THE DEVELOPMENT OF PRIMARY CARE ORGANISATIONS IN NEW ZEALAND

A review undertaken for Treasury and the Ministry of Health

Laurence Malcolm
Lyn Wright
Aotearoa Health

and

Pauline Barnett
Christchurch School of Medicine

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Preface and acknowledgments

This report was prepared at the request of the Ministry of Health and Treasury. It has sought to document and analyse developments in primary medical care and related services especially in recent years and, through these insights, to contribute to the development of a national primary health care policy and strategy.

We are grateful for the many agencies and individuals who contributed to the initiation of the project, the provision of information and to commenting on the early and final drafts of this review. We are particularly indebted to the Ministry of Health and Treasury for funding the project and for follow up comments, and to the Health Funding Authority for its support in providing information and subsequently commenting on the draft.

We are also very grateful to many IPAs/PCOs and other provider organisations and individuals who provided us with information through surveys and information resources, and for comments on earlier drafts. The comments of the Independent Practitioners Association Council, through Carolyn Gullery, were also appreciated.

We hope that this report will make a significant contribution to what we believe is the next phase in progress towards a comprehensive and integrated primary health care service.

Laurence Malcolm
Lyn Wright
Pauline Barnett

Disclaimer

This paper is the work and opinions of the authors and does not necessarily represent the views of the Ministry of Health or the Treasury.
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EXECUTIVE SUMMARY

Overview, aims and definitions

1. This review documents the major recent developments in general practice and primary care. More than 80% of GPs are now members of primary care organisations (PCOs). The review is seen as contributing to the development of a national primary care policy and strategy.

2. The objectives of the review were to develop a descriptive overview, classification and a preliminary analysis of PCOs; identify gaps in the information needed to evaluate PCOs; and provide insights into the possible future of PCOs within the New Zealand health system.

3. PCOs are defined as organisations which provide comprehensive, generalist care with primary medical care as the core service, and which have a contractual relationship with the Health Funding Authority (HFA).

4. Four main organisational categories of PCOs have been identified: independent practitioner associations (IPAs), contracting practices, loose networks and community owned and driven agencies. IPAs are distinguished by the fact that they are co-ordinated over multiple sites and practices while contracting practices have a single practice base. All PCOs, except loose networks, have resource management contracts with the funder.

Information sources

5. Information for this review was sought from the HFA, PCOs and other sources. PCOs were also asked to complete a questionnaire to update information obtained from previous surveys in 1994, 1996 and 1998. Information was also sought from PCOs on new services being provided and quality initiatives. The review also drew on a number of published and unpublished reports.

6. In general, information was widely variable and often incomplete. Despite good co-operation from both PCO and HFA staff, pressure from the current contracting round prevented some material being made available.

Motivational issues in PCO development

7. Despite significant progress key issues facing primary health care were factors in PCO development in the early 1990s. These included the fragmented and peripheral role of primary care, major inequities in access, uncontrolled growth in expenditure, lack of clinical accountability for cost and quality, poor information systems and almost no community participation.

8. The recent development of PCOs arose from the 1993 health reforms and the new contracting relationships with the regional health authorities (RHAs). For RHAs the primary interest was control of demand driven expenditure. For PCOs the new arrangements were an opportunity to put general practice and primary health care into a stronger position and to improve health outcomes for patients and communities.
Main achievements

9. By mid-1999 GP membership of PCOs was 2642 or about 84% of the total GP workforce. Of these 2107 were members of 21 IPAs, 86 of 10 contacting practices, 389 of two loose networks and 60 were in some 28 community owned and driven services.

10. The top goals of IPAs are “achieving better health outcomes for your patients” and “making better use of primary care resources”. Also rated highly were “improving the health of the community you serve” and “improving the standards of general practice”. The least highly rated goals were “shifting the balance of services to primary from secondary care” and “involving the communities you serve more actively in service provision”. Professional values remain strong motivators.

11. PCOs have developed many new services in support of good practice such as information systems, clinical guidelines, continuing medical and nursing education, and a range of quality initiatives. New internal relationships among members are leading to shared goals and a sense of identity.

12. PCOs have also developed a wide range of external relationships with non-GP primary care providers and are developing formal community participation initiatives. Relationships are also developing between primary and secondary care, largely initiated by PCOs through service integration projects, for example in diabetes, child health, care of older people.

13. Over the years relationships with both purchasers and HHSs have shown a shift from the initial wariness to a more co-operative if somewhat tentative basis. Relationships with other primary care providers in some cases are still tinged with concern about GP dominance through PCOs. Some PCOs have worked hard to overcome this.

14. A number of PCOs have sought to build better relationships with public health and population based health services. Many are seeking to improve the health status of their enrolled populations through population focused programmes, for example, immunisation and screening. Some are establishing more organised primary mental health care services in collaboration with HHSs. About half of the PCOs are now making moves to develop stronger relationships with their communities via a number of community participation initiatives.

Primary care and PCO funding

15. From northern region data PCOs are responsible for 61.5% of pharmaceutical and 57.9% of laboratory expenditure. GP related expenditure was 79.0% of the total for pharmaceutical and 74.9% for laboratory services. Most of the remainder in the region was incurred by specialists.

16. Funding for PCOs comes from a wide variety of sources including individual shareholders, the RHAs/HFA, and a variety of community sources. However, a large proportion has come government sources but has varied between RHAs and divisions of the HFA.
17. In the 1998/99 financial year estimated overall expenditure was $541.8 million of which $132.3 million was for general medical services (GMS) including capitation, $280.5 million pharmaceutical and $83.7 million for laboratory services. Management costs were estimated to be $13.5 million or 2.5% of overall expenditure, and extra services to patients and communities was $6 million or 1.1%. For most PCOs the HFA paid $6,300 per FTE GP member for management costs.

18. Studies of needs adjusted per capita GMS, laboratory and pharmaceutical expenditure point to wide variation between areas, between PCOs, and especially within PCOs. There is strong evidence of poor utilisation of primary medical care and related services by the most disadvantaged populations, including Māori, and hence low per capita expenditure, confirming the persistence of the “inverse care law” in primary care funding.

**Budget holding and related strategies**

19. Budget holding, both laboratory and pharmaceutical, has been a key strategy in the development of PCOs. Despite this, there have been few evaluations of this strategy. Completed evaluations show that PCOs have implemented comprehensive strategies which compare favourably with those in other countries to improve quality in primary care resource use.

20. Evaluation studies in a number of PCOs show significant changes in prescribing behaviour relating to specific drug categories. Estimated savings range from 5–10% of overall expenditure. No significant reductions have been demonstrated, other than in laboratory utilisation, in the wide variability in per consultation and per capita expenditure.

21. Service integration in primary health care is a key strategy in health services development. PCOs have taken a number of initiatives towards collaboration and integration in recent years. Collaboration is favoured over competition as it mitigates against indifference and/or outright resistance from other organisations. PCOs have established a wide range of integration projects including disease management and age-related services.

**The HFA’s primary care strategy and PCO response**

22. The HFA’s 1998 discussion paper The Next Five Years in General Practice attempted to establish a national strategy for primary care including population-based funding. PCOs’ response indicated a lack of a broad-based consensus on aspects of the strategy, including the overall vision and concern about the major issues facing patient enrolment.

23. Capitated or population-based GMS, pharmaceutical and laboratory expenditure in primary care has received increasing support from PCO leadership, particularly if inclusive of referred laboratory and pharmaceutical expenditure. A 1998 survey found 70% of PCO leadership supported capitation and this appears to have increased.

24. There are major inequities in primary care utilisation and expenditure between regions, sub-regions, PCOs, and within PCOs. Primary care expenditure by PCOs serving poorer populations is generally well below that expected by the HFA funding formula. An effective
strategy is needed which will change clinical behaviour to reduce inappropriate variation so that progress can be made towards implementing population based equity, as agreed to in the recent contract negotiations.

25. Major PCOs have now recognised the need for nationally consistent contracting strategies to which they can all contribute. This recognition led to the formation of the Independent Practitioners Association Council (IPAC) earlier this year. IPAC became the negotiating body for the majority of IPAs in the 1999 contract round.

26. The new national contract includes common goals, recognition of the need for strategic vision, acceptance of enrolment, an agreed set of principles underpinning primary care, and an agreement to work towards population-based equitable funding. These agreements represent a major step forward in PCO development.

Overview of achievements

27. The key achievement of PCOs has been the organisational commitment to achieving the best health outcomes for a defined population within a set of limited resources. To achieve these goals PCOs have established a range of organisational models, quality initiatives, information systems and are providing many new services.

28. PCOs, as organisations, are also resolving some of the key issues facing primary health care such as developing an advocacy role and identity for primary care, addressing inequities in access to services, improving the quality of primary health care and developing information systems.

Major issues needing to be addressed

29. A key issue yet to be addressed is the perceived growth in the dominance of general practice over other primary care providers, particularly nurses, who are seeking a more independent status. Turning this perceived threat into a collaborative opportunity is a major challenge for PCOs.

30. Other issues include the implementation of population-based equitable funding and capitation, risk management, progressing governance and management roles and the further development in community participation models and information systems.

31. IPAC appears to be an effective body in advancing the organisational capability of primary care to address the key issues listed above. However, it is in only one negotiating body and its development may be perceived to be a further threat to other GPs and non-GP providers.

Where to from here?
32. The emergence of PCOs reinforces both the need for and the opportunity to establish a national primary health care policy and strategy as a key step in the development of the New Zealand health system. Organised primary health care can be a more effective advocate for the important role it can play in a better balanced health system.

33. Key components of this policy and strategy are that primary health care must be organised as a comprehensive, holistic service which integrates all disciplines, is based on population enrolment and is equitably funded. The strategy must plan the shift to equitable funding, build primary health care teams, clarify roles of PCOs, establish a comprehensive primary care information system and build democratic relationships with communities.

Further research and development work

34. Research is a high priority in order to understand and address the wide and apparently inappropriate variation between practices in per capita utilisation and expenditure on GMS, laboratory and pharmaceutical services within PCOs.

35. Many community participation initiatives are being established by PCOs and a study is needed to evaluate these important initiatives.

36. A national study is needed to review and evaluate attempts to establish collaborative, joint venture relationships by PCOs with non-GP providers of primary health care services and with Māori providers and assess how these initiatives are perceived by all participants and to work out how better relationships might be developed.

37. A national strategy is needed to promote a major expansion of research, development and evaluation activity in primary health care.
1 INTRODUCTION

1.1 Purpose of the review

In the last decade general practice in New Zealand has experienced major change. Many general practitioners, from working in individual practices and partnerships, now belong to independent practitioner associations (IPAs) responsible for a wide range of quality programmes and managing an increasing amount of public funding. Larger practices have also entered into new arrangements with funders.

These are not the only type of organised primary care which have evolved in recent years. To meet the needs of specific groups such as Māori, Pacific and other disadvantaged populations, as well as local communities, a diverse range of organisations have evolved providing primary medical care together with a range of other related services.

For this review these evolving forms of primary care development are called PCOs. This review was undertaken to bring together the relatively sparse information currently available, to assist in developing policy advice. The detailed objectives of the project are set out in Appendix 1. In brief, the objectives were:

- to identify and review the available information on the development of PCOs
- to develop a descriptive overview and classification of PCOs
- to provide a preliminary analysis of current PCO models
- to identify gaps in the information needed to evaluate PCOs in order to provide policy advice on a range of issues, including governance, financial management, integration, organisation, community participation, and to achieve the government’s objectives for health and disability support services through PCOs.

The review has brought together available information and provides a preliminary analysis of the development, activities and achievements of PCOs. Gaps in information have been identified that need to be filled by further studies.

The review also provides:

- a historical and policy perspective on the evolution of primary health care New Zealand
- an analysis of what has been learnt
- a view on what the experience, especially in recent years, has shown about the nature and scope of primary health care
insights into how primary health care might become more fundamental within the New Zealand health system.

1.2 Scope and definition of primary health care

One of the problems limiting the development of primary health care has been a lack of clarity as to what it is and what it encompasses within the primary health care framework. We take the pragmatic view that primary health care is defined not only by its broad philosophical approach but also by its level and focus of care, with a specific content provided largely in the community (WHO, 1996).

1.2.1 A philosophy and strategy of care

WHO (1996) has defined primary health care as:

- based on a philosophy of equity and social justice
- a strategy concerned with intersectoral collaboration
- a level of care that is the first point of contact with the health system
- a set of activities that includes basic clinical services.

This view is widely accepted both internationally and in New Zealand (Canny et al., 1999).

1.2.2 An operational level and focus of care

Operationally, primary health care comprises:

- generalist care – the provision of basic clinical service
- comprehensive, holistic care – concerned with all aspects of the individual and family, and provided by an interdisciplinary team
- continuing care – concerned with the continuing health of individuals and families within the context of their family and community
- accessible care – the point of first contact and means of entry to the wider health system on an equitable basis
- a strong emphasis on community participation and community development.

Primary health care contrasts with more “traditional” primary medical care as follows.

<table>
<thead>
<tr>
<th>Primary medical care</th>
<th>Primary health care</th>
</tr>
</thead>
<tbody>
<tr>
<td>• disease focus</td>
<td>• health focus</td>
</tr>
<tr>
<td>• episodic care</td>
<td>• continuing care</td>
</tr>
</tbody>
</table>
- treatment of illness
- individual providers
- individual patient focus
- medically led
- comprehensive care
- team care
- practice and population focus
- community involvement in leadership

Primary health care contrasts with secondary health care, as follows.

<table>
<thead>
<tr>
<th>Primary</th>
<th>Secondary</th>
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<tbody>
<tr>
<td>generalist</td>
<td>specialist</td>
</tr>
<tr>
<td>holistic</td>
<td>focus on only one set of problems</td>
</tr>
<tr>
<td>continuing</td>
<td>episodic</td>
</tr>
<tr>
<td>comprehensive</td>
<td>limited in scope</td>
</tr>
</tbody>
</table>

The defining feature of primary health care is that primary health care professionals, through PCOs, are collectively accountable for the provision of this generalist, comprehensive, continuing and accessible care.

1.2.3 Content of primary health care

Primary health care may include:

- primary medical care and related services such as pharmaceutical and laboratory services
- primary nursing care
- allied health professional services such as physiotherapy, social work and occupational therapy
- primary disability care, for example, community support services
- sexual health services
- primary maternity services
- primary level population health services provided in clinical settings

1.3 The scope of PCOs

Sections 1.2.1 and 1.2.2 above describe the service focus and content for primary health care, but it is important that there is also a consistent understanding of the term “primary care organisation”. For the purpose of this review we have defined PCOs are defined as organisations which meet the following three criteria:

- provides or seeks to provide the requirements of the focus and level of care, that is, comprehensive, generalist care which is accessible to the community

- provides primary medical care as the core service

- have a contractual relationship with the HFA for the management of services.
This definition excludes “special purpose” primary care services which do not offer a comprehensive service, such as Family Planning those which do not provide primary medical care (eg such as Plunket) or services outside a contractual framework (such as individual GPs making claims for general medical services under the standard payment terms (as laid down in a notice under section 51 of the Health and Disability Services Act 1993).
2 METHODS USED

2.1 Framework for the review

This review is based on an information from both a wide range of existing sources and elicit information taken from PCOs. PCOs were requested to complete a questionnaire to update surveys undertaken in 1998. This related to new developments including the provision of new services and quality initiatives.

A number of extended interviews were conducted with PCO leaders. This provided further information relating to issues such as the implementation of capitation, the management of geographically dispersed PCOs, the development of information systems and quality initiatives.

The information supplied by PCOs was confidential and would only be disclosed with the agreement of the PCO concerned. In bringing together this information we have also drawn upon our personal experience and knowledge of PCOs, and relationships with PCO members built up over many years.

2.2 Information sources

Three main sources of information were used: HFA documentation; PCO documentation; and independent research studies.

2.2.1 HFA documentation

A variety of documents were obtained from the HFA, the most significant being:

- HFA Board Paper, 14 April 1998, General Practice Strategy
- the HFA’s General Practice Strategy of 1998 and the submissions and comments relating to this
- follow up of Midland Evaluation of PrimeHealth
- Quality Pharmaceutical Report for First Health
- an undated list of PCOs with GP and population data and operating payments for 1998/99.
- informal documents, largely in draft form
- Trends and expenditure in GMS laboratory and pharmaceutical services obtained from Health Benefits Ltd.
• **Problems with HFA information**

Despite the willingness of HFA staff to assist there were constraints on their capacity to provide information. For example:

- pressures upon staff to give to give priority to ongoing HFA activities, in particular the completion of the current contracting round together with the merging of the four regions, led to difficulties in retrieving material from the HFA’s filing system. Some categories of information supplied were incomplete.
- some data supplied was widely variable, for example, categorising PCO-related expenditure, particularly for the funding of projects additional to laboratory and pharmaceutical management.
- no readily accessible trend data was available on major PCO expenditure categories such as GMS, practice nurse, laboratory and pharmaceutical services.

2.2.2 **PCO documentation**

An email was sent from the Ministry of Health/Treasury to all PCOs indicating the nature and extent of the project, and requesting support for it. This was followed up by an email from the authors, together with a questionnaire, requesting “off the shelf” documents, reports, newsletters, annual reports, and any other material relating to the development, activities and achievements of PCOs.

This correspondence was also sent to other organisations, such as Health Care Aotearoa, which represents the contracting interests of a large range of PCOs serving largely disadvantaged populations.

• **Problems with PCO documentation**

Some difficulties were also experienced in obtaining information from PCOs for the following reasons.

- Almost all PCOs were heavily engaged in the final stages of contract negotiation with the HFA.
- Relatively few PCOs had “off the shelf” documents such as annual reports, reports on particular studies or evaluations of their activities readily available.
- Few had undertaken any reviews and evaluations including any evaluation of budget holding.
- Most, for reasons of commercial sensitivity, were reluctant to provide financial information relating to their organisations, but most were willing to supply information relating to funding arrangements with the HFA for management services and special projects.
- Limited documentation was received on Māori organisations.

2.2.3 **Independent research and evaluation studies**
A range of studies were used for the review. They include:

- three surveys of PCOs from 1994 (Malcolm and Powell, 1996a), 1996 (Malcolm and Powell, 1996b) and 1998 (Malcolm et al, forthcoming) as a basis for building a more complete picture of PCO development
- a number of studies evaluating PCO budget holding which are largely unpublished (Malcolm, 1997a; Malcolm, 1998a&b; Malcolm et al, 1999)
- a study for the HFA on primary care utilisation and expenditure in the Auckland subregions (Malcolm, 1998b).

There is little independent published research, but where this is available it is cited in the text. We have also accessed unpublished data and reports kindly made available by other researchers and cited below.
3 POLICY AND HISTORICAL CONTEXT

3.1 International policy context

Primary health care has become an important policy priority in the health systems of most countries. It was recognized to be a new approach in the 1970s and formally launched with great expectations at the Alma Ata Conference in 1978 (WHO, 1978). It was seen then, as now, to be a key strategy in resolving major health service problems such as poor access, inequities in health status, rising costs, and failure to develop community participation.

There were widely held expectations about progress towards health systems based upon primary health care, with its emphasis upon social justice, broad concept of health, an intersectoral approach and participation by communities (WHO, 1981, 1996). However, progress has been slow (WHO, 1993; World Bank, 1997).

3.2 Primary health care in New Zealand to the early 1990s

The development of general practice and primary health care in New Zealand has been through steady, if not always easy, progress since the Social Security Act 1938. In 1941 GMS funding by a range of methods was introduced, including capitation, although fee for service has always been overwhelmingly preferred by GPs. Discussion about the development of general practice until recently has centred mostly upon the declining level of GMS, and more recently ACC payments, associated with inflation. Apart from funding issues, some important steps in primary care organisation, development and funding over the last three decades have been:

- the formation of the Royal New Zealand College of General Practitioners in 1972, and the subsequent development of the Family Medicine Training Programme and Medical Council General Practice Vocational Registration in 1996.

- attempts to improve access to primary care for disadvantaged populations for example in the 1970s, through the construction of health centres by hospital boards in areas such as South Auckland and Porirua and, in the 1980s, through the establishment of union subsidised health centres

- exploring alternatives to fee for service arrangements. For example, capitated funding was initiated by Otorohanga Health Centre in Tauranga in 1979 (Seddon et al, 1985), and subsequently taken up by a number of general practices including union health centres in the 1980s (Crampton, 1999)

- discussion in the late 1980s under Health Minister Caygill of integrating primary health care, including funding, into area health boards. However, in 1989, the Health Minister Helen Clark moved away from this and introduced a voluntary GP contract scheme which involved a cap on GMS funding and fee-fixing by the government. This was taken up by only a minority of GPs (Matheson and Hoskins, 1992) and was challenged in the courts by the Royal New Zealand General Practitioners Association (NZGPA).
The contract scheme, and changes to maternity services in 1990, were factors undermining the fragile relationship between the government and GPs. Government subsidies to GPs remained largely on an open ended fee-for-service basis with significant patient co-payments.

3.3 Issues for primary health care in the 1990s

Analyses of primary health care (Choices for Health Care, 1986; Upton 1991, Malcolm, 1993; Barnett, 1993; Kearns and Barnett, 1992; Malcolm, 1994; Taskforce, 1994; Coster and Gribben, 1999) have highlighted the following issues facing the organisation and development of primary health care at the beginning of the decade.

- Its peripheral and fragmented role in contrast to the well-organised power and status of the hospital.
- Uncertain and often confrontational relationship with government.
- A lack of clear identity and consensus on how it might best be organised.
- Major inequities in the distribution of primary medical care and related services, reflecting the “inverse care law”, that is, most in need of care are those least likely to receive it.
- Significant financial and other barriers to access.
- Uncontrolled growth, with demand driven funding, in referred services expenditure such as laboratory and pharmaceutical services, a growth well in excess of population and inflation.
- A lack of collective clinical accountability for cost and quality of care.
- A serious absence of information systems to manage, monitor, research and evaluate primary care development.
- Fragmentation between primary and secondary care which has led to cost shifting between each sector.
- Almost no community participation in primary health care development.
4 DEVELOPMENT OF PRIMARY CARE ORGANISATIONS IN NEW ZEALAND 1991–1999

4.1 Overview of developments

The health reforms created a new environment for primary health care, and important developments followed the publication of the 1991 Green and White Paper.

The Paper was vague on the future of general practice and primary care, but it was clear that the government was seeking an alternative to uncapped expenditure. The Health Reforms Directorate, established to assist with the implementation of the reforms, sponsored 10 pilot projects which were intended to explore alternative methods of funding and managing primary health care services, including multi-practice arrangements and budget holding (Kirk, 1994). The Health Reforms Directorate also part-funded (with the NZPGA) the Uniservices Report (University of Auckland, 1992) which explored the prospects for IPA development and became the basis for some early initiatives.

Developments in contracting and alternative methods of funding and managing services were initially either resisted strongly or treated with caution by the majority of GPs. The main opposition was voiced by the GP Action Group and to a lesser extent, for short period, by the NZGPA and NZMA.

Early successes in contracting, in budget holding for pharmaceutical and laboratory services and establishing new services, arising in part from budget holding savings, led to the gradual and progressive recruitment of PCO membership. Numbers and membership of GP-led PCOs expanded so that by 1996 some 60% of GPs were represented by their PCO (Malcolm and Powell, 1996; MOH, 1998). Numbers grew to more than 70% by the end of 1998 (Malcolm et al, forthcoming).

4.2 The process of change

There has been considerable interest in and commentary on the processes of formation of PCOs, but little substantive research, (Brown et al, 1998). Research into PCO “rank and file” members is in progress but not yet available. Preliminary findings from a 1997 study of 28 leaders of GP organisations (mainly IPAs but including some contracting practices and loose networks) sheds considerable light on the emergence of commitment, motivation, and facilitating and inhibiting factors. This research in progress (Barnett), is summarised below

Interview survey of GP leaders- 1997

- Emergence of commitment

By the end of 1993 around 20 groups had taken the initiative to form a new entity and at least begin negotiations with RHAs, with some contracts signed. The more proactive had a high level of political awareness, and recognised that some local benefit might accrue. Other GP leaders expressed greater levels of caution about both the government and RHAs and an element of distaste
for “non-doctoring” activities. This group also reported a growing understanding of the issues, the recognition of the inevitability of change and a growing confidence in dealing with RHAs.

- **Motivation**

Three broad influences on the decision to proceed with forming the new organisation and negotiation of a contract are identified. The most important is the desire for professional security (19 respondents), which includes both the service provision and business element of general practice—the “service enterprise”. A similar number (18) reported service development as important, with nine leaders having a specific vision which included teamwork and integration within primary care.

Others saw opportunities to improve relationships with secondary care, reallocating resources and upgrading doctors’ skills. Nine GP leaders identified “disciplinary enhancement” as an important factor. They reported low morale and decline of the role of the GP. They described disempowerment, a sense of exclusion and loss of control.

- **Facilitating and inhibiting factors**

Forming a PCO was essentially a local task, and larger PCOs, with some exceptions, often arose out of the merger of smaller groups. The existence of some local infrastructure (eg, after-hours group, active NZMA group) was helpful, along with recognised local leadership.

Occasionally a few individuals (eg, Dr Tom Marshall) were seen as having had a wider role. In terms of the wider health sector, the national policy framework was clearly influential as, occasionally, were local circumstances (eg, CHE relationships). The dominant factor was the RHA. In the early stages two styles were noted, with Central and Southern seen as more low-key, relatively responsive but not taking initiatives. Northern and Midland were seen by GP leaders as trying to manage the sector more actively.
5 OVERVIEW OF PRIMARY CARE ORGANISATIONS

5.1 Sources and categories of information

The following information is based on a survey of IPAs/PCOs in 1998 (Malcolm et al., forthcoming) and a follow up survey undertaken for this review in June 1999. Thirty-seven PCOs were surveyed in 1999 and of these 22 or 60% responded directly to the questionnaire attached as Appendix 2. Information was obtained from non-respondents by follow up email and telephone calls. A complete list of the PCOs is shown in Appendix 3 with contact person, GP membership and email address.

PCOs can be characterised broadly by their governance, service co-ordination and contract arrangements into two broad categories: GP-led PCOs (mainly IPAs but also contracting practices and loose networks) and community owned and driven arrangements, such as community trusts, iwi health services, and so on. Table 1 summarises the categories of PCOs from Appendix 3.

Table 1 Characteristics of PCOs

<table>
<thead>
<tr>
<th>Category</th>
<th>Primary control: GP or community driven?</th>
<th>Co-ordination: single or multiple sites?</th>
<th>GP membership/numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPAs (21)</td>
<td>GP</td>
<td>Multiple</td>
<td>2123</td>
</tr>
<tr>
<td>Contracting practices (10)</td>
<td>GP</td>
<td>Single</td>
<td>86</td>
</tr>
<tr>
<td>Loose networks (2)</td>
<td>GP</td>
<td>Multiple</td>
<td>389</td>
</tr>
<tr>
<td>Community owned (28)</td>
<td>Community</td>
<td>Variable</td>
<td>60</td>
</tr>
</tbody>
</table>

There has been a progressive growth of GP-led PCOs in New Zealand. In 1994/95 the size varied from a group practice of five to the largest of 198 with a mean of eight members. The total GP membership of those responding was 1263 (Malcolm and Powell, 1996).

Beyond the reported figures it was known that the membership of the groups that did not respond brought the total estimated membership up to 50% of all general practitioners. In the third survey of late 1998 the total membership of GP-led PCOs was 2000 or approximately 70% of all GPs. Membership of GPs in other contracting PCOs brought this total to nearly 80% (Malcolm et al., forthcoming).

The figures at mid-1999 show further growth in PCO membership. If the total number of GPs is still approximately 3159 (Medical Council, 1999) the number in all PCOs is now 84% of this total. However, there are some uncertainties with these figures and allowance must be made for factors such as locums and registrars in training being counted in PCO and Medical Council figures.

5.2 GP-led PCOs

5.2.1 Categories and size

PCOs differ markedly in their composition, size, organisational arrangements and focus. The following is a summary of the features of the GP-led PCOs.
• **Independent practitioner associations (IPAs)**

Table 2 lists the 21 PCOs categorised as IPAs. They have the following features.

- They are organised over a number of practices.
- They have a single contract for the collective management of resources, clinical activity and quality, that is, a comprehensive focus.
- Networking occurs between the group’s practices to support the management and contracted activities.

<table>
<thead>
<tr>
<th>Compendia Health Services Ltd</th>
<th>Procare (Central, North, South)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Health Services Ltd</td>
<td>Progressive Health (NZ) Inc</td>
</tr>
<tr>
<td>First Health &amp; PrimeHealth</td>
<td>Rotorua General Practice Group</td>
</tr>
<tr>
<td>Hawkes Bay I. Providers Assn. &quot;Paradigm&quot;</td>
<td>Selwyn Rural Health</td>
</tr>
<tr>
<td>Hurunui-Kaikoura Rural Health</td>
<td>South-Med Ltd</td>
</tr>
<tr>
<td>Hutt Valley IPA</td>
<td>South Link Health</td>
</tr>
<tr>
<td>Independent Primary Care Services</td>
<td>Taranua IPA</td>
</tr>
<tr>
<td>Manawatu IPA</td>
<td>The Doctors (Hawkes Bay)</td>
</tr>
<tr>
<td>Mangere Health Resources Trust</td>
<td>Wellington IPA</td>
</tr>
<tr>
<td>Pegasus Medical Group</td>
<td>Whangarei HealthCare Ltd</td>
</tr>
<tr>
<td>Pinnacle</td>
<td></td>
</tr>
</tbody>
</table>

There are wide variations between IPAs in ownership, legal status and level of geographic proximity. “Mainstream” IPAs are GP owned (18/20 respondents) and have largely GP membership. There are two variants on this. First Health networks, with sites in Northland, Auckland, Waikato, Taranaki, Eastern Bay of Plenty and Tairawhiti, are fully owned subsidiaries of Aetna an American company providing management services to the networks. First Health is a joint venture partner with GPs in the PrimeHealth area providing contestable management services. The Mangere Health Resources Trust has a different philosophy in its contracting and membership status and has a strong community base and.

Legal status of IPAs is largely that of a limited liability company (12/17 respondents), three incorporated societies and one not-for-profit community trust. The majority of IPAs have GP members only (15/20 respondents), five include nurses and some include other health care professionals.

Most IPAs tend to be geographically concentrated in one area. By comparison First Health has geographical bases in Auckland, Taranaki, East Coast (Tairawhiti area) and Waikato giving a mixed rural/urban constituency. Pinnacle covers large parts of the HFA Midland area from Taranaki to Coromandel. Southlink Health, covering all of the South Island excluding Nelson and Marlborough...
and with some members in Christchurch, probably has the widest geographic spread and a disparate mix of rural/urban interests.

- **Contracting practices**

Contracting practices are characterised as individual practices contracting with the HFA to manage their own resources, clinical activity and quality. The number of GPs involved with each contract is small (mean of 8.6). Commonly they are GP owned – three of the six respondents are partnerships, two are limited liability companies and one community trust. Table 3 shows the organisations classified as contracting practices.

**Table 3  Contracting practices**

<table>
<thead>
<tr>
<th>Bay Health Ltd.</th>
<th>Papanui Medical Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christchurch South Health Centre</td>
<td>Pukekohe Health Services</td>
</tr>
<tr>
<td>Dargaville Medical Centre</td>
<td>Westview Medical Centre</td>
</tr>
<tr>
<td>Kaikohe IPA</td>
<td>Whangaroa Health Services</td>
</tr>
<tr>
<td>Karori/Ropata IPA (KRIPA)</td>
<td>Upper Hutt Medical Centre</td>
</tr>
</tbody>
</table>

- **Loose networks**

Loose networks are a recent formation of groupings of individual GPs and practices. They are an alternative organisational model for those unwilling to enter into budget holding contracts. They may be united by a common philosophy. For example the Nelson/Tasman Clearing House is a local network providing Section 51 based primary care services to patients (that is the doctors claim payments from the HFA through a notice issued under Section 51 of the Health and Disability Services Act 1993). The groups may have special purpose contracts such as providing communication between members, local practice guidelines, immunisation co-ordination and diabetic surveillance support rather than contracting for budget holding.

There are some 389 GPs involved in two groups. One is an incorporated society and non-GP membership includes practice nurses. Table 4 shows the PCO organisations categorised as loose networks.

**Table 4  Loose networks**

<table>
<thead>
<tr>
<th>Loose networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marlborough GPs Society</td>
</tr>
<tr>
<td>National Primary Care Network (&quot;Carenet&quot;) includes Nelson Clearing House</td>
</tr>
</tbody>
</table>

Appendix 3 also lists two practices still on Section 51 but that want a contract with the HFA. This has so far been denied for a variety of reasons including size.
5.2.2 Governance and management

The response to questions on staffing was mixed with some reporting FTEs and others reporting part-time staff. Overall, those responding indicated a staff of 202, giving an average of 6.5 per responding PCO. IPAs employed the majority of staff (169), which had an average of nine staff members each. Twenty-one of the 28 respondents to the 1998 survey had a CEO or general manager. See Table 5.

Table 5 Governance and management of PCOs by category (survey respondents)

<table>
<thead>
<tr>
<th></th>
<th>IPAs (n=19)</th>
<th>Contracting practices (n=9)</th>
<th>Loose networks (n=2)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing: - total</td>
<td>169</td>
<td>30</td>
<td>3</td>
<td>202</td>
</tr>
<tr>
<td>- average</td>
<td>8.9</td>
<td>4.3 (1)</td>
<td>- (2)</td>
<td>8.8</td>
</tr>
<tr>
<td>Directors: - GPs</td>
<td>116</td>
<td>39</td>
<td>21</td>
<td>176</td>
</tr>
<tr>
<td>- other</td>
<td>6</td>
<td>13</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>PCOs with community representatives on boards</td>
<td>6</td>
<td>-</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Legal status:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ltd Liability co</td>
<td>14</td>
<td>3</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>Inc Society</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- partnership</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>- Trust</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

Among responding PCOs, GP board members totalled 176. Once again the majority, 169, were on IPA boards. There were 30 directors who were not GPs with the bulk of these (13) serving on the boards of contracting practices. Seven organisations indicated that they had community representatives on their boards and of these six were IPAs. No contracting practices had community representatives on their boards.

Of those PCOs indicating they had formed legal entities, 17 were limited liability companies and six were incorporated societies. There were four partnerships and two non-profit trusts. IPAs tended to have the majority of limited liability companies, 14 out 17. There may be a trend for IPAs to become non-profit trusts to indicate their rejection of perceived profit making for members.

5.2.3 Goals and policies

In the 1998 survey GP-led PCOs (IPAs, contracting practices and loose networks) were asked to rate a list of goals on a five-point scale from very important to unimportant, and then select their most important goal, (Malcolm et al, forthcoming). The highest rating goal was “achieving better health outcomes for your patients” which was also the most frequent response. “Making better use
of primary care resources” was rated equally highly as was “improving the health of the community you serve”.

The lowest rated goals were “shifting the balance of services to primary from secondary care” and “involving the communities you serve more actively in service provision”. These goals and ratings were similar to those of the 1996 survey (Malcolm and Powell, 1997). Professional values remain strong motivators (see table 6).

**Table 6  Rating of the goals of GP-led PCOs**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Goal weighting (out of possible 5)</th>
<th>Most important goals, no of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieving better health outcomes for your patients</td>
<td>4.8</td>
<td>7</td>
</tr>
<tr>
<td>Making better use of primary care resources</td>
<td>4.8</td>
<td>1</td>
</tr>
<tr>
<td>Improving the health of the community you serve</td>
<td>4.7</td>
<td>3</td>
</tr>
<tr>
<td>Improving standards of general practice</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>Integrating your services with other providers of primary health care, nurses, etc.</td>
<td>4.4</td>
<td>0</td>
</tr>
<tr>
<td>Becoming a stronger negotiating body with the HFA</td>
<td>4.3</td>
<td>0</td>
</tr>
<tr>
<td>Improving services for patients through holding integrated budgets</td>
<td>4.2</td>
<td>1</td>
</tr>
<tr>
<td>Protecting the status of general practice</td>
<td>4.2</td>
<td>1</td>
</tr>
<tr>
<td>Integrating primary and secondary care services</td>
<td>4.0</td>
<td>1</td>
</tr>
<tr>
<td>Shifting the balance of services from secondary to primary care</td>
<td>3.7</td>
<td>0</td>
</tr>
<tr>
<td>Involving communities you serve more actively in service provision</td>
<td>3.7</td>
<td>2</td>
</tr>
</tbody>
</table>

Several questions sought information about the organisations’ policies, including computerised registers, capitation payments and financial risk management. Computerised age-sex registers are totally supported with almost total coverage of members’ practices. There was majority support (19) for formal patient enrolment with only four IPAs opposed to this.

With respect to financing and risk-management policy there was more diversity. In terms of current financing, the main source for PCOs was HFA budget holding (14), with some receiving HFA special grants (5), and HFA special projects funding (3). “Other” reported sources of funds were uncommon, but included investment income, contracts for services (eg, with the Ministry of Health or local HHS), computer services and software, and management fees.

In 1998 the HFA signalled its intention to establish integrated, capitated budgets (Health Funding Authority, 1998b). Most respondents opposed or were uncertain about individual budgets for GMS and associated services, laboratory or pharmaceutical services. A majority (14 out of 24 respondents) supported integrated budgets for all of these combined. Only five groups indicated...
opposition. There was also strong support (21) for a move from historical to population needs-based funding with only three opposed to this.

Eleven supported the acceptance of funding to purchase secondary care services, six opposed this and seven were uncertain. Seventeen of the 28 respondents opposed taking on the risk of going over budget. This indicates less opposition than in previous surveys. On the other hand almost all respondents (26) opposed retaining savings as personal benefits. There was no particular pattern with respect to these responses except that those opposed to enrolment were also opposed to holding budgets and taking on risk.

5.2.4 Information systems

All PCOs have established information systems to enable them to manage, monitor and evaluate the performance of their organisations. These information systems include:

- computerised registers in member practices with data on age, gender, Community Services Card (CSC), High Use Health Card (HUHC) and, in some cases, disease registers
- establishment of central PCO information systems which receive data from practices for a central patient register which ensures, as far as possible, a record of the actual population served by the PCO
- the ability to receive data from external sources such as HBL related to pharmaceutical, laboratory and, in some cases, gms claim data
- the ability to analyse data and provide personalised feedback to members on prescribing and laboratory utilisation on expenditure, volume and particular drug or laboratory test categories
- overall analysis of primary care related expenditure by members and, in more sophisticated systems, per capita expenditure adjusted for age, gender and CSC weightings in order to determine more precisely the nature and extent of variation between member practices
- allocation of National Health Indexs (NHIs) to member practices and patients and the ability to develop a PCO NHI register.

5.2.5 New developments

PCOs were asked to list developments introduced since their establishment and to indicate whether these were for members, patients or communities. This was grouped around emerging themes of management, health service delivery, improved access, joint ventures and integrated care and improved relationships.

- Management

PCOs reported a variety of initiatives related to management support. Some examples included information technology support and computerised record keeping and recall. Computerisation was
also useful for electronic data submissions, and in one case, a patient enrolment pilot. Another new service related to computerisation was the development of software in a number of PCOs.

New services for members included managers undertaking contract negotiations with the HFA, bulk buying and economic analysis. One organisation cited the development of a shared strategic vision. Across both IPAs and contracting practices there was little variance in the type of new management services reported. The single community owned and driven entity reported the introduction of financial management advice, contract assistance, advice on legal matters, computerisation, and advice on personnel matters.

Almost all organisations reported the introduction of data collection analysis and feedback related to referred services. In addition a number of organisations had introduced pharmacy facilitation, prescription guidelines, and prescribing review. These services were seen as a benefit to members.

- **Health service delivery**

Enrolled population-based services benefited mainly patients and, to some extent, the wider community. These initiatives included:

- smoking cessation programmes
- screening vision and hearing
- immunisation programmes including co-ordination and associated quality standards, and programmes targeting infants, 11-year-olds and neonates
- breast and cervical screening
- sexual health services for youth
- health education and promotion services
- a focus on wellness and preventive health services.

There were a number of patient disease management programmes reported. These included:

- spirometry and audiology
- bone scanning
- echocardiograms
- electronic blood pressure monitoring
- COPD and general respiratory specialist consultations
- diabetes and asthma guidelines and information
- a methadone service with associated relationships with relevant agencies
- cardiac rehabilitation, disease coding, and respiratory education.

The following programmes had a wider community focus:

- meningitis awareness
- mouth guard programme
- tattoo removal and associated hepatitis B vaccination
- walking for health
- winter peak planning
enhanced management of chronic diseases.

Other services cited were counselling, relationship services, green prescriptions and vasectomies.

**Improved access**

PCOs reported initiatives aimed at reducing barriers to accessing services. These included:
- the establishment of a hardship grant
- the development of special benefits
- a community dietitian service free to CSC patients and subsidised for other patients
- free terminal care services
- free ultrasound services
- access to elective radiology.

Contracting practices reported a wider range of initiatives. These included:

- subsidised practice nurse consultations
- free sexual health services for adolescents, and assistance with counselling costs
- assistance with private radiology services where speedy access is essential
- subsidised health clinics
- free cervical smears
- benefits for terminally ill patients, access to hospital ENT services
- free skin checks and subsidised excision of skin cancer
- marae based services for Māori.

One organisation has elected to subsidise its GP services.

Three organisations reported initiatives which benefit the wider community. One has adopted community needs assessments, which enables improved service access. A second is funding the local Pasifika Fono and its local HHS health network. The third organisation reported having purchased a van that it has donated to the community to be run by local volunteers.

**Joint ventures and integrated care**

Most of the agencies reporting integrated care and joint venture initiatives were IPAs. These included:
- Māori integrated services
- integrated care for diabetes and respiratory diseases
- child health and well child integrated services
- shared maternity care with HHS midwives
- integrated care for older persons
- mental health service integration
- district nurse liaison
- joint ventures with Plunket
5.2.6 Quality initiatives

This report reviews the responses to Question 3 of the 1999 survey where PCOs were asked to list their quality programmes in planning and those implemented. The discussion focuses on the following emerging themes:

- Quality and staff development.
- Evidenced based service delivery.
- Clinical safety and effectiveness.
- Cultural appropriateness.
- Responsiveness to customer needs.
- Consideration of potential access barriers.
- Appropriate and effective management systems, including quality management.

Table 7 shows the response levels by the category. There are no significant variations between the groupings in terms of their responses.

- Quality and staff development

Both IPAs and contracting practices reported similar new services related to quality and staff development, most commonly continuing medical and nursing education. These services were provided in a variety of ways, with some providers accredited with the Royal New Zealand College of General Practitioners to provide continuing medical education, and some working jointly with other organisations, for example the local HHS.

Staff development for GPs and nurses included general peer review, peer review groups in special disease areas and case studies. Staff development for nurses included practice nurse liaison groups, and practice nurse education. Training for GPs also included items such as minor surgery, training in Māori consultation skills, training in motivational interviewing, business skills and professional accreditation. Other services mentioned included both internal and external audit.

- Evidence-based service delivery

Of the 20 PCOs which responded with information on quality, 15 are using strategies such as guidelines for prescribing and disease management, analysis and feedback on laboratory and pharmaceuticals, and disease and risk registers.
• Clinical safety and effectiveness

A stronger response was evident in terms of quality related to clinical safety and effectiveness programmes, with 17 initiatives implemented and 7 planned. Items noted here include the establishment of risk registers for disease management, continuing medical education and

Table 7  Quality initiatives in place or planned by PCO category

<table>
<thead>
<tr>
<th>Quality grouping</th>
<th>IPAs (n=11)</th>
<th>Contracting Practices (n=7)</th>
<th>Loose networks (n=2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence-based service delivery</td>
<td>In place: 9</td>
<td>Planned: 0</td>
<td>In place: 4  Planned: 0</td>
</tr>
<tr>
<td>Clinical safety and effectiveness</td>
<td>In place: 10</td>
<td>Planned: 4</td>
<td>In place: 6  Planned: 3</td>
</tr>
<tr>
<td>Cultural appropriateness</td>
<td>In place: 4</td>
<td>Planned: 0</td>
<td>In place: 2  Planned: 1</td>
</tr>
<tr>
<td>Responsive to patient needs</td>
<td>In place: 6</td>
<td>Planned: 0</td>
<td>In place: 4  Planned: 0</td>
</tr>
<tr>
<td>Consideration of access barriers</td>
<td>In place: 9</td>
<td>Planned: 2</td>
<td>In place: 2  Planned: 0</td>
</tr>
<tr>
<td>Appropriate and effective management</td>
<td>In place: 11</td>
<td>Planned: 1</td>
<td>In place: 5  Planned: 5</td>
</tr>
</tbody>
</table>

Note: These categories are not cumulative.

continuing nursing education. Among both IPAs and contracting practices, it was clear that training was extended beyond nursing and medical training to other staff and, in one case, to associated community workers. Other items mentioned included the use of guidelines, that is for specific diseases like diabetes, asthma, respiratory illnesses, and so on; and registers for monitoring screening and immunisation rates, along with associated recall systems.

• Cultural appropriateness

The quality initiatives which appear to have had the least attention to date are those relating to cultural appropriateness. Only six respondent PCOs had implemented initiatives and two were planning to do so. First Health and PrimeHealth have employed staff for this purpose in their networks. Of the eight PCOs, five were from the Auckland/Northland area and were focusing on bicultural issues. One South Island PCO has appointed a Chinese community worker to meet local needs.

• Responsiveness to consumer needs
About half of the PCOs indicated quality programmes responding to consumers’ needs. A variety of approaches were being adopted to meet this. These included complaints policies and procedures, satisfaction surveys, setting up consumer liaison committees, consulting on special needs (including those of Māori), working with other community-based agencies in order to establish needs, and conducting market research to establish needs and satisfaction levels. One PCO has a community development director along with a trust fund to support community development initiatives.

The development of new forms of community participation are discussed in Section 9.5.

- Reducing access barriers

There were a number of innovative approaches to reducing barriers to accessing primary care. These included a range of free services (eg, free terminal care, or ultrasound), the running of hardship funds and/or special situation benefits, ensuring that general practitioner development included Māori consultation skills, ensuring 24-hour availability of home visits by doctors, exploration of barriers to particular services (eg, setting in place structure and linkages to a wide range of ethnic and community groups to help identify barriers to access and overcome other cultural barriers to access).

- Management systems

Fifteen PCOs had developed or were developing a management system to provide continuous quality improvement. This, coupled with the quality programme for clinical safety effectiveness, probably reflects the need to get a thorough, sound infrastructure in place to support other developments. A common example was computerisation to establish the electronic database to support registration recall, risk registration, the allocation of NHIs and patient enrolment. Computerisation also allows the monitoring and review of laboratory and pharmaceutical utilisation, and provides a useful tool for business management.

A number of PCOs either had achieved accreditation (eg, ISO 2002, RNZCGP for continuing education) or were working towards it. It was clear that most PCOs had developed quality plans whether for continuous quality improvement of for more specific purposes (eg, health action plans, relating to the management of particular diseases), or achieving target coverage rates for cervical screening and immunisation.

- Research into quality programmes (Houston, unpublished)

The above findings are similar to those of Houston’s 1998 survey. He found that 80% of PCOs surveyed (25) gave high priority to quality via such activities as:

- provision of practice education to employees, 96%
- provision of education to GP members and the development of clinical guidelines, 92%
- clinical guidelines implementation strategies, 84%

22
rational prescribing initiatives, 84%
peer view aged 84%, patient satisfaction surveys and clinical audit, 64%
development of clinical quality standard, 64%
dealing with poor performing members, 52%.

Quality standards then in existence or being developed covered clinical, administrative and patient related topics. They commonly covered areas such as age-sex registers, employment matters, infection control, and asthma, diabetes and immunisation rates. Small cell/peer groups were a common process and focused on education, clinical and pharmaceutical guideline development, and two-way communication between PCOs and members and peer review and support. In addition almost all (96%) members had information technology support and three quarters had pharmacy facilitators.

One of the strengths of the quality initiatives included GP member involvement in developing the quality agenda leading to shared aims and a choice of achievable and measurable topics. Houston reports that an important factor in the success of quality initiatives was a positive attitude by GPs. Negative attitudes constituted a definite barrier. Other barriers noted were time pressures, insufficient money to support the process, and political inconsistency in the commitment to primary care. The professionalism of staff was the most important element in overcoming any barriers. While financial incentives can compensate for time spent, they were not seen as the prime motivator.

### 5.2.7 Internal relationships

We are aware of some anecdotal comments regarding levels of GP satisfaction/dissatisfaction with PCO leadership and management. There has been speculation, for instance, on the "gap" between the aspirations for change on the part of PCO leaders and the views of some members. Some PCOs have undertaken their own surveys of member opinion and made significant efforts to improve communication. A study of these relationships is currently being undertaken by one of the authors.

In the 1999 survey, all categories of PCOs reported improved internal relationships. This was been achieved through such means as bulletins and newsletters to members and better information sharing. One loose network PCO reported that not only were internal relationships improved but also external ones, for example, with the HFA and the Ministry of Health.

The 1998 survey asked PCOs a set of questions designed to elicit the views of IPA leadership, as far as they could tell, on a number of issues relating to internal relationships (Malcolm et al, forthcoming) The results are summarised in Table 8.

While there is a need to treat this information (perceptions of perceptions) with caution it does indicate a positive understanding by PCO leadership of their efforts to build good internal relationships.

**Table 8** Responses of PCOs to asking their level of agreement, as far as they could tell, of members with activities of their PCO
5.2.8 Perceived achievements

In the 1998 survey PCOs were asked to rate a list of achievements as being “very successful” (scaled as 3), “quite successful” (2) and “not very successful” (1) (Malcolm et al., forthcoming). Items included in the list were assessed by the authors to have been important in the development of PCOs and similar groups. From Table 9 it can be seen that the four achievements rated as most successful were “establishing an infrastructure” (2.7 out of 3) “collaboration between members” (2.5), “developing information systems” (2.4) and “primary care resource management” (2.3).

Moderate successes included establishment of new services, development of integrated care initiatives, collaborative external relationships with other providers, collective accountability for primary care resource management, and collective accountability for quality of care. Community involvement, at 1.7, was the lowest rated achievement. A few additional achievements were mentioned, including an effective partnership with Māori, a good working relationship with the HFA, effective management arrangements for the IPA and being a good advocate for integrated care developments.

All respondents reported that, as far as they could tell, their members gave “strong” or “moderate” levels of support to group goals, leadership, communication, the services provided and the opportunities to participate in the activities of their groups.

Table 9 Rating of achievements by PCOs and similar groups

<table>
<thead>
<tr>
<th>Achievements</th>
<th>Not very successful</th>
<th>Quite Successful</th>
<th>Very Successful</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing an infrastructure (27)</td>
<td>1</td>
<td>6</td>
<td>20</td>
<td>2.7</td>
</tr>
<tr>
<td>Collaboration between members (26)</td>
<td>0</td>
<td>13</td>
<td>13</td>
<td>2.5</td>
</tr>
<tr>
<td>Developing information systems (26)</td>
<td>1</td>
<td>13</td>
<td>12</td>
<td>2.4</td>
</tr>
<tr>
<td>Primary care resource management (26)</td>
<td>4</td>
<td>11</td>
<td>11</td>
<td>2.3</td>
</tr>
<tr>
<td>Establishment of new services (24)</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>2.0</td>
</tr>
<tr>
<td>Integrated care initiatives (25)</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>Collaborative external relationships with other providers (26)</td>
<td>7</td>
<td>11</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>Collective accountability for primary care resource management (25)</td>
<td>4</td>
<td>16</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td>Collective accountability for quality of care (26)</td>
<td>7</td>
<td>14</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td>Community involvement (26)</td>
<td>12</td>
<td>9</td>
<td>5</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Average score based on ‘very successful’=3; ‘quite successful’=2; ‘not very successful’=1.
Numbers of respondents in parentheses.

5.3 Community-owned and driven PCOs

5.3.1 Health Care Aotearoa

Over the last 10 years an increasing number of primary care providers have developed a different approach to both organisation and funding. The term “third sector” has been adopted to describe organisations which regard themselves as being non-government and non-profit, and usually employ salaried GPs (Crampton, 1999). The proponents of this classification see this group differing from the private general practice model and the publicly owned special medical area model.

These PCOs began with union health centres in 1987 in South Auckland and in Newtown, Wellington. Subsequently six more union health centres were established in Otara, West Auckland, Hamilton, Christchurch, Porirua and Lower Hutt. The Department of Health promoted these initiatives as a way of providing health care to vulnerable communities.

In 1994 Health Care Aotearoa (HCA) was formed by union and related health centres as a national network of non-profit primary care providers. HCA members are community managed organisations placing strong emphasis on providing services for low-income populations, and on working biculturally. They are referred to as “community managed” because their governance arrangements give primacy to patients and consumers.

HCA members now include some 19 PCOs, and several specialist organisations such as mental health and alcohol and drug services making a total of 33 member and associate member organisations in the HCA network.

Third sector PCOs have developed in New Zealand for a variety of reasons including:

- a response to financial barriers to accessing primary health care services, especially among low income populations
- in response for a desire from iwi and consumer groups to exercise more control over primary health care services.

HCA organisations have developed in areas where particular populations have found it hard to obtain primary care services. These populations include, for example, refugee populations and populations containing large numbers of patients with severe and enduring mental illness.

It is estimated that HCA PCOs serve a population of nearly 100 000 with about 40 FTE GPs.
Features of PCOs in the HCA network are that they:

- serve very disadvantaged populations as measured by the NZDep 96 scores
- have high proportions of Māori and Pacific peoples
- have a high level of health need leading to prolonged consultations
- are all community owned and driven
- provide services which are subsidised with community funding, for example capital and voluntary labour
- tend to have a low uptake of CSC which adds to their disadvantage in HFA funding both capitated and GMS
- have a high patient/GP ratio, usually over 2000.

Unlike most IPAs, HCA is not funded by the HFA for management of budget holding or other contracted services. In recognition of the special needs of the populations served by HCA a substantial grant was provided by the Minister of Health in 1998 to provide new services. This funding was tied to the establishment of new centres working to the HCA model, and the establishment of a quality improvement programme for community-based services. Although this grant was important it did not provide for management type services.
HCA is funded by its members out of very tight budgets. Providers serve patients who cannot afford to pay anything more than minimal fees but who need longer consultations for complex problems that take longer than the average GP consultation (Malcolm, 1996a).

The need is critical for appropriate and sustainable funding for infrastructure development, management of this infrastructure, new services and equitable funding of primary health care services for HCA and other PCOs serving the most vulnerable sections of the population.

5.3.2 Māori PCOs

In its publication Tihei Mauri Ora the Māori Health Commission in 1998 indicated that it was working towards ensuring that Māori participation in the health sector was “across the board”. The goal was to create effective Māori participation in the development and control of mainstream Māori health resources and services.

Progress in Māori PCO development has been one of the important developments arising from the 1993 health reforms (Crengle, 1999). These have been both iwi and geographically based. The key features are;

- a holistic approach to care
- a core of primary medical care services supplemented by a wide range of new and culturally appropriate support services including health promotion and education services which may be funded from the public health “ring fence”
- services sponsored and subsidised by iwi and related Māori funding
- a strong focus upon traditional and cultural approaches to care
- staff in an employment relationship with the service provider
- a strong focus upon improving the health status of Māori.

An important focus of Māori health development has been of the move initially towards managed care by Māori, and more recently expressed as the principle of tino rangatiratanga.

A list of such PCO providers, based on information from various sources including the HFA, is shown in Table 10. There is uncertainty about the completeness of this list. There are some 220 Māori health provider organisations but only a small proportion, are PCOs according to the definition used in this review.

Some of these contract directly with the HFA while others receive contracting support through their membership of Health Care Aotearoa. Māori also receive services designed to meet their needs through Union Health Centres and community trusts, most of which are under the umbrella of Health Care Aotearoa. Many IPAs are seeking to respond to the needs of Māori by establishing joint ventures with Māori groups to provide culturally appropriate services.
The HFA is undertaking a detailed study of Māori PCOs and a report is due to be released in late 1999.

Table 10  Specific Māori PCOs, an estimate of the populations served and their medical staff

<table>
<thead>
<tr>
<th>PCO</th>
<th>Estimate of population</th>
<th>Medical staff</th>
<th>Iwi based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hauora Hokianga*</td>
<td>9600</td>
<td>4</td>
<td>Yes</td>
</tr>
<tr>
<td>Kia Mataara Society</td>
<td>1500</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Te Puna Hauora o te Raka Paewhenua</td>
<td>3000</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>Te Whanau o Waipareira Trust</td>
<td>5000</td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>Ngati Whatua Orakei*</td>
<td>2000</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Raukura Hauora o Tainui: South Auckland</td>
<td>15 000</td>
<td>5</td>
<td>Yes</td>
</tr>
<tr>
<td>Raukura Hauora o Tainui: Waikato</td>
<td>15 000</td>
<td>5</td>
<td>Yes</td>
</tr>
<tr>
<td>Whakatohea (Opotoki)</td>
<td>3000</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Te Oranganui* (Wanganui)</td>
<td>5000</td>
<td>3</td>
<td>Yes</td>
</tr>
<tr>
<td>Kokiri Marae Seaview (Lower Hutt)</td>
<td>2000</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Te Rununga o Toa Rangatira Inc (Porirua) *</td>
<td>2000</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>63 100</strong></td>
<td><strong>27</strong></td>
<td>-</td>
</tr>
</tbody>
</table>

* Also member of Health Care Aotearoa

5.3.3  PCOs serving Pacific peoples

There are approximately 200000 Pacific peoples in New Zealand. Of these 65% are based in Auckland. They are a young population with large families, high birth rate and a low income. Pacific peoples, along with other disadvantaged populations, currently have poor access to primary care services (Tukuitonga, 1999).

Pacific peoples in Auckland have established three PCOs. The first of these, Pasifika Health Care, located in West Auckland was established in 1994. It has about 1.5 GPs FTE and serves a growing population of at least 6000. Funding is on a block grant basis. The Trust provides general practice and a range of other services including cervical screening and youth health. Joint ventures are being planned with Te Waipareira Trust and Waitemata Health. The group has an elected board which changes annually and has a community representatives advisory group advising the board.

The Tongan Health Society providing service at Langimalie Health Centre in Penrose is the second group in Auckland established in late 1997. This group has an elected board managed by a trust, serves a growing population of about 4000 people and is GMS funded. The staff include 1.5 FTE GPs, Nurses and community workers. The group has a very close alliance with the Tongan churches.
The most recent centre is the South Seas Health Group in Otara providing services to about 500 people and with one FTE GP, gms funded. This group has been viewed with some concern by a number of mainstream providers as providing unwelcome competition in this area of Auckland.

There may be other providers of primary medical care for Pacific peoples but no information was received about these.

There are number of issues and barriers facing Pacific PCOs. These include:

- many people have never previously been to a GP, they have complex problems and often need and get long consultations
- there has been some financial support for the establishment of PCOs but ongoing funding appears to make no allowance for the special health status problems and culturally appropriate ways in which these need to be managed. As noted elsewhere in this report this cannot be addressed within the present levels of funding
- services provided are subsidised by a large amount of voluntary or low income labour including GPs, nurses, receptionists and community health workers
- there is a serious lack of management and governance expertise and a need for an ethnically appropriate workforce for example, doctors, nurses and other health professionals
- the issue of competitiveness between organisations, for example, between Pacific health groups and the concerns of mainstream Palangi health groups and professionals that they are losing business to these new agencies
- the lack of understanding between the Pacific and Palangi communities and within the Pacific community, (about 50% of the community are New Zealand born) leading to a dilution of Pacific values
- geographically scattered/ small population groups throughout New Zealand
- largely economically deprived populations with poor access to entitlements.

These developments and the issues they are seeking to address highlight the need for a comprehensive national primary health care strategy.

5.3.4 Overview of community-owned and driven PCOs

The above sections have attempted to present a brief summary of the information related to PCOs which are primarily community-owned and driven. An estimate of the population served is 155 000 with about 60 FTE GPs. However, a definite population base is difficult to determine as such populations tend to be mobile and may be registered in multiple practices. The key features of these PCOs are that they:

- serve predominantly low income, disadvantaged populations with high health needs
- have a strong focus upon improving the health status of the population served
- tend to be capitated or bulk funded as gms type funding seriously disadvantages such populations with the inadequate uptake of CSCs
- are all community owned and driven and subsidised both by community funding and voluntary labour
- provide care under adverse financial circumstances, with limited patient ability to pay fees, which compounds their disadvantage
- employ medical and other staff on a salaried basis which, with capitated/bulk funding, is fostering a team-based approach to primary health care
- provide a wide range of new and culturally appropriate support services including health promotion and education which may be separately contracted out of the public health "ring fence”.

The evidence is clear that such organisations are responding to meeting their high health needs through providing comprehensive and integrated primary health care. There is a trend towards the provision of such care by workers other than GPs (Crampton, 1999).

The mobility, multiple enrolment, and the tendency of these populations to use emergency department services of hospitals for primary care poses particular problems in the move towards capitated funding based upon enrolment. There is clear evidence, discussed elsewhere in this report, of serious per capita underutilisation and therefore underfunding of such populations for primary medical care and referred services expenditure inclusive of GMS, practice nurse, pharmaceutical and laboratory services.

That such populations are high users of hospital inpatient services is possibly a direct consequence of their inadequate access to appropriate primary health care services. Furthermore improving the poor health status of such populations may depend significantly on improving access to primary health care.

Resolving these issues for populations whose need is greatest will be a major challenge facing the HFA in its contacting relationship with PCOs serving disadvantaged populations.

5.4 Improving enrolled population health status

5.4.1 Scope and definitions

PCOs have stated that improving the health of their enrolled patients and the wider community are important goals. They are also demonstrating, in a variety of new services, their commitment to achieving such goals.

This section discusses the initiatives being undertaken by PCOs to improve the health of their populations. It is clear from previous surveys and sections of this review that, for the most part, attempts by PCOs to improve population health have focused upon their enrolled populations and not the broader geographic populations or others targeted by wider population-based public health services. This section, therefore, defines the population health activities of PCOs as being concerned with enrolled-population health.
Firstly, it is important to clarify and define the HFA funding and contractual relationships devoted to improving population health and the potential contribution which might be made by PCOs.

The Public Health Operating Group of the HFA is responsible for funding and contracting for two separate components of public health. The largest proportion of funding comes from within the public health ring fence, to protect and promote public health at national, regional and local level through a variety of programmes delivered through HHSs, other Crown companies and independent service providers.

The second component, amounting to approximately 25% of the public health budget, is derived from the personal health services allocation and is concerned with enhancing, monitoring and evaluating services provided in personal health care settings. These services include:

- national vaccine purchase, storage and distribution to vaccinators
- promoting immunisation programmes including immunisation co-ordination
- the national cervical screening register
- the national breast screening programme
- follow up and control of notified communicable diseases
- refugee and migrant health
- national smoking quitline

5.4.2 PCO enrolled-population health services

Within the definition of enrolled-population health a wide range of services may be identified as being provided by PCOs. These should all be delivered as part of quality primary health care services and are funded by the Personal Health Operating Group of the HFA as part of the main primary care contract. They are concerned with the following spectrum:

- the prevention of disease in healthy individuals, for example, through immunisation
- assisting in reducing the risks associated with unhealthy behaviours, for example, smoking
- identifying and managing those with health risks, for example, raised blood pressure and serum cholesterol
- identification, through screening, of covert disease, for example, breast and cervical cancer
- better management of overt diseases affecting population groups such as diabetes and asthma.

In all these activities there is an overlay of health education and lifestyle counselling needed to enhance the uptake of, and compliance with, programmes.

Specific clinically focused services such as disease management are discussed elsewhere in this report. This section discusses the following more population focused services/programmes being developed by PCOs:

- immunisation
- smoking cessation
- sexual health services
mammography and cervical screening
health education and promotion

It is being recognised by PCOs, and more widely, that these programmes will be more effectively delivered as part of an integrated and comprehensive primary health care service. “Vertical” national programmes for mammography, cervical screening, hepatitis B immunisation, and so on are important in establishing policy and ongoing monitoring and evaluation but may have only a small part to play in actual delivery. These alternative strategies are discussed later.

- Immunisation

Some PCOs have been able to demonstrate that through patient enrolment and associated recall systems it is possible to achieve MMR immunisation rates, for example in two-year-olds, of over 90% (Bell et al, 1997). This has been achieved through target setting, birth registration and recall systems within an organised programme based on an information system at the PCO level.

Some PCOs have also been promoting MMR immunisation for 11-year-olds, influenza vaccination for over 65-year-olds and, more recently, hepatitis B.

Associated with these programmes have been systems for cold-chain monitoring, promotion of training in immunisation for practice teams, patient education, employment of immunisation co-ordinators and working through co-ordination committees.

- Smoking cessation

Some PCOs have developed active smoking cessation programmes. For example, Pegasus Medical Group:

- provides both members and practice nurses with tools and resources to assist smokers to quit
- pays for public advertisements to encourage enrolment in the programme
- provides options for smokers to assist in changing their smoking behaviour incorporating motivational advice and behavioural strategies
- subsidises nicotine replacement therapy
- provides for relapse prevention and ongoing support.

The programme has yet to be formally evaluated.

- Sexual health services

A number of PCOs have taken an active role in promoting the better management of sexually transmitted diseases and see sexual health services as part of a broader responsibility within a primary health care framework. For example, Wellington IPA has recently become the contracted provider for sexual health services at the primary care level in the Wellington area.

Some IPAs, for example, Pegasus Medical Group, provide free sexual health consultations and contraceptives to adolescents as well as associated lifestyle counselling.
• **Mammography and cervical screening**

Although these are national “vertical” programmes many PCOs are accepting direct responsibility for the promotion and management of mammography and cervical screening through PCO and practice registers as part of an integrated primary health care service. The reasons for this are:

- advantages of general practice recall systems backed up by PCOs’ systems to monitor and evaluate progress
- involvement of trained practice nurses in screening and follow up
- advantages of opportunistic cervical screening or promotion of breast screening associated with consultations for other conditions
- a more personalised individual and family approach to the provision of care including follow up clinical care, counselling and support.

• **Health education and lifestyle counselling**

It is increasingly recognised that the general practice consultation of 15 minutes or less provides little time to address the educational needs of many individuals and families. This is particularly so within a fee-for-service payment system.

Educational programmes are needed to deal with:

- mental illness including providing alternatives to pharmaceutical management
- better management of asthma especially in disadvantaged populations including Māori
- better management of diabetes in focusing on both individuals and families
- changes in lifestyle including alternatives to pharmaceutical management of raised blood pressure, raised serum cholesterol, and smoking cessation
- promoting exercise and other lifestyle changes.

The Triple S scheme funds the involvement of GPs in health education programmes but is seriously limited. For example, to improve the overall scope of the scheme, Pegasus medical Group has expanded the funding to:

- establish an organised programme involving a project co-ordinator and management committee
- fund patient access to GPs with specialist skills in counselling and lifestyle counseling
- provide funding assistance to GPs to acquire specialist skills.

5.4.3 **Overview of enrolled-population health development in PCOs**

This section has only briefly touched upon the many and rapidly evolving activities in which PCOs are engaged in this field. For example, a wider range of services are being developed by PCOs serving Māori, Pacific peoples and other disadvantaged populations where there are high needs for such programmes.
Research suggests that GPs in New Zealand have high levels of competence and enthusiasm for preventive and health promoting work (Williams et al, 1999). While PCOs clearly focus on personal health interventions, there is an important role for them in health promotion, particularly as advocates and in participating with other agencies in community programmes for environmental protection and injury prevention (for example safer communities projects).

Of particular importance is the emerging recognition that these activities are an essential part of the widening evolution of primary medical care into primary health care. These developments need to be recognised and built into a national policy and strategy for primary health care, as will be discussed later.

5.5 Primary mental health care services

There have been many initiatives over past decades by primary care practitioners to improve the management of mental health problems at the primary care level. More recent initiatives developed by PCOs include integrating relationships with secondary care mental health services. This section discusses initiatives being undertaken by some PCOs and the recognition of the need for these developments by the Mental Health Commission (1999).

5.5.1 The Mental Health Commission's strategy for primary care

The Commission's national mental health strategy includes the development of better primary mental health care services. The strategy identified key issues which need to be addressed at the primary health care level including:

- the high prevalence of mental disorders in the community
- the relative infrequency of referral of patients with mental illness to the secondary care sector and therefore the need for better primary care management
- the inadequate experience of primary health care practitioners in the prevention, screening and management of mental health problems
- the inadequacies of training, especially at postgraduate level.

The key objectives of the strategy include:

- improved access to primary health care providers for those with or at risk of developing mental health disorders
- improving the quality of primary health care services
- improving co-ordination between specialist mental health services and primary health providers.

The Commission acknowledges important achievements put in place including:

- pilots to encourage greater participation of primary health care providers
- the development of guidelines
- the provision of some 20 primary sector consultation liaison positions.
The Commission stresses the importance of a primary mental health care strategy supported by both mental health and primary health care sectors enabling:

- increased primary care capacity to detect and manage mental illness
- improving relationships between primary care services and specialist mental health services
- improved access to culturally relevant mental health services that have essential mental health expertise.

5.5.2 **PCO initiatives in primary mental health care**

The following are examples of initiatives in primary mental health care.

- **Newtown Union Health Service**

  The Commission refers to an important development in the Newtown Union Health Service providing mental health services in a primary care setting for more than 10 years. The service includes the more holistic management of patients at the primary care level, a range of community-based services and close liaison with the secondary care services of Capital Coast Health.

- **Auckland Healthcare and ProCare - LASC project**

  One of the HFA's national, integrated care projects is the integration of mental health care between Auckland Healthcare and ProCare. This is using a randomised controlled trial to test the service quality of “liaison attachment shared care” (LASC) compared with existing Community Mental Health Care Team care. LASC is an alternative, more community-based model of integrated mental health care involving collaboration between GPs, as lead providers, and clinical nurse specialists for people with serious or long-term mental health problems.

- **The Wellington Primary and Secondary Mental Health Liaison Programme**

  Another pilot development initiated in 1998 by the Wellington IPA in conjunction with Capital Coast Health Mental Health Service is actively addressing the problems identified by the Commission.

  From a primary care perspective some of these included:

  - unacceptable waiting times for referral to secondary care
  - uneven information on progress and discharge arrangements
  - difficulties and delays when discharged clients need to re-enter secondary care services when required.

  From the perspective of secondary mental health care services there were concerns about difficulties in devolving clients to primary care because of:

  - primary care practitioner competence
  - client financial disincentives
It was agreed that clients who would take part in the programme:

- would be suitable for GP care on the basis of their mental health status and treatment required
- would choose the GP responsible for their care
- would be discharged from the mental health service to the care of the GP
- could be in joint care with primary and secondary care services providing different components of care.

The development of the service required the establishment of:

- governance and reporting relationships
- consumer participation to ensure that issues are addressed from a consumer perspective
- formal evaluation by the Mental Health Commission ensuring that GPs and consumers are satisfied with the programme and that the programme would be cost effective.

The programme involves the formal training of GPs in the management of mental health problems at the primary care level. It is still in the early stages and is currently responsible for the ongoing management of some 50 clients.

5.5.3 Overview of primary care mental health development in PCOs

The description above has only touched upon many developments which PCOs are initiating. The evidence is clear that some PCOs are developing a formal responsibility for the management of some of the major issues facing mental health care in New Zealand. They demonstrate that primary mental health care is seen by these PCOs as an integral component of a comprehensive primary health care service. In this regard there is a need to expand membership of the primary care team to include social workers and others able to contribute to mental health service development.
6 FINANCING PCOs

6.1 Overview

The financing of primary medical care and related/referred services comes from patients’ fees, the HFA (GMS, in fee for service and capitation payments, practice nurse subsidies, referred pharmaceutical and laboratory services and a number of other minor subsidy categories), and ACC subsidies.

Table 11 summarises this expenditure for the year 1997/98 by expenditure per capita, per GP and per consultation. By far the largest single item is pharmaceutical. It is important to include ACC funding in these figures as this is part of the total consultation cost and there is an interaction between the levels of ACC and GMS subsidies. Practices serving poorer populations with higher levels of CSC received proportionally smaller subsidies from ACC. This added to the inequities being experienced by such populations as discussed elsewhere in this report (Malcolm, 1996). This inequity has now been rectified by direct full subsidy from ACC as from July 1999.

Table 11  Government and ACC expenditure on primary medical care and related services for 1997/98 (GST exclusive)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total expenditure ($m)</th>
<th>Expenditure per capita ($)</th>
<th>Expenditure per GP ($)</th>
<th>Expenditure per consultation ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Medical Services (GMS)</td>
<td>202.0</td>
<td>53.2</td>
<td>65,161</td>
<td>10.6</td>
</tr>
<tr>
<td>Practice nurse</td>
<td>32.0</td>
<td>8.4</td>
<td>10,323</td>
<td>1.7</td>
</tr>
<tr>
<td>Accident Compensation Corporation (ACC)</td>
<td>75.4</td>
<td>19.8</td>
<td>24,323</td>
<td>4.0</td>
</tr>
<tr>
<td>Laboratory</td>
<td>102.2</td>
<td>26.9</td>
<td>33,968</td>
<td>5.4</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>546.6</td>
<td>143.8</td>
<td>176,323</td>
<td>28.8</td>
</tr>
<tr>
<td>Total</td>
<td>958.2</td>
<td>252.2</td>
<td>309,097</td>
<td>50.4</td>
</tr>
</tbody>
</table>

1 Figures derived from HFA Funding Formula and unpublished data from a recent study for the HFA Northern Division and ACC statistics. Based on a population of 3.8m, 5.0 consultations per capita per annum and 3100 GPs.
2 $40 million of the above laboratory, pharmaceutical and practice nurse costs are also ACC.
3 Total expenditure assumes that 80% of overall pharmaceutical and 70% of overall laboratory expenditure is primary care, ie incurred by GPs.

No information was supplied to this project regarding the proportions of pharmaceutical and laboratory expenditure that was being expended by PCOs, non-PCO general practice and specialists. Table 12 shows figures from the study of primary care utilisation and expenditure in the Northern Region including Auckland for the calendar year 1997 (Malcolm, 1998). GPs in this study were identified by linking their NZMC number to GMS, pharmaceutical and laboratory service claims with GPs being identified as those who made GMS claims.
The table shows that PCOs were responsible for 61.5% of pharmaceutical and 57.9% of laboratory expenditure. Of the total expenditure specialists incurred more than 20%, a pattern likely to be similar for other regions.

Table 12  Percentage of total GMS, pharmaceutical and laboratory expenditure incurred by general practice and PCOs from a study of the Northern Region expenditure 1997 (GST inc)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total expenditure ($m)</th>
<th>Percentage of total incurred by all GPs (i.e. excluding specialists)</th>
<th>Percentage of total incurred by PCOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS</td>
<td>112.5</td>
<td>100.0</td>
<td>74.4</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>251.1</td>
<td>79.0</td>
<td>61.5</td>
</tr>
<tr>
<td>Laboratory</td>
<td>57.0</td>
<td>74.9</td>
<td>57.9</td>
</tr>
</tbody>
</table>

6.2 The growth of capitated primary care

Capitated primary care is an international trend. It has been in place for a long time in Britain and some European countries where 60-65% of GPs' income is from capitated payments. Capitated funding for GP consultations, as an alternative to the fee for service system, was introduced to New Zealand in 1941 following the Social Security Act 1938. However, very few GPs took up this option.

Capitation is seen to:

- provide a denominator to measure prevalence/incidence of disease
- encourage delegation to nurses and others who may be more appropriate providers of primary care
- facilitate a move from an illness to a wellness model of health.

In 1979 capitation of GMS was introduced as a means of payment in Otumoetai Health Centre in Tauranga (Seddon et al., 1995), and subsequently taken up by a number of general practices including union health centres in the 1980s (Crampton, 1999). After the 1993 health reforms, bulk funding, as an alternative to capitation, became a preferred method of funding of general practice for many centres serving Māori.

The main recent thrust towards the implementation of capitation came from the Midland RHA where, as at June 1997, 45% of GPs were on capitation. This contrasted markedly with other regions, which ranged from 4.8% to 12% (MOH, 1998).

In the Midland region two contrasting ways of implementing capitation were introduced. In the networks established by First Health, GP members accepted capitation of GMS in choosing to join. On the other hand capitation was an option for Pinnacle members. Pinnacle provided information to practices, advising them on their current GMS expenditure along with the advantages and disadvantages of capitation. Most practices were either cost-neutral or gaining. The choice to
accept capitation was assisted by a grant of 10% for quality gains. There is concern that the new contract may not include this and that this may mean that some will shift back to fee for service (Vickers, personal communication).

About 65% of the Pinnacle membership is now on capitation for the approximately 90% of enrolled patients while 10% are casuals on fee for service (Vickers, personal communication). This is an increase from 40% of members in 1998. The reason reported for this is that many felt “pressured” by the HFA’s Next Five Years in General Practice (Health Funding Authority, 1998b). It appears that there were a number of incentives driving the move to capitation and the experience of Pinnacle in achieving these rates voluntarily needs further study.

6.3 Financing PCOs

Special funding to establish and maintain PCOs has come from a wide variety of sources in the 1990s, including individual shareholders, the RHAs, and more recently the THA and the HFA. Funding has also been received from a variety of community sources such as iwi, unions, community trusts, and private sponsoring organisations.

PCOs also receive funding from the Ministry of Health, through the RHAs, in the 1994/95 Transitional Assistance Programme. Recently a special grant was given to Health Care Aotearoa by the Ministry of Health directed by the Minister of Health in recognition of the special needs of the populations being served by member organisations. Many PCOs have derived substantial funding in more recent years from the results of budget holding for pharmaceutical and laboratory services. However, PCOs serving well off populations with above average primary care expenditure were the main beneficiaries of such savings. There was little or no benefit for organisations, such as those represented by HCA, to take on budget holding as in all cases they were spending well below their expected levels (Malcolm, 1996a, 1998d).

Deriving even approximate figures for total government and non-government investment in PCO establishment and ongoing activity has been difficult for the following reasons:

- No reliable records were available from the HFA regarding expenditure of this kind over previous years.

- The reluctance and perhaps inability of the PCOs to provide such information, particularly since becoming established.

- The difficulty of classifying such information according to purpose, such as establishment of infrastructure, ongoing maintenance and the provision of services. Some funds were received by members, for example, the establishment of information systems, and some funds were directed to the provision of services to patients and communities.

- There is much uncertainty as to how much budget holding has saved, as will be discussed elsewhere, and the varying contribution that these savings have made to infrastructure development, staff and member development, and the provision of a wide range of new services for members, patients and communities.
6.3.1 Shareholder investment

Most PCOs in the early days required GP members to contribute funds as shareholders in order to get the PCOs up and running. The extent of this contribution per member varied widely, from sums as low as $50 in some groups to $4,000 in others. It was unclear as to whether there would be dividends paid out on such shareholder investments, or whether they were to establish the PCO in order to form a legal entity which could then enter into contract negotiations with the RHAs.

Given the commercial environment encouraged by at least some RHAs, there was some uncertainty as to whether PCOs could be expected to become profit-making companies with savings derived from budget holding activity. Such savings might possibly have been used not only for patient but also for member benefits. This view has been consistently rejected by PCOs in all surveys (Malcolm et al, forthcoming). There may be a trend towards PCOs becoming charitable trusts to avoid perceptions that they are private businesses making a profit for members.

Shareholder investments, although important in the early stages, have remained a very small proportion of the total costs of investment in PCO development.

6.3.2 Funding from government sources

In the early stages of RHA/PCO negotiations, how much support PCO development would be given even in policy, let alone funding, from government sources was unclear. Midland RHA took a commercial approach seeing PCOs as private entities in which shareholder investments would be repaid from savings derived from providing more efficient services through budget holding risk management.

Other RHAs took a more public sector view, seeing PCOs as agencies in which public money, through budget holding, could result in significant returns. For at least one PCO, the RHA provided a loan for this development to be repaid from budget holding savings.

An important initiative from Health Minister Shipley in 1994, the Transitional Assistance Programme, set aside $20 million of central government funding to sponsor the development of a wide range of activities, including PCO development. This funding was available to RHAs provided that they put an equal amount of their own funding for specific proposals with final decisions being made by the Ministry of Health. There was a widely varying response to the proposals, with some well-advanced PCOs gaining maximum benefit from this time-limited programme.

More recently, specific funding has been made by the HFA for PCO development on the basis of membership numbers, as well as special grants for computerisation of general practices, information system development, quality programmes, and a wide range of new services to patients and communities. However, the extent of this funding varied widely, not only between RHAs but also even within RHAs. In the 1998/99 financial year this allocation has been on the basis of $6,300 for GP members over 0.2 FTE if they were engaged in budget management.
An attempt has been made to classify this funding into the groups listed, for example, management services and additional patient services as follows:

- Direct service payments inclusive of GMS; practice nurse, pharmaceutical and laboratory expenditure.
- Administrative expenditure inclusive of the management of referred services and population services and information development.
- Savings and other designated projects providing new services to patients and communities.

An overview of this expenditure is presented in Table 13 and summarised below:

- $541.8 million overall expenditure, the largest single component of which is pharmaceutical expenditure at 51.8% (note that this now excludes dispensing fees of 30% of total pharmaceutical costs).
- A figure of $132.3 million GMS inclusive of the capitation fees.
- The total management costs as derived from the above classification of $13.5 million or 2.5% of total turnover.

Extra services to patients and communities, now being provided by PCOs, of $6.0 million or 1.1% of total turnover.

Table 13  Summary of expenditure on patient services and additional financial support given to PCOs in the 1998/99 financial year by the HFA (GST exc) (includes only IPAs and contracting practices)

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenditure ($m)</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS fee for service and capitation</td>
<td>132.2</td>
<td>24.4</td>
</tr>
<tr>
<td>Practice nurse subsidies</td>
<td>25.9</td>
<td>4.8</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>280.5</td>
<td>51.8</td>
</tr>
<tr>
<td>Laboratory</td>
<td>83.7</td>
<td>15.4</td>
</tr>
<tr>
<td>Management services</td>
<td>13.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Additional patient services</td>
<td>6.0</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>541.8</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

However, there are many uncertainties about the figures presented. These include:

- Incomplete or absent data for some of the categories, particularly GMS, as supplied by the HFA.
- The GMS, pharmaceutical and laboratory expenditure for some major PCOs was derived from alternative sources but the figures are still incomplete as not all sources could be accessed.
- Lack of clarity of the classification used by the HFA in the data supplied.
- Lack of data on management or administrative costs from some important groups where funding was derived solely from budget holding savings.

Although giving some indication of the relatively small costs of the administrative and infrastructure developments, the figures shown in Table 13 should be regarded with considerable caution.

6.3.3 Special purpose funding

Special funding has been made to PCOs in recent years for different purposes, largely to provide new services for patients and communities. Again it appears that there is no register of expenditure and categories of grants. For the 1998/99 year the figure of $6.0 million is almost certainly a serious underestimate of the true amounts being spent on a wide variety of projects including some large integration projects discussed elsewhere in this report.

Apart from funding from direct grants, many projects have been financed from the savings from budget holding. Although these projects are discussed elsewhere, along with new services generally, no reliable information is available regarding the extent of such investment. This is likely to be only a small proportion of overall turnover with more than 95% being spent on core primary medical care and related/referred services.

The question of whether this small but significant investment is value for public money will be discussed elsewhere.
7 POPULATION NEEDS-BASED FUNDING: THE EQUITY ISSUE

7.1 Population based equitable funding and inequities in access

The recent contract negotiations (Section 10) between the HFA and PCOs agreed on the principle of equity of access based upon needs and ability to benefit. Enrollment was agreed to be an essential ingredient in achieving population-based equity. There was agreement to work together to develop an agreed formula for population-based equity, including a process and timetable for enrollment.

Studies of GP utilisation and expenditure have consistently shown over many years wide geographic variation in GP availability and utilisation. Higher availability, usually in better off areas, was strongly correlated with both high utilisation and expenditure (Malcolm, 1993) indicating that supply influenced utilisation. This suggested that the choice of GPs to live and work in better off areas, despite the lesser health needs of these populations, was a continuing expression of the “inverse care law” that is, those in greater need are those least likely have their needs met.

More recent studies have been undertaken which highlight continuing serious inequities in utilisation and expenditure on primary medical care and related services (Gribben, 1996; Williams, 1997; Malcolm, 1996). This inequity exists both within as well as between PCOs. However, in many of these studies there have been questions about the extent of overlap in patient registration and difficulties in determining the denominator on a calculation of these rates.

A study to clarify this question was undertaken for the HFA by Aotearoa Health in 1998 (Malcolm, 1998d). This sought to allocate the census population of the four Auckland sub-regions to all PCOs in this area. Options to enable this allocation were explored including the merged practice register system used by North Health, the use of NHIs and the allocation of population based upon GMS claim data. The GMS claim data proved to be the most reliable for this purpose. The executive summary for this report is attached as Appendix 5.

The findings are summarised below.

- There were serious deficiencies in the data needed to calculate both numerators and denominators for rates of utilisation and expenditure.

- There were major overlaps in the merged practice register data of PCOs, so much so that the merged practice register system being implemented by North Health appeared to be of little or no value in determining population denominators.

- Given the problems with the data calculation of denominator populations, using GMS utilisation claim data and allowing for A3s (ie adults without a CSC) seemed to be the most appropriate method for determining PCO populations.

- Expected funding based upon age, sex, CSC values from the practice register data as compared with actual expenditure, showed a clear demonstration of the “inverse care law”. For those populations in greatest need for services, such as those in Mangere, the actual expenditure was
some 30% below the expected as compared with well off populations where actual expenditure was nearly 30% above expected (Figures 1 and 2).

- Analysis of cross-boundary flows between the Auckland regions indicated that net utilisation flows were relatively minor, probably well below the margin of error in calculating expected as compared with actual expenditure.

- There was a wide variation between the sub-regions in primary care related expenditure. West Auckland was $181.9 per capita compared with $290.2 in Central. North Harbour and South Auckland were close to equity (Figure 3).

The important findings of this study are shown in Figures 1 and 2 below with the PCOs in coded form. The study is still in draft form and has only recently been sent to PCOs for comment.

**Figure 1** Comparison of per capita entitlement of PCOs/IPAs/groups in Auckland under the HFA funding formula with actual per capita expenditure for 1997 with totals for Auckland and national figures

![Figure 1](image-url)
Figure 2  Actual per capita expenditure for PCOs/IPAs/groups in Auckland compared with the Auckland total for 1997 for GMS, laboratory and pharmaceutical expenditure.

The per capita variation between the Auckland subregions in GMS, pharmaceutical and laboratory expenditure is shown in Figure 3.

Figure 3  Per capita expenditure on GMS, laboratory and pharmaceuticals by subregion for 1997 with allowances for cross-boundary utilisation flows.
Figure 4 shows the typical pattern of variation within PCOs in per capita GMS, pharmaceutical expenditure. This is based on a number of studies of PCOs.

**Figure 4** Comparison of annual per capita expenditure on GMS, laboratory and pharmaceutical services in bottom mean and top 10% of practices in PCOs serving an average population.

Figure 5 shows the distribution of this per capita variation in GMS, pharmaceutical and laboratory expenditure by practices in a sample, IPA adjusted for age and CSC.

**Figure 5** Variation between practices in a sample IPA in per capita GMS, pharmaceutical and laboratory expenditure adjusted for age and CSC.
The findings of this and other studies point to major problems in addressing population-based equity at all levels: between regions, sub-regions, between PCOs and within PCOs. It is argued that until an effective strategy is found which will change clinical behaviour to reduce inappropriate variation, there will be little progress towards implementing population-based equity agreed to in the recent contract negotiations.

7.2 Other evidence of inequities in access

Evidence for low pharmaceutical spending on poorer populations is shown by a PreMec Intergroup Prescription Analysis Comparisons report to IPAs which includes information on Health Care Aotearoa GPs (HCA) for the period July to September 1998. The figures for nine IPAs range, per GP, from $30,206 up to $50,186 for the three-month period. The HCA figure by contrast was only $23,496 per GP.

HCA GPs each serve a population of about 2500 in contrast to the average IPA GP who serves a population of about 1200. Translating these figures to annual per capita pharmaceutical expenditure, HCA populations received $9.40 per capita for the three months or $37.50 annually. The calculated figure for the IPAs, based on an average for the three months of $40,000, is $133 or nearly four times greater. The average per capita figure from the HFA funding formula is $143.80 (Table 11). For the population served by HCA this figure would be expected to be much greater according to the HFA Funding Formula.

Another recent study of problems experienced by low income people in accessing primary care services has been published by the Family Centre Social Policy Research Unit (Waldegrave et al 1999). This study showed that:

- 56% of all households had members who did not visit a doctor when they needed to in the previous year because of a shortage of money
- 56% of households had members who had not been able to afford to pay for medicine or a prescription at least once during the previous year
- 34% of all households had been unable to purchase medicines three or more times during the previous year
- 26% said the costs of paying for their chronic illnesses prevented them paying other household bills
- the most common illnesses that households could not afford to have treated were colds and flu (44% of all respondents), headaches and migraines (32%) and, more seriously, asthma (17%) and internal conditions (17%).

The study indicates that financial barriers are important in limiting access to both primary medical care and pharmaceutical services for low income families. It is further evidence of the continuing operation of the “inverse care law”.

Other studies have drawn attention to the serious problems which disadvantaged families are facing in accessing health and related services. A report from the Early Start project in Christchurch has highlighted the problems facing some 10% of New Zealand’s families most at risk from a range of
health and social problems (Fergusson et al., 1999). The study indicated that specific support services, targeted to meeting the needs of these families, was successful in improving access to health services, especially preventive services. However, the report noted that a properly conducted randomised controlled trial was necessary in order to establish the benefits of such an approach in serving disadvantaged and at risk-families.

7.3 Addressing the equity issue

The many studies referred to in this section as well as the discussion in Section 5.4 highlight the importance of finding solutions to the apparent gross inequities in utilisation of primary health care services. While there is clear evidence of serious underutilisation it is not clear at this stage as to what are the best ways of spending additional funding on such populations. While financial barriers limit access there are also other barriers such as low expectations, geography, transport and the day-to-day pressures of coping with disadvantage.

There are indications that additional funding would improve utilisation and health outcomes. However, further work is needed to identify what strategies and services would be most successful in improving utilisation of primary health care and what are the likely health status outcomes of such utilisation.
8 MANAGING ACTIVITY IN PRIMARY CARE ORGANISATIONS

8.1 Evaluation of PCO budget holding activities

Budget holding for laboratory and pharmaceutical services has been a key strategy in the development of PCOs. Despite this, little attention has been given to its evaluation by the HFA or its predecessor RHAs. Evaluation that has been attempted has been either largely superficial, or asked unanswerable questions, such as “has budget holding improved health outcomes?”

In part this has been due to a lack of clarity to the objectives of budget holding. From the perspective of the RHAs/HFA it has been seen as a strategy for containing demand-driven fee for service related expenditure. RHAs/HFA have expressed interest in improving the quality of prescribing and laboratory behaviour. Yet the overwhelming impression from discussions with PCOs, HFA staff and the review of documents, is that the key measure of success for the HFA has been whether or not budget holding has reduced financial risks associated with this expenditure for the RHAs/HFA. However, there are also those within the RHAs/HFA who claim that the primary motivation to contain demand-driven expenditure was that it limited their ability to fund other needed services.

The primary purpose of budget holding, as expressed by PCOs, has been to improve the quality of prescribing and laboratory utilisation in GP members and to generate savings for additional services. This has been repeatedly stated in discussions with PCOs and is demonstrated in the evaluations reported below.

8.1.1 Evaluation of budget holding by the purchaser (RHAs/HFA)

Miller (1998) reviewed budget holding from the RHAs/HFA perspective in her work “Summary of IPA Contracting”. She comments on some evaluations of pharmaceutical budget holding, including in Central Health where an evaluation of pharmaceutical budget holding concluded that, for an investment of $5 million in budget holding management, savings amounted to only $1.4 million. Her findings on budget holding contrast with the published successes of laboratory budget holding by Pegasus Medical Group discussed below (Kerr et al, 1996). Miller makes no reference to the evaluation of pharmaceutical budget holding carried out by Aotearoa Health for the THA in 1997.

Miller reports that the initial strategy adopted by the RHAs in 1993/94 was to encourage the rapid growth of member organisations (eg PCOs) that would serve to:

- create a viable alternative contractual arrangement to the terms in the notice issued under Section 51 of the Health and Disability Services Act 1993
- change the behaviour of GPs, not only their prescribing and referring, but also their relationships with other health providers and in focusing on the health of the wider population
- develop a management framework for the control of demand-driven budgets and quality enhancement programmes, that is, encourage alignment of clinical and financial accountability
- provide a platform for the development of integrated care organisations, including population-based budgets.

Contractual relationships between the RHAs and PCOs focused largely upon budget holding, especially pharmaceutical budget holding, which RHAs saw as the largest pool of uncapped risk.

Contracting relationships varied widely between the RHAs, regions, and within regions. In summary, the arrangements varied with respect to:
- provisional or actual budgets
- methods of determining budgets and how they would be adjusted with trends in pharmaceutical and laboratory expenditure
- funding support for budget holding and related activities, such as the development of information systems
- the extent to which RHAs and PCOs would retain savings
- the influence or control PCOs would have over the use of their savings
- the extent to which risk was passed by RHAs to PCOs and the varying attitude of both RHAs and PCOs to the management of such risks and the ethics associated with budget holding, including retention of savings as personal benefits.

The contracting strategies adopted by Midland were markedly different from those of other RHAs. Midland’s primary focus was upon capitation of GMS as a prelude to pharmaceutical and laboratory budget holding. As a consequence the proportion of GPs on capitation of GMS are much higher than any other region (see Section 6.2).

Furthermore, Midland adopted a more commercial approach to budget holding. Some within the RHA saw IPAs/PCOs as commercial entities with shareholders being able to retain a proportion of the savings derived from budget holding as personal benefits. The commercial approach was encouraged through negotiated arrangements, initially through PrimeHealth and subsequently through the Aetna backed Managed Care New Zealand (later known as First Health) which “purchased” the risk from Midland RHA for budget holding activities for GMS, laboratory and pharmaceutical services.

It was clearly intended that PrimeHealth would move towards risk-holding arrangements for not only primary, but also secondary care. Much work was done towards planning such an approach in the Western Bay of Plenty. This particular risk-holding model of budget holding was extended by First Health to other parts of the Midland region and to the Northern region, as is discussed elsewhere in this report.
Midland RHA did not require First Health to reveal the level of savings achieved or how these savings were being used. It appears that the level of savings achieved by First Health, from trends in pharmaceutical expenditure, may not have been all that significant. However, the commercial sensitivity in the use of public money relating to the First Health contract raises questions about the nature of the relationship between First Health and its GP members which a more transparent contracting process would clarify. It also raises questions about the value of full riskholding and the incentives associated with it, as discussed elsewhere in this report.

- **The evaluation of PrimeHealth by Midland Health**

Brown, Larsen and Sceats (1998) evaluated budget holding by PrimeHealth in their report “General Practitioner budget holding: final evaluation reports on PrimeHealth Ltd.”

PrimeHealth was one of the first PCOs formed in 1994 as a joint venture between PrimeHealth Network Limited in the Western Bay of Plenty, and First Health Limited, a subsidiary of Aetna New Zealand. In 1995 Midland Health transferred responsibility to PrimeHealth for purchasing pharmaceutical services for their enrolled patients, and for laboratory services in 1996.

An evaluation of this development was requested by PrimeHealth at the outset and was undertaken by the Health and Disability Analysis Unit of Midland Health. The evaluation sought to answer three questions:

- What is the impact on the health status of the people of the Western Bay of Plenty?
- How did PrimeHealth fulfil its contractual arrangements as a budget holder?
- What are the potential implications of this type of arrangement for the health sector?

The evaluation reported that no conclusion could be reached regarding the first question in part because a follow up questionnaire could not be undertaken because of changes in the HFA. Regarding the second question, the evaluation found that PrimeHealth appeared to have processes in place to meet many of the goals of a purchaser of primary care services. However, there were questions regarding the sustainability of the current contractual arrangement. No information was provided regarding quantitative results relating to budget holding.

Regarding the third question, Brown, Larsen and Sceats found that this type of contracting arrangement effectively creates a purchaser in competition with the HFA. It puts the HFA at a disadvantage with respect to the HFA’s access to information necessary to monitor and evaluate its expenditure. However, while positive relationships were developing between the HFA and PrimeHealth, a comprehensive evaluation of PrimeHealth was prevented by the difficulties in obtaining data including financial data.

It is unfortunate that the one significant attempt by Midland and other RHAs to evaluate PCO development should have yielded so little information.
8.1.2 Independent evaluations

- Evaluation of laboratory budget holding in Pegasus Medical Group

Although laboratory budget holding has been widely adopted by PCOs it appears to have been given much less attention by both the RHAs and PCOs than pharmaceutical budget holding. This is not surprising given that pharmaceutical expenditure is more than five times greater than laboratory expenditure.

Kerr et al (1996) evaluated the implementation of budget holding in one PCO in their report “Successful implementation of laboratory budget holding by Pegasus Medical Group” (1996). Pegasus had implemented a comprehensive laboratory budget holding strategy in early 1994. This included the feedback of personalised comparative data to members, advice on laboratory use and test form redesign to remove less useful tests. It was felt that laboratory budget holding would be easier to implement than pharmaceutical budget holding.

Two pilot groups and a control group of Pegasus members were formed. The pilot groups received regular personalised feedback on their use of expenditure on laboratory tests compared is the control group.

It was agreed that Pegasus would:

- retain all the savings for the pilot group
- retain a substantial proportion of the savings for the control group
- determine how its share of the savings would be used with the approval of the Southern RHA once it had paid off a loan received for its establishment.

The evaluation showed that:

- overall savings of 22.7% were achieved within the budget over a 13 month period with savings of 32.9% for the first pilot
- a comparison in the first pilot group of the eight GPs with the highest cost per consultation with the eight GPs with the lowest per consultation expenditure showed both a marked narrowing in the wide initial variation in this indicator and a decline in both groups and the mean (See Figure 6)
- 23.7% of the expenditure decline was explained by the removal of selected tests from the laboratory test form
- there was little change in the expenditure per test indicating that almost the entire expenditure decline was explained by changes in volume rather than price
- overall expenditure for Pegasus Medical Group over the period of study declined by 16.9% compared with a 16.0% increase in the remainder of the Southern Region and 7.4% increase in the national expenditure on laboratory tests.
The evaluation concluded that Pegasus had introduced an effective and comprehensive strategy involving education, active feedback and test form redesign within an incentive of retaining budgetary savings for service improvements. It illustrated the importance of GPs collaborating, rather than separately competing, as a strategy to achieve cost control and value for money gains in health services.

Follow-up work in Pegasus has shown that the top 15 members in expenditure per consultation remained at $12.0 per consultation, whereas the bottom 15 reduced their expenditure from $3.0 to $2.0 per consultation (Malcolm et al, forthcoming). Ongoing monitoring by Pegasus of laboratory utilisation and expenditure indicates that, despite continuing growth in laboratory expenditure per member both regionally and nationally, expenditure per Pegasus GP has remained at or around 1994/95 levels.

Figure 6 Comparison of the changes in cost per consultation in the mean and the means of the top and bottom eight members in the first pilot group before and after the implementation of laboratory budget holding in Pegasus Medical Group

- Evaluations of pharmaceutical budget holding undertaken by Health Care Aotearoa
A series of evaluations were carried out by Health Care Aotearoa in a number of PCOs, including ProCare Health Limited, Pegasus Medical Group, South-Med Ltd, Karori/Ropata Medical Centres and Christchurch South Health Centre. A summary report on these evaluations was presented to the THA in August 1997 (Malcolm, 1997a).

Further work in evaluating pharmaceutical, and to some extent laboratory budget holding, was undertaken for Comprehensive Health Services, Independent Primary Care Services and Hutt IPA (Malcolm, 1998a). However, the focus in these latter groups was more an analysis of primary care expenditure rather than an evaluation of pharmaceutical budget holding and is discussed elsewhere in this report.

Appendix 4 provides the summary of the report to the THA by Aotearoa Health in August 1997 of the overall evaluation of pharmaceutical budget holding and management in three IPAs, ProCare Health Limited, South-Med Limited, Pegasus Medical Group and three large practices, Karori and Ropata Medical Centres in Wellington and Christchurch South Health Centre (Malcolm, 1997a).

In all situations, especially ProCare (Malcolm, Barry and McLean, 1999) and Pegasus (Malcolm et al, 1999), a comprehensive pharmaceutical management strategy had been implemented. This included personalised feedback to members relating to total and drug category expenditure, compared with the average for the group, management committees, appointment of pharmaceutical staff to manage the programme, development of information systems, guidelines, peer review groups and active personalised feedback to members on prescribing.

The overall findings of this study are summarised as follows.

- Comparing 1996 with 1995 savings achieved by ProCare and South-Med against the budget were just under 10% in each IPA.

- Analysis of trends and expenditure by members of the three IPAs indicated that, in comparison with national trends, “savings” of 4.5–5.7% were achieved, again comparing 1996 with 1995.

- The analysis indicated that these savings may have been larger if allowance had been made for the decline in the proportions of “Doctor zero”, that is, those GPs who did not enter their NZMC numbers on their prescriptions, and the effect of pharmaceutical budget holding on national trends.

- Wide variation was observed in all situations in pharmaceutical expenditure per consultation and for ProCare for age adjusted per capita expenditure between practices.

- Despite feedback indicating the extent of variation, particularly total expenditure, the low expenditure members reduced their expenditure proportionally to a greater extent than high expenditure members did.

- Expenditure per capita for the health/medical centres, adjusted for age, sex and CSC, was below the national average.
Despite wide variation in expenditure per consultation there was almost no variation in the mean cost per item, indicating that the almost total explanation of variation and expenditure was due to the volume of drugs prescribed, not their price.

Analysis of variation in British National Formulary (BNF) categories for all groups showed a remarkably consistent pattern, including comparison between high and low cost prescribers. In other words feedback relating to these categories might just reassure high cost members that their prescribing patterns were not out of line with the average for the group and therefore be counter-productive.

The findings indicated that the PCOs had established a comprehensive programme of pharmaceutical management. Although significant savings were achieved more fundamental achievements were noted which went well beyond just quantifiable savings. These included the development of:

- a broadly based infrastructure for pharmaceutical management, including information systems
- guidelines by GPs in peer group discussions
- a system of active and personalised feedback to members
- a sense of collective professional accountability for both quality and cost

This evaluation study identified three groups of prescribing expenditure.

- Average practices serving an average population where per capita expenditure varied widely around a mean.
- Those practices and PCOs serving disadvantaged populations where per capita expenditure was well below the national mean.
- Good quality general practice where per capita expenditure was below, and in some cases well below, the national mean.

The study put forward a number of recommendations to the THA, some of which have been built into the recently completed contracting strategy. The most important is the need for the HFA and PCOs to develop a strategy to address the inequities in pharmaceutical and other primary care expenditure both between and within PCOs.

- **Evaluation of the savings achievements of the Best Practice Advocacy Centre (BPAC)**

BPAC was established in 1997 to provide support, feedback and educational resources to primary and secondary care providers to help maximise quality of health care. It operates largely in the Southern Region, but also extends its activities to the Midland Region.
The BPAC approach is based on a range of strategies including quality strategies, evidence, volume reduction and cost-effective strategies. Although its primary focus has been improving quality in prescribing it has also sought to reduce unnecessary prescribing and therefore to achieve savings primarily as a result of improving quality.

A preliminary analysis of pharmaceutical savings from data supplied by BPAC is shown in Table 14. This compares expenditure by BPAC GPs with other GPs in the Southern area, less BPAC, for the period January to November 1998 with the same period the previous year. Overall cost savings of 8.7% were achieved with a reduction of 5.2% in volume and 4.0% in the price of items prescribed. It is estimated that this overall saving was $4.3 million. This was quantified as 10 times greater than the investment required to achieve this level of savings.

As with other budget holding strategies within PCOs, additional benefits include the development of information systems, guidelines, and mechanisms for feedback, better understanding of factors which improve prescribing behaviour and overall improvements in quality of prescribing.

Table 14  Interim results of the savings from BPAC strategies when BPAC expenditure and volumes are compared with the remainder of the Southern area

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenditure with dispensing fee ($m)</th>
<th>Volume of items (million)</th>
<th>Expenditure/item ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPAC Jan–Nov 1997</td>
<td>72.3</td>
<td>3.29</td>
<td>22.0</td>
</tr>
<tr>
<td>BPAC Jan–Nov 1998</td>
<td>62.8</td>
<td>3.15</td>
<td>19.9</td>
</tr>
<tr>
<td>Difference</td>
<td>-9.56</td>
<td>-0.14</td>
<td>-2.1</td>
</tr>
<tr>
<td>Difference (%)</td>
<td>-13.2</td>
<td>-4.2</td>
<td>-9.4</td>
</tr>
<tr>
<td>Southern Jan–Nov 1997 less BPAC</td>
<td>96.4</td>
<td>3.86</td>
<td>25.0</td>
</tr>
<tr>
<td>Southern Jan–Nov 1998 less BPAC</td>
<td>92.1</td>
<td>3.90</td>
<td>23.6</td>
</tr>
<tr>
<td>Difference</td>
<td>-4.31</td>
<td>.037</td>
<td>-1.3</td>
</tr>
<tr>
<td>Difference (%)</td>
<td>-4.5</td>
<td>1.0</td>
<td>-5.4</td>
</tr>
<tr>
<td>Percentage difference BPAC compared with Southern</td>
<td>-8.7</td>
<td>-5.2</td>
<td>-4.0</td>
</tr>
</tbody>
</table>

- Evaluation of changes in specific prescribing behaviour

Two reports were provided to this review relating to specific changes in prescribing behaviour in particular drugs categories. The first of these was the Impact Evaluation of Pharmaceutical Education Programme undertaken for Pegasus Medical Group (Richards, 1999). This evaluation compared changes in behaviour in an intervention group with control groups to determine the effectiveness of a small group prescribing education programme focusing on a number of selected interventions.

The evaluation found that significant changes were observed in the intervention group compared with the control group.
Increasing the use of metered dose inhalers for asthma treatment.

Increasing the proportion of erythromycin scripts compared with more expensive macrolides.

Decreasing the proportion of high dose H2 antagonist scripts.

Decreasing the proportion of augmentin scripts and substituting amoxycillin.

Changes in these proportions range from 7–40%.

The study did not seek to calculate the economic benefits of this change in prescribing behaviour but the above findings are probably associated with a significant drop in pharmaceutical expenditure. The study concluded that the results clearly demonstrated to funders the effectiveness of the programme in promoting rational prescribing and therefore quality of practice, and would be expected to have positive gains for pharmaceutical budget holding.

The second report was from First Health/Prime Health relating to their Quality Improvement Plan in Pharmaceutical Budget Holding in 1998/1999. As part of budget holding, First Health has introduced an extensive programme of pharmaceutical management, focusing primarily on quality.

The report describes changes in prescribing behaviour within and between its four networks – East Coast, Prime Health, Taranaki and Waikato. The quality improvement plan, developed with the HFA, includes network-based clinical committees, pharmacists’ facilitators, green prescriptions and focus groups, prescribers’ review and standard measures of quality. Specific targets relating to quality of prescribing included:

- increasing the use of preventative agents targeted at the treatment of asthma
- stabilisation of the use of beta agonists
- reduction in the dosage of ACE inhibitor treatment
- promoting the management of hypertension in line with national guidelines
- reducing variability in prescribing antidepressants
- increasing in the prescription of penicillins compared to macrolides across the networks.

The report indicates the achievement, in graphical format, of almost all the objectives and targets. However, as the report shows, there is still wide variability both between and within the networks in the various indicators of prescribing behaviour.

These studies more formally complement the many anecdotal reports about the successes of budget holding strategies in changing prescribing behaviour, in particular changing categories of drug usage towards more rational and, in most cases, less expensive prescribing.

8.1.3 International experience in pharmaceutical management
The studies reported above show that New Zealand’s PCOs have followed a classical pharmaceutical management strategy (Bradlow and Coulter, 1993; Stewart-Brown et al., 1995; Harris and Scrivener, 1996).

The level of savings achieved is consistent with the UK experience (Harris and Scrivener, 1996). The variation in expenditure is also similar to findings reported elsewhere (Davis et al., 1994; Davis and Gribben, 1995). However, studies are limited. There is almost no reported experience in the international literature of successful attempts to reduce overall inappropriate variation in prescribing behaviour.

8.2 Evaluation of Comprehensive Health Services (CHS)

Malcolm (1998c) reviewed the overall development of Comprehensive Health Services including budget holding. This review sought to:

- document the overall development of CHS
- describe and review the process set in place to establish its organisation, management, financing, budget holding guideline development and information systems
- describe and evaluate the results of pharmaceutical budget holding and to analyse variation in per capita expenditure on GMS laboratory and pharmaceutical services.

The executive summary is presented as Appendix 5. In brief the findings were:

- with 89 GP members in 38 practices CHS serves a registered patient population of nearly 140,000
- CHS is managed by a board of directors and a management committee with a staff of six
- CHS has developed a wide range of projects and services funded in part by grants, its contract with North Health and savings derived from pharmaceutical and laboratory budget holding
- CHS has established a wide range of relationships, both internally and externally, and has undertaken surveys to ascertain the views of both members and consumers
- CHS has established a pharmaceutical management programme similar to other PCOs
- although comparison of pharmaceutical expenditure against the agreed budget showed that savings of 21.4% had been achieved to the year ending December 1997, there were major uncertainties about the budget setting process
- analysis of savings using trend data as reported in other evaluations indicated savings of 6.1% in the initial stages which declined to only 2.3% in the year ending September 1997
there was wide variation in age and CSC adjusted laboratory pharmaceutical and GMS expenditure per capita with the top five practices spending almost three times as much as the bottom five practices.

The key achievements of CHS were not just in budget holding. More important was the development of a new sense of collaboration, accountability, sensitivity to quality, peer review among members and the establishment of a platform from which major future achievements in quality, cost control and integration of care could be expected.
9 EXTERNAL RELATIONSHIPS AND INTEGRATION

Sections above have discussed ways in which new relationships have developed between PCOs and purchasers, other primary care providers, CHEs/HHSs and the local community. The 1998 and previous surveys asked about these relationships and how much these had changed in previous periods. (Malcolm and Powell, 1996 and 1997; Malcolm et al forthcoming)

9.1 Purchaser relationships

Of particular importance has been the changing relationship with previous RHAs and the HFA. These have varied widely in the past, the dominant pattern being, at least initially, one of confrontation and conflict (Malcolm and Powell, 1996).

Relationships with the HFA over the past few months have been significantly affected by:
- changing staff within the HFA
- uncertain policies relating to contracting associated with the merging of the four RHAs
- a lack of government policy relating to the future of PCOs and primary care generally
- no clear HFA primary care strategy.

With the resolving of PCO contracts it is expected that these relationships will improve.

9.2 Relationships with HHSs

The initial surveys of PCOs showed that relationships with CHEs were largely neutral or negative with uncertainty expressed by CHE CEOs (Barnett and Malcolm, 1997). However, the major efforts towards service integration, largely initiated by PCOs, over the last two years have seen a major strengthening and improvement of this relationship and this was reflected in the 1998 survey (Malcolm et al, forthcoming). Three PCOs reported full collaboration with CHEs, 17 reported partial collaboration, neutral relationships were reported by six, and competitive relationships were experienced by one, with a further PCO experiencing active competition/opposition. PCOs also reported that over the last 12 months relationships had improved (12) or remained the same (12), with only one reporting a deterioration.

However, PCOs have indicated that relationships are still in a tentative stage and that there has been no great enthusiasm by HHSs to foster such relationships, despite the fact that PCOs are the primary “customers” of HHS services. Important reasons cited for this are:

- an uncertain role for HHSs including commercial/business rather than health service/outcome goals
- senior management staff in HHS feeling threatened by services being taken over by PCOs
- unclear public/private sector relationships.
9.3 Relationships with other primary care providers

Many PCOs have sought to build relationships with other primary care providers such as nurses and midwives, Plunket Society, Māori organisations and other community-based services. For many PCOs these relationships have been pursued with some enthusiasm over a number of years and formal relationships of various types have evolved, such as MATPRO in Wellington.

For other PCOs these relationships are still in an early stage. Some PCOs are regarded with uncertainty and suspicion by other primary care providers who are concerned by the growth of dominant general practice organisations and perceive threats to roles which other providers have traditionally exercised or are seeking.

9.4 Relationships with public health services

Many PCOs have sought to build better relationships with the public/population health services provided by HHSs and other Crown entities, especially those with a personal health focus, for example, those provided by public health nurses. Again these relationships and initiatives have been regarded with some suspicion. Existing providers perceive a potential threat to traditional activities and in some cases PCOs have won contracts for services previously held by established public health providers. There is a view in some of these services that GP-led PCOs do not have a good understanding of the scope of population health practice including health promotion strategies.

9.5 Community relationships

In the 1998 survey (Malcolm et al, forthcoming) PCOs demonstrated some support for community involvement. Fourteen out of 28 respondents indicated it to be “quite important”, eight “slightly important”, and six “not important”. Respondents provided information to the community mainly through newsletters and pamphlets. A number of consultative processes have developed such as public meetings (10), submissions on written documents (12), complaints advocacy procedures (13) and surveys of community views (9).

Ten respondents had direct community representation on their boards, seven had established community advisory boards and five had established joint ventures with community groups. Respondents also reported a variety of other community initiatives including:

- involvement on the boards of other health agencies
- provision of health information (e.g. via a web site, through local media)
- participation in projects such as a health survey and health promotion meetings
- involvement with other groups in more formal health planning projects.

The 1999 survey for this review was conducted within a few months of the 1998 survey, and therefore there is little change in the results. An additional two groups had joint ventures set up, three groups indicated that they had membership on other agencies’ boards, and one organisation indicated that it had a community development director with an associated trust fund for community
development initiatives. In an unusual innovation one organisation is planning to set up a Māori services advisory panel to advise on Māori health service delivery.

One PCO has made a formal approach to its local city council requesting nominations of members for a community board to be financially supported by the PCO and to advise the PCO on its policies, priorities and service planning.

Two of the PCOs have particularly strong community bases. These are Health Care Aotearoa and the Mangere Health Resources Trust.

9.6 Service integration

• Integration in the 1970s and 1980s

The pursuit of greater integration has been a concern of most health systems in recent years (WHO, 1996). In New Zealand important progress towards integration started in the 1970s through what were called service development groups (SDGs). These brought together a range of health professionals and agencies in a service framework such as mental health, care of the elderly and primary health care. These approaches were piloted initially in Northland, Wellington and Canterbury (Barnett et al, 1983). Their success led to the Area Health Boards Act of 1983 requiring such boards, as lead agencies, to establish SDGs to integrate the public, private and voluntary sectors in their areas.

However with the implementation of area health boards towards the end of the 1980s, little progress was made with integration, other than bringing public health services under the organisational control of such boards. Boards were fully preoccupied with the implementation of National Health Goals, the implementation of the State Sector Act 1998 and the Public Finance Act of 1989. Relatively little attention was given to building new relationships outside the board’s organisational boundaries.

• Impact of the health reforms

With the implementation of the 1993 health reforms there was major progress with the integration of funding through the RHAs. However, the more competitive contracting environment led at the same time to a fragmentation of the provider sector which saw the competitive model as a disincentive to collaboration. Almost no attempts were made by the CHEs to establish collaborative relationships with their main customers, general practice and related services, despite the requirement that they be successful businesses.

With the more collaborative approach to health services from 1996, and the growth of the PCOs, integration again became a key strategy in health services development. Most of the initiatives towards collaboration and integration over recent years have come from PCOs and similar groups, often against indifference and resistance from CHEs and HHSs. More recently, with the government requirement that HHSs collaborate with such initiatives there has been a greater willingness to explore collaboration with PCOs.

• Managed care and integrated care
One of the early expectations in IPA development was that, once budget holding for laboratory and pharmaceutical services had been established, PCOs would progressively move into holding budgets for secondary care services. This growing expectation led to wide ranging discussions relating to the concept of managed care and to the Managed Care Conference in 1996 attended by some 600 participants.

However, “managed care”, both the terminology and the underlying concept, has now been replaced by “integrated care”. There were two reasons for this. The first was the association of managed care with a competitive, controlling US model and secondly the view by most PCOs that more collaborative relationships between primary and secondary care were a prerequisite for successful integration.

This was confirmed by the 1998 survey of PCOs in which views were sought on these two service integration options (Malcolm et al, forthcoming). There was strong support for joint venture projects between primary and secondary care providers (19) but much less support for the purchase of secondary care from a primary care base (5).

- **PCO initiatives in recent years**

A wide range of integration projects has been established largely through the initiatives of PCOs in recent years. These may be classified into four categories. These are:

- integration of the care of whole populations
- integration of disease management
- age related integration
- general practice led integration
- integration of primary care

There were three attempts to establish whole population integration. These were:

- in Wanganui through the efforts of Progressive Health Inc, a joint venture between GPs and specialists
- the PrimeHealth initiative in the Western Bay of Plenty
- the Wairau project.

For a variety of reasons government has not approved any of these initiatives.

The main interest of the HFA has been in disease integration projects. Of the 10 national integrated care pilot projects supported by the HFA seven are disease based: in mental health, asthma, COPD, and so on. Of the remaining three, two are in child health and one in the care of the older persons.

Interest in general practice related initiatives towards integration, based upon the fund holding model in the UK, were expressed by both Karori and Ropata Medical Centres in Wellington and
Christchurch South Health Centres that initially involved outpatients and elective surgery services. However, little interest was shown by the HFA.

Further important initiatives in integration have been sought between the PCOs and other primary care providers. The most important have been attempts by the PCOs to work in collaboration with midwives. The most successful of these has been the Wellington based MATPRO.

Another important relationship, which a number of PCOs have attempted to establish, is with Māori organisations. The most successful, and which was actually implemented, was a joint venture between IPCS in West Auckland and Te Whanau o Waipareira Trust. This pilot appeared to be successful but support from the HFA was withdrawn before an evaluation could be carried out.

Initiatives of a similar nature are being explored by the Rotorua IPA with Te Arawa and Pegasus Medical Group with Ngai Tahu but as yet have failed to make significant progress. This appears to be largely due to Māori organisations still working out their policies in consultation with the wide range of interests in their iwi.

Despite the importance of efforts to integrate primary and secondary care, few studies have analysed the referral relationships between the two. Studies are needed, for example, of referral patterns and the relationship between GMS and CSC categories and the utilisation of secondary care expenditure. A study of such expenditure for patients registered with the Christchurch South Health Centre has shown the importance of linking data through the NHI to provide insights into referral to specialist outpatient and hospital inpatient services (Malcolm and Wright, 1998).

Much of the discussion of primary and secondary integration is based upon a very limited information base.

In summary the initiation of various models of managed care and integration over recent years have been largely led by PCOs as a key strategy for the development of a more integrated primary care led health system. This issue will be further discussed below.
EMERGING HFA POLICY ON PRIMARY CARE

10.1 HFA policy and the response of general practice

There has been increasing support for capitation from PCO leadership, as shown by the surveys of IPAs in 1994/95 and 1996 (Malcolm and Powell, 1996). Support rose to over 50% at the end of 1996 and to over 70% in the 1998 survey (Malcolm et al, forthcoming).

Strong support for capitation, inclusive of GMS, pharmaceutical and laboratory services at a representative meeting of PCOs in April 1998 was an important factor in the development of the HFA’s 1998 discussion paper The Next Five Years in General Practice (Health Funding Authority, 1998b). The key elements of this are summarised in Table 15.

<table>
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<th>Community confidence in the provision of quality primary care to meet needs and based on the Treaty of Waitangi</th>
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<td>Proactive, population focused and well managed</td>
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<tr>
<td>Better outcomes/effective and efficient use of resources</td>
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<tr>
<td>Continuity, teamwork and co-ordination</td>
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<tr>
<td>Targeting services to those with the greatest needs who have a potential to benefit</td>
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There was a strong emphasis upon achieving public confidence, contracting consistency, service quality, population based funding and equitable allocations, and workforce development.

New funding arrangements were proposed that stressed population enrolment, moves from historical to equitable funding based upon need, a strong emphasis upon outcomes, and performance incentives and collective accountability. Consultation was sought on these.

Although the word “capitation” was not mentioned in the HFA document there was a widespread impression that capitated GMS, practice nurse, pharmaceutical and laboratory services funding was being proposed.

The consultation process that followed elicited a wide range of views which, in many cases, differed markedly from those being expressed by PCO leadership. The review of the submissions on the strategy showed:

- a lack of any broadbased consensus on the strategy, including the overall vision
- resistance to setting a level for GMS payments above which services might be capitated and for limiting the size of primary health services organisations to a minimum of the 30,000 population thought to be needed for financial viability
- uncertainty about budget holding based on population, associated with problems of defining populations and the development of appropriate needs based formula
- identification of the major issues facing patient enrolment.
10.2 Towards a PCO contract

Uncertainties associated with these responses, together with the reorganisation and amalgamation of the personal health services section of the HFA, meant little obvious progress in general practice and primary care strategy development through much of the 1998/99 financial year. The principal focus of primary care development became the finalisation of the contracting strategy by the end of June 1999.

Most larger PCOs, recognising the need for a nationally consistent contracting strategy to which they could all contribute, formed the Independent Practitioners Association Council (IPAC) in March 1999. This became the main negotiating body and dealt with the large amount of documentation issued by the HFA as part of its overall contracting strategy. A final contract was signed towards the end of June 1999.

While the first two sections of the contracting document are applicable nationally, the contract leaves open the negotiation of locality contracts with individual PCOs within this national framework.

The key elements of the new national contract are:

- acknowledgment of the common goal of “promoting the health of the individual and the population through provision of comprehensive quality primary health care and the integration of other health care services with primary care services”
- the recognition of the need for the HFA to develop and implement, in consultation with the sector, a strategic vision for primary care
- agreement to develop Māori health plans
- acceptance of enrolment based on the NHI is an essential ingredient in achieving population-based equity
- agreement relating to a set of principles including the need for comprehensive, continuous services provided by the general practice team which the population have access to on a 24-hour, seven-days-a-week basis.
- sharing of timely and accurate information
- agreement to work toward population-based equity
- definition of the role of PCOs and the devolution of appropriate responsibilities to PCOs.

These agreements would appear to represent a major step forward in the continuing development of PCOs as key entities in the provision of comprehensive and integrated primary health care.
11 WHAT HAS BEEN ACHIEVED?

11.1 Overview of achievements

This study has brought together information from a wide range of sources relating to the development of PCOs in recent years. Although not readily available, much evidence has accumulated relating to the establishment of PCOs, their activities, infrastructure, relationships and achievements. Some important conclusions may be drawn from this information.

- Organisational models

PCOs now represent the interests of over 85% of GPs in a variety of models. These include large organisations mostly urban based, smaller practice-based groups, those with a strong community focus and loose networks. This variety allows for both choice and continued experimentation with new initiatives in the development of primary health care. With Carenet this organisational choice now extends to provide for those who are reluctant to move beyond Section 51 but who wish to implement mechanisms for improving quality of care within a non-budget holding model.

- New services

This review has shown that PCOs have developed a wide range of new services for patients and communities. Some of these have come from budget holding savings and therefore do not involve additional expenditure from HFA funds. These include more organised population-based health services such as immunisation, screening and smoking cessation activities.

- Infrastructural models

In order to implement these initiatives PCOs have established a range of infrastructural models including systems of governance, management, staffing and information systems, that is, the typical arrangements required for an effective organisation.

New services are being provided to members such as practice development support, computerisation, disease coding, information systems, newsletters, service guidelines, organised continuing medical education, and a range of quality initiatives previously not available in general practice. As a direct result of PCO development there is almost total computerisation of age-sex registers in member practices.

- Quality initiatives

PCOs have reported a wide range of quality programmes. These cover evidence-based service delivery, clinical safety and effectiveness, cultural appropriateness, responsiveness to customer needs, consideration of potential access barriers, and quality related to appropriate and effective management systems. Of these, PCOs appear to have been remarkably effective in implementing quality initiatives related to management systems, responsiveness and clinical safety and effectiveness.
This is consistent with organisations establishing and consolidating their infrastructure and there appears to have been a positive shift towards higher quality and better standards. Cultural appropriateness appears to be the least well developed of the reported quality initiatives. Now that PCOs have largely developed their quality infrastructure, issues such as this are likely to get more attention in future.

- **New relationships**

PCOs have also established new sets of relationships. These include internal relationships with and between members and practices. These relationships have been important in:

- establishing a sense of identity and purpose
- sharing of information and experience
- the development of a shared set of goals
- putting primary care into a more central role within the health system

Also important has been the development of a range of relationships within primary care with other primary care providers such as midwives, nurses and community agencies, and with communities through more formal community participation initiatives. However, as will be discussed below, these initiatives are viewed by some with apprehension as potential attempts by GPs to retrieve their declining influence in the provision of primary care services.

A particular thrust has been the building of relationships which previously were almost non-existent between primary and secondary care. This is being achieved through initiatives in child, mental health, care of older persons, and disease management programmes. GPs are now involved in activities and relationships which, until recently, would have been thought to be either impossible or quite inappropriate.

### 11.2 Towards resolving issues facing primary health care

This review has demonstrated that many of the problems and issues facing primary health care, as listed in Section 3.3, are being effectively tackled by PCOs.

- As new agents in the organisation of primary care they are establishing a power base, effectively and creatively but within a collaborative framework, to challenge the perceived dominance of hospital and secondary care services.
- They are establishing a clearer identity of what primary health care is and how it can be organised and managed.
- PCOs provide a mechanism through which inequities both within the populations they serve as well as between populations served by different PCOs can be identified and addressed through moves towards population-based equitable funding.
- A wide range of quality initiatives has been implemented and, over time, will lift standards in primary care.
Through budget holding and other resource management strategies, although as yet limited in achieving savings and especially in the reduction of inappropriate variation, PCOs are managing referred services and related expenditure, within a quality framework.

PCOs are beginning to demonstrate a well-developed sense of collective clinical accountability for both quality and cost which was only rudimentary in previous strategies such as professional training programmes and continuing medical education.

There has been major progress in information system development to manage, monitor and evaluate primary care development, although there is much yet to be achieved in this area.

A wide range of integration strategies are being developed to explore new relationships between primary and secondary care and how a better balance between these two sectors can be achieved.

Major initiatives are being implemented or explored in community participation.
12 WHERE TO FROM HERE? ISSUES TO BE ADDRESSED

Despite evidence of success, this review has also shown that there are many unresolved issues in the further development of PCOs. The following reviews the most important of these.

12.1 Population-based equitable funding

It is clear from the evidence presented above that the proposed implementation of population-based equitable funding by the HFA in conjunction with PCOs faces major challenges. An important related issue is patient enrolment.

The studies referred to above indicate that there is wide variation in age, gender and CSC adjusted per capita expenditure between areas, PCOs and within PCOs.

The evidence relating to outcomes of budget holding indicate that relatively small percentage reductions have been achieved in overall expenditure by PCOs and have affected low-cost prescribers to a greater proportion than high cost members. There is almost no evidence that the wide variation between members and practices has been reduced by even comprehensive budget holding strategies. In part this may be due to the primary focus on price and drug categories rather than on per capita variation and the volume problem.

Given that the HFA, in its primary care contracting, is required to work within a fixed budget, the equity issue can only be resolved through major savings being achieved by higher spending practices and PCOs. Such savings are needed in order to finance improved access and to meet the need for equitable allocations in funding. This shift is particularly important in:

- improving access to primary health care for disadvantaged populations with poorer health status served by lower spending PCOs and practices within PCOs, the consequences of which are inappropriately high use of hospital services

- giving incentives to those PCOs and practices to provide new services to their patients where expenditure, because of good practice, is below the expected figure.

Finding an effective strategy to enable these shifts to be made must start with addressing inequities within PCOs. As yet no effective strategy appears to be available either internationally or nationally that offers a solution to this problem. The evidence is clear that those with high rates of consultation are also those who are higher users of laboratory and pharmaceutical services.

Research into these dynamics might be more productive if it contrasted the patients and GPs in a group of practices at the high-end of the expenditure spectrum with those towards the lower end. This research might have the following objectives.

- To examine the characteristics of GPs in these two groups.
- To contrast the patients from a health status perspective.
- To analyse in more detail the nature of the prescriptions being issued by the two groups.
To determine patient outcomes in terms of satisfaction, the results of the consultation, patient referral as well as hospital admissions.

To implement and evaluate strategies, with the insights from these studies and with appropriate incentives, which focus upon shifting prescribing and related expenditure towards the mean of the PCO.

A proposal for such a research project has been prepared and is currently under discussion between the HFA and Pharmac. A number of PCOs have expressed interest in participating in this research.

12.2 Risk management

It was assumed by some RHAs, notably Midland, that PCOs were commercial organisations which would assume financial risk in their contracts as soon as possible. This view was based on a number of assumptions.

From the RHA’s perspective it was a way of minimising its risk.

As commercial organisations PCOs would have a greater incentive to manage budgets with risk-holding.

GPs would benefit both financially as well as professionally.

The offer of First Health, with its international capital backing, to “purchase the risk” from the RHAs in its budget holding contracts was therefore attractive to the Midland RHA and to some extent the Northern RHA. However, there is little evidence from the information available to this review that such a risk purchasing strategy was successful in minimising the purchaser’s risk. Growth in Midland’s referred services expenditure did not appear to be contained by First Health strategies.

PCOs have shown little enthusiasm for financial risk-holding. Reasons for this include:

- Little confidence in the quality of the data needed for secure risk-holding budgets
- Uncertainty about the future role of PCOs
- Uncertain political stability especially regarding the future of the HFA
- Political risks associated with being perceived as commercial rather than professional organisations both by other sectors of the health system, as well as the political left, particularly given a possible change of government later this year
- Uncertainty about commitment of members to risk-holding
- The lack of any significant capital backing which most commercial organisations would require in assuming financial risk.

Although PCO leadership has recently expressed more interest in risk-holding there is also almost complete rejection by such leadership of personal gain incentives. There is now widespread acceptance of budget holding itself, but little support for the commercial version originally envisaged by some RHAs.
PCOs boards may be considered to be similar to the boards of directors of HHSs in that they are managing large amounts of public money. Although their members are private practitioners, they operate in practice as “quasi-public” bodies, managing public money to achieve public goals. Only indirectly might this assist in improving the financial circumstances of members.

A key question is to identify the type of incentives which might be most effective in controlling the apparently excessive expenditure associated with high volume uses of primary care services. Would financial incentives assist in clarifying the reasons behind this behaviour, at least in the initial exploration of such behaviour? This needs detailed study.

Another problem associated with a more commercial risk-holding approach is that PCOs might terminate the membership of high cost members or selectively recruit low-cost members. Apart from implications under the Commerce Act 1986 selective behaviour would have adverse public health consequences. Such high cost members would no longer be under the potential influence of the quality and cost containment initiatives which members of PCOs are subjected to.

It is far from clear at this stage that commercial, risk-holding strategies have any advantage to offer PCOs or the HFA in their future contracting arrangements. This question needs further study.

12.3 Integrating relationships within primary health care

The formation of PCOs by GPs is seen by a number of the disciplines and groups within the primary health care sector as a strategy for enhancing the already dominant role of GPs within the sector. Nurses, midwives, and other providers of primary care, including alternative providers such as chiropractors, have made many efforts over recent decades to have a greater professional role in the provision of services and to gain independent access to funding (Carryer et al, 1999).

Government, through deregulatory strategies, has broadly supported these efforts. Over the last decade, midwives have become independent following the Nurses (Amendment) Act 1989. More recent developments include moves towards nurse prescribing and ACC recognising alternative providers to GPs in its funding arrangements.

These moves towards greater independence of non-medical primary care providers offer greater patient choice and the opportunity for such providers to develop their own service strategies. However, many GPs see them as a commercial and professional threat. There is concern that such moves will lead to further fragmentation of primary health care, with adverse consequences for quality of care.

The findings of this review indicate that PCOs have developed an organisational framework through which GPs might exert a more dominant role over the primary health care sector. To counter this the evidence from the review suggests:

- that some PCOs are seeking collaborative relationships with primary care providers. In a limited number of situations, for example, nurses and pharmacists are becoming PCO shareholders.
there is increasing commitment to capitation that could reinforce the collaborative relationships that are limited by present fee-for-service remuneration

patient enrolment within a primary care setting offers the opportunity for PCOs to provide a more comprehensive and accountable team approach to primary health care

PCOs are exploring collaborative relationships with other agencies such as Māori, Pacific peoples, Plunket and the providers of population-based services within HHSs.

However, relationships at this stage remained tentative and uncertain (Carryer et al, 1999). PCOs are still perceived by some non-GP primary care providers as threats rather than an opportunity to move toward a more integrated approach to primary health care. As yet little is known about either the extent of the collaborative integrating initiatives being pursued by PCOs. Little is also known about how other primary care providers perceive these initiatives. A study is needed with the following objectives:

to document initiatives being undertaken by PCOs to explore new relationships within the primary health care sector and the extent to which these relationships are succeeding
to ascertain the views of non-GP primary care providers regarding their aspirations and interests in advancing primary health care and the extent to which a more collaborative framework between these providers and existing PCOs might be developed.

12.4 Governance and management in PCOs

The rapid growth of PCOs in recent years has resulted in a wide range of governance and management structures with substantial staffing, information and infrastructure arrangements. While these appear to be working successfully, there is concern about a range of issues that need to be addressed if a more sustainable future is to be established for PCOs.

Of these the most critical is the need for a national primary health care policy in which the roles and responsibilities of PCOs, as more permanent ongoing organisations, are established. The evidence from this report indicates that PCOs might expect to have a long-term future, although not necessarily with their present roles, responsibilities and membership.

It seems clear that the evolutionary changes which have occurred in recent years are likely to continue towards more broadly based organisations in terms of wider primary care team membership, relationships with a wide range of primary care agencies, and also with local communities. Questions also need to be resolved relating to a number of issues.

Governance and its membership and accountabilities.
The need for training, of staff at all levels of PCOs. They are now too large and complex to be regarded as collegial organisations on a part-time basis by practising GPs. There is a need to incorporate new skills, particularly generic management, but also a wider range of specialist skills, for example negotiation, communication, and public health analysis.

Working out relationships between the local communities and PCO members especially in small provincial centres when the PCO has a broad-based geographic coverage.
Devolution of funding and accountability to PCOs, for example, payment of GMS to members, integration of GMS, pharmaceutical, laboratory and other funding. Primary/secondary care relationships and the holding of budgets for referred secondary care services.

12.5 PCOs and community participation

This review has shown that a wide range of community participation initiatives have been established. These include:

- community-owned primary care services by organisations associated with Health Care Aotearoa
- provision of services by Māori, Pacific peoples and a number of community trusts
- formal community participation relationships including formal advisory committees and appointment of community representatives to boards of governance.

These developments are important in the evolution of the philosophy and strategy for primary health care. There has been much political discussion relating to community input to the secondary care sector, for example elected board members. Yet there has been almost no discussion relating to the nature and type of community participation needed at the primary health care level.

However, it is at the primary care level that the most effective input from communities is likely to be achieved. People contact their primary care provider far more frequently than they are seen by secondary care services or are admitted to hospital. Community input into primary health care services is important in order to address issues such as quality of care and barriers to access.

This review could not adequately identify the full extent of community participation initiatives nor what has been learned from these developing initiatives. Further studies are therefore needed to document and evaluate these experiences, both as part of the inputs to a national primary health care strategy and to enable the initiatives to be more widely shared among PCOs.

12.6 Information systems

It is clear from this review that the quality of data and information available for the adequate analysis and evaluation of PCO activities, as well as other aspects of health system development, is grossly lacking. It is recognised that the major restructuring which the RHAs and the HFA have been through in recent years has been an important factor in limiting the availability of information. There is a need for a broadly based national research, development and evaluation strategy inclusive of the following elements:

- identification of national and HFA priorities in primary care
- funding for research to ensure that new strategies and services are properly developed and evaluated
research to be subject to peer review with the results being made widely available

- a comprehensive information system including a library service providing for the ready retrieval, both in a hard copy and electronically, of the wide range of documents which previous RHAs and the HFA have accumulated over the years from many studies reports, evaluations and so on

- the continued development of Pharm House, being developed by Pharmac, and related strategies to establish a reliable database accessible to relevant agencies needing data on primary health care utilisation and expenditure.

At the same time PCOs need to initiate their own research and development strategies. Many are doing so and a substantial amount of work has been undertaken and that has been revealed by this review. However, there appears to be little sharing of information and experience.

A national research, development and evaluation strategy is needed involving the Ministry of Health, New Zealand Health Information Service, the HFA and PCOs to promote a major expansion of research, development and evaluation activity in primary health care.

12.7 The Independent Practitioners Association Council (IPAC)

IPAC is an umbrella structure that appears to have potential to achieve important gains in PCO development. It has already proved to be a successful body in negotiating the recent PCO contract on behalf of IPAs. Although IPAC is not fully representative of all PCOs, its negotiations would appear to have benefits for PCOs outside its membership.

IPAC offers an important new structure to provide leadership in the development of PCOs and primary health care generally. Some members, non-members, and non-GP providers of primary health care may view formal recognition of such a role with some apprehension. It could be perceived as a further structure advancing the status and dominance of GPs.

On the other hand it is a structure through which the HFA and government policy generally could influence trends in PCO development towards the broader population and interdisciplinary perspective which has been highlighted by this review.

The success of IPAC will depend largely upon how it is perceived by its members, other GPs and the wider health community as well as its success in providing leadership in addressing the issues discussed in this report.

12.8 A framework for a national primary health care policy and strategy

The Minister of Health has requested that a primary health care strategy, led by the Ministry of Health, be prepared by the health sector. The emergence of PCOs offers a new opportunity for the development of such a national primary health care policy and strategy. There is clear evidence from this review that PCOs are moving towards establishing a comprehensive and integrated system of primary health care, the key components of which were outlined in the introduction to this review. PCOs, as their name implies, are recognising and demonstrating that comprehensive, integrated
primary health care can be achieved. It is also clear that this is being achieved around a core of primary medical care.

The National Health Committee is currently reviewing primary health care including equity and health status related questions. It has commissioned a set of papers on primary health care which has covered some areas of this review (Carney et al, 1999; Coster and Gribben, 1999; Crampton, 1999; Crengle, 1999; Cumming, 1999; Tukuitonga, 1999). It is expected that these papers, along with this review, will provide a significant information base for policy and strategy development.

A key issue to be addressed is the continuing debate, both in New Zealand and internationally, about how primary health care might be organised. In the absence of any organisational framework some have pushed for so called “vertical programmes”, typified in New Zealand by the National Cervical Screening Programme, immunisation, mammography and disease management programmes.

The preference for these “vertical programmes” is understandable. Until recently there has been no organisational or accountability framework to work with. This has led to competing interests in “fragments” of primary health care especially in the absence of a national policy for primary health care. While “vertical programmes” have an important role in setting national policy, and in monitoring and evaluation of programmes, they may now have only a small part to play in actual delivery.

“Vertical programmes” also have major disadvantages. They tend to fragment primary care and minimise the role and accountability of providers. There may also be other problems. The following are actual case reports (Auckland/Northland Diabetes Consortium, 1999).

A diabetes nurse specialist was attempting to manage severe hypertension in a female patient. The hypertension was pregnancy related and potentially life-threatening to mother and child. The nurse had focused on the disease and not considered other possibilities outside of her diabetes “square”.

A woman in the cervical screening programme was screened by a “lay” screener and therefore more comprehensive “well-woman” checks were not undertaken. An ovarian tumour was not diagnosed until it was well advanced.

“Vertical programmes” can now can be replaced by the organised delivery of comprehensive primary health care. Figure 7 is a model of how a balanced set of relationships, evidenced by this review, appear to be evolving within primary health care and with the community. Primary health care is a foundation service of the health system. From this foundation better integrating relationships can be built by PCOs with communities, within primary health care and with the secondary care sector to establish a more balanced health system.

In the past priorities have been driven more by organised secondary and tertiary interests than the needs of the community. Organised primary health care, bringing together all the components discussed in Section 1.2, is now in a much stronger position to be an advocate for its appropriate role within a more balanced health system.
The service framework depicted provides a holistic approach, bringing all components together into a balanced set of relationships. For example discussions about more integrated services for children and mental health care need to take into account the key integrating role of the primary health care service, including public, private and non-profit providers.

12.9 Key components of a primary health care policy and strategy

This review and other reports, for example, from the National Health Committee, and national and international experience, suggest key components for a national primary health care policy and strategy. These are listed below.

- Primary health care is a key service within an integrated health system. It occupies a strategic relationship with the community and its self-help services on the one hand and secondary care services on the other.

- This primary health care service should be comprehensive, integrated, continuing, holistic and population focused.
Primary health care should be organised, within an emerging PCO model, to include primary medical care as a core service but must expand its scope to include nursing, midwifery, social work and a wide range of other disciplines if it is to function effectively as a comprehensive team.

The service should have an integrated population-based budget and be organised in such a way that all components are brought together to work within an agreed accountability framework for both quality and cost.

Population enrolment with integrated PCOs is essential to achieve the population basis and focus for the service.

Funding between and within PCOs should be equitable and based upon population need and the ability to benefit.

The following are key components of a primary health care action strategy to implement this policy.

- Planning the shift from current historical funding to population-based equitable funding and developing strategies to achieve this.
- Building integrating relationships within PCOs to bring GPs, nurses, social workers, midwives and other disciplines together into an integrated team.
- Clarifying the roles of PCOs in the provision of an integrated primary health care service including relationships to the community and the health sector generally.
- Resolving the governance roles of PCOs and building needed organisation and management structures.
- Establishing the comprehensive information systems needed to plan, manage, monitor and evaluate the strategy including a much expanded research and development capability.
- Build more formal relationships between PCOs and communities to promote a more democratic health system at the primary health care level.

The findings of this review, together with discussions with PCOs, the HFA and with the health sector generally, indicate that it is now not only opportune, but of high priority, for national health agencies to work together to formulate a national primary health care policy and strategy.
13 REFERENCES


Health Funding Authority. (1998a). HFA strategy for the funding of general practice services, within a vision for primary health services. Health Funding Authority: unpublished HFA paper.

Health Funding Authority. (1998b). The next five years in general practice, Health Funding Authority: Auckland.

Health Funding Authority. Stocktake of PCOs and Contractual Relationships. computer files. 1998/99

Houston N. 1998. Results of a survey of how quality issues are being addressed by Independent Practitioner Associations in New Zealand. Glasgow.


Malcolm L, Wright L..  1998. Primary and secondary care expenditure for the Christchurch South Health Centre patients. Report prepared for the Centre and the Health Funding Authority.


A wide range of information was also supplied by PCOs.
PROJECT OBJECTIVES

JOINT MINISTRY OF HEALTH / TREASURY STOCKTAKE OF PRIMARY CARE ORGANISATIONS

OBJECTIVES

1. To identify and review the information on the development of Primary Care Organisations (PCOs) from all readily available “off the shelf” sources such as the Ministry of Health, Health Funding Authority, PCOs, academic, consultancy and other sources.

2. To develop, from these sources, a descriptive overview and classification of PCOs according to their organisational structure, governance, contractual arrangements, size, infrastructure, financing, scope of activities and relationships with communities served.

3. To provide, from these sources, a preliminary analysis of the current situation of predominantly GP-based PCOs, drawing contrasts with alternative PCO models. The scope of the analysis will include their developments, accomplishments and frustrations current evidence of PCOs’ results in terms of health outcomes and quality of care, managing clinical activity, skill-mix, identifying and addressing issues in access and utilisation, relationships within primary care and with secondary care services, resource management, and community participation.

4. To identify gaps in the information needed to evaluate PCOs in order to provide policy advice on issues such as:
   - governance of PCOs including clinical governance
   - financial, including risk management of primary care resources
   - integration of primary care between GPs, nurses, and so on
   - integration between primary and secondary care
   - population-based funding of primary care including implementation issues
   - organisation of primary care
   - community and consumer participation
   - ways of enhancing the achievement of the government objectives for health and disability support services through PCOs.

5. To present a draft report on these findings by 30 June 1999.

6. To respond to comments on the draft and integrate to the satisfaction of the sponsors.

7. To produce a final report by 31 July 1999.
Questionnaire to Primary Care Organisations/Independent Practitioner Associations

From
Aotearoa Health
Lyttelton RD1
1 June 1999

Please complete the following and return to us by email by 15 June or as soon as possible.

1.1 Name of the IPA/group ____________________________________________

1.2 Number of GP members _______

1.3 Does your IPA or group include other health professionals (e.g. practice nurses) as members/shareholders or associate members? Yes/No ______ If so what categories? ____________________________________________

1.4 Does your IPA or group intend to expand its membership to include other health professionals in the future? Yes ______ No ______ Uncertain _______

1.5 What is the legal form of your IPA or group?

   Limited liability company ____ Incorporated society ____
   Non-profit trust ____ Other (please state)________________

1.6 What number of staff does your IPA or group have employed? ______

1.7 How many directors are there:

   On the board ______ From outside the GP membership?_______

   Is there one (or more) community representative on the board? Tick one. Yes [ ] No [ ]

1.8 What is your estimate of the population served by your IPA or group for capitation purposes?

1.9 What is your estimate of the overall health needs of your population?

   High health needs_______ Medium health needs_______
   Low health needs_______
2. New services being provided

What new services is your IPA providing as a direct result of your establishment? Please list and, if possible, provide background documentation.

2.1 To members

2.2 To patients

2.3 To communities

3. Quality programmes/plans

Please list these

3.1 In planning

3.2 Implemented/being implemented now

Thank you
### 16 APPENDIX 3

Summary information relating to PCOs as at 1 August 1999. Based on surveys and follow up calls

<table>
<thead>
<tr>
<th>Name</th>
<th>Region</th>
<th>Contact</th>
<th>Position</th>
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<td>Whangarei Healthcare</td>
<td>North</td>
<td>Mr Kevin Hayes</td>
<td>Manager</td>
<td>54</td>
<td><a href="mailto:kevhayes@igrin.co.nz">kevhayes@igrin.co.nz</a></td>
</tr>
<tr>
<td>Comprehensive Health</td>
<td>North</td>
<td>Dr HughFininmonth</td>
<td>Chairman</td>
<td>91</td>
<td><a href="mailto:hfininmonth@chs.co.nz">hfininmonth@chs.co.nz</a></td>
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<tr>
<td>Integrated Primary Care Services</td>
<td>North</td>
<td>Mr Alan Greenslade</td>
<td>Manager</td>
<td>75</td>
<td><a href="mailto:alan@ipc.co.nz">alan@ipc.co.nz</a></td>
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<tr>
<td>ProCare Central/North/South</td>
<td>North</td>
<td>Mr David Cashmore</td>
<td>Manager</td>
<td>325</td>
<td><a href="mailto:d.cashmore@procare.co.nz">d.cashmore@procare.co.nz</a></td>
</tr>
<tr>
<td>EastHealth Services</td>
<td>North</td>
<td>Mr Paul Cressy</td>
<td>Manager</td>
<td>51</td>
<td><a href="mailto:paulc@easthealth.co.nz">paulc@easthealth.co.nz</a></td>
</tr>
<tr>
<td>South-Med Ltd</td>
<td>North</td>
<td>Mr Paul Rosenman</td>
<td>Chairman</td>
<td>77</td>
<td><a href="mailto:paul@south-med.co.nz">paul@south-med.co.nz</a></td>
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<tr>
<td>Mangere Health Resources Trust</td>
<td>North</td>
<td>Mr Michael Lamont</td>
<td>Chairman</td>
<td>50</td>
<td><a href="mailto:m.lamont@compuserv.com">m.lamont@compuserv.com</a></td>
</tr>
<tr>
<td>Pinnacle - All Branches</td>
<td>Midland</td>
<td>Mr Ian Vickers</td>
<td>Manager</td>
<td>200</td>
<td><a href="mailto:ian@gms.co.nz">ian@gms.co.nz</a></td>
</tr>
<tr>
<td>Pinnacle Waikato - North</td>
<td>Midland</td>
<td>Dr Geoffrey Knight</td>
<td>Chairman</td>
<td>45</td>
<td><a href="mailto:geoff_knight@mzcgp.org.nz">geoff_knight@mzcgp.org.nz</a></td>
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<tr>
<td>Pinnacle Waikato - South</td>
<td>Midland</td>
<td>Dr Ross Marshall</td>
<td>Chairman</td>
<td>226</td>
<td><a href="mailto:jonathon.simon@aetna.co.nz">jonathon.simon@aetna.co.nz</a></td>
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<td>Pinnacle Coromandel</td>
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<td>Dr Allan Peckowitz</td>
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<td><a href="mailto:avonbiel@wave.co.nz">avonbiel@wave.co.nz</a></td>
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<td>Dr Andrew McNeill</td>
<td>Chairman</td>
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<td>Pinnacle Tauranga</td>
<td>Midland</td>
<td>Dr Chris Cochrane</td>
<td>Chairman</td>
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<td>Rotoroa General Practice Group</td>
<td>Midland</td>
<td>Mr John McRae</td>
<td>Manager</td>
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<td>First Health Network Ltd</td>
<td>Auckland</td>
<td>Dr Jonathan Simon</td>
<td>Manager</td>
<td>80</td>
<td><a href="mailto:marc.hay@xtra.co.nz">marc.hay@xtra.co.nz</a></td>
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<tr>
<td>First Health Network Ltd</td>
<td>Northern</td>
<td>Dr Jonathan Simon</td>
<td>Manager</td>
<td>103</td>
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<td>First Health Network Ltd</td>
<td>Northern</td>
<td>Dr Peter Catt</td>
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<td>51</td>
<td><a href="mailto:kate@huttliga.org">kate@huttliga.org</a></td>
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<td>First Health Taranaki</td>
<td>Midland</td>
<td>Dr Nick Duffy</td>
<td>Chairman</td>
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<td><a href="mailto:michael.troussell@xtra.co.nz">michael.troussell@xtra.co.nz</a></td>
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<tr>
<td>First Health Waikato</td>
<td>Midland</td>
<td>Dr Andy von Biel</td>
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<td><a href="mailto:fiona@pmc.co.nz">fiona@pmc.co.nz</a></td>
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<tr>
<td>PrimeHealth Tauranga</td>
<td>Midland</td>
<td>Dr Lee Barradell</td>
<td>Manager</td>
<td>302</td>
<td><a href="mailto:murray@jin.otago.ac.nz">murray@jin.otago.ac.nz</a></td>
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<tr>
<td>Paradigm, HBIPA</td>
<td>Central</td>
<td>Dr Howard Dickson</td>
<td>Manager</td>
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<td>Manager</td>
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<td>Ms Cathy O'Malley</td>
<td>Manager</td>
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<td>Central</td>
<td>Ms Kate Harris</td>
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<tr>
<td>Hurunui - Kaikoura Rural Health Ltd</td>
<td>Southern</td>
<td>Mr Bob Bills</td>
<td>Manager</td>
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<tr>
<td>Pegasus Medical Group</td>
<td>Southern</td>
<td>Mr Michael Troussell</td>
<td>Manager</td>
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<td>Selwyn Rural Health</td>
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<td>South Link Health Inc</td>
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<td>Prof Murray Tilyard</td>
<td>Chairman</td>
<td>302</td>
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**Total IPAs**

**Contracting Practices**

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<td>Dr Graeme Stokes</td>
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<td>Dargaville</td>
<td>Northern</td>
<td>Dr Laurie Herd</td>
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<td><a href="mailto:dargavilledocs@xtra.co.nz">dargavilledocs@xtra.co.nz</a></td>
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<tr>
<td>Whangara Health Services Trust</td>
<td>Northern</td>
<td>Ms Beth Kelly</td>
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<tr>
<td>Upper Hutt Medical Centre IPA</td>
<td>Central</td>
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<td>Manager</td>
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<td>Karori-Ropata IPA</td>
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<td>Southern</td>
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<td>Christchurch South Health Centre</td>
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<td>Ms Siobhan Storey</td>
<td>Manager</td>
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<td><a href="mailto:siobhan@xtra.co.nz">siobhan@xtra.co.nz</a></td>
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**Total contracting practices**

86

**Loose networks**

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<td>Manager</td>
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<td>Marlborough GPs' Society Inc.</td>
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<td>Dr Mark Pring</td>
<td>Chairman</td>
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**Section 51 Practices wanting a capitated contract with the HFA**

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<td><a href="mailto:wmc@xtra.co.nz">wmc@xtra.co.nz</a></td>
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<td>Tamatea Medical Centre</td>
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<td>Dr Richard Eastcott</td>
<td>Chairman</td>
<td>5</td>
<td><a href="mailto:eastcott@voyager.co.nz">eastcott@voyager.co.nz</a></td>
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**Total**

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**Community owned (see Section 5.3)**

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**Total GPs**

60

**Total GPs in all groups**

2670
SUMMARY OF A REPORT PREPARED FOR THE TRANSITIONAL HEALTH AUTHORITY AND PHARMAC BY LAURENCE MALCOLM, HEALTH CARE AOTEAROA HEALTH AUGUST 1997

1. Executive summary and recommendations

Background

1. Pharmaceutical management, including budget holding, has been one of the major strategies adopted by independent practice associations (IPAs) and encouraged by regional health authorities (RHAs). Primary care organisations PCOs now represent the interests of some 70% of GPs and growth is continuing, including expansion of budget holding strategies.

2. Budget holding has been strongly supported by PCOs as a way of improving both the quality of prescribing of members, as well as a way of generating savings to be put into a range of services, including IPA development. PCOs have invested major efforts in their budget holding strategies, including the establishment of information systems, providing feedback to members, the development of guidelines, peer discussion groups and so on.

3. Budget holding has also been fostered by RHAs as a strategy for containing the continuing growth in pharmaceutical expenditure. Despite this few formal attempts have been taken to evaluate this new and important strategy within New Zealand’s primary care services.

The evaluation goals

4. An evaluation of pharmaceutical management/budget holding was undertaken during the first part of 1997 in ProCare Health Limited South-Med Limited in Auckland and Pegasus Medical Group in Christchurch. The study was also extended to what may be regarded as model general practices Karori and Ropata Medical Centres in Wellington and Christchurch South Health Centre in Christchurch.

5. This report summarises the results of these studies with the following aims: to describe and analyse the establishment of pharmaceutical management/budget holding mechanisms in PCOs, to report on the level of savings being achieved, to identify changes in prescribing behaviour including variation in such behaviour both within and between the groups studied and to compare the findings with national and international experience. Recommendations are put forward to the Transitional Health Authority and Pharmac based upon the findings.

Pharmaceutical management/budget holding in PCOs and practices studied

6. The three PCOs and the three general practices studied had a combined membership of 639 GPs and served a total population of nearly 900,000. Budget holding in the PCOs was based upon an agreed budget and levels of savings to be retained in contracts with the RHAs.
7. Within the health/medical centres however it was recognised that budget holding strategies were inappropriate as their expenditure was already low. As models of good practice they had already focused upon good quality prescribing including the avoidance of unnecessary drug use.

8. The PCOs studied had, in general, adopted a comprehensive pharmaceutical management budget holding strategy, including management committees, appointment of pharmaceutical staff to manage the programme, development of information systems, guidelines, peer review groups and active personalised feedback to members on prescribing.

International and national experience of pharmaceutical management/budget holding

9. An overview of international experience in pharmaceutical budget holding suggests that the most effective approach is one which adopts a broad range of strategies maintained over a period of time and is based upon guidelines, personalised feedback, educational material and incentives.

10. Studies of savings in pharmaceutical budget holding suggest that the results are relatively modest, in general only about 6% of the overall budget and that this may not be sustained over a prolonged period. There is very little in the literature about variation in prescribing or how to successfully reduce unacceptable variation.

The evaluation strategy

11. This evaluation strategy sought specific answers to questions related to strategies which have been put in place, the level of savings achieved, changes in prescribing expenditure and variation and differences in prescribing patterns between high and low cost prescribers.

12. Data were obtained on expenditure against budget, pharmaceutical expenditure and volume by individual members of PCOs and centres, practice register data and GMS consultations. These data were analysed to determine the level of savings achieved, expenditure trends of individual members and variation in prescribing by registered patient and by consultation.

Evaluation findings

13. The savings achieved by ProCare and South-Med against the budget negotiated with North Health was just under 10% in each IPA, comparing 1996 with 1995. Savings against an agreed budget for Pegasus were not available.

14. An analysis of the trends in expenditure by members of the three PCOs indicated that, in comparison with national trends, “savings” of 4.5-5.7% were achieved comparing 1996 with 1995. This may have been larger if population increases in the practices had been allowed for as well as a decline in the “doctor zero” proportions and the effect of pharmaceutical budget holding on national trends. Allowing for these factors the real savings may be nearer 8-10% in line with the agreed budgeted savings.
15. There was a wide variation in the total pharmaceutical expenditure incurred by individual IPA members when the bottom and top groups were compared. No narrowing of this variation was observed comparing 1996 with 1995, suggesting that feedback had had little impact upon such variation.

16. This variation persisted between bottom and top groups even when expenditure per registered patient and consultation was calculated. For ProCare the mean of the bottom and top 15 practices, even when adjusted for age, ranged from $41 to $269. Although uncertainty in practice registers and the data generally may explain some of this variation, the findings suggest that for the most part it is real and unexplained by patient factors.

17. Expenditure per capita for Karori and Ropata was less than $100 even when adjusted for age, sex and CSC.

18. In Pegasus the mean expenditure per consultation for the top 15 members was nearly four times greater than the bottom 15. Expenditure per consultation in Karori and Ropata, and to a lesser extent in Christchurch South, was close to the level of the bottom members of Pegasus.

19. A surprising finding was that the bottom group of practices had reduced their total expenditure proportionally to a greater extent than for the high cost prescribers as well as cost per consultation. This suggests that these prescribers were initially low because they were sensitive to cost and responded even further to feedback despite this showing that they were already low cost prescribers.

20. Despite the wide variation in expenditure per registered patient and per consultation, there was almost no variation in the mean cost per item using data for October to December 1996, either within or between PCOs and the practices studied. The mean cost per item was close to $20. On the other hand for Pegasus there was a wide range of variation in items prescribed per consultation indicating that the main source of the variation within and between PCOs and the practices studied was the volume, not the price of the drugs prescribed.

21. These findings were supported by a correlation analysis of the Pegasus data which showed a very high correlation between total expenditure per member and the total items prescribed (r = 0.95). Similarly the cost per consultation was heavily influenced by items prescribed per consultation (0.94).

22. An analysis of variation in BNF categories was undertaken for all groups, with the exception of Christchurch South, including patterns in high and low cost prescribers. There was a remarkably consistent pattern across all groups, suggesting that morbidity patterns, if linked to prescribing patterns, did not vary significantly between the groups. This is consistent with the findings already discussed above that high cost prescribers prescribed many more drugs, but not necessarily more expensive drugs, than low cost prescribers.

Significance of the findings
23. The findings indicate that the PCOs studied have established a comprehensive and effective programme of pharmaceutical management, the achievements of which go well beyond the significant savings identified. The savings in the PCOs appear to be slightly greater than those reported from overseas studies.

24. Of particular importance in these achievements has been the development of an infrastructure for pharmaceutical management, including information systems, guidelines, active personalised feedback, a new sense of responsiveness to peers and the wider health system with a strong emphasis upon quality rather than just achieving savings.

25. The findings point to where significant further gains can be achieved in both improving the quality of prescribing and achieving greater savings. Of particular importance is the finding that high cost prescribers are high volume prescribers and that volume rather than price is the key factor in prescribing cost variation.

26. The results of this study, combined with other evidence, suggest that there are three categories of pharmaceutical expenditure. The first group is average practices serving an average population where per capita expenditure varies widely around a mean, which may be above the national mean of about $165. The second group is those practices and PCOs serving disadvantaged populations where per capita expenditure is below $100. The third group includes what may be recognized as models of good quality general practice where per capita expenditure may be nearer $100 than the national mean.

27. Major improvements are needed not only in pharmaceutical information systems but in primary care generally, including more reliable patient registers, more comprehensive information relating to consultation rates and better information relating to pharmaceutical expenditure and volumes. As this study has demonstrated, a linkage is needed between these categories in order to make appropriate comparisons, with adjustments for patient need factors, expenditure per registered patient and per consultation.

28. The findings also point to where further research is needed based upon the much better information systems which need to be developed at practice, IPA and regional levels, including greatly expanded research, development and evaluative strategies.

2 Recommendations

The following recommendations arising from this report are put forward to the Transitional Health Authority and, where appropriate, to Pharmac.

1. That the THA and its divisions work together in a much more collaborative relationship with PCOs and larger practices to improve information systems both within the THA as well as providers.

2. That in developing this expanded information system the THA continues to extend the use of the NHI amongst providers to define more precisely the populations served by providers through the merging of practice and IPA registers and the use of GMS claim data.
3. That the THA promote the collection of complete consultation data, including A3s, and the use of PAN and NHIs, as well as the NZMC number on all transactions to ensure that pharmaceutical expenditure is linked as closely as possible to patient, prescriber and practice.

4. That the THA encourage PCOs to focus their attention upon outliers as identified in this report including possible quality issues associated with low levels of prescribing and cost savings associated with high levels of prescribing.

5. That the THA, given the evidence of savings and other benefits achieved from the relatively small percentage investment in pharmaceutical management, expands this investment particularly focusing upon quality as well as cost issues identified in this report, including a greatly expanded research and development and evaluative strategy.

6. That the THA develops a programme of study of model practices with a view to expanding the evidence presented in this report regarding the possible link between high quality general practice and low cost prescribing, including focusing upon the management of particular disease categories, compliance with recognised guidelines and links between low pharmaceutical utilisation and secondary care utilisation.

7. That the THA expands studies in disadvantaged populations, as reported for South-Med, to obtain more accurate information relating to prescribing levels and particularly the link between low prescribing levels and other underutilisation of primary care services and the link between this underutilisation and high utilisation of hospital-based services.
APPENDIX 5

PRIMARY CARE UTILISATION AND EXPENDITURE IN THE AUCKLAND SUBREGIONS

A project undertaken for the Health Funding Authority as a basis for planning for population-based funding of primary care. Second draft with PCOs coded. By Laurence Malcolm, Health Care Aotearoa Health, March 1999.

1 Executive Summary

· Background/organisation of the project

1. Given the moves to equitable, capitated funding of general practice and related referred services expenditure, this project sought to allocate the known population of the Auckland subregions to PCOs and other providers, using a variety of methods including the merging of IPA and practice registers.

2. It then sought to relate actual utilisation and expenditure on GMS, laboratory and pharmaceutical services to these population denominators and to determine the extent of variation of this expenditure from the “entitlements” of the HFA funding formula.

3. The project was based upon data supplied from the Northern Division of the HFA on practice registers and claim data related to GMS, laboratory and pharmaceutical expenditure for calendar years 1996 and 1997 and linked to NZMC numbers.

4. Initial consultation regarding the project with PCOs and other provider groups indicated for the most part strong support. However, some PCOs expressed reservations about the potential value of the project mainly because of the expected poor quality of the data available.

5. Major problems were experienced with the quality of the data. These included the lack of application of data standards in merging of practice registers, serious errors in the data such as 42% of high use cards (HUHCs) in Mangere Health Resources Trust (N) data, a very large number of provider identifiers, in total 8691 in the three claim categories (with more NZMCs in the list than registered with the Medical Council), no linkages between data and serious errors in the location codes.

· Methods used

6. Despite these problems, linking through NZMCs of the GMS, pharmaceutical and laboratory data allowed a definition of those who were GP claimants and therefore enabled the calculation of overall utilisation and expenditure figures for primary care as compared with other groups, including trends for the whole region and in particular for the four Auckland subregions.
7. Using the practice register data for PCOs and other providers’ cost weightings, using the 33 groups in the HFA funding formula inclusive of age, sex, CSC and HUHC, were calculated to determine the “entitlement” of PCOs and other groups to primary care expenditure and for comparison with the actual expenditure being incurred by these groups.

8. Using the GMS volume data supplied, and adjusting for the lack of A3s in the data, total numbers of consultations related to each provider group, both budget holders and non-budget holders, were calculated for the Auckland region as a whole and for each of the four Auckland subregions.

9. These per capita subregional consultation rates were then used to calculate the population served by each IPA and other provider groups. These populations were then used as a basis for calculating the actual per capita expenditure on GMS laboratory and pharmaceutical services by these groups as compared with their “entitlement” under the HFA funding formula.

10. In order to determine the extent to which cross-boundary registration and particularly utilisation may have affected the population denominators, an analysis of cross-boundary registrations and GMS claims was used to determine the net inflows and outflows for each of the four Auckland subregions.

Results/findings

11. Trend data analysed showed that in 1997 budget holders prescribed 61.5% of pharmaceuticals and general practice in total 79.0%. For laboratory expenditure budget holders ordered 57.9% and all general practice 74.9% in the region.

12. There was some evidence from the analysis that, allowing for the increase in GMS claims incurred by budget holders, the growth in budget holding expenditure was 9.0% less for pharmaceuticals, and 6.1% less for laboratory expenditure than for non-budget holders.

13. Analysis of trends also showed that almost all increases in pharmaceutical and laboratory expenditure were due to volume, not price growth. Per item expenditure on pharmaceuticals incurred by budget holding general practice was $19.7 compared with $18.8 for non-budget holders and $43.1 for specialists.

14. There were major overlaps in the merged practice register data submitted by PCOs with relatively small proportions of patients being unique to PCOs. However, even the merged practice register data was, for some sub-regions, grossly in excess of the actual population within the sub region. This indicated that the merged practice register system in its present form is of little or no value in determining denominator populations of PCOs and other groups.

15. The cost weighting analysis showed that the percentages of CSCs in PCOs/groups were highly negatively correlated with the percentage of those over 65 years. The percentage of CSCs and HUHCs were very important factors in determining a cost weighting, and therefore population “entitlement”. A 1% increase in the level of these cards gives a $6 per capita increase in “entitlement”.

94
16. Calculations of denominator populations, using GMS utilisation claim data, appeared to be reasonably successful in determining the actual populations served by PCOs and other provider groups, although significant reservations remain, as will be discussed below.

17. Calculation of funding "entitlement", as compared with actual expenditure, showed a clear demonstration of the "inverse care law". Those populations in greatest need, such as those served by N, were found to be approximately $90 per capita “underfunded” whereas the populations served by AC were approximately $100 “over funded”.

18. Examination of cross-boundary flows, including registrations, showed that whereas there was a net inflow in registrations to Central Auckland of 8.9%, the actual utilisation inflows resulted in a net gain of 3.4%, a relatively small figure with little impact upon the above funding levels.

19. Adjusting for these cross boundary flows there is a marked variation in per capita primary care expenditure by subregion from a low of $181.9 in West Auckland to a high of $290.2 in Central. North Harbour and South Auckland are close to equity.

- Discussion/implications

20. The study has highlighted major limitations of the HFA’s data collection systems. Despite this it has been possible to draw some important conclusions about the distribution, utilisation and expenditure on primary care services in the Auckland subregions.

21. The HFA and government need to review the adequacy of the CSC as an appropriate way of funding better access to primary care services and consider a formula based on the NZDep 96 as an alternative.

22. The findings of this study have major implications for the implementation of equitable capitation. The gross “underfunding” of populations most in need of better access to and utilisation of primary care services must be addressed as a matter of some urgency.

23. This is needed, not only to improve the quality and utilisation of more appropriate primary care services, but also as it is almost certainly a key factor in the much higher utilisation of secondary care, including hospital admissions related to such populations, as well as impairing health outcomes.

24. Finding a strategy which will effectively reduce the evident “over funding” of well off populations, such as Central Auckland, will also be a major challenge in the implementation of the shift from historical to equitable funding.

2 Recommendations

1. That the HFA, after reviewing this report and before wider publication, forward it to PCOs/groups for comment.
2. That the HFA establish, in consultation with PCOs and similar groups, a Primary Care Information Board comprising members drawn from stakeholder groups, to further primary care information system development and exchange and to improve the quality of relationships between PCOs/groups and the HFA relating to information systems.

3. That the proposed Board establish a system of key performance indicators (KPIs) to enable the effective monitoring and evaluation of all primary care services.

4. That the HFA, in conjunction with the NZHIS, undertake a full analysis of the management of the NHI in the Northern Region to determine the extent of duplications and the actual level of unique NHI records currently allocated.

5. That if the system for merging IPA/practice registers is continued it be based upon formally agreed standards between the HFA and PCOs of patients to be included and excluded, and methods of allocating the patients who are included.

6. That the HFA use the method described in this report as an interim approach to allocating denominator populations to PCOs/groups for capitation purposes.

7. That the HFA investigate the use of the NZDep96 system for determining “entitlement” of populations to primary care funding.

8. That the HFA expand efforts to support IPA leadership in managing the clinical behaviour of IPA members as a key component of its primary care strategy.

9. That the HFA work with PCOs/groups in developing a mutually supportive R&D strategy to address key questions associated with primary care development, including benchmarks for good quality general practice.