Primary Care
Referrals to Hospital
Specialist Clinics

General Practice Victoria/Australian Health Workforce Institute
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For further information contact:

Jane Measday
Email: j.measday@gpv.org.au

General Practice Victoria
1st Floor 458 Swanston Street
Carlton Vic 3053
Phone: 03 9341 5200
Website: www.gpv.org.au

ABN: 80 081 371 968
Executive Summary

Anecdotal evidence and informal feedback from hospital staff in Victorian public hospitals suggests that poor quality and inappropriate referrals to hospital specialist clinics are a widespread problem. Despite this, there is little evidence in the established literature pertaining to the precise nature and scope of the issue. Very little evidence has been gathered pertaining to the primary care/hospital referral program in general.

In order to address this lack of evidence this project developed a standardised audit tool for assessing the quality and appropriateness of primary care referrals to public hospital specialist clinics. The tool was developed with the assistance of participating General Practice Liaison Units (GPLUs) and drew on previous quality improvement activities undertaken independently by GPLUs at a number of hospitals. The work was also informed by feedback from the GPLO Network and a project advisory group.

GPLUs from four health services agreed to assist the project team in conducting the audit. The hospital sites participating were Ballarat Health Services, Western Health, St Vincent’s Hospital and the Royal Melbourne Hospital. Two clinics were selected for audit at each hospital, with 50 consecutive referrals sampled at each, for a total of 400 referrals. The clinics sampled were general surgery, gastroenterology and gynaecology.

Qualitative interviews were included in the project to provide context to the results of the audit, particularly with respect to knowledge, attitudes and beliefs that can impact on the referral process. Three specialists, two GPs and one Unit Manager agreed to participate in interviews with the project team. GPLOS also interviewed 28 GPs.

Primary Care Referrals to Hospital Specialist Clinics

The audit provided a snapshot of referrals being received at four hospitals. With respect to the source, format and appearance of audited referrals, we determined that:

- General Practitioners are the main source of referrals to these clinics (77.49%). Other sources of referrals were emergency departments (3.77%), other specialist clinics (1.51%), other internal hospital departments (15.08%) and 2.26% were from all other sources.
- Most of the referrals (70.50%) were typed with 23.5% being handwritten.
- 42.00% appeared to have been generated by software packages such as Medical Director. 20.25% utilised templates specific to the hospital. 4.00% of referrals used the VSRF template. 8.50% utilised referral templates specific to the clinic in question.
- 80.75% were considered easily legible, 17.25% moderately legible and 2.00% illegible. Illegibility was strongly linked to handwritten referrals.
Poor quality Referrals
Quality was measured by the degree to which referrals contained the information necessary for transfer of patient care. This included measuring the ‘completeness’ of both clerical/demographic information and clinical information. ‘Adequacy’ of the referral was also measured by whether contact with the referring clinician/patient was necessary for triage to take place. The audit found that:

- The referrers are providing adequate clerical information. 145 (36.25%) of the 400 referrals audited had completed all clerical information to an ‘excellent’ standard and 343 (85.75%) recording ‘excellent’ rankings for at least 80% of clerical items. The audit identified that missing data items are GP provider numbers and patient Medicare details.
- Clinical items were not completed as highly as the clerical information but are providing enough information for triage.
- 8.8% of referrals were considered inadequate with respect to clerical information, and 3.8% were considered inadequate with respect to clinical information, requiring follow-up with the referring clinician before the referral could be triaged.
- Quality of referrals is associated with referral source, with General Practitioners generating higher quality referrals than other primary care providers (p<0.007).

 Appropriateness of Referrals
- 3 (0.8%) referrals audited could be considered unequivocally inappropriate.
- 52 (13.2%) referrals, while appropriate, might have been treatable elsewhere with no compromise of patient safety or outcomes.
- When the reason for the referral was clear, there is a significant association between the reason for referral and a belief that the referring condition may have been treated elsewhere (p<0.005).

 Qualitative component

The analysis of the interviews with the participants in the referral process identified that even though there was a clear understanding of the purpose of specialist clinics the GP/specialist clinic interface was characterised by uncertainty and a lack of ownership of the communication processes.

Specialists and GPs agreed that the specialist clinics provide an avenue for GPs to have access to expert opinion, specific investigations and/or specific procedures that the GPs themselves were unable to provide to patients in the community setting. What is not clear is what ought to be managed in the community, how conditions could be managed in the community and who should take ownership of that. As a consequence, what is deemed as appropriate referral is likely to be viewed differently by GPs, specialists and unit managers at different times.

This uncertainty is compounded by the lack of access to information that allows GPs and Specialists to track or monitor the progress of the patient and communication across the primary care/specialist care interface. Specialists reported they do not know when their dictated letters go or if they are well received or useful. GPs wanted to be informed of progress of their patients through the system. They were also particularly keen to know waiting times for specialists’ clinics, even if the information was only vague: a number of GP respondents indicated that knowing this information
would change their referral patterns, directing patients either to private clinics or to other public services where the waiting list may be shorter.

The participants also commented that the increased demand for specialist services had led to a shift in what was considered as appropriate for referral and as a consequence an increased expectation that GPs manage more in the community. The challenge is that these responses to services in high demand are being done without communication/consultation between GP and specialist clinics.

What was positive is the goodwill between GPs, Unit managers and Specialist. Both GPs and specialists commented on the importance of developing professional relationships. Any process adopted to improve the quality and appropriateness of referrals – which must also link in with the referrals process itself – already has significant stakeholder buy-in.
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Introduction

Background

The referrals process forms an integral component of a patient’s care. Appropriate and prompt referrals can have a significant impact upon the timely diagnosis and treatment of a patient where these fall outside the capabilities of the primary care provider (1). Similarly, inappropriate or poor quality referrals can have adverse effects for the patient, in the form of delayed diagnosis and treatment (2 – 4). Furthermore, in an environment in which resources are finite and demand for specialist clinic services is growing, inappropriate referrals can have a negative impact on health services as a whole, through the unnecessary use of limited equipment and resources.

In recognition of the important role that referrals play in ensuring timely and appropriate treatment of patients, a great deal of research has been conducted in an attempt to understand the manner in which specialist services are utilised, how primary care providers operate within the referral system, and any issues that may interrupt the efficient flow of information between primary care providers and specialist services. However, the bulk of this research has been carried out internationally and is somewhat dated.

In Australia, evidence detailing the nature and extent of poor quality or inappropriate referrals remains largely anecdotal, despite the problem being widely acknowledged and discussed in relevant professional networks. In recognition of this issue, General Practice Liaison Officers (GPLOs) in a number of Victorian hospitals have undertaken and engaged in quality improvement activities, attempting to determine more precisely the nature and extent of the problem as it affects their hospital. While most have employed a similar process of auditing incoming referrals, these projects have largely been undertaken independently of one another, with each site developing their own audit tool and examining clinical areas of particular concern to that site. Whilst this information is invaluable, the lack of a common framework for assessing the problem makes it difficult to generalise from these local findings or to draw comparisons across different hospital sites.

Through the Victorian GPL Network, individual units working on GP referral into specialist clinics have been able to cooperate to gather evidence to inform improvement work. GPLs are well placed to understand the GP and specialist clinics context and have established trusted relationships which facilitated the success of the audit project across four sites.

Purpose

This assessment represents the first stage in a process which aims to enhance the utilisation of specialist (outpatient) clinic resources by improving the quality, timeliness and appropriateness of patient referrals. This project will contribute to this process by providing a greater understanding of the nature of ‘problem’ referrals and of factors which may contribute to this issue.
Specific objectives of the project were to:

- Develop an audit tool for use in assessing the quality and appropriateness of referrals to multiple sites in Victoria
- Identify the predominant sources of referrals to public hospital specialist (outpatient) clinics and the proportion of referrals coming from each
- Quantify the proportion of referrals that are of poor quality
- Quantify the proportion of referrals that may be considered ‘inappropriate’
- Identify factors which may be affecting the quality of referrals made to specialist clinics
- Identify possible avenues for improvement of the referrals from primary care providers

The Project Team

**Dr Lucio Naccarella**  
NHMRC Post-Doctoral Research Fellow/Senior Research Fellow  
Australian Health Workforce Institute, University of Melbourne  
General Practice Victoria

**Ms Jane Measday**  
Program Coordinator, Victorian General Practice Liaison Program  
General Practice Victoria

**Ms Amie Bingham**  
Research Assistant  
Australian Health Workforce Institute, University of Melbourne

The Project Sites

Project sites were selected through convenience sampling: General Practice Liaison Units (GPLU) were invited to participate in the project, with four quickly committing to the audit. This can be attributed to the close alliance of the project objectives with those of GPLUs, with an emphasis on improving the exchange of clinical information between primary care providers (particularly General Practitioners) and hospitals. In addition, GPLUs have a strong commitment to collaborative efforts aimed at producing a solid evidence base regarding issues associated with the General Practice/Hospital interface.

Participating health services include Ballarat Health Service, Royal Melbourne Hospital, St Vincent’s Hospital and Western Health.

Limitations

Given that the project was restricted to a three month time frame, a decision was made to limit the audit to three clinics. This allowed for a greater amount of detailed data to be collected for these specific clinics, however it limits the capacity for generalisations across other clinics. It is possible
that an audit of referrals to other clinics would produce significantly different results. Similarly, an audit conducted across a greater length of time may also produce different results.

The audit tool is itself a newly developed instrument. While feedback from participating GPLUs has been generally positive, further refinement of the tool is required before its widespread dissemination and use. Suggestions made to date by the GPLUs include:

- The inclusion of an item to indicate whether the clinical information included in the referral was sufficient to indicate urgency at triage, and
- Whether further study could follow referrals through to completion, such that a comparison of GP expectations and requests could be made with the actual outcome of the referral within the specialist clinics

As the project required access to confidential data held in the public hospital system, ethics approval was required at each of the sites sampled. While approval was granted for all sites to conduct this project as a quality assurance or improvement project, this process significantly delayed the progress of the audit. As such, the qualitative aspect of the project, including semi-structured interviews with key informants, could not be completed by the intended date.
Section 1.1: Quantitative Study

Aim
The specific aims of the quantitative aspect of the audit were to:

- Quantify the proportion of referrals that are of poor quality
- Quantify the proportion of referrals that may be considered ‘inappropriate’
- Identify factors which may be affecting the quality of referrals made to specialist clinics

Methodology

Referrals Audit

Data Collection
A standardised audit tool was developed by the research team in order to audit 100 consecutive referrals made to specialist clinics at four hospitals across the state, three in metropolitan Melbourne and one in regional Victoria. These hospitals represent a convenience sample of public hospitals in Victoria receiving referrals from General Practitioners and other primary care providers, and which have a General Practice Liaison Unit.

Two clinics were chosen for audit at each site, with an emphasis on clinics that would allow the greatest capacity for generalising across the sites, but which would also receive sufficient numbers of referrals to allow data collection to be completed in the time frame allowed. General Surgery and Gastroenterology clinics were chosen at St Vincent’s, the Royal Melbourne and Western Hospitals, while General Surgery and Gynaecology clinics were sampled at Ballarat Health Services. In each case, the initial referral was sampled randomly, with all subsequent referrals being audited until the limit of 50 for each clinic was reached. GPLOs at each hospital were able to devise their own means of collecting referrals in order to ensure that there was no disruption to the efficient processing of patient information and no compromise on patient confidentiality.

GPL Units were provided with a copy of the standardised audit tool and an electronic data collection tool. Once 100 referrals had been audited at each site, a summary of the results were sent electronically to the research team for analysis with PASW (SPSS) Statistics 18.0.

Referrals

<table>
<thead>
<tr>
<th>Clinic</th>
<th>No. Referrals Audited</th>
<th>% Referrals Audited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastroenterology</td>
<td>150</td>
<td>37.5</td>
</tr>
<tr>
<td>General Surgery</td>
<td>200</td>
<td>50.0</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>50</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 1: Number of referrals audited and clinics from which they were sampled.
Section 1.2: The Audit Tool

In order to develop an audit tool capable of capturing the desired information, it was necessary first to determine what constituted an adequate or appropriate referral in the ‘real life’ context of hospital specialist clinics. This was a highly collaborative process involving the research team, GPLOs participating in the audit, and other members of the GPLO network and advisory group.

Informed by an assessment of the available literature and previous research, the research team led a discussion with the above-named participants in order to determine:

a) The role of the referral in patient care
b) What information a referral had to contain in order to fulfil this role (“adequacy”); and
c) What makes a referral appropriate or otherwise

The Role of Referrals

It was agreed that the role of the referral itself was to provide sufficient information to hospital staff and specialists to allow the safe, effective and efficient transfer of patient care from the primary care provider to the specialist clinic.

Exploring ‘quality’ in referrals

It was considered by the research team and other participants that a high quality referral was one which contained sufficient information for the referral to fulfil its stated purpose.

Defining ‘appropriate’.

While outlining the information required in a referral had been a relatively straightforward task, the question of a referral being ‘appropriate’ or otherwise was more complex. After much discussion, it was agreed that a referral was appropriate if:

a) the referred patient was a member of a population treated by the clinic to which they had been referred (for example, they were in an appropriate age group)
b) the requested clinic could provide the services required
c) the referral had been made in a timely manner: it was neither too early nor too late

The Audit Tool

Measuring the quality and adequacy of referrals

In order to determine the quality of referrals being received by specialist clinics, and whether or not they were adequate for their purpose, it was necessary first to establish the specific information that a referral should contain. In doing so, the research team drew heavily on the experience of the GPLO network, and on work previously conducted by GPLOs from The Alfred, Royal Melbourne Hospital, the Royal Children’s Hospital, Northern Health, Ballarat Health Services and Eastern Health. Audit tools that had been independently developed at each of these sites were obtained and comparisons made with respect to the items of information that each had sought to audit.

The information considered important for a good quality referral could essentially be considered to fall into one of two categories: clerical information, which outlined the personal and professional
details of both the referring clinician and the patient, and clinical information, which provided details of the patient’s relevant history and any other investigations or treatments that had been undertaken by the referring clinician.

There was a high degree of commonality, with similar items appearing in most – if not all – of the audit tools, and few items that were relevant only to particular sites. The ‘common items’ from the audit tool were then used to generate a mock-up of a standardised tool which would be used for the project, which was then workshopped with GPLOs and the advisory group, with feedback incorporated into further iterations of the tool until all parties were satisfied.

The GPLOs and advisory group noted that, while the audit tool was reflective of what a ‘good quality’ referral should be – or a ‘gold standard’ – it was possible that

- a referral could include some information for every item measured by the audit tool and still be of poor quality, and
- that even poor quality referrals could be considered ‘adequate’, in that they were still able to be processed by experienced staff in hospitals, but with an increased risk of incorrectly triaging the patient or of doubling up unnecessarily on investigations or tests.

It was therefore decided that the quality and adequacy of referrals should be assessed independently.

The quality of the referral was assessed by recording how complete the information provided for each item was, and whether or not it was legible. Items were ranked on a scale of 1 to 3, with 1 being ‘excellent’ and 3 being ‘poor’.

Adequacy was measured by determining whether or not it had been necessary for a member of the hospital staff to contact the referring clinician in order to proceed with the transfer of patient care, for both clerical and clinical information.

A further question, designed to establish whether the information contained in the referral was sufficiently complete and clear was also included in the audit, namely, ‘was the reason for the referral clear?’.

Measuring ‘appropriateness’

Given the agreed definition of an ‘appropriate’ referral, the audit tool measured appropriateness with a single question: “is the service requested available at your institution?”

However, it was also noted that the hospital receiving the referral may not be the only appropriate destination for the patient in question, and that other health service providers may be equally able to provide the services requested with no compromise on the quality of patient care. The audit tool therefore included two questions exploring this issue: could the condition for which the patient was referred be better treated elsewhere? And if so, where?
Interpreting the audit

Quantitative data gathered by the audit was analysed using PASW (SPSS) 18.0.

Data gathered by the audit was primarily collected in the form of binary (yes/no), ordinal (ranking) or categorical variables. Some scale variables were generated to assess the overall quality or completeness of referrals.

Data analysis was largely descriptive. Statistical significance was ascertained using 95% confidence intervals (CI) calculated by Chi-square and Fisher’s exact test as appropriate or, in the case of scale variables, analysis of variance.
Section 1.3: Findings

Referrals: A Snapshot

The following tables 2 and 3 outline the format and appearance of referrals being received by hospital specialist clinics, with feedback from hospital staff and GPLOs suggesting that referral layout and legibility can significantly impact on the ease with which referrals are triaged from a clerical perspective.

A significant portion of the referrals received appeared to have been generated by medical software programs such as those used in General Practice clinics (Table 2). Other templates, such as those created by the hospitals were also in widespread use, while the VSRF was poorly utilised. A significant portion of the referrals audited were handwritten (Table 3).

<table>
<thead>
<tr>
<th>Form Type</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSRF</td>
<td>16</td>
<td>4.00</td>
</tr>
<tr>
<td>Clinic</td>
<td>34</td>
<td>8.50</td>
</tr>
<tr>
<td>Hospital</td>
<td>81</td>
<td>20.25</td>
</tr>
<tr>
<td>Medical Software Template</td>
<td>168</td>
<td>42.00</td>
</tr>
<tr>
<td>GP Letter</td>
<td>40</td>
<td>10.00</td>
</tr>
<tr>
<td>Other</td>
<td>61</td>
<td>15.25</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2: Templates used by primary care providers to create referrals to hospital specialist clinics.

<table>
<thead>
<tr>
<th>Format</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handwritten</td>
<td>94</td>
<td>23.50</td>
</tr>
<tr>
<td>Typed</td>
<td>282</td>
<td>70.50</td>
</tr>
<tr>
<td>Combination</td>
<td>23</td>
<td>5.75</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>0.25</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Format of referrals received in specialist clinics.

As might be expected, given the high proportion of typed referrals the referrals were generally considered to be easily legible (Table 4). Very few (8) were considered on the whole to be illegible, however the frequency of moderately legible and illegible referrals – nearly 1 in every 5 referrals received – suggests that this is likely to be a workflow issue for those responsible for triaging referrals.
<table>
<thead>
<tr>
<th>Legibility</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easily Legible</td>
<td>323</td>
<td>80.75</td>
</tr>
<tr>
<td>Moderately Legible</td>
<td>69</td>
<td>17.25</td>
</tr>
<tr>
<td>Illegible</td>
<td>8</td>
<td>2.00</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 4: Legibility of referrals received.

Sources of Referrals to Hospital Specialist Clinics

Feedback from GPLOs and hospital staff prior to the audit suggested that both specific clinics and specific hospitals may have a different profile with respect to the source of referrals from primary care providers.

Source of referrals to particular clinics

Figures 1.1 to 1.4 outline the type of primary care providers referring patients to the clinics audited.

![Pie chart](image1.png)  
Fig 1.1 Source of referrals to gastroenterology clinics

GP: 78.67%  
ED: 2%  
Other Internal: 18%  
Other: 1.33%

![Pie chart](image2.png)  
Fig 1.2 Source of referrals to general surgery clinics

GP: 71.21%  
ED: 5.56%  
Specialist Clinic: 3.03%  
Other Internal: 16.67%  
Other: 3.54%

![Pie chart](image3.png)  
Fig 1.3 Source of referrals to gynaecology clinic

GP: 98%  
ED: 2%

![Pie chart](image4.png)  
Fig 1.4 Source of referrals to all clinics

GP: 77.39%  
ED: 3.77%  
Specialist Clinic: 1.51%  
Other Internal: 15.08%  
Other: 2.26%

It is clear that General Practitioners (GPs) provide the vast majority of referrals to these clinics, ranging from 71.21% in general surgery to 98% for the gynaecology clinic. Primary care providers from other parts of the hospitals make up the bulk of the remainder of referral sources: emergency
departments and other specialist clinics provide relatively few referrals, while in all but the gynaecology clinic, a significant number of referrals were recorded as coming from other internal sources. A number of other referral sources were noted, and could include such sources as, among others, other hospitals, prison and private specialists.

Statistical analysis showed that, when controlling for different hospital settings, the specific clinic was significantly associated with referral source at Sunshine Hospital (Western Health) and at the Royal Melbourne Hospital (p<0.005 and p=0.034, respectively), while no such association was apparent at the remaining hospitals.

**Source of referrals to hospitals**
The following figures outline the type of primary care providers referring to each of the hospital sites audited.

![Fig 2.1: Source of referrals to Sunshine Hospital](image1)
![Fig 2.2: Source of referrals to Royal Melbourne Hospital](image2)
![Fig 2.3: Source of referrals to Ballarat Hospital](image3)
![Fig 2.4: Source of referrals to St Vincent's Hospital](image4)

GP: General Practice; ED: Emergency Department

Though roughly comparable in a number of instances, the above figures suggest that different hospitals may have very different referral source profiles (e.g. Fig 2.1 compared to 2.4). This indicates that further exploration of this issue is necessary. This is particularly true given that the referral profile is associated with the hospital even when the specific clinics sampled are taken into account (p<0.005). Despite this, General Practitioners consistently generate a large portion of primary care referrals to hospital specialist clinics, meaning that further work aimed at improving

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1 NB: The gynaecology clinic was excluded from this analysis, as it was sampled at only one hospital and therefore no comparisons could be made.
communication and the transfer of care at the General Practice/hospital interface will play a vital role in the improvement of the referrals system.

**Referral Quality: Completeness**

The following section reports the degree to which the referrals audited provided the elements of information considered necessary for safe, effective and efficient triage of patients.

**Clerical Information**

For clerical information, items were ranked in the audit according to the following scale:

- **Excellent** The information is included and is clear and legible, OR, if the information is not provided, the referring clinician has provided a reason for not doing so.
- **Average** The information is provided but is incomplete or difficult to read/illegible
- **Poor** The information has not been provided and no explanation has been given

While many of the items audited as ‘clerical information’ in the referrals are perhaps unnecessary for the safe and effective triage of patients in a *clinical* sense, there was strong consensus from hospital staff and GPLOs that clerical information was equally as important for specialist clinic workflow. Some clerical data is necessary before patients can be triaged into hospital administration systems, while in other instances it is necessary for follow-up with the referring patient and/or clinician. Table 5, below, outlines the completeness of clerical items included in the referrals audited.

<table>
<thead>
<tr>
<th>Item</th>
<th>Excellent (%)</th>
<th>Average (%)</th>
<th>Poor (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referrer Name</td>
<td>92.2</td>
<td>3.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Referrer Provider No.</td>
<td>74.8</td>
<td>1.3</td>
<td>24.0</td>
</tr>
<tr>
<td>Referrer’s Address</td>
<td>90.0</td>
<td>2.8</td>
<td>7.3</td>
</tr>
<tr>
<td>Referrer’s Fax No.</td>
<td>89.8</td>
<td>1.0</td>
<td>9.3</td>
</tr>
<tr>
<td>Referrer’s Phone No.</td>
<td>90.0</td>
<td>1.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Patient Name</td>
<td>99.5</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Patient DOB</td>
<td>96.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Patient Address</td>
<td>96.0</td>
<td>0.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Patient Phone No.</td>
<td>86.5</td>
<td>0.5</td>
<td>13.0</td>
</tr>
<tr>
<td>Patient Medicare Details</td>
<td>57.0</td>
<td>0.8</td>
<td>42.3</td>
</tr>
</tbody>
</table>

*Table 5: ranking of clerical items included in audited referrals*

For the vast majority of the referrals audited, clerical details completed very well, with a median rank of 1 and 145 being ranked as ‘excellent’ across all items, while 343 referrals achieved ‘excellent’ rankings for at least 80% of clerical items. Of note, however, are the rankings for the items ‘referrer provider number’ and ‘patient Medicare details’. For both of these items, considerably fewer referrals provided the appropriate details than for other items, with fewer than 75% of referring clinicians giving a provider number, and fewer than 60% of referrals including the patient’s Medicare number. Completion of these items was significantly associated with the form type used to generate the referral, with the ‘Clinic’ and ‘Other’ forms significantly less likely to provide these details (p<0.005). 23 (5.75%) audits were ranked as ‘poor’ across 50% or more of clerical items.
**Clinical Information**

Clinical items were included in the audit if they were considered necessary for patient safety, to establish the urgency of the referral, and to ensure that the specialist clinics were not ‘doubling up’ on investigations or examinations already conducted by the primary care provider.

Items in this section were ranked according to the following scale:

- **Excellent**: Sufficient information for the item is present and clear OR the referrer has indicated that the information is not available
- **Average**: Some information for the item is present, but may require clarification or need additional information. Information has been included that is largely irrelevant
- **Poor**: The information has not been provide and no explanation has been given
- **NA**: The information in the item is clearly not relevant for the referring condition

Table 6, below, outlines the completeness of clinical items audited. Please note that responses of ‘NA’ have not been included in the analysis, with the frequencies reported below referring only to those referrals where the item in question was considered relevant.

<table>
<thead>
<tr>
<th>Item</th>
<th>Excellent (%)</th>
<th>Average (%)</th>
<th>Poor (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td>62.6</td>
<td>5.1</td>
<td>32.3</td>
</tr>
<tr>
<td>Allergies</td>
<td>56.4</td>
<td>1.4</td>
<td>42.1</td>
</tr>
<tr>
<td>Relevant Past History</td>
<td>55.1</td>
<td>29.5</td>
<td>24.5</td>
</tr>
<tr>
<td>Relevant Psychosocial History</td>
<td>10.2</td>
<td>9.1</td>
<td>80.7</td>
</tr>
<tr>
<td>Clinical Exam Information</td>
<td>40.2</td>
<td>24.7</td>
<td>35.1</td>
</tr>
<tr>
<td>Clinical History</td>
<td>57.6</td>
<td>29.5</td>
<td>12.9</td>
</tr>
<tr>
<td>Relevant Investigations and Results</td>
<td>58.4</td>
<td>15.4</td>
<td>26.2</td>
</tr>
<tr>
<td>Clinician Treatment for Referring Problem</td>
<td>53.5</td>
<td>15.0</td>
<td>31.5</td>
</tr>
<tr>
<td>Differential Diagnosis</td>
<td>64.4</td>
<td>20.0</td>
<td>15.6</td>
</tr>
</tbody>
</table>

**Table 6:** ranking of clinical items included in audited referrals

It is clear that clinical information is not included in referrals as clearly or as completely as clerical information. 48 (12%) audits achieved ‘excellent’ rankings for all relevant clinical information, with 89 (22.25%) achieving an ‘excellent’ rank for 80% or more of clinical items. Despite this, with some exceptions, relatively few items were considered to have been completed ‘poorly’: as with clerical information, the median for most items was 1. ‘Relevant Psychosocial History’ and ‘Clinical Exam Information’ were not completed as well as other items, with a median rank of ‘Poor’ and ‘Average’ respectively. 7 (1.75%) referrals were considered ‘poor’ across all clinical items, while 226 (56.5%) were considered ‘poor’ across 50% or more of clinical items.

A number of items, such as Medications, Allergies and, to a lesser extent, ‘Clinician Treatment for Referring Problem’ and ‘Relevant Investigations and results’ tended towards being completed either very well or very poorly. Others - Relevant Past History, Clinical Exam Information and Differential Diagnosis – were spread more evenly across rankings, though skewed towards a more positive ranking.
It is worth noting that, as a result of the scale used to assess referrals, it is possible – if not likely – that the rankings for clinical information will be over-representing the number of ‘poor’ referrals for these items. Given that the guidelines for conducting the audit stipulated that the ranking of ‘NA’ should be used only when it was clear that an item was not relevant for the referring condition, it is possible that a number of referrals were ranked as ‘Poor’ on some items when in fact that item was not relevant.

**Referral Quality: Adequacy**

While the completeness of the referrals was used as an indication of quality, ‘adequacy’ was measured by determining whether or not it had been necessary for the person triaging the referral to contact the referring clinician to gather extra information. By this measure, while a referral requiring follow-up is clearly a poor quality referral, the reverse does not hold true: a referral cannot be considered to be of good quality purely by virtue of having had sufficient information to proceed with the triage.

<table>
<thead>
<tr>
<th>Follow up Required</th>
<th>Clerical Information (%)</th>
<th>Clinical Information (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8.8</td>
<td>3.8</td>
</tr>
<tr>
<td>No</td>
<td>91.2</td>
<td>96.2</td>
</tr>
</tbody>
</table>

**Table 7**: Proportion of referrals requiring follow-up to enable triage

It is clear that, regardless of the completeness or otherwise of the information in the referrals, the vast majority were able to be triaged (Table 7). Of potential significance is the fact that the reason for referral was clear in 96% of cases. While a number of referrals were missing clinical information, this did not result in specialist clinic staff contacting the referring clinician or patient to obtain further details. This suggests that hospitals are able to respond to referrals for which the reason is clear despite a degree of incomplete information: however, further investigation is required to determine whether or the extent to which incomplete clinical information in referrals results in hospitals undertaking investigations or examinations already completed by the referring clinician.

**Sources of poor quality or inadequate referrals**

**Illegible Referrals**

Legibility of referrals was associated with the referral format. Table 8, below, outlines the legibility of referrals received in each format.

<table>
<thead>
<tr>
<th>Legibility</th>
<th>Handwritten (%)</th>
<th>Typed (%)</th>
<th>Combination (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easily Legible</td>
<td>8.36</td>
<td>85.45</td>
<td>6.19</td>
</tr>
<tr>
<td>Moderately Legible</td>
<td>88.24</td>
<td>7.35</td>
<td>4.41</td>
</tr>
<tr>
<td>Illegible</td>
<td>87.5</td>
<td>12.5</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Table 8**: Legibility of referrals according to referral format

The vast majority of referrals considered to be either moderately legible or illegible are handwritten, with statistical analysis suggesting that this association is significant (p<0.005).
Poor quality ('incomplete') referrals

Clerical Items and Referral Source

The following figures illustrate the mean proportions of each ranking achieved by different categories of referring primary care providers, across all clerical items combined.

While all sources of referrals had excellent results across the clerical items, referrals from General Practice were consistently ranked the highest, while the highest proportion of ‘poor’ rankings could be found in referrals from ‘other’ sources.

Statistical analysis suggests that this relationship is significant: referrals from General Practice are more likely to be ranked as ‘excellent’ for clerical items (p≤0.005) and to have a better average ranking for these items (p≤0.007) than referrals from all other sources.
**Clerical Items and Referral Type**

The figures below illustrate the mean proportion of rankings achieved by referrals generated using different formats or templates.

**Fig 4.1**: Mean proportion of rankings achieved for clerical items by referrals using the VSRF

- Excellent: 98.13%
- Average: 0.00%
- Poor: 1.88%

**Fig 4.4**: Mean proportion of rankings achieved for clerical items by referrals generated using medical software templates

- Excellent: 91.01%
- Average: 0.36%
- Poor: 8.63%

**Fig 4.2**: Mean proportion of rankings achieved for clerical items by referrals using clinic templates

- Excellent: 82.65%
- Average: 1.47%
- Poor: 15.88%

**Fig 4.5**: Mean proportion of rankings achieved for clerical items by referrals written in letter format

- Excellent: 87.50%
- Average: 0.50%
- Poor: 12.00%

**Fig 4.3**: Mean proportion of rankings achieved for clerical items by referrals using hospital templates

- Excellent: 88.27%
- Average: 2.72%
- Poor: 9.01%

**Fig 4.6**: Mean proportion of rankings achieved for clerical items by all other referral formats

- Excellent: 74.59%
- Average: 1.31%
- Poor: 24.10%

While all formats produce good to excellent referrals with respect to the completeness of clerical information, the VSRF performs particularly well in this regard (Fig 4.1), with referrals generated using medical software templates also ranking highly, referrals generated by this method averaging over 90% of clerical items being ranked as ‘excellent’.
Clinical Items and Referral Source
The following figures illustrate the mean proportions of each ranking achieved by different categories of referring primary care providers, across all clinical items combined.

Fig 5.1: Mean proportion of rankings achieved for clinical items for referrals from General Practice

Fig 5.2: Mean proportion of rankings achieved for clinical items for referrals from Emergency Departments

Fig 5.3: Mean proportion of rankings achieved for clinical items for referrals from other specialist clinics

Fig 5.4: Mean proportion of rankings achieved for clinical items for referrals from other internal hospital sources

Fig 5.5: Mean proportion of rankings achieved for clinical items for referrals from ‘other’ sources

Fig 5.6: Mean proportion of rankings achieved for clinical items across all referral sources

Though the general quality of clinical information in referrals was lower than for clerical items, regardless of source, referrals from both General Practice and from Emergency Departments (Figs 5.1 and 5.2) were of relatively high quality: referrals from both sources had a high proportion of clinical items ranked as ‘excellent’ (>50%) and comparatively few ranked as being ‘poor’ (<28%). Of particularly poor quality were those referrals received from other specialist clinics within hospitals.
Feedback from GPLUs and hospital staff suggest that it is possible that this is a result of hospital staff believing that this information is automatically and easily made available to those triaging internal referrals – though this is generally not the case.

**Clinical Items and Referral Format**

The figures below illustrate the mean proportion of rankings achieved across clinical items by referrals generated using different formats or templates.

**Fig 6.1**: Mean proportion of rankings achieved for clinical items by referrals generated using the VSRF

**Fig 6.2**: Mean proportion of rankings achieved for clinical items by referrals generated using clinic templates

**Fig 6.3**: Mean proportion of rankings achieved for clinical items by referrals generated using hospital templates

**Fig 6.4**: Mean proportion of rankings achieved for clinical items by referrals generated using medical software templates

**Fig 6.5**: Mean proportion of rankings achieved for referrals generated in letter format

**Fig 6.6**: Mean proportion of rankings achieved for referrals generated in all other formats

---

Excellent: 54.46%
Average: 14.55%
Poor: 30.99%

Excellent: 61.99%
Average: 14.66%
Poor: 23.35%

Excellent: 37.48%
Average: 13.25%
Poor: 49.27%

Excellent: 42.66%
Average: 27.51%
Poor: 29.83%

Excellent: 55.67%
Average: 11.65%
Poor: 32.68%

Excellent: 32.29%
Average: 23.99%
Poor: 43.72%
With respect to clinical information, the most complete referrals were generated by medical software template (Fig 6.4), which had the highest proportion of ‘excellent’ rankings coupled with the lowest proportion of ‘poor’ rankings. Referrals generated using clinic templates and ‘other’ methods had the highest proportion of ‘poor rankings’, meaning that these were the least complete for clinical items.

**Inadequate referrals**

There were no significant associations between the need for clinical or clerical follow-up and either referral source, the type of referral (form type) or referral format (handwritten/typed).

**Inappropriate Referrals**

The appropriateness or otherwise of referrals was primarily indicated by responses to the question ‘is the service requested available at your institution?’

Of the 400 referrals audited, this question was answered for 399 cases. 99.2% (n=396) stated that the requested services was available at their institution, with only 0.8% (n=3) reporting that the service was not available.

By this measure, the problem of *inappropriate* referrals appears to be very small for the particular clinics and hospitals audited. It is likely that this is a reflection of the services offered by the clinics chosen, with feedback from the hospitals stating that these clinics primarily offer a small and relatively clearly defined set of services.

That a referral may be appropriate for the hospital, however, does not mean that the referring condition may not be responded to equally well – if not better – in a different setting. Consequently, the audit also sought information as to whether or not ‘the condition for which the patient was referred could be better treated elsewhere’.

There were 398 responses to this question, with the results outlined below.

<table>
<thead>
<tr>
<th>Condition treatable elsewhere</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>52</td>
<td>13.1</td>
</tr>
<tr>
<td>No</td>
<td>341</td>
<td>85.7</td>
</tr>
<tr>
<td>Unsure</td>
<td>5</td>
<td>1.3</td>
</tr>
</tbody>
</table>

*Table 9: Proportion of referring conditions potentially treatable in setting other than hospital clinic requested*

It appears that although only 0.8% of referrals could be considered ‘inappropriate’, it is possible – though the measure is subjective – that up to 13.1% of referrals audited could have been directed ‘more appropriately’.

Statistical analysis shows that, where a reason for the referral was clear, there is a significant association between the reason for referral and whether or not the referral could have been directed more appropriately (p<0.005). Referrals for ‘Diagnosis’ or ‘Specific Investigation’ were more likely to have been considered appropriate for treatment elsewhere than referrals given for other reasons.
Section 1.4: Key Quantitative Findings

The findings of the audit highlight the significant relationship between GPs and specialist clinics, with GPs generating the majority of referrals received in specialist clinics. The quality of referrals from GPs is high, particularly with respect to completion of clerical data, with the vast majority of referrals also considered adequate for triage. The strong association between the type and format of referrals and their overall quality suggests that encouraging the use of electronically generated referrals – such as the VSRF and medical software templates – is an obvious avenue for quality improvement in this regard.

The low usage of the VSRF is interesting, given that the results indicate that it produces referrals of comparable, if not higher, quality than many other types of referral. This is an issue that warrants further attention if the use of the VSRF is to be encouraged.

The issue of poor referrals has been demonstrated to be one spanning all primary care providers, however internal referrals appear to be of lower quality than others. Interventions to improve internal communications may assist in specialist clinic workflow.

The relatively low quality of clinical information included in the referrals, despite the excellent demographic and clerical information provided.

Referrals generated using clinic templates and ‘other’ methods had the highest proportion of ‘poor rankings’, meaning that these were the least complete for clinical items. This suggests that generating clinic specific referral forms may not result in better clinical information.
Section 2: Qualitative component

Aim
Qualitative interviews were included in the project in order to provide the project team with a greater understanding of the knowledge, attitudes and beliefs which may underlie negative or positive aspects of the current referrals process – both at the point of the referral being made, and how that referral is then interpreted at the point at which it is received – as well as to identify potential avenues for improvement. The purpose of the interviews was to supplement the quantitative data collected during the audit process, giving greater context to the results of the audit and providing a deeper understanding of the referrals process.

Methodology

Recruitment and Consent
Potential participants were purposively sampled and included GPs referring to the hospital outpatient clinics during the period of the project, unit managers of the outpatient clinics, and specialists working within those clinics. GPs were identified through referrals sampled in the audit, and were drawn from GPs operating in clinics externally to the hospital clinics. While this recruitment method did not result in a statistically representative sample, it is appropriate for our qualitative methodology, as the purpose is not to provide statistically significant results but to identify ‘information-rich’ sources who can generalise and provide in-depth understanding of the nature of the processes and issues under investigation (5).

At each site, two GPs, two specialists and one unit manager were approached by the GPLO and invited to participate in the project. The GPs were selected from those referring to the outpatient clinics, separately to those contacted during the audit process but using a similar process. Potential participants were provided with a verbal introduction to the project and, if interested in participating, with a written plain language statement giving further details, a consent form and interview schedule.

In addition to the above, GPLOs were able to use the results of the audit to identify GPs referring to their hospitals and to contact them to discuss issues relating to the quality and appropriateness of referrals. As well as providing an opportunity for GPLOs to coach GPs with respect to the quality and appropriateness of their referrals, it also allowed for the collection of further data relating to the manner in which GPs utilise hospital specialist services.
Participants
Three specialists, two GPs and one Unit Manager agreed to participate in interviews with the project team. Demographic details of participants contacted by the project team are outlined in the table below.

<table>
<thead>
<tr>
<th>Profession</th>
<th>Gender</th>
<th>Age</th>
<th>Location</th>
<th>Years Practicing</th>
<th>Practice Size</th>
<th>Ave. Pats/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialists</td>
<td>M</td>
<td>35 – 54</td>
<td>Metro</td>
<td>10 - 14</td>
<td>NA</td>
<td>6 - 10</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>55 - 64</td>
<td>Regional</td>
<td>&gt;20</td>
<td>NA</td>
<td>25 - 50</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>45 – 54</td>
<td>Metro</td>
<td>10 - 14</td>
<td>NA</td>
<td>25 - 50</td>
</tr>
<tr>
<td>GP</td>
<td>M</td>
<td>35 – 44</td>
<td>Regional</td>
<td>10 – 14</td>
<td>Small Group</td>
<td>100 - 150</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>45 – 54</td>
<td>Regional</td>
<td>&gt;20</td>
<td>Small Group</td>
<td>50 - 100</td>
</tr>
<tr>
<td>Unit Manager</td>
<td>F</td>
<td>35 – 44</td>
<td>Metro</td>
<td>5 – 9</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Table 10: Demographic details of interview participants

Supplementary data was also provided by GPLOs who had contacted GPs referring to their hospitals during the audit period. 28 GPs were contacted by GPLOs, including 8 referring to Royal Melbourne Hospital, 5 referring to St Vincent’s Hospital, 10 referring to Ballarat Health Services, and 5 referring to Western Hospital. The table below outlines the characteristics of these GPs.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ballarat</th>
<th>Melbourne</th>
<th>St Vincent’s</th>
<th>Western</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Degree Provider</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>International</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Years Since Graduation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 – 9</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10 – 19</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>20 – 29</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>≥30</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Practice Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Regional</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>0</td>
<td>8</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Practice Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solo</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Small Group</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Large Group</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Average Patients per Week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;50</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50 – 100</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt;100 - 150</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>&gt;150</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 11: Demographic details of GPs contacted by GPLOs

Interviews conducted by the research team
Once participants had faxed or sent the consent form back to the project team, an investigator will contacted them to arrange an interview at a time and place convenient to them. Interviews lasted between approximately 15 and 30 minutes, and were ‘semi-structured’, following a series of pre-determined questions that were used as prompts, but allowing the respondents scope to talk about their particular experiences and perceptions (5). Interviews were recorded.
Analysis
Interviews were analysed thematically. A member of the project team, having familiarised themselves with the audio recordings of the interviews, identified common themes and concepts arising in the interviews, selectively transcribing key illustrative quotes.

Results
The Referrals Process: Into the Void (and out again)

“It’s two big black holes. It’s GP land, and we throw patients out the door with no follow-up or inappropriate communication with the GP, or expecting them to follow-up on all sorts of results without knowing why they were done or how or where or when, and the same comes back to us in the other direction....The interface is crucial.”
(Specialist)

“There needs to be more communication between the parties. Because I think in many respects, they go ahead doing their own job...sometimes ignorant of what the other parties are doing.” (Unit Manager).

While the responses of participants indicate that the problems associated with the referral process manifested themselves in different ways according to the people interviewed, it quickly became apparent that at the heart of many of these issues was a lack of communication between GPs, specialists and unit staff. While all participants were clearly familiar with the point at which they themselves were involved in the referrals process, little was known about what happened to the referral – both literally, with respect to the piece of paper, and sometimes more figuratively, with respect to the patient and patient management – at other points. While very much aware that they were part of a larger patient management process, when it came to the process of formal (written) referrals in the public health system, participants gave every appearance of being compelled to operate in silos, each contributing and responding to one element of patient care and management, while the bigger picture regarding the other elements of the patient’s journal through the referrals process as a whole, and the means by which these elements were connected, remained largely inaccessible to them.

It became apparent that, rather than being a function of any lack of willingness to communicate with others involved in patient management, or to understand the patient management process as a whole, this lack of communication was likely to be due to systemic issues related to working in the public health system. That these structural issues – such as the constraints imposed upon referrals systems and patient care and management through by working within the hospital system – were a prime source of the frustrations described by respondents was perhaps best indicated by the comparisons drawn between the relative efficiency of communication between GPs and specialists in the private system, and the problematic referrals process described in the public system.

Perhaps the most fundamental issue to be identified by respondents, either explicitly or implicitly, was the lack of ‘ownership’ of referrals, patient information and patients themselves in the public system. While each person freely takes responsibility for one component of the process, this lack of
ownership prevents them from accessing other components of the system and understanding more fully how it works. This was directly acknowledged by one specialist, who stated:

“[my clinic] doesn’t own the referrals to [my clinic].... It comes into a general area, someone then has to sift through it and work out where it’s going to go...and then we sort of sift through them and it’s a very...ad hoc thing... No-one would know that I went through a dozen referrals this morning...except that I’ve put them ... to the outpatient team who then try and book them. And I don’t know whether that’s happened, and whether the GP’s received them or whether the patient has.” (Specialist)

Not only does this lack of ownership relate to the processing of referrals, but also potentially to the content of communication between hospital-based staff and GPs. For example, the same specialist also stated:

“I’m not always certain whether all my letters have come past me because I can’t remember all the patients I’ve dictated on. And I don’t know if they’ve reached their GPs and I don’t know whether they’re getting the information they need. I give them what I think is useful for them to manage a patient, but I don’t know whether my letters are particularly good or not. I certainly don’t speak to all of them... So much goes on in the hospital...and yet, I’m not sure if we really communicate the fullness of that to GPs.” (Specialist)

This specialist’s perception was largely supported by and reflected in the responses of the GPs contacted by both the project team and the GPLO units. Where the specialist indicated that he did not know whether he was providing GPs with the information that they wanted, GPs contacted by the GPLOs also indicated that they did not receive information about specialist units and referrals from the hospitals. Instead, the majority stated that they learned about the services provided by specialists units and referrals through ‘experience’, ‘local knowledge’ or other general practitioners. Similarly, where the specialist did not know what happened to his letter once he had finished the dictation, GPs stated that they tended not to know what happened to their referrals or patients once they had been referred to hospitals: who triages referrals, for example? Why are some referrals apparently rejected? While most indicated that they were happy with the content of letters received back from specialists, in some cases there was some confusion about what happened between the dictation of those letters and their receipt in the GP clinic. One GP contacted by the project team said that she had received a letter that had clearly been dictated on the day of the specialist consultation, but that she had not received it until three months later, with no indication of where the letter had been. To add further to the impression of a lack of ‘ownership’ of the referrals process in the public system, the Unit Manager also noted the lag time between letters being dictated and then dispatched to GPs, but stated that that issue was ‘to do with the hospital system, beyond the control of the unit manager.’ (Unit manager).

By contrast, many of the issues raised with respect to referrals in the public system were perceived not to be equally reflected in the public sector. With respect to the issue of ownership, one specialist clearly stated that in her experience private clinics run more smoothly because “we take ownership of the referrals process and of the referrals themselves.” (Specialist) Again, this perception was lent credence by the responses of GPs, who indicated that responses from specialists in private clinics tended to be more prompt than those received from public clinics. Perhaps
crucially, in the private sector the notion of ‘ownership’ can also extend to the patient: in private clinics, specialists have the capacity to have repeated contact with individual patients and become familiar with their history, while in the public system, by virtue of the systems in place, such continuity of care is lacking. Furthermore, while being able to establish a rapport with patients, specialists in the private system are more likely to be able to establish channels of communication with particular GPs, as GPs tended to refer to the same private specialists multiple times. Again, this was reflected in the responses of the GPs, who indicated that while they were perhaps willing to contact specialists in the public system for pre-referral advice on patient management, they were more likely to contact private specialists with whom they had a pre-established relationship.

While such contextual factors may seem far removed from the specific issue of poor quality and/or inappropriate referrals, they in fact provide the lens through which each participant viewed and understood this issue, as well as providing the structural framework within which referrals are produced and received. As such, this is the context in which the following discussion, which deals more explicitly with quality and appropriateness in referrals, should be understood and interpreted.

**Referral Quality: Content and Purpose.**

Concerns about the quality of referrals raised by both specialists and the unit manager primarily related to the comprehensiveness and clarity of the information provided – an issue that was in turn related to the perceived purpose of the referral. Perhaps the most fundamental issue is an apparent lack of consensus or shared understanding of the specific information required to generate a good quality referral – which in turn requires similar consensus on the purpose of the referral itself, and an understanding of the ways in which it is process and by whom, as evidenced by the sometimes conflicting views of participants.

The unit manager, for example, expressed a preference for referrals generated by the clinical software packages (such as Medical Director, MedTech) describing them as ‘noticeably better’, as they self-populated with a great deal of information which was particularly good for first-time patients. By contrast, one specialist interviewed suggested that these pro-forma referrals could be quite difficult to understand as they listed too much information, including multiple diagnoses, medications and results which therefore made it difficult to tease out exactly what the GP was requesting and which was the currently active problem.

With respect to current problems, unit managers and specialists seemed broadly to agree on the type of information required: one specialist summarised the information he wanted as

“*What’s the question you’re asking? What’s been done so far, the results, and how urgent is the problem.*” (Specialist).

The unit manager agreed, suggesting that after checking the clerical information (contact details, etc) unit staff checked for evidence supporting the GPs assessment of the current issue, such as x-rays, test results to support a proposed diagnosis and so on, describing this as ‘the sort of thing that GPs tend not to do’. The unit manager also noted that the lack of this sort of information in the referral places additional strain on the specialist clinic resources, as without it, clinic staff must ‘work up’ the patient again, which requires them to then bring the patient back for a second appointment.
at a later date, when had the information been present initially, a single appointment may have sufficed.

As argued above, the continued receipt of referrals by hospital specialist clinics that do not contain adequate clinical information points to a lack of a shared understanding with GPs about what information is required by those receiving their referrals, which is in turn indicative of – and at least partially dependent upon – a lack of communication between hospitals, specialists and GPs. Once again, a perceived difference between the public and private system illustrates the structural issues that contribute to this problem: there was a perception among some of the specialists interviewed that, while referrals received in private clinics could often still be poor, ‘more of them are better’. When asked more specifically about this issue, one specialist clearly stated that referrals were definitely better from GPs that he knew personally, which was less likely to happen with referrals to public clinics because specialists are much more faceless than perhaps we are in private’, and that knowing people personally ‘absolutely’ made a significant difference.

Interestingly, the GPs interviewed by the project team or contacted by GPLOs stated that they did not change the style and/or content of their referrals, except in cases where particular hospitals or clinics specified a template for use. The greater ease with which GPs are able to establish communication with private specialists may once again be a possible explanation for the perceived difference in referral quality on the part of the specialists: it may be that the greater contact with these doctors facilitates more frequent and effective discussion regarding information required in referrals to specialists, rather than the potentially higher quality referrals received by private specialists being the result of conscious effort on the part of individual GPs.

The precise details and extent of the information contained in referrals may also be dependent upon the template used. Some GPs reported, for example, that the VSRF and/or hospital specific templates were ‘clunky’, and required what GPs considered too much information or irrelevant information in some respects, but that they sacrificed information elsewhere. While one assumes that where hospitals request referrals in a specific template they do so because they feel that that format serves their purpose, the fact that GPs disagree suggests that there is, again, a lack of shared understanding of the various purposes that a referral must serve: both from a patient management perspective and as a workflow issue.

One possible contributing factor to this is the different settings in which referrals are produced (the community) and received (the hospital). Participants’ responses suggest that, from hospital staff, there is a particular ‘formula’ for referrals that relates both to the ideal information included in referrals (as discussed above) and the point at which it is received in the context of the patient’s care and management. At the other end of the process – in the GP clinic – there is a recognition that sometimes, there will simply be uncertainty: for example, while some specialists and hospital staff felt that clinic guidelines outlining the minimum data requirements for referrals, or the investigations/tests that should be performed prior to referral, GPs themselves often considered such guidelines irrelevant and unhelpful, if they had heard of or considered them at all. One GP who had had some experience with guidelines described them as ‘unnatural’ and ‘restrictive’, saying that sometimes ‘it’s quite clear cut that a patient needs to be seen before you’ve done everything in the guidelines.... but you might do more than what’s in the guidelines if the problem’s not acute’. For
him, the restrictive nature of the guidelines and the inherent attempt to apply certainty and order where they do not necessarily exist made his work harder.

‘Appropriate’ Referrals: The Uncertainty Principle

The idea of uncertainty was also pervasive when exploring the idea of appropriate referrals and the role of specialist clinics in patient management. While we defined an ‘appropriate’ referral in narrow terms throughout the audit process – an appropriate referral being one that requested a service provided by the hospital for that particular patient and the referring condition – it became apparent that while such a definition may be technically correct, it did not necessarily resonate with all those involved in the referrals process, who had differing opinions of when a referral was appropriate despite generally agreeing on the role of specialists in patient care.

Though specific examples and details given differed among participants, broadly speaking there was a shared understanding of the role of specialist clinics, which were variously described as ‘for GPs to be able to refer to specialists to manage conditions beyond their capacity’ (Unit Manager), ‘to catch the patient for the GP when the GP feels out of their depth’ (Specialist) and for referral when the GP is unable to do any more for the patient, or the condition is complex or serious enough to require specialist input (GP). Specialists and GPs agreed that the specialist clinics provided an avenue for GPs to have access to expert opinion, specific investigations and/or specific procedures that the GPs themselves were unable to provide to patients in the community setting. Despite this apparent shared understanding, however, it became clear that the expectations of what ought to be manageable in the community, how conditions could be managed in the community, who should take ownership of that and what is therefore appropriate for referral to the specialists were likely to be viewed differently by GPs, specialists and unit managers at different times. There was no clearly articulated or commonly held view of when the GP’s role finished and that of the specialist and specialist clinics began.

For specialists, an overarching context within which some assessed their role appeared to be one of increasing demand for specialist services, with concurrent changes in their involvement in patient management and in what they deemed as ‘appropriate’ for referral. The increased demand for specialist services and the funding models for specialist clinics were seen to create an expectation of high turnover, with more new patients entering the system. One specialist reported that his role in patient management had changed, in that he no longer had time to see patients on multiple visits and to track the progression of their disease as he had done when he commenced practicing.

Instead, his role was to provide a single service before sending the patient for management by GPs. In addition, the increased demand for specialist services had also led to a shift in what was considered – by specialists – as appropriate for referral, with an expectation that GPs would therefore be able to manage more in the community. As one specialist stated:

“When I first started, any newly diagnosed diabetic could be sent, whereas with the sheer numbers and volume of diabetes patients that’s no longer the case. Now we expect GPs to be able to manage diabetes and initiate insulin therapy and manage complications and the only referrals we would deem acceptable for referral to a specialist clinic are those that are not able to be managed beyond...a much more complex level than we would have accepted twenty years ago....
I think that GPs now possibly don’t understand at what point they’re allowed to refer and what purpose we would serve as a specialist clinic” (Specialist).

The final statement suggests that there is ‘a’ point at which GPs ought to refer their patients - however, the same specialist recognised that while this may be ideal from the hospital/specialist perspective, in reality it was not practical to be so restrictive. She acknowledged that there are limits to what an individual GP could do – that expecting GPs to be capable of an ever increasing range of skills, and of managing more and more complex cases was both unrealistic and unfair. In that sense, it was the role of the specialist to catch a patient for the GP whenever the GP should feel out of their depth, whenever that may be, and it was implicitly accepted that there would be varying points at which this would be the case for individual GPs.

That the appropriateness of referrals may depend on the different capabilities of different doctors was also acknowledged by the Unit Manager, who perceived that the level of experience of doctors referring to her unit had had a direct impact on the appropriateness of referrals. In her view, the demographics of doctors referring to her unit had changed, with a number of experienced GPs retiring and being replaced by more junior GPs who tended to refer patients more quickly. This view was not necessarily shared by the participating GPs, however. One participating GP did not see that her management of patients had changed with greater experience. On the other hand, another stated that for at least some conditions he had grown more comfortable in managing patients in the community. For example, he had grown more comfortable in managing patients with mental health issues, although he also stated that this was directly related to the difficulty of getting such patients seen in specialist clinics: after repeated failures in this regard, he had decided that the patient would receive better treatment if he simply commenced management himself.

There was also a suggestion that GPs were potentially making referrals as a simple solution of dealing the patients quickly and easily, shifting them from the GP clinic to the hospital system. The Unit Manager, for example, stated that it appeared that GPs were sometimes treating specialist clinics as an ‘overflow GP clinic’ and simply ‘flicking’ patients to the specialist clinics. Perhaps unsurprisingly, this was in significant contrast to the responses of GPs. Most of the GPs contacted – either by the project team or the GPLOs – stressed that they managed patients to the limit of their capacity prior to referring, and that they considered a range of factors before referring patients into the patient system. Most of the GPs contacted by the GPLOs reported that their primary reasons for referral were for specific investigations or treatments not available elsewhere. The responses from GPs also suggested that they tended to think carefully about when and where they would refer patients, taking into account patient finances and insurance status (with these often being considered one of the most important factors when considering referrals), ease of access to the clinic in question and, if known, the likely waiting time before being seen in a clinic. It seemed that GPs, where possible, would actually avoid sending patients to public specialist clinics. For example, a number of GPs stated that while they generally referred uninsured or less wealthy patients to public specialist clinics, if they knew that a particular clinic had a very long waiting list they would encourage such patients to try and pay for private services, even if it were difficult to do so.

The idea that GPs may be referring patients too quickly was also expressed in another way, which may reflect potential uncertainty regarding either what information should be included in a referral or differing opinions on the role of the GP in patient management. The Unit Manager, for example,
expressed a desire for some evidence in referrals that GPs had exhausted avenues for conservative management of the referring condition in the community, prior to sending the patient to specialist clinics – in other words, proof that the GP had exhausted other options with specialist care regarded as a last resort. The unit manager believed that, in some cases, referrals genuinely were not appropriate because conservative management in the community had not been attempted, but acknowledged that in other instances what might appear to be an inappropriate referral for this reason may in fact be a ‘poor quality’ referral, in that it simply lacked adequate information.

In some cases, ‘inappropriate’ referral was due to a misunderstanding clear instructions or information pertaining to clinics. For example, the unit manager expressed a belief that patients could be referred inappropriately when doctors failed to understand/familiarise themselves with publicly available information regarding the days and hours during which particular clinics were accessible. The role of the patient in ‘inappropriate’ referrals was also acknowledged. For example, patient preferences played a role for some GPs when considering factors prior to referral, with one also acknowledging that in the Australian system, patients had a right to specialist opinions. This was also acknowledged as a potential source of inappropriate referrals by the Unit Manager, who believed that patient requests may be the reason for some referrals from GPs. In addition, the unit manager reported that patients often misunderstood instructions from GPs, arriving at clinics when their referral clearly stated that they should have gone elsewhere.

**Improving the Primary/Secondary Care Interface: People, Systems and Processes**

Despite the problems outlined above, and the frustration that was often verbalised in the form of (negative) generalisations expressed by participants, perhaps one of the most positive messages that was clear in the interviews was the respect held by all participants for others involved in the referrals process, whether they be specialists, clinic staff or GPs. Though there was clearly a temptation to locate the ‘blame’ for issues in the referrals process elsewhere, there was also a shared understanding that everyone was working within their own difficult environment and the specific pressures that arose within that context. Any negative comments that were made were therefore generally very quickly qualified and placed within this larger picture. This goodwill was also accompanied by a recognition that communication was currently sub-optimal, an openness to inter-professional communication and to adopting new methods of managing the flow patients into and out of public specialist clinics, whether through different models of patient management or different methods of communications. As such, any process adopted to improve the quality and appropriateness of referrals – which must also link in with the referrals process itself – already has significant stakeholder buy-in.

Participants were asked specifically by the project team and GPLOs how they felt that the referrals process and the interface between primary and secondary care could be improved. Their responses, as well as proposed solutions offered implicitly or explicitly elsewhere in the interviews, are summarised below.
People
Broadly speaking, respondents indicated that establishing direct and/or informal contact between specialists and GPs was beneficial to the referrals process.

GPs and specialists who indicated that they had established working relationships stated that these had been initiated either through having trained together, having met at workshops or information evenings, professional development days or simply through professional contact. Of these, perhaps the most feasible opportunity for increased contact between specialists and GPs is through the facilitation of information sessions and/or workshops. Factors which may support the implementation of such sessions include the willingness of specialists to attend and provide GPs with more detailed information about their particular clinics – the specialists contacted by the project team indicated that they either actively participated in such sessions or had done so in the past. However, participants indicated that a lack of time may be an issue in some cases.

Systems and Processes

Establishing Consensus
One of the major issues identified was a lack of consensus regarding the specific items of information required in a referral, from the perspectives of GPs, specialists and unit managers. Establishing a minimum data set that meets the needs of these different professional groups involved in referrals may provide a more solid platform from which to identify truly poor and/or inappropriate referrals, as well as offering a shared framework within which everyone can operate. Clearly, establishing such a minimum data set requires that specialists, unit managers and GPs are provided with an appropriate forum in which to exchange views and information on this issue.

Communicating Information: Pre-Referral
Should consensus exist, exchanging hospital/clinic information with GPs who are likely to refer to that clinic or hospital is crucial, and must occur in a way that is both accessible and appropriate for both the clinics and the GPs. It is likely that this is not currently the case – or if it is, it is not happening in a form that targets older/more experienced GPs: of the GPs contacted by the GPLOs, the majority responded that they found out about the services provided by hospital clinics through experience and/or local and ‘general’ knowledge. Others indicated that they asked other GPs. GPs referring to one particular hospital often cited information received from the hospital or from their local Division as their primary source of information about specialist clinics, which suggests that active, targeted distribution of information by hospitals may be effective. Very few GPs stated that they accessed hospital websites or utilised guidelines for this information. Among the specialists, there was virtually no experience or familiarity with guidelines at all.

In some instances, it may be that websites and electronic guidelines are simply not appropriate for individual practices: some GPs contacted by the GPLOs reported that they did not have computers in their practices. At other times, the utility of guidelines and websites may be hampered by the design of those websites: for example, the unit manager interviewed stated that the website for her hospital was difficult to navigate and utilise. Though in the minority, however, some GPs did report to GPLOs that particular examples of guidelines were useful, including the Royal Children’s Hospital and Austin guidelines. Further investigation into what makes some of this information accessible and useful, as opposed to ‘restrictive’ and ‘clunky’ could inform the development of future guidelines.
Communicating Information: A Continuing Process

All participants recognised that the current system of communication between the care providers was inadequate. Several participants suggested that electronic communication of specialists’ letters to GP would be preferable to the current paper/fax versions, which were often difficult to keep track of (both from the specialists’ perspective and the GPs’). Emailing letters would give both parties a greater ability to ensure that the information had been received, as well as making it easier to access at other times.

GPs were particularly keen to know waiting times for specialist clinics, even if the information was only vague: as mentioned above, a number of GP respondents indicated that knowing this information would change their referral patterns, directing patients either to private clinics or to other public services where the waiting list may be shorter. The unit manager agreed that it may be desirable to provide this information.

GPs were also interested in being informed regarding the progress of their patients through the referrals system: in the worst cases, patients had been referred and neither the GP nor the patient had received any correspondence confirming that the hospital had received the referral, and there was often a sense that GPs simply did not know what was happening in the hospital system.

Generating Referrals

With the exception of the very few practices that were not computerised, the majority of GPs expressed a preference for electronic templates generated by software packages – though some had also constructed their own individual or practice-specific templates. The prime importance for GPs appeared to be that the form was easy to find, easy to use, and contained the appropriate information. Again, depending upon the ability to establish a mutually appropriate ‘minimum data set’, creating an electronic template that can be accessed through standard medical software packages may be beneficial: while the VSRF is currently available, it generally appeared to fail the criteria outlined above with respect to ease of use etc. Despite this, some GPs reported being open to adopting it for use in their practice. Intensive training on its use may also be beneficial: one GPLO reported that while coaching a GP on their referrals, he had been able to show the GP specifically how to use the VSRF, overcoming many of the barriers that had previously preventing the GP from doing so.

Both specialists and GPs indicated that a system by which GPs may contact specialists to discuss the management of patients that they are considering for referral is beneficial: in some cases, it can allow the specialist to advise further tests that may be done in the community, preventing the need for referral into the hospital system. In others, it may simply result in a ‘better’ referral. Currently, these informal consultations occur primarily between GPs and specialists who have an existing professional relationship. One specialist suggested that formalising this process may be beneficial – though noted that given that specialists in this situation can provide only general information, not having the in-depth knowledge of the specific patient’s medical history, there may be medico-legal issues associated with this. A generic telephone ‘consultation’ service was suggested as an alternative.
Patient Management

Though not specifically related to the generation of referrals, a number of suggestions were offered that may assist patients in accessing appropriate care outside the current method of referring them into specialist clinics.

From the perspective of specialists, this may take the form of encouraging GPs to learn new skills, such as specific investigations or tests that they may be able to undertake in the community. This was partly achieved through communication with GPs prior to referral (i.e., informal telephone consultations), but it was also suggested that there may be the capacity for GPs to spend time in the specialists clinics under the ‘instruction’ of specialists – particularly if they were able to continue charging for their time at normal rates while they were doing so.

GPs also indicated a willingness to undertake further roles in the community: in some cases, this was reflected in an increased confidence in managing conditions in the community that was achieved over time. One GP contacted by the project team indicated that he would be willing and able to take on further specific roles, such as prescribing certain medications that currently required the involvement of specialists – in his view, unnecessarily.

The unit manager also indicated that other staff within the specialist clinics aside from the specialists themselves – such as nurses and allied health staff – were capable of undertaking certain aspects of patient management under the supervision of specialist managers, alleviating the pressure on specialists’ time.

Models of ‘shared care’ were also mentioned by one specialist, with the possibility of specialists providing care in the community themselves, or of closely supervising the provision of such care by other service providers such that the need for the patient to attend the clinics themselves was negated.

Ownership

As argued above, the lack of ‘ownership’ of the referrals process by those involved in the public health system. While each respondent was comfortable with the element of the referrals process for which they were directly responsible, it was the spaces ‘in between’ that were somewhat inaccessible.

It is possible that the GPLO can take a leading role in this regard. They are already recognised by hospital staff as providing an effective conduit between the hospital and GPs, though the extent of their profile varied by hospital, as did knowledge of the precise role that GPLOs may play. However, there was evidence that the GPLOs were facilitating greater inter-professional communication in some cases, with one specialist reporting that he was working with them to give a presentation to some junior doctors. The unit manager reported that while there was a willingness on the part of specialists in her hospital to be involved in inter-professional evenings or training sessions, there was a lack of anybody with the time or inclination to organise and facilitate such sessions. Again, this may be an area in which the GPLOs can provide some leadership.
Funding
Almost universally, there was a call for more clinics and/or more funding. In addition, the current funding model was particularly linked by specialists and the unit manager with restricting access to specialist clinics.
Section 3: Implications and the Way Forward

Key findings from the quantitative audit highlight:

- the significant relationship between GPs and specialist clinics, with the majority of referrals in the clinics received from GPs
- the relatively high quality of referrals received from GPs when compared to those from other sources
- the comparatively high quality of referrals received in the clinics audited, with most adequate for triage
- despite the above, the relatively low quality of clinical information provided in the referrals, particularly in comparison with the clerical/demographic information provided
- a strong association between the type and format of referrals and their quality, with the use of electronic referrals being of higher quality
- the low utilisation of the VSRF, despite the quality of referrals it produces

Key findings from the qualitative report highlight:

- the need for consensus regarding the information required for a high quality referral
- a lack of communication between hospital staff and GPs
- the lack of ownership of the referrals process as a whole in the public system
- the complexity and uncertainty inherent in a referrals system that must be responsive to the individual skills, needs and requirements of GPs and patients

Despite the relatively high quality of referrals from GPs to the clinics audited, it is logical that specialists and unit staff often perceive GPs to be the source of ‘problem’ referrals, given the high proportion of referrals they generate. As became particularly apparent in the qualitative interviews, issues with the quality and appropriateness cannot be viewed in isolation, but must be viewed in the context of the ‘interface’ between one element of patient care and another. The actual referral itself is simply one component of a complex system of ‘interactions that link steps in care and involve transferring information and/or responsibility between providers, patients and/or their respective organisations.’ (6)

To progress interventions in this area it may be useful to utilise the various frameworks developed to understand the primary/secondary interface. For example, GPs responded to a 2006 report from the Victorian Auditor General titled Access to Specialist Medical Outpatient Care June 2006) with a series of GP requirements such as information, communication pathways, notifications and access as primary concerns with respect to this interface, among others. (7) As with our results, researchers elsewhere have found that ‘the very complexity of health systems often mitigates against effective communication between the sectors.’ (8) Taplin et al (2010) conceptualise the provision of specialist health care in terms of ‘process of care’, which includes the ‘types of care, transitions, steps and interfaces’ that must be negotiated in receiving care, while ‘systems of care’ includes not only the provision of care but the infrastructure for communication that facilitates it. (6) Kvamme et al (2001) suggest that patients feel as though they are in ‘limbo’ when moving through the system, as ‘each
part of the system tends to focus on its own tasks and resources and not on the system as a whole. . . . so the task of improving the quality of interaction, cooperation, and communication across the interfaces is not seen as any one group’s particular responsibility. ’ Working in ‘separate medical realities’ can undermine cooperation and understanding between professional groups: focus on the patient, rather than on specific points of care, can therefore provide a more cohesive, cooperative framework within which to view the primary/secondary interface. (8) This idea of the continuity of care also provide an insight into the potential for the primary/secondary interface to disrupt the patient’s experience of health care: continuity of care relates to informational continuity (the use of information to develop appropriate care for the individual), management continuity (a consistent approach to the management of health conditions that is responsive to the individual’s needs) and relational continuity (an ongoing therapeutic relationship between a patient and care providers). (9)

This framing resonates with some of the issues raised in the audit, with the focus on and competence of people involved on individual stages of the process of care, and the perceived lack or inaccessibility of appropriate mechanisms through which those delivering care could communicate, or even familiarise themselves with other elements of the referrals process.

**Policy Implications**

The project highlights the fact that any attempt to address the issue of poor quality and inappropriate referrals will have to do so on multiple levels. Single, targeted interventions – such as the production and dissemination of guidelines – are unlikely to produce significant change at the general practice or hospital level. While such tools may be important – for example, in establishing consensus on information desired by specialists or unit staff, or on the services provided by individual clinics – they are not capable of addressing the multitude of factors that influence the referrals process.

The challenge arises in identifying how policy development can support the various elements identified by respondents: namely, fostering greater communication and mutual respect and understanding; improving processes that allow for the effective transfer of appropriate and adequate information between care providers; acknowledging and overcoming the perceived lack of ‘ownership’ of the referrals process, and investigating and – if appropriate – supporting alternative models of patient management and/or clinic funding.

**Implications for Practice**

In the event that suitable interventions to address issues in the primary/secondary care interface are identified, the complex and interconnected nature of referrals and the system in which they occur has significant implication for practice. For example, interventions cannot be targeted merely at one professional group (such as GPs), as the GPs themselves are merely one element of the patient journey, rather than representing an end in and of themselves. Any alterations or improvements to the current system must therefore be appropriate for, at the very least, GPs, specialists and unit managers, who are key partners in maintaining a cohesive journey for the patient.

**Implications for Further Research**

While this project has provided valuable data and highlighted a number of important issues found at the primary/secondary interface in the Victorian public health system, a number of further avenues remain unexplored. This project was restricted to a small number of hospitals, auditing very specific
clinics in a limited number of geographic locations. It is possible that replicating the study in different locations or with different clinics could produce vastly different results. Furthermore, a number of issues raised in the study point to potential avenues for more in depth research – for example, examining the impact that GP experience may have on their referral practice, or further exploring the role of GPLOs as professionals capable of crossing the various boundaries that separate specialists, unit managers and GPs, or for taking ownership of the elements of the interface that are currently under-explored and lacking in appropriate leadership. Rather than representing a definitive evaluation of poor quality and inappropriate referrals, therefore, the findings of this report may best be used as a ‘springboard’ for further discussion and communication with key stakeholders involved at the interface or primary and secondary care.
References


# Appendices

## Appendix 1: The Audit Tool

### Audit Date: Institution: Referral Source: Audit Reference No: Clinic:

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<tr>
<td>2.8 Was a phone call/fax back to the referring clinic made in order to complete sections 1 and/or 2?</td>
<td>Yes / No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Referral Format:</th>
<th>Tick as appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Form Type</td>
<td>VSRF</td>
</tr>
<tr>
<td>GP Template</td>
<td>GP Letter:</td>
</tr>
<tr>
<td>3.2 Format</td>
<td>Handwritten:</td>
</tr>
<tr>
<td>3.3 Legibility</td>
<td>Easily Legible:</td>
</tr>
<tr>
<td>3.4 Referral Date included:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Clinical Details:</th>
<th>Rank as follows</th>
<th>1: Excellent</th>
<th>2: Average</th>
<th>3: Poor</th>
<th>4: NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Medications included:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 Allergies included:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3 Relevant Past history included:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4 Relevant psychosocial history included:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5 Clinical examination information included:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.6 Clinical history included</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.7 Relevant Investigations and results included:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.8 Clinician Treatment for referring problem included:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.9 Differential diagnosis included:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Clinical Triage:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Was the reason for the referral clear?</td>
</tr>
<tr>
<td>5.2 If yes, tick which of the following reasons is most suitable:</td>
</tr>
<tr>
<td>Diagnosis</td>
</tr>
<tr>
<td>Specific Treatment</td>
</tr>
<tr>
<td>5.3 Was it necessary to obtain additional clinical information from the referring doctor before this referral could be triaged?</td>
</tr>
<tr>
<td>5.4 Is the service requested available at your institution?</td>
</tr>
<tr>
<td>5.5 Could the condition for which the patient was referred be better treated elsewhere?</td>
</tr>
<tr>
<td>5.6 If yes or unsure, please indicate potential alternate providers of treatment/care:</td>
</tr>
<tr>
<td>General Practice:</td>
</tr>
<tr>
<td>Community Health Centre:</td>
</tr>
</tbody>
</table>

☐ Recommend for follow-up phone call
Appendix 2: Interview Schedules

Project: Audit of Referrals to Public Hospital Specialist Clinics

May-June 2010

General Practitioner Interview

Project: Audit of Referrals to Public Hospital Specialist (Outpatient) Clinics

Principal Researcher (s):

- Lucio Naccarella, PhD; Amie Bingham (The University of Melbourne)
- Jane Measday (General Practice Victoria)

The semi-structured interviews will take place either face-to-face or via telephone and will be expected to run for approximately 25 minutes. The interviews will be conducted in two parts:

- **Part 1: Background information** will be collected at the beginning of the individual interviews via a brief questionnaire (see below)
- **Part 2: Experiential information** will be collected to identify your experiences, perceptions and expectations about hospital specialist (Outpatient) clinics.

Part 1: Background Information

This part is designed to obtain information on you, your work practices and the care you provide and will be used to complement the interview that will be conducted with you.

**Gender (Please tick):**
- ☐ Female
- ☐ Male

**Age Group (Please tick):**
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ >65

**Location of practice (Please tick):**
- ☐ Rural
- ☐ regional
- ☐ Metropolitan

**Length of time practicing medicine (Please tick):**
- ☐ <5
- ☐ 5-9
- ☐ 10-14
- ☐ 15-19
- ☐ >20

**Size of practice**
- ☐ solo
- ☐ small group
- ☐ large group

**Average number of patients you usually seen each week? (Please tick)**
- ☐ <50
- ☐ 50-100
- ☐ >100-150
- ☐ 150-200

Please describe your specialists or topic areas you have training in

Which other health professionals work in your clinic? (Please list- e.g., practice nurse, psychologist etc)
Part 2: Experiential Information

This part is designed to identify your perceptions, experiences and expectations about patient referral to hospital specialist (Outpatient) clinics

1. What role, if any, does outpatients play in the care and management of your patients?
   
   Prompts:
   
   - Has the way you use outpatient services changed? If so why? (e.g., patient populations)
   - Have you become more confident in managing patients in the community that you used to refer to outpatients?
   - What number or percentage of patients would you refer?

2. What factors do you consider before referring patients to outpatient services?
   
   Prompt:
   
   - Do you have access to peer support with whom you discuss difficult patients? (e.g., specialists; allied health professionals; other GPs, practice nurses)
   - Do you refer to multiple hospitals? Multi –list?

3. Do you know the specialists in the public system and does this matter to your overall patient management style and to you referring patients to public specialist clinics?
   
   Prompts
   
   - Do you know any specialists in the public system?
   - How do you know them?
   - How did you come to know them?

4. Do you generally receive a timely response to confirm receipt of referral and appointment?
   
   Prompts:
   
   - Is this important?

Rate your experiences:

1. Prompt feedback
2. Tardy reply without specific appointment
3. No feedback at all

5. Do you use the same referral style and content when referring patients to private specialist clinics compared to public specialist clinics? If not, why and how are they different?
6. What has been your experience with pre-referral guidelines to facilitate outpatient referral? Please provide TWO examples of pre-referral guidelines?

Prompts

- Have you or do you use them?
- Are they useful or not useful? And why?
- How would you modify the pre-referral guidelines if you could to assist your referral?

7. How could patient access to outpatient services improve from a GP point of view?

Prompt:

- If there is a long wait clinic would you value a letter that indicates the actual waiting time and other management options available?
- Are there opportunities to improve the quality of GP referral? If so in what areas?
- Are there opportunities for GPs to manage more conditions in the community?
Hospital Specialist Clinic Managers Individual Interview

Project: Audit of Referrals to Public Hospital Specialist Clinics

Principal Researcher(s):

- Lucio Naccarella, PhD; Amie Bingham (The University of Melbourne)
- Jane Measday (General Practice Victoria)

The semi-structured interviews will take place either face-to-face or via telephone and will be expected to run for approximately 25 minutes. The interviews will be conducted in two parts:

- **Part 1: Background information** will be collected at the beginning of the individual interviews via a brief questionnaire (see below)
- **Part 2: Experiential information** will be collected to identify your experiences, perceptions and expectations about hospital specialist clinics.

### Part 1: Background Information

This part is designed to obtain information on you, your work practices and the care you provide and will be used to complement the interview that will be conducted with you.

**Gender (Please tick):** 🌐 Female 🌘 Male

**Age Group (Please tick):** 🕐 25-34 🕐 35-44 🕐 45-54 🕐 55-64 🕐 >65

**Location of practice (Please tick):** ★ Rural ★ regional ★ Metropolitan

**Length of time as clinic manager (Please tick):**

- 🕐 <5
d- 🕐 5-9
d- 🕐 10-14

**Average number of patients seen each week in this clinic? (Please tick)**

- 🕐 <50
d- 🕐 50-100
d- 🕐 100-150
d- 🕐 150-200

**If you manage more than one clinic, what is the average number of patients seen each week in all these clinics? (Please tick)**

- 🕐 <50
d- 🕐 50-100
d- 🕐 100-150
d- 🕐 150-200
Part 2: Experiential Information

This part is designed to identify your perceptions, experiences and expectations about patient referral to hospital specialist clinics

1. What is your understanding about the purpose of hospital specialists clinics?
   
   **Prompts**
   
   • Has this purpose changed? If so, why?

2. What role do GPs play in hospital specialists clinics?
   
   **Prompts**
   
   • What are your experiences of GP referrals into outpatients?

3. What are GP expectations of hospital outpatient clinic services?
   
   **Prompts**
   
   • What are consumers and specialists expectations?
   • Do they match resources? Are they realistic?

4. How could patient access to outpatients improve from a Unit Manager’s point of view?
   
   **Prompts**
   
   • Is there anything GPs can do to help/hinder GP referral?
   • Are there things that specialists can do to help/hinder GP referral?
   • What about patients, do they help or hinder GP referral? How?
   • What about clinic managers, do they help or hinder GP referral? How?

5. What impact is the GPLO having on GP referrals to hospital specialist clinics?
   
   **Prompts**
   
   • What is the role of GPLOs?
   • What qualities do GPLOs require to improve the GP-hospital interface?

6. What has been your experience with pre-referral guidelines?
   
   **Prompts**
   
   • Do GPs know or you use them?
   • Are they useful or not useful? And why?
• How would you modify the guidelines if you could to assist your referral?

8. What changes need to occur to improve the relationship between GPs and specialists in the GP-hospital interface?

Prompts

• What could outpatients services do to assist GPs to better manage their patient in the community?
• Other Changes:
  • Organisational, payment & regulatory arrangements
  • Pre-referral guidelines
  • Opportunities to get-to-know specialists & GPs (vice-versa)
Hospital Specialist Individual Interview

Project: Audit of Referrals to Public Hospital Specialist Clinics

Principal Researcher(s):

- Lucio Naccarella, PhD; Amie Bingham (The University of Melbourne)
- Jane Measday (General Practice Victoria)

The semi-structured interviews will take place either face-to-face or via telephone and will be expected to run for approximately 25 minutes. The interviews will be conducted in two parts:

- **Part 1: Background information** will be collected at the beginning of the individual interviews via a brief questionnaire (see below)
- **Part 2: Experiential information** will be collected to identify your experiences, perceptions and expectations hospital specialist clinics.

### Part 1: Background Information

This part is designed to obtain information on you, your work practices and the care you provide and will be used to complement the interview that will be conducted with you.

**Gender (Please tick):**
- ° Female
- ° Male

**Age Group (Please tick):**
- ° 25-34
- ° 35-44
- ° 45-54
- ° 55-64
- ° >65

**Location of practice (Please tick):**
- ° Rural
- ° Regional
- ° Metropolitan

**Length of time working in this clinic (Please tick):**
- ° <5
- ° 5-9
- ° 10-14
- ° 15-19
- ° >20

**On average how many patients would you see per week? (Please tick):**
- ° <25
- ° 25-50
- ° >50

**What is your discipline? (Please tick):**
- ° Medical oncology
- ° Radiation oncology
- ° Surgery
- ° Haematology
- ° Palliative care
- ° Other, please specify________

**How many years have you practised in your current discipline? (Please tick):**
- ° less than 5
- ° 5-10
- ° 10-15
- ° 15-20
- ° more than 20

**What is your estimated percentage of time currently spent in/occupied in:**

_____% Private practice  _____% Public practice  _____% Other
Part 2: Experiential Information

This part is designed to identify your perceptions, experiences and expectations about GP referrals to hospital specialist clinics

1. What is your understanding about the purpose of hospital specialists clinics?

Prompts

- Has this purpose changed? If so, why?
- Has your work as a specialist changed? If so, why?

2. What is your understanding of the role of GPs in this part of the public health system?

3. What has been your experience of GPs referrals to hospital specialist clinics?

Prompts

- Are they realistic?
- Are they useful?

4. Do you get different standards of GP referral to private specialist clinics compared to public specialist clinics? If so why?

5. How could patient access to outpatient services improve from a specialist point of view?

Prompts

- Is there anything GPs can do to help/hinder GP referral?
- Are there things that specialists can do to help/hinder GP referral?
- What about patients, do they help or hinder GP referral? How?
- What about clinic managers, do they help or hinder GP referral? How?

6. What impact is the GPLO having on GP referrals to hospital specialist clinics?

Prompts

- What is the role of GPLOs?
- What qualities do GPLOs require to improve the GP-hospital interface?

7. What has been your experience with pre-referral guidelines?

Prompts
• Do GPs know or you use them?
• Are they useful or not useful? And why?
• How would you modify the guidelines if you could to assist your referral?

8 What changes need to occur to improve the relationship between GPs and specialists in the GP-hospital interface?

Prompts

• What could outpatients services do to assist GPs to better manage their patient in the community?
• Other Changes:
  ○ Organisational, payment & regulatory arrangements
  ○ Pre-referral guidelines
  ○ Opportunities to get-to-know specialists & GPs (vice-versa)

9. What would you as a specialist be prepared to do, or think could be done to assist GPs to better manage their patients in the community

Prompts:

• What could their professional group do to improve the interface?
• How do they see GPs/Specialists/outpatient departments coming to any agreement about what conditions should be dealt with in primary care/ or outpatients.