenatal shared care	• Culture in hospital re GP integration • Antenatal shared care

(d) Aids and barriers to effectiveness

<u>Respondents cited different types of factors that aided the effectiveness of the GPLOs:</u>

- At the state-wide level, respondents generally noted the allocation of tied DHS funding, the running of Victorian GPLO workshops and establishment of a network of contacts between Victorian GPLOs, and the state government's policies in regard to diverting demand from hospitals particularly through the Hospital Admission Risk Program (HARP) were all very helpful.

- In relation to hospitals respondents agreed with the literature on partnership in citing the value of executive support or at least the support of senior clinicians; the prior knowledge and understanding the hospital and division(s) shared; in two cases the community oriented culture of the hospital, and/or the close location of the hospital and the division.

- All parties noted the divisions' commitment and ownership of the GPLOs as being of major assistance. This was amplified in a couple of settings where the hospital found the division leadership particularly skilled and pro-actively helpful.

- At the personal level the hospital and division representatives emphasised the value of the personalities of the individual GPLOs- their enthusiasm, their energy, and their credibility particularly with their peers. The personalities of the GP GPLOs were more often commented on than the project officers. For example, a hospital representative said '*Everyone likes (x). (He/she)*

is very reasonable and understands complexities', and a division GP leader said '(*x*) *is very personable and well connected. (He/she) is a good negotiator, experienced'*.

The GPLOs themselves commented that the partnership between the GP and the project officer was invaluable, particularly where the project officer was fulltime or worked four days a week. In one setting the GP GPLO also commented on the value of having another 'hat' in the hospital. In two settings the GPLOs commented on the value of the GP being flexible in regard to their hours, and in three settings comment was made on the value of the GP GPLO having medical education skills. This confirms the Danish experience (Olesen, Jensen et al. 1998). The hospital representatives in two settings commented that the fact that the GPLO was a practising GP was a major asset for credibility and for being clinically informed

In sum, the perceived aids to the effectiveness of the GPLOs were

- DHS funding
- DHS policy directions
- State-wide networking between GPLOs
- Senior hospital executive support/attitude
- Division commitment and ownership
- Personal and educational skills/ credibility of GPLOs
- Practising GP
- Partnership between GP and project officer GPLOs

<u>Respondents cited a number of barriers to the effectiveness of the GPLOs:</u>

- At the state-wide level, the commonwealth/state division of responsibilities for health was seen as problematic by a number of respondents as this is the basis for the separation between general practice and the acute sector. An example of this commonwealth/state divide was the lack of funds for IT infrastructure spanning the hospital and general practice, because of uncertainty about who was responsible for this linkage.

  The Hospital Admission Risk Program (HARP) auspice for GPLO funding was seen as problematic in one setting as the evaluation criteria were focussed on admissions avoided, not the system changes the GPLOs were working on. This created uncertainty in direction and funding arrangements.

- According to most stakeholders the greatest number of constraints to the effectiveness of GPLOs stemmed from the hospital environment. The most commonly cited issue in the hospital was the hospital IT system –its limitations and the difficulties entailed in getting changes made.

  In settings where the hospital was the employer the GPLOs suggested that change in the hospital was slow and frustrating. In two of these settings the divisions interpreted this slowness or lack of action as the hospital being 'hospital-centric' - that the hospital could direct GPLOs to their issues of concern or make them fulfil organisational requirements. This was not necessarily overcome where the GPLOs were division employees - it was just manifested differently. So in these latter two settings the comments were that it was difficult to get into the hospital, that there was limited access to HMO education, that GP integration was deferred compared to other priorities. In one of these settings the division felt that the hospital had not changed its policy in regard to GPs and this stemmed from the lack of support from the medical director and CEO. These comments suggest that, while there might be a shared stated set of priorities, in practice implementation of agreed change was very slow.

  Hospital factors that impacted on the rate of desired change often seemed to stem from resource issues such as funds for IT, personnel to implement agreed changes, administrative support for the GPLOs, time for senior personnel to follow through on a commitment. In addition there were

the inevitable hospital restructures, changes in senior personnel, and the constant turnover in medical staff.

In two settings success bought its own problems. The GPLOs and the hospital experienced more demands as the GPLOs became better known and visible but the GPLO time available remained constant.

In only one setting did a respondent (a hospital representative) suggest that a constraint stemmed from the antagonism of some individuals.

- Remarkably few barriers were seen to stem from divisions. However it was noted that divisions have limited resources to assist the GPLOs and are small fry compared to a hospital; that dealing with more than one division in a catchment area was time consuming; and that in one setting there could be more GP input into how they wanted things to work in the GP/hospital interface.

- At the personal level most respondents noted that the major constraint on GPLO effectiveness was time available. Time was an issue in all settings. Two GP GPLOs felt their credibility within the hospital was a constraint as one was not a practising GP and the other felt the lack of a clinical role within the hospital.

The only other issue raised or implied by GPLOs in three settings was that of motivation. These GP GPLOs suggested that motivation comes and goes, and is much more of an issue than in a clinical environment as you have to be a self-starter in GPLO work. As one GP GPLO said '*Sometimes no-one loves you*'.

In sum, the perceived main barriers to GPLO effectiveness were

- GPLO time available
- Hospital IT system and lack of funds for IT infrastructure
- Slow change implementation in hospitals
- Personnel changes in hospital
- Motivation when achievements low or intangible

CHAPTER 4: DISCUSSION

In this small qualitative study the views of the key stakeholders involved with GP Liaison Officers in five Victorian settings were sought. While these settings were geographically dispersed, had different employment arrangements and histories, and had varying GPLO hours available, the foci of the GPLOs' work and the stakeholders' views about that work were surprisingly similar. The divisions of general practice and hospital representatives were very positive about the GPLOs' achievements regardless of the number of GPLO hours per week. The problem the GPLOs were addressing was not primarily that of people with chronic and complex conditions but the structural issue of continuity of care between primary and secondary care as it affects a wide range of health service users.

The Victorian GPLO role as ascertained in this study is similar to that described by Olesen et al in Denmark (Olesen, Jensen et al. 1998) in that the GPLOs provide a link between the hospital and the local GPs, and they encourage and improve the exchange of information, cooperation, efficiency, and quality of communication between hospitals and general practice in relation to patients and in relation to services provided by the hospital. Unlike the New Zealand and Danish experience the Victorian GPLOs in this study did not focus on the development of management guidelines and associated GP upskilling, or on regional health service planning about particular issues including the distribution of care between primary and secondary care. However some role was taken in shifting care to the most appropriate setting and preventing the need for acute care through some shared care, some GP education, some facilitation of GP involvement in HARP, and some involvement in the provision of after hours care. The level of involvement in shifting care was not necessarily correlated with the length of time the GPLO positions had been in place as found by Reynolds et al (Reynolds, Oldroyd et al. 2002) or with the number of hours the GPLO worked. Given the well-established role of divisions of general practice and the stakeholders reference to GPLOs as but one of a number of strategies to improve GP hospital communication it is probably now mistaken to expect efforts to shift care mainly to be associated with long standing GPLOs.

The actual role taken by the GPLOs seems to reflect and, in some cases, exceed the initial expectations of both hospitals and divisions of general practice. Exceeding the initial expectations appears to have occurred where the expectations were low or general to start with, and has occurred both for divisions and for hospitals. The two most clear-cut examples of this are in relation to ED: in one setting the division was very pleasantly surprised by the change in attitude towards GP referrals to ED after GPLO involvement, and in another setting the hospital was pleasantly surprised at the help the division and GPLOs could offer, in reducing the crowded emergency department. There is also acknowledgement that some of the specific 'wants' may not have been fully addressed yet (eg assistance in dealing with medical workforce problems, 'no shows' at outpatients, and timely legible useful discharge summaries) but are still being worked on by the GPLOs in conjunction with the divisions and hospitals.

So where do GPLOs sit in the hierarchy, particularly of hospitals? Can they make change happen? Are they boundary spanners (Williams 2002) or integration managers (Ashkenas and Francis 2000)? In these five settings the GPLOs are not integration managers, but boundary spanners. For a start they do not work quickly to integrate two separate entities (Ashkenas and Francis 2000).While in two settings they are accountable to executive directors and in two settings the GP GPLOs are on the division committee of management the GPLOs did not see themselves as part of the hospital management structure. Rather they identified as people who were sufficiently senior to go across hospital departments and the division, and to influence the work of others, not direct it. They described bringing people together, particularly through a GP liaison meeting, offering solutions and suggestions to units seeking to improve their communication with GPs, creating opportunities for mutual understanding, ensuring follow through on commitments, and promoting collaborative ways of working. These methods of operation exactly match Williams' description of the roles of boundary

spanners as networker, entrepreneur and innovator, cultural broker, trust builder, and leader (Williams 2002).

The use of the RE-AIM framework has demonstrated the different types of achievements the GPLOs have had in terms of reach into general practice, and into the hospital, and effect on relationships, on communication, on behaviour, on information flows, and on sustainability. While one might expect that GPLOs would affect most GPs using the relevant hospital, it was surprising that in all the settings the GPLOs were seen to have affected five major hospital departments, and furthermore some respondents in three settings perceived that the GPLOs had affected every unit in the hospital. While no budgetary information was sought it is evident that the relatively small investment in GPLOs is being used as a driver for change in the way hospitals work. In four out of the five settings the divisions felt any changes made in outpatients and emergency departments and the cultural shift in attitudes towards general practice were sustainable without the GPLOs should that be necessary. One cannot but feel that that the GPLOs are like little tug boats slowly, and in some cases, very slowly, pulling big ships in a different direction. The use of the RE-AIM framework has also highlighted the lack of hard data being collected at the local level on the utilisation and/or adoption of GPLO generated service and patient information mechanisms.

A major mechanism available to the GPLOs in their efforts to take the hospitals in a slightly new direction is the relationship between the division and the hospital. In all five settings this relationship improved from the time the GPLOs started until the time of the interviews in mid 2005, and in some instances substantially improved. The stakeholders perceived that the GPLOs contributed to the strengthening of the relationship both directly and indirectly. In two settings the stakeholders suggested there was now a partnership between the hospital and the division(s), and collaborative planning and implementation - Keast et al's higher order integration mechanism - was a result of that partnership (Keast , Brown et al. 2003).

When we apply Leonard's assessment criteria (Brinkerhoff 2002) to the 'partnerships' between divisions and the hospitals involved it was evident that the stakeholders agree that across the five settings there is '*willingness to share ideas and resolve conflict'*, and*' improved access to resources'*. There appears to be <u>some</u> *'achievement of mutual and individual goals'*, and some '*shared accountability of outcomes'*. In each of the settings at least one division respondent did not quite trust the hospital to be as interested in the linkage with general practice as the divisions were, and noted that the inequalities in resources were too marked for a real shared agenda and accountability. These findings reflect the lack of natural 'partner compatibility' between divisions and hospitals (Brinkerhoff 2002), which is an argument for the ongoing insertion of a boundary spanner to create and sustain an alliance. In four of the five settings there was general '*satisfaction with relationships between organisations'*. No information was sought in relation to *cost effectiveness.*

Compared to the study of Australian GPLOs undertaken by Reynolds et al (Reynolds, Oldroyd et al. 2002) this study revealed a greater range of limits to the effectiveness of GPLOs'- particularly related to the fact that linking to general practice is not hospitals' core business - and a greater range of aids to their effectiveness - at the state-wide level, in the hospitals, in the divisions, and in the GPLOs themselves. This reflects a Victorian health environment that has (a) encouraged hospital and division thoughtfulness about the future of the health system, and (b) supported the emergence of individuals to act as boundary spanners. This active interest in change at many levels has made the deficiencies of the current system of health service provision increasingly visible. Hopefully this will lead to more consistent attention to the weaknesses in the interface between primary and secondary care to strengthen continuity of care.

CHAPTER 5: CONCLUSION

From this study it would appear that GPLOs in Victorian public hospitals are an effective means of improving GP hospital communication which hopefully affects continuity of care

Sustainable changes and partnership appear more likely where the hospital employs the GPLO and the GP GPLO works 12-16 hours a week with a skilled project officer working longer hours. Divisions need to be the GPLO employer where the level of hospital commitment and interest in continuity of care is uncertain. However this arrangement does create difficulties in accessing the hospital and engaging senior level support.

A specific focus for GPLOs' work is advisable when the GP GPLO hours are low i.e. six hours a week or less. However where there are more GP GPLO hours available the broader focus does allow for recognition of the GP role through a greater range of hospital units and in the hospital culture.

In recruiting GP GPLOs criteria should include proven ability to communicate well and experience in medical education. For credibility it is desirable for the GP GPLO to be a division member, to understand divisions, and to be a practising GP. The GPLO project officer role is not very visible to the stakeholders but is vital to the effectiveness of the GP GPLO as they can provide the follow through and project management the GP GPLO cannot exercise in their limited hours.

Structures that assist the effectiveness of the GPLOs include workshops and an email network at the state-wide level, and GP hospital liaison meetings of senior hospital and division personnel at the local level. Thus the Victorian health department's commitment to an emphasis on continuity of care and to hospitals' partnership with general practice is very helpful in influencing the hospitals' attitude and in supporting the GPLO role. Senior division and hospital commitment is vital to the effectiveness of the GPLOs.

The division's role is to engage with senior level hospital personnel to:

- improve the GP hospital relationship and identify issues both parties are willing to work on;
- inform GPs of the hospital's mode of operation, constraints, and needs;
- provide input to the hospital on how it can improve its communication and engagement with GPs; and
- offer suggestions on and engender GP interest in means by which the hospital and general practice can better collaborate in the medical care of patients.

The hospital's role is to engage with division senior personnel to:

- improve the GP hospital relationship and identify issues both parties are willing to work on;
- inform the division and GPs about the hospital's mode of operation, constraints and needs;
- seek input and implement mechanisms to improve hospital communication and engagement with GPs; and
- consider and implement suggestions on ways the hospital and general practice can better collaborate in the medical care of patients.

While stakeholders perceive that continuity of care has been strengthened it would be valuable to measure continuity of care in some systematic way and determine the impact on patients, on referrals, on GP skills, and on health service provider and patient satisfaction. Indeed it would be helpful to develop common performance indicators for Victorian hospitals to measure their relative contribution to continuity of care. This would complement performance indicators for divisions developed by the Australian Government.

APPENDIX 1: LITERATURE REVIEW

The problems to be addressed by GP liaison

As the WHO report on future directions for primary health care notes the 21st century is experiencing a complex range of population changes that require adjustments in our systems of health service delivery (World Health Organisation 2003). In the Australian context the most pressing of these changes are the ageing of the population and the increasing proportion of people with chronic conditions, with, in many cases, preventable risk factors. The health system is experiencing high expectations of the quality of care and high levels of demand on the health service delivery system. With the increase in chronic conditions combined with technological and pharmaceutical developments, many developed countries are initiating strategies to a) strengthen primary health care provision to more appropriately prevent and manage chronic conditions, and b) improve the interface of primary and secondary health care to strengthen the continuity of care for those needing multiple services (Ministry for Health and Social Services 2001; Ministry of Health 2001; Commission on the Future of Health Care in Canada 2002).

The strongest evidence we have that continuity of care has been problematic in Australia comes from GPs and from patients. Thus in 1991 a survey of Australian general practitioners showed that 83% thought there was insufficient communication and collaboration between hospitals and GPs, and that 60% felt that specialists did not value the care provided by GPs to shared patients (Douglas and Saltman 1991). Numerous smaller scale studies have confirmed this finding (Isaac, Gijbers et al. 1997; Evans, Mayer et al. 2000). From patients the Victorian Patient Satisfaction Monitor showed that the discharge and follow-up index is the weakest performing index across all the hospital categories for the period 2001-2003 (DHS 2003).

One of the strategies advocated to improve communication between service providers is the placement of a liaison function. In Australia Betbeder-Matibet et al noted that hospitals, divisions and community health centres reported 'wide agreement on the need for greater integration' and that GPLOs were viewed as especially useful in this endeavour(Betbeder-Matibet, Fridgant et al. 2000). During the last ten years GP liaison has been suggested as the solution to fragmented service delivery in relation to pharmacy, substance abuse, psychiatry, and antenatal shared care(Balla and Jamieson 1994; Mant, Kehoe et al. 2002; Gunn 2003).

The role and achievements of GP liaison elsewhere

In the UK the term 'GP liaison' is often used in reference to liaison psychiatry. The role is performed by one or more mental health worker(s) who provide outreach mental health services to general practices (Bindman, Goldberg et al. 2001; Emmanuel, Mc Gee et al. 2002). Emmanual et al cite benefits from studies on this type of liaison as follows: *Reduced in-patient usage, cost effective communication and mutual learning, better treatment compliance, fewer and more appropriate referrals to secondary care, enhancement of the skills of the primary health care team, and improved staff and patient satisfaction* (Emmanuel, Mc Gee et al. 2002).

In addition, in their randomised controlled trial Emmanuel et al found that increased liaison improved the social functioning of patients to a marked extent.

In the UK there are also references to Macmillan GP advisors for cancer and palliative care (Shipman, Addington-Hall et al. 2002) who assist local Cancer Care Alliances in engaging GPs in ongoing education in cancer and palliative care. These advisors have contributed to more GP practices using the Gold Standards Framework (a system of care at home for people in their final year of life) and the promotion of a good practice guide to cancer in primary care (http://www.macmillan.org.uk/aboutmacmillan/).

In Denmark Olesen et al (Olesen, Jensen et al. 1998) describe a system throughout Denmark whereby about 8% of GPs are employed by hospitals as part time GP advisors or coordinators. Almost all (98%) of the hospitals in Denmark have at least one GP advisor. The GP advisor typically works with one of the larger hospital departments, such as gynaecology or general surgery, and provides a link between that department and the local GPs. Their role is to encourage and to improve the exchange of information, cooperation, efficiency and quality of communication between hospitals and general practice. Initially most focussed on the development of guidelines on management of specific problems, symptoms, or diseases, and provided GPs with information about hospital services. As the roles developed the GP advisors started to involve the local Continuing Medical Education (CME) and quality improvement groups e.g. in developing programs for post myocardial care.

A few GPs are also employed to coordinate the work of the advisors in one or more hospitals. As part of this coordination they are involved in planning care for a region, for example diabetes care, cervical smear campaigns, etc. This includes agreeing to the distribution of care between primary and secondary care, a framework for referrals, and public information.

Olesen et al suggest that the main indication of the success of GP advisors is their fast acceptance and implementation, a considerable improvement in the timeliness and content of discharge communication, and improvements in the relevance to general practice of the information from the hospitals. Local reports suggest improved use of laboratory tests by GPs, reduction in inter-practice variation, and reduction in referral to hospitals. There are reports of earlier discharge from hospital because hospitals know more exactly what follow up help they can expect from GPs. There are also reports of improvement in the care of people with cancer because of better pain management and use of community supports. In some areas GP advisors have assisted in the development of a regional GP oriented computer based information system whereby GPs receive monthly electronic information letters and have instant access to information about procedures, waiting times for appointments, etc.

Olesen et al outline lessons learnt to date for successful implementation of GPLOs with hospitals as:

- The drive to employ GP advisors should come from hospital clinicians
- The GP community needs to be involved in the appointment of the GP advisors
- GP advisors should have proven ability to communicate well with colleagues
- GP advisors should have experience in delivering CME
- The GP advisors should have some experience of the medical speciality with which they are liaising
- The GP advisors need to remain true representatives of the GPs.
  (Olesen, Jensen et al. 1998)

In New Zealand GP liaison is referred to in relation to electives services and efforts to reduce demand for such services. In a nationwide project ‘GP liaisons’, project managers, and Independent Practitioner Association facilitators were employed in most health regions to implement elective services primary care management guidelines. The goal of the project was ‘*To improve the care of patients through enhanced primary care and where necessary, more timely and appropriate access to secondary assistance and advice*’ (Goh and Barry 2003). The GP liaison role was to enable GPs to work with secondary care specialists, facilitate communication across formal sector boundaries, and facilitate joint working schemes (Jenkins 2001). The evaluation showed that the ‘GP liaisons’ facilitated GP involvement in local elective services committees, which prioritised and developed local primary care guidelines based on national guidelines. The ‘GP liaisons’ were also instrumental in GP education about the local guidelines and providing feedback on the appropriateness and quality of referrals received at the hospital (Goh and Barry 2003). In addition, due to training and upskilling sessions, a high proportion of GPs changed their practice so that more GPs were able to perform additional procedures that would otherwise have required referral. Consequently all District Health Boards involved in the project reported a decrease in the number of GP referrals to elective services and an improvement in the quality of information provided in those referrals received. The numbers on

the relevant waiting lists reduced. An improved clarity of primary and secondary care roles at a local level was reported, and improved commitment to returning patients to primary care (Goh and Barry 2003).

The role and achievements of GP liaison in Australia

In Australia the Centre for General Practice Integration Studies (CGPIS) undertook an initial survey of GPLOs in 1999 (Lissing and Powell Davies 2000) followed by a more comprehensive survey in 2001(Reynolds, Oldroyd et al. 2002). This second study identified 54 GPLOs across Australia, mostly based in urban areas and in public tertiary hospitals. Hospitals were the main source of funding for these positions. CGPIS found that GPLOs and hospital managers agreed that the most important role for the GPLO was to develop ongoing systems for linking GPs and hospitals. Much of the activity of GPLOs was concentrated on developing systems which better managed '*transitions of care'*, particularly relating to discharge communication, GP referral, and pre admission communication, and those which assisted in '*building better relationships between GPs, divisions and hospitals*' such as joint projects or planning between the hospital and the divisions of general practice. From positions that had been in place for longer periods it appeared that the GPLO was likely to become involved in more complex activities that relate to '*shifting care'* and '*reducing the need for hospital care*' such as shared care programs or hospital in the home (Reynolds, Oldroyd et al. 2002).

GPLOs and hospital managers agreed that the positions had improved the relationship between GPs and hospitals, and had increased activity around integration projects. CGPIS found strong evidence that indicated GPLOs were integral to the implementation of complex programs such as shared care and GP involvement in hospital in the home. The limits on the effectiveness of GPLOs appeared to be the part-time nature of the positions, the apparent lack of documented strategic planning, and the lack of evaluation (Reynolds, Oldroyd et al. 2002).

Assessment of partnerships

Brinkerhoff, in her overview of partnership assessment, suggests that partnership is touted as the answer to many public service challenges. To use partnerships effectively we need to know more about them and how to assess them (Brinkerhoff 2002).

In evaluating partnership relationships in the health sector Brinkerhoff quotes Leonard (1998) as concluding that identified assessment criteria should include

- Willingness to share ideas and resolve conflict
- Improved access to resources
- Shared responsibility for decisions and implementation
- Achievement of mutual and individual goals
- Shared accountability of outcomes
- Satisfaction with relationships between organisations
- Cost effectiveness

These criteria may be useful in assessing the effect of GPLOs on the partnership relationship between divisions/GPs and hospitals.

Brinkerhoff also argues that partnership indicators are likely to be qualitative and subjective rather than quantitative and objective. Furthermore, '*Partnership cannot be expected to yield immediate results. As partners become more familiar with each other's strengths, weaknesses, etc synergistic rewards will emerge with the increase in mutual understanding and trust. Since partnerships are dynamic they have the potential to yield different costs and benefits at different stages of their development. We should expect a shift from being activity driven to being more strategic over time and shift the indicators accordingly.*' (Brinkerhoff 2002).

Boundary spanners

Bardach maintains that whatever else might explain success in the collaboration process the efforts and creativity of 'purposive practitioners' is an essential explanatory ingredient (Bardach 1998).

Gittell and Weiss (Gittell and Weiss 2004) quote Lawrence and Lorsch (1967) in describing cross-functional boundary spanners as '*staff members whose primary task is to integrate the work of other people*'. They integrate work that crosses functional boundaries. Examples are project managers, or case managers. Gittell and Weiss suggest that boundary spanners are expected to be effective when cross functional coordination is highly critical and/or when existing boundaries are highly divisive, making coordination difficult to achieve. They also quote Clark and Wheelwright (1992) who note that boundary spanners are expected to be more effective the fewer projects, products, processes or customers whose information they are responsible for coordinating at any one time.

In his overview of the literature on 'boundary spanners' Williams (Williams 2002) outlines the following roles fulfilled by boundary spanners:

- **Networker**: Brings unlikely partners together based an understanding of the social constructions of others. This forms the basis for successful negotiation.
- **Entrepreneur and innovator**: Brings together problems and solutions, and creates opportunities to solve issues.
- **Cultural brokers**: Engages others without being enmeshed and creates opportunities for mutual understanding
- **Trust builders**: Ensures each party fulfils their commitments to the other. Trust is pivotal to collaboration (Webb 1991). Bachmann (2002) refers to trust as a mechanism for coping with uncertainty and complexity. Each time an outcome meets expectations trusting attitudes are reinforced.
- **Leader**: Moves participants from a traditional leadership style and structure to a style and structure more appropriate to a collaboratively inclined organisation (Williams 2002).

Writing in the Harvard Business Review, Ashkenas and Francis delineate the role and success factors for what they term '*integration managers'*- purposive practitioners who facilitate the integration of an acquired company after a merger or takeover. These practitioners operate in a similar way to '*boundary spanners'* as described by Williams above but they are placed high up the hierarchy, have authority, and work intensively and quickly so the company can achieve its deadlines (Ashkenas and Francis 2000).

Keast et al provide some definitions of cooperation, coordination and collaboration, with collaboration being a higher order integration mechanism required for complex types of problems and requiring a high level of trust. They suggest that optimal integration is more likely to be achieved by mixing and matching the '*integration mechanisms to best suit the goals sought and the operational context'*
(Keast , Brown et al. 2003).

APPENDIX 2: EXAMPLE OF AIM OF MOU BETWEEN THREE NEIGHBOURING DIVISIONS AND A HOSPITAL

The aim of the Memorandum of Understanding

Recognising the importance of maintaining and developing strong relationships between the Divisions of General Practice and their members and Western Health, this Agreement has been developed to underpin this relationship and its intended outcome of improving the health of the communities that we serve by working together to:

3.1 Foster a spirit of cooperation between the parties each acknowledging the constraints and complexities of the other;

3.2 Collaborate together in the planning of health services designed to improve patient services;

3.3 Reinforce the links existing between the parties, which will assist patients to access the services of the parties and improve the access, continuity and quality of the services provided;

3.4 Improve the integration of services between general practice, other primary care providers, specialists and Western Health, which will positively impact on the continuity and quality of patient care;

3.5 Improve the transfer of patients between the acute and primary care settings with the aim of reducing overlap or gaps in service delivery;

3.6 Identify and develop opportunities for interested GPs to be involved in appropriate activities and programs of Western Health;

3.7 Work together to provide continuing medical education, which will include GPs, medical specialists and other Western Health personnel;

3.8 Work together to improve the GP workforce issues in the Western suburbs through promotion of the area and the training and practice opportunities available;

3.9 Undertake joint endeavours for the mutual benefit of all parties eg research, training and education;

3.10 Jointly advocate on behalf of the communities served by the parties to improve the availability and quality of health care services.

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