Evaluation of the Implementation and Intermediate Outcomes of the Primary Health Care Strategy

First Report: Overview

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First Report: Overview

1 Introduction

This overview report summarises the key findings from the first stage of an Evaluation of the Implementation and Intermediate Outcomes of the Primary Health Care Strategy. The three year Evaluation is funded by the Health Research Council of New Zealand, the Ministry of Health and ACC, and commenced in late 2003. It is led by researchers at the Health Services Research Centre, Victoria University of Wellington, and CBG Health Ltd, Auckland, and involves a team of researchers from New Zealand and the United Kingdom. Appendix 1 lists the research team members and their affiliations.

The Evaluation is formative, and the findings are being disseminated throughout the research period, in order to inform policy development as the Strategy is implemented. Thus, this report provides an overview of the findings from the first phase of this evaluation. A fuller version of the report provides more detail on the Evaluation and its methods and findings to date.

This report begins by providing background information on the Primary Health Care Strategy and its implementation. It then sets out the key stages of the Evaluation, and summarises key findings from the first stage of the Evaluation. The report concludes with a discussion on some of the implications of the findings for implementation of the Strategy over the next few years.

2 The Primary Health Care Strategy

In February 2001, the New Zealand government published the Primary Health Care Strategy (King 2001). The Strategy noted that "a strong primary health care system is central to improving the health of New Zealanders and … tackling inequalities in health" (King 2001, p. vii).

The Strategy provides a clear direction for the development of primary health care, and states that over a five to ten year period, a new vision will be achieved, where:

> *"People will be part of local primary health care services that improve their health, keep them well, are easy to get to and co-ordinate their ongoing care. Primary health care services will focus on better health for the population, and actively work to reduce health inequalities between different groups"* (King 2001, p.vii).

The Strategy envisages a greater emphasis on population health and the role of the community, health promotion and preventive care, the need to involve a range of professionals in service delivery, and the advantages of funding based on population needs rather than fees for service (King 2001, p.vii).

The Strategy has six key directions, to:

- Work with local communities and enrolled populations;
- Identify and remove health inequalities;
- Offer access to comprehensive services to improve, maintain and restore people's health;
- Co-ordinate care across service areas;
- Develop the primary health care workforce; and
- Continuously improve quality using good information (King 2001).

Essentially, there are three major organisational and policy changes occurring to implement the Strategy:

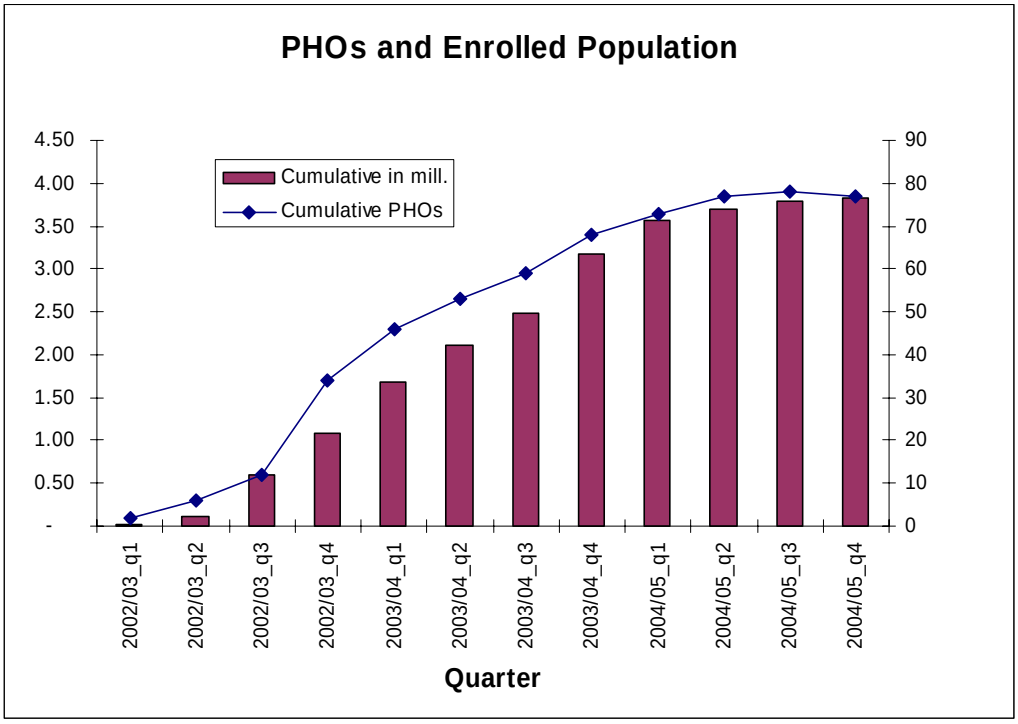
- Government funding for primary health care is being increased, so that fees that service users pay can be reduced and so that more people are eligible for government subsidies for primary health care;
- The Government is encouraging the development of Primary Health Organisations (PHOs) as local non-governmental organisations which serve the needs of an enrolled group of people; and
- Public funding of primary care has changed from fee-for-service subsidies at the practitioner level to capitation funding of PHOs.

PHOs are local organisations with the following features:

- They are funded by District Health Boards for the provision of a set of essential primary health care services to those people who are enrolled;
- At a minimum, these services include approaches directed towards improving and maintaining the health of the population, as well as providing first-line response services;
- They are expected to involve their communities in their governing processes;
- All providers and practitioners must be involved in the organisation's decision-making, rather than one group being dominant;
- They are not-for-profit bodies and are required to be fully and openly accountable for all public funds that they receive; and
- Membership by practitioners in PHOs is voluntary (King 2001).

Implementation of the Strategy is proceeding quite quickly – the two first PHOs were established in July 2002 and as at April 2005, there were 77 PHOs in existence covering 3.828 million New Zealanders. The numbers of New Zealanders in PHOs is set out in Figure 1 below.

Figure 1



Note: Left-hand axis is the Enrolled population in millions (bar graph); Right-hand axis is the number of PHOs (line graph).

Source: Ministry of Health

There are two main types of PHOs – Access-funded and Interim-funded. A PHO may be Access-funded if more than 50% of its enrolled population are Māori, Pacific, or people from the lowest (NZDep 9 and 10) socio-economic areas. There are higher subsidies for all those enrolled in Access-funded PHOs. Those in Interim-funded PHOs have been funded at a lower subsidy rate. However, new funding has been provided to Interim-funded PHOs for those aged 6-18 years of age (from 1 October 2003), and to those aged 65 and over (from 1 July 2004), increasing subsidies and allowing fees for these population groups to be reduced. The government aims to have all New Zealanders funded at higher rates from 1 July 2007, with those aged 19-24 in PHOs to be covered by higher subsidies from 1 July 2005, those aged 45-64 eligible from 1 July 2006, and the remainder of the population – those aged 25-44 – to be covered from 1 July 2007.

Details of the type of PHOs and the numbers of New Zealanders within them are provided in Table 1.

Table 1
The Number of New Zealanders Enrolled in PHOs,
With and Without Low Cost Access
as at April 2005

PHO Type	Access-Funded PHOs	Interim-Funded PHOs	Interim-Funded PHOs	Total
Level of Need/Age Group	Low cost access	Low cost access	No low cost access	
*High need**				
<18	244,551	141,340	0	385,891
18-64	368,732	0	252,938	621,670
65+	44,702	42,334	0	87,036
High need subtotal	657,985	183,674	252,938	1,094,597
Lower need				
<18	106,392	537,678	0	644,070
18-64	283,817	0	1,416,045	1,699,862
65+	60,138	329,582	0	389,720
Lower need subtotal	450,347	867,260	1,416,045	2,733,652
Total	1,108,332	1,050,934	1,668,983	3,828,249

*High need people are those who are Māori, Pacific or low socio-economic status (in NZDep 9 or 10). Low cost access is available to all those in Access-funded PHOs and to those aged <18 and 65+ in Interim-funded PHOs.

Source: Ministry of Health

In addition to providing new funding to reduce user charges, there has also been additional funding provided for 'services to improve access', for management costs, and for health promotion. A number of other targeted initiatives are also in place. Overall, the government is providing an additional $1.7 billion in funding over the six year period from 2002/03 for implementation of the Strategy.

3 Primary Health Care In New Zealand

The current primary health care reforms occur in the context of a more general recent restructuring of the health care sector. In 2001, the Government established 21 geographically-based district health boards (DHBs) as new local health organisations responsible for planning services in their districts. DHBs also provide many hospital and community services, and purchase services from community-based providers including primary health care, mental health, disability support and care for the elderly. Currently funding for primary health care is held by the Ministry of Health; however, DHBs are the agencies with whom PHOs interact at a local level.

Primary health care in New Zealand has traditionally been organised around general practices that provide first contact care, from which people have then been referred into the separately funded and organised wider system of care (Coster and Gribben 1999). Until the 1990s, general practice services were largely provided through single or small group practices. GPs have been partly funded through government subsidies paid on a fee-for-service basis, and partly through fee-for-service charges paid by service users who were free to use any general practice. Since the 1990s, government subsidies have been targeted towards particular populations – children, low income adults and high service users, and service users have been paying what many regarded as high fees for accessing care.

In the New Zealand health care system, the Accident Compensation Corporation (ACC) also funds primary health care. ACC administers New Zealand's accident compensation scheme, which provides personal injury cover for all New Zealand citizens, residents and temporary visitors to New Zealand. ACC is responsible for preventing injury; administering levies and claims processes; paying compensation; purchasing health and disability support services to treat, care and rehabilitate injured people; and for providing advice to government.

A successful ACC claim enables a patient to be subsidised on a fee-for-service basis. Subsidised care for injuries includes care provided by GPs and practice nurses, as well as from a range of other providers including physiotherapists, chiropractors, osteopaths, and acupuncturists. Most of these professionals charge a co-payment at the time of the service; the level of which is determined by the provider. ACC fee-for-service payments for general practice have been higher than health subsidies in recent years, but still only cover part of the cost of care.

The New Zealand approach to primary health care was criticised for many years by commentators and academics on the grounds that it contributed to:

- Poor access to care for some groups in the population, arising from financial, cultural and other barriers to care (Health Benefits Review 1986; Coster and Gribben 1999; Crampton 1999; Crengle 1999; Cumming and Mays 1999; Tukiotonga 1999);
- Little incentive for practices to promote health or prevent disease;
- A poorly distributed workforce in relation to population needs (Malcolm and Clayton 1988; Malcolm 1993; Malcolm 1996; Malcolm 1998);
- A bias towards GP care; and
- An inability for the government to fund according to population health needs.

The Primary Health Care Strategy has been designed to address these issues.

4 Evaluation of the Implementation and Intermediate Outcomes of the Primary Health Care Strategy

Given the extent of the reforms and the amount of funding being provided to support them, it is encouraging that a number of evaluations of the reforms are being undertaken by researchers around New Zealand (see Appendix 2). In particular, the Health Research Council, Ministry of Health and Accident Compensation Corporation have funded a 'lead' Evaluation of the Implementation and Intermediate Outcomes of the Strategy. The Evaluation aims, amongst other things, to describe the implementation of the Strategy; to evaluate the implementation of PHOs against the objectives of the Strategy; and to identify positive and negative influences on PHO achievement and critical success factors for the delivery of effective, accessible primary health care (Cumming and Raymont 2003).

The main objectives of this evaluation are to:

- Describe the implementation of Primary Health Care Strategy with a specific focus on PHOs;
- Evaluate the implementation of PHOs against the objectives of the Strategy;
- Analyse the net costs of the strategy at the national and the PHO level, and the extent to which expenditure changes over time, by population group and service type;
- Identify positive and negative influences on PHO achievement and the critical success factors for delivery of effective, accessible primary health care; and
- Disseminate the results from the evaluation to government agencies, DHBs, PHOs, and other PCOs (Cumming and Raymont 2003).

To meet these objectives, the Evaluation will reach an understanding of the experience and activities of Primary Health Organisations (PHOs) and their member providers in responding to the Primary Health Care Strategy (PHCS); measure change in programmes, processes and intermediate health outcomes during the adoption and implementation of the PHCS; and assess the impact of the Strategy on reducing health inequalities involving Māori, Pacific peoples and the financially disadvantaged. The Evaluation considers both health and injury-related services in relation to these objectives.

The research uses four main methods – key informant interviews; a postal questionnaire; quantitative analyses focusing on utilisation and intermediate health outcomes; and quantitative analyses in support of an economic analysis of the impact of the Strategy. These are briefly described below; further details are provided in the fuller version of this report.

Key Informant Interviews – The aim of these interviews is to reach an in-depth understanding of the experience and activities of PHOs and their member practices in responding to the Strategy, and to inform the design of a nationwide quantitative, postal survey. A first round of interviews, completed during 2004, provide the data used for this report. A second round of interviews is to be undertaken in late 2005/early 2006.

Postal Survey – The postal survey, to be undertaken in mid-2005 and again in early-to-mid 2006, will cover a similar range of themes and topics as the interviews but will enable the evaluation to be widened to cover all PHOs and a sample of general practices. It will allow quantification of the findings of the interviews.

Quantitative Assessment – Utilisation and Intermediate Health Outcomes – This phase of the research will measure the change in activities, processes and outcomes of primary care during the adoption and implementation of the Strategy. Data for this phase of the research will come from two main sources – national databases and practice management systems. Further details on the planned quantitative analyses are included in Appendix 3.

Economic Analysis – For the economic component of the evaluation, we will undertake two analyses that aim to estimate the (net) costs of the Strategy and the extent to which the distribution of expenditure changes over time, by population group and by service type. We will use both national and practice-level data sources for the economic analysis.

Ethics – The research plans were submitted for ethical consideration to the Chair of the Wellington Ethics Committee. The Chair noted that this project did not require formal ethical approval. However, the Research Team agreed with the Chair on stringent adherence to sound ethical research practice. Formal ethical approval has since been sought and granted for the quantitative analyses which use practice data.

This report focuses on findings from the key informant interviews. Given the early stage of implementation of the Strategy and the development of PHOs, much of the material in these reports is descriptive; more detailed analyses of the implementation and intermediate outcomes of the Strategy will be undertaken as this Evaluation progresses. The next phases of our research include completing the postal survey and undertaking detailed quantitative analyses using data from national databases and from practice management systems. Future reports will draw on the findings of the other evaluations undertaken over the next eighteen months, as well as on additional research projects that are currently in the planning stages or underway involving members of the research team.

5 Key Informant Interviews

Methods

The aim of these interviews was to reach an in-depth understanding of the experience and activities of PHOs and their member practices in responding to the Strategy, and to inform the design of a nationwide quantitative survey. Overall, the researchers undertook 151 interviews in twenty-three purposively selected PHOs and practices within PHOs; eight interviews in practices outside of PHOs; and 15 interviews with policy makers and other stakeholders. Interviews in PHOs, practices, the Ministry of Health and with key stakeholders were undertaken between April and October 2004; interviews with ACC staff took place in March 2005. Semi-structured interview schedules were used to guide interviews. Grounded theory techniques were used to ensure that emergent ideas were reported and reflect the everyday reality of PHOs. From notes made during the course of the interview, the interview data was gathered into sections using an iterative process. Quotes pertaining to each section were then assembled and reviewed. From this a brief description of each message was generated and quotes were selected to give the detail and flavour of the message. It should be noted that in analysing the qualitative data, while every effort has been made to avoid emphasizing uncommon situations, we have focused on including different viewpoints rather than quantifying the extent to which views are held across participants. A robust study of the frequency of various structures, initiatives and problems, and of their correlation with PHO characteristics, must await the completion of the postal survey later in 2005.

In the findings presented below the sources of the quotes are identified with the following codes: Chair = PHO Board Chair; CRep = PHO Board Community Representative; GP = General Medical Practitioner; Ind = Independent Informant; Manager = PHO Manager; MoH = Ministry of Health Official; ACC = ACC official; MRep = PHO Board Māori Representative; PN = Practice Nurse. Where the informant is a member of a PHO, the type of PHO is identified using the following codes: M-PHO = Māori focused PHO; P-PHO = Pacific focused PHO; A-PHO = Other Access-funded PHO; IPA-PHO = IPA based PHO. PCO = Primary Care Organisation (other than PHO).

Findings

Reactions to the Goals of the Strategy

Almost all informants had strong positive reactions to the goals of the Strategy. For example, one informant said:

> *"I think there will be population health gain because I'm convinced that money going into primary care will have a flow-on advantage to [reduce the need for] secondary care."* (GP, IPA-PHO)

They identified a number of benefits they felt would be achieved, or already had been achieved. In relation to patient care, informants believed there was now better access to care as a result of reduced costs to the patient, and some practitioners felt that capitation allowed opportunities to improve patient care, for example, through the ability to supervise patients without having to see them in the office, the possibility of providing preventive care and the opportunity to give more time to those who needed and valued the extra consultation time. Informants also mentioned the potential benefits of integration of services, both between and outside of practices. Some informants felt there was improved ability to care for people when a population was identified. At the practice level, many practitioners felt their practice would be better resourced, and pointed to the advantages of co-operation with other practices and with others, such as *iwi*.

Concerns about the Strategy

While GPs were pleased that public resources for primary care were being increased, some were concerned that their role had been inadequately recognised in the Strategy. They felt their participation was unavoidable (that is, that they had to participate in order to have access to the new funding being provided, given that those practices not in PHOs are not eligible for new funding), but they were worried about the long-term financial implications for themselves and their practices, and about perceived moves towards greater control of general practice by government. Comments on these issues included the following:

> *"The fiscal risks of this new model were required to be borne by the GP and the Ministry lacked, and still lacks, the capacity to provide GPs with the information about that risk, or to show an adequate audit trail."* (GP, IPA-PHO*)*

> *"I felt we should either become fully nationalised and let the government take the risk of running the business ... or we shouldn't have any interference altogether ... [perhaps there could be] a patient owned subsidy."* (GP, PCO)

Some informants were also concerned that administrative changes would occur without realisation of the intended benefits. The attention being paid to fees was seen by some to be preventing a focus on other issues, and hence was hindering the general development of the Strategy, in particular a population-based approach to health.

In spite of these concerns, some practitioners have come to believe that the prospects are positive for their practices in a financial sense and were expressing a more optimistic view of the Strategy and the changes it might engender.

PHO Governance

The community appeared to be well represented at board level in PHOs. The most common approach was to have representatives of the community (including representatives of Māori and Pacific peoples) along with clinicians (both medical and nursing) on the PHO board. The process by which PHO board members were selected varied; often nominations were requested from the community-at-large or from community groups. In some cases a more corporate model was followed with specified groups having a shareholding in the PHO:

> *"The DHB called for applications and the people had to have knowledge of the primary health care strategy, community development, links back into the communities and community organisations, a broad understanding of access issues and barriers."* (CRep, IPA-PHO)

Many PHOs have a formal process whereby community groups provide input to the board, in some cases, by direct representation:

> *"We have a community advisory group ... There was a fairly wide-ranging community consultation ... to bring forth members from the community or from NGOs or from different organisations to actually reflect some of the communities' pulse to the board. ... The board has given them the prime authority to look at all the SIA [Services to Improve Access] proposals. ... The board are trying to give this community group some teeth ... and they are blooming good."* (CRep, IPA-PHO)

In some PHOs, however, there was concern about medical dominance:

> *"We have gone through a process to set up governance structures that are inclusive and bring the community in, but what is happening around the table is that those community people ... are deferring to those professionals who know the most or have the longest history, and that is usually an IPA representative."* (DHB)

Interaction with the general community was handled by multiple informal and formal mechanisms, including various types of community groups and the use of personal links into the relevant community. In many districts, both urban and rural, Māori organisations were in a position to provide strong representation and seemed to be leading efforts to make community participation a reality. Some Māori saw their involvement as implementing Article Three Treaty Rights and expected some resistance to their participation on PHO Boards.

Many informants were clear that communication with the community was in its early stages. Many board members and practitioners considered that the general community was relatively unaware of developments in primary care, and that some sub-populations were hard to reach.

The Implementation Process

It was felt by many informants that more resources should have been put into the implementation process. Some key informants suggested a need for more definitive guidelines relating to, for example, PHO size. Others, however, recognised the need for there to be local solutions to local issues. Some informants also noted that business rules had changed during implementation, generating uncertainty and, in some cases, dismay.

Many informants thought that targeting of the increased funding had been imprecise and that money had been 'wasted' on those who could afford to pay while – among those groups for whom funding had not been increased – affordable care was not available to many. One practice nurse noted:

> *"Now, we worked out that if we have to charge a uniform flat rate for all over 65s*[1] *that it will be $28 – so that's a $2 reduction for CSC [or] high needs [patient], but a $25 reduction for people who could previously afford to pay."* (PN, IPA-PHO)

Many of those involved with PHOs complained that the process for dealing with patients who made casual visits at practices where they were not enrolled, or where patients changed doctor, were unsatisfactory. Casual visits resulted in 'clawbacks' (loss of funding) which could exceed the capitation sum originally received for the individual patient, leading to uncertainty about practice income. However, the impact of clawbacks varied. Some PHOs found that the issue had relatively little impact; some found that there was little effect on the overall amount of money received and that errors for a particular practice could be mitigated by the PHO. With regard to situations where patients changed doctor, populations with unmet health needs, such as Māori and Pacific people, were often mobile and the resulting changes in enrolment were problematic for PHOs serving these groups and provided a perverse incentive for the PHO not to enrol them. Informants also raised concerns over the lack of information made available to practices and PHOs on these clawbacks and enrolment changes.

[1] The changes apply to those aged 65 and over.

PHO Management

There was general agreement that PHO management required a large input of time and money:

> *"The huge workload, the huge burden, on all the providers who have decided to do it. In a short time there is a big expectation in terms of IT and admin."* (DHB)

> *"There is a huge amount of unpaid work to get everything up and running."* (GP, IPA-PHO)

Small PHOs were struggling with inadequate management resources while large ones were trying to establish and maintain adequate communication with practices. It was also felt that new programmes would require an expansion of managerial capacity, and that it was easy to take on too much.

Some smaller PHOs felt their financial state was marginal, while some large ones had significant positive cash balances. However, most informants felt that practices were better off under the new funding arrangements. There was a sense that the hard work of setting up and organising PHOs was nearing completion and focus could soon be directed to improving services and implementing new programmes. Relationships within PHOs were generally positive, and PHOs were seen to support practices well.

Access

It was generally agreed that fee reductions had improved access to primary care:

> *"The patients do not have that fear of not being able to visit a doctor because they can't pay their fees."* (PN, IPA-PHO)

> *"Cost is [one barrier], a big leap ahead with that one because we are an access PHO we provide cheaper visits and prescriptions."* (PN, IPA-PHO)

This applied to all patients of Access-funded practices, to those eligible for Care Plus and people aged 6-18 or 65 and over. Some informants expressed concerns that people aged 19-64 just unable to qualify for a Community Services Card were experiencing continued, and sometimes increasing (where fees were rising), financial barriers to care. Concerns were also expressed by some over the ability to provide longer visits with limited co-payments, although others suggested that the shift from fee-for-service to capitation had enabled them to have longer visits.

Population Health

Population health issues were just beginning to be addressed, with innovative programmes related to changing health determinants and identifying populations with low use of services. Improved enrolment data were seen to allow better estimation of population health need and to facilitate targeting of services on the basis of need:

> *"At one stage we were flummoxed because we had to write a plan for the health promotion position because none of us had any experience in that before and that was difficult."* (RN, IPA-PHO)

> *"We are endeavouring to [influence] the determinants of health. So we have been putting a lot of work into housing, poor housing, youth, employment, - recreational facilities, lifestyle, the district council. If you had to say what the difference between us and the IPA, which looked after the clinical side, we've moved a lot into the actual ... determinants."* (CRep, M-PHO)

Quality and Information

Freedom from fee-for-service funding was reported to allow some practitioners in Access-funded practices to spend longer with patients, allowing a greater focus on education and prevention.

Some informants suggested that IPAs and Health Care Aotearoa had always had a strong focus on quality, with few innovations since moving to the PHO. Practices that had not been associated with IPAs anticipated a greater effect from the introduction of quality targets. It was noted that for small practices, possible incentive payments related to the quality framework were relatively small and were therefore likely to be ineffective.

Many informants noted the need to upgrade data and information technology; while some noted that a beneficial side-effect of this process was improved population data, of value for needs assessment. Practices that had not been associated with IPAs anticipated a greater effect from the introduction of quality targets:

> *"We do not have the IPA experience of being aware of pharmaceutical budgets and management. So [funding for quality targets] will be a major impact for us. We will have to have a greater input [from a] pharmaceutical facilitator and clinical advice to management; we also need administrative support which we do not have in place."* (Manager, A-PHO)

New Services

Many informants noted that new services were in the planning stage or that there was a need for work on community needs and priorities before they could be introduced:

> *"We've said that we wouldn't look at any proposals until we had a grip on what the community looks like, what the priorities were, and then we would match up funding proposals with those priorities."* (CRep, IPA-PHO)

However, in some cases, new services had already been initiated prior to the PHO being established. In general, informants suggested that new service developments would depend on the resources available. The types of new services discussed are set out in the table below.

Table 2
New Services Discussed by Key Informants

Greater accessibility and acceptability	**Focused clinics**
Extended opening hours	Care Plus related activities
Whole family visits	Diabetes and nutrition clinics
Recruitment of a female practitioner	Asthma nurse clinics
Home visiting	Smoking cessation
Medical clinics at schools	One-stop-shop for youth
Assistance with transport	Free sexual health clinics
Information for new immigrants	Cervical and breast screening
24 hour PHO Helplines	Programmes for mental health
Cultural training	Programmes for disabled persons
Interpreter services	**Extra-practice services**
Secondary care liaison	Radiology
ED liaison services	Retinal screening
Acute illness home care	Refraction
Specialist availability in practice	
Podiatry	

Nursing Issues

There are many opportunities under the Strategy to enhance the contribution of nursing practice to better health outcomes. These include expanding the activities undertaken by nurses within traditional general practice and taking on new tasks required under the Strategy:

> *"The new funding impacts on nursing from the point of view that practices are capitated which means that doctors and nurses can actually take on different roles. Nurses can take on the teaching and well being."* (PN, IPA-PHO)

Individual practices vary enormously in the degree of nursing development, depending mainly on the preferences of the GPs as employers. Busy GPs are more likely to welcome the opportunity to delegate, to nurses, tasks that they are accustomed to undertaking themselves.

Nurses felt that the development of a career pathway would improve the attractiveness of primary health care nursing. This would involve recognition, including financial recognition, of different levels of skill and experience. It was recommended that appropriate training be made available, that practical barriers to education be reduced and that nationally recognised and accredited standards for practice nurses be agreed:

> *"There should be a structure that recognises skills, accepts that there is [sic] senior staff. There must be incentives to up-skill, nurses should be rewarded."* (PN, IPA-PHO)

The Primary Health Care Workforce

The Strategy increases the responsibilities of the primary health care team, and there is concern that that there may be insufficient medical and nursing workforce to undertake the tasks required by the Strategy. Many key informants saw workforce capacity as a major issue for the immediate future:

> *"What we have identified as the key issue we are facing is workforce capacity and the need for more nurses and more GPs."* (DHB)

> *"Retention and recruitment is a major issue."* (MRep, IPA-PHO)

Some informants felt that GP morale is low, with some mentioning they are no longer able to practice as they feel they should and that their remuneration compares poorly with many of their peers in specialist practice or in non-medical careers. Other informants felt that new approaches, possible under the Strategy, were raising morale. In this context, individual key informants mentioned a shared vision, a sense of belonging, the support of the population, and the direction of government policy in thinking a primary health care led system is cheaper.

These divergent views may be related to different reactions to perceived changes in the content and style of general practice. For example, some informants saw increased teamwork as an opportunity by being able to give more time to difficult problems, while others saw that other practitioners might take on the easy parts of the practice, leaving them with only complex problems and a more difficult workload. Some believe that GP attitudes to a career in primary health care are changing, with GPs no longer automatically making themselves available for after-hours care and with many

interested in a salaried position rather than taking on the responsibility of running a small business. Some suggested that such changes may well attract recent medical graduates to primary health care.

Issues of workload and paperwork were also noted as concerns. An expanded role for nurses was seen by some as potentially compensating for an increase in workload related to better access, and some key informants mentioned initiatives, where clinicians were busy, to remove some of the administrative work.

Injury Services

All respondents felt there would be no change in the management of injuries as a result of the implementation of the Strategy. There was a suggestion that ACC policies should be aligned with the population health and prevention focus of the Strategy, for example by merging injury services into the PHCS, thereby encouraging better prevention strategies, more efficient utilisation of services and improved well-being. The focus by ACC on fee-for-services was contrasted with attempts to move to a focus on well-being, with the emphasis on prevention:

> *"There is a bit of a miss-match there between primary care services and what ACC are trying to do."* (GP, IPA-PHO)

> *"There needs to be a shift in the way that ACC is funded. It's quite separate."* (GP, IPA-PHO)

ACC officials noted that although ACC as presently constituted is not able to match some aspects of the Strategy, there are a number of potential benefits for injury care in the context of the PHCS. ACC has a strong emphasis on injury prevention with its investment in public safety and workplace programmes and leading the New Zealand Injury Prevention Strategy.

It was noted that the incentives for making ACC claims have changed – with ACC co-payments now being higher in some practices than non-ACC co-payments, patients have a disincentive to make claims; however, there are incentives for practices to make ACC claims as these are outside the capitation payments they already receive.

Secondary and Referred Services

Some key informants suggested that there would be an incentive to use hospital services more, as a result of the shift to capitation and with secondary care services being funded separately. However, respondents reported that they thought there appeared to be little change in the use of secondary health services to date. It was suggested that the use of emergency departments for after-hours care should be monitored.

Management support for the use of laboratory tests and pharmaceuticals and initiatives to reduce hospital admissions is on-going, and were thought likely to be supported by the PHO performance management project and the incentives it provides. With regard to laboratory use and prescriptions, respondents felt that it was relatively urgent to deal with known under-use of pharmaceuticals and laboratory tests by some populations with high needs:

> *"[There is] supposed to be a feedback loop, to change historical distribution, but it hasn't happened and delay favours the status quo. ... It needs to be analysed and reviewed before distributing referred services money. Even small shifts there would make a huge difference."* (DHB)

Relationships Between Organisations

PHO respondents mentioned examples of positive relationships with other PHOs. In one case, there had been the development of a memorandum of understanding between a Pacific PHO and a local Māori PHO; in another case, two large Interim-funded PHOs had developed a good practical relationship with small Access-funded PHOs:

> *"We have a working and growing relationships with other the four PHOs in the [district] ... just for sharing knowledge and understanding and also to form a lobby with DHB."* (Manager, IPA-PHO)

One Pacific PHO had developed a memorandum of understanding with a local Māori PHO. Two large Interim-funded PHOs had developed a good practical relationship with small Access-funded PHOs but one noted that there were ideological differences:

> *"We have a working and growing relationships with other the four PHOs in the [district] ... just for sharing knowledge and understanding and also to form a lobby with DHB."* (Manager, IPA-PHO)

> *"On the ground our providers and our staff work constructively together; we have both been interested in establishing some clinics in secondary schools."* (Manager, IPA-PHO)

One key informant noted that there were ideological differences between the community owned and operated practices and the practices which are privately owned. There were also a number of examples of PHOs or their member practices working with other community organisations, most commonly district nurses and Plunket.

Looking Ahead to Achieving Sector Goals

There was concern in the sector that the changes generated by the Strategy might stall and it was thought that many key goals had not yet been achieved:

> *"But also my concern is we still have this ten year vision. We [said] that if you are just doing this to reconfigure general practice you are wasting your time and money, it needs to be a bigger more audacious goal than that and that is about bringing in other services [and functions]."* (DHB)

A first key goal is the delivery of low cost care, which, it was felt by some, has yet to be achieved for all patients. It was noted by one informant that practices do not get rewarded for offering low cost care:

> *"They should make low cost care one of the quality indicators. At the moment there is absolutely no recognition for those providers that do provide low cost care, they just get inundated with people wanting to join their service – no reward, no reinforcement and yet that is supposed to be a key part of the strategy."* (DHB)

A second key goal is to address population health, and some informants suggested that there is some way to go yet to achieve this vision. A third goal is the need to move beyond tokenism in community involvement in PHOs; and a fourth is the need to monitor outcomes. Other goals still to be achieved are the consolidation of community health services within PHOs and the development of closer ties with agencies involved in the determinants of health. Others noted that the future seemed to lie with larger practices, while concerns were also expressed over how to ensure service provision in rural areas.

6 Discussion – Issues Raised by the Research

The findings presented above come directly from the interviews with key informants. In this section, we discuss the findings, in light of our own knowledge of the sector, academic material and information available on the Strategy and its implementation from the Ministry of Health and other sources. We have focused on key topics where problems are being encountered and on possible resolutions to these problems.

Implementation of the Strategy

In the four years since the government published the Primary Health Care Strategy, much has been achieved and there is wide, and strong, support for the goals of the Strategy. More than 90% of the population are registered or enrolled in one of 77 PHOs, an uptake considerably faster than originally anticipated. PHOs report that much of the set-up work has been completed and that effort can now be re-directed towards substantive changes in service delivery.

For many New Zealanders, there are now lower fees (Ministry of Health 2004), and there are reports from our key informants that access to services has improved. PHOs indicate that they are better able to identify and meet the needs of a known, enrolled, population. Community representation on PHOs boards appears to have been achieved and many service development initiatives are underway.

Some general medical practitioners, freed to some extent from the incentives of a fee-for-service subsidy, have noted a greater flexibility in how they use their time. Some have found in the PHO environment a welcome opportunity to co-operate with other practitioners and one went so far as to say that the changes would rejuvenate general practice. Nurses appreciate the opportunities newly available to them to develop their practice.

However, informants have noted a number of issues relating to the Strategy and its implementation. For example, there are on-going concerns over the lack of targeting in the new system and concerns that some New Zealanders may still be missing out on cheaper care. Some GPs feel that the government is seeking a greater degree of control of general practice and that the viability of practices may be threatened. A number of implementation problems have also been noted.

Variations Between PHOs

There is great variation between PHOs in terms of size, structure, age and context. Our familiarity with the interview material suggests that there are two broad types of PHOs. Table 3 presents the key characteristics of these PHOs and the discussion following develops further these characteristics further.

One of the key differences across PHOs relates to size. Of 77 PHOs, 37 are small with less than 20,000 people enrolled, and while these PHOs made up 48% of PHOs, they work with only 10% of the total enrolled population. Small PHOs face most of the compliance costs of large ones, and while their management fees are set at a higher amount per enrollee, they tend to have difficulty meeting external reporting requirements and supplying management input within their organisations. Small PHOs are more likely to be made up of Access-funded practices (62% of small PHOs are Access-funded) while large ones are more commonly Interim-funded or have mixed funding (70% of large PHOs are Interim-funded or have mixed funding).

Table 3
Characteristics of PHOs (simplified)

Small (< 20,000 enrollees) Inadequate management resources	Large (>20,000 enrollees) Well resourced, efficiently managed
Access-funded History – Previous NGO, capitated Low investment in IT, premises Salaried doctors	Interim-funded History – Previous IPA, fee-for-service Established IT, premises etc Doctor's own practice
Low co-payments Full/increasing use of nurses Established community governance Māori and Pacific focus	Higher co-payments Use of nurses dependent on workload Establishing community governance General population focus

Many Access-funded practices serve populations that, historically, have been poorly provided with health care by private practice. Such populations usually have low incomes, have a high proportion of Māori or Pacific people, and may live in remote locations. In the past, their health care has often been provided by community-owned and governed primary health care organisations, commonly related to union, Māori or Pacific organisations. These health organisations have traditionally been bulk funded, initially as 'special medical areas' and more recently under individualised capitation-based contracts. They have had low co-payments and have been unable to make large investments in premises or infrastructure. They have employed doctors, along with nurses, on salary, and have encouraged a team approach. The team has often involved additional workers including midwives, dentists and community health workers along with the doctors and nurses. Because of the needs of the population, this team has spent additional time liaising with other parts of the health service, particularly secondary care services and other agencies such as Work and Income New Zealand, the Police and Justice. Needs analysis, outreach efforts, analysis of the determinants of health, and health education and public health initiatives, have often been undertaken by these practices.

It would be fair to say that PHOs made up of such Access-funded practices already possess many of the qualities and provide many of the services mandated by the Primary Health Care Strategy. However, it would appear from the views of our informants that these organisations, given fewer management resources, are at risk financially and from individual and group 'burn-out'.

Interim-funded practices are invariably privately owned; co-payments are generally higher (Ministry of Health 2004) and practice infra-structure is often well established. Such practices join a PHO as independent entities and may see little need to make changes beyond compliance with the reporting needed for remuneration. Some community informants believed that the risk here is that the anticipated benefits of the PHO model will not fully materialise.

It should be noted, however, that some large Interim-funded PHOs are functioning very well, leading the way in needs analysis, public health and health education initiatives, and in the provision of new clinical services.

In our research, in addition to the broad characteristics of PHOs noted above, we have also noted that the issue of 'overlap' may be an important determinant of experiences under the Strategy. Overlap occurs where more than one PHO services the same population. PHOs vary in the extent to which the population they serve is distinguished geographically or culturally. Where the target population is poorly defined, the PHO is likely to experience difficulties with enrollees moving between practices. Under such circumstances, the PHO may not be so easily able to understand the particular needs of that population or to identify individuals or sub-groups that are under-serviced. Overlap also increases competition between PHOs for staff and patients.

Finally, it should be noted that more recently-founded PHOs have had less time to undertake key tasks, such as needs analysis, and to put in place services specific to the needs of their enrolled population.

Policy Implications. A key question arising from this and related research is whether small PHOs are viable, and whether policies need to be developed to support them. A review of management services in PHOs (Capital Strategy Ltd 2004) has recently been released acknowledging the importance of small PHOs and suggesting appropriate measures to support them. Extra funds have been set aside for the management costs of PHOs with less than 20,000 enrollees (Poutasi 2005) and the Ministry of Health is investigating the potential of shared service arrangements.

In our postal survey and in later phases of this research, we aim to follow-up on the implications of size. Further, two of our principal investigators, Judith Smith and Jackie Cumming, are now undertaking a separate project which will identify the issues that need to be considered in relation to size of PHOs. This will focus on the tension between critical mass/management capacity on the one hand and sensitivity/community and practitioner engagement on the other.

The development of PHO-level initiatives in needs analysis, public health and health education, outreach, and the provision of new clinical services should be monitored and managed to ensure that the changes suggested by the Strategy are being fully realised by all types of PHOs. In our future research, we aim to evaluate the extent and success of these innovations on the bases of the size and other characteristics of each PHO.

Where PHOs overlap without a clearly defined population to be served (for example, an ethnic group), consideration should be given to amalgamation or co-operation in some functions (for example, needs analysis). DHBs may play a crucial role in supporting PHOs here.

Ensuring meaningful community engagement, encouraging wider participation in PHO decision making, and a wider population understanding of the Strategy, are also key issues for the immediate future. The Ministry of Health and DHBs should work together to identify issues here and to facilitate further development in these areas.

Managing Referred Services

A key issue that arises from this research is how PHOs and practices refer and link to other services that are provided in community settings. The cost of general practice services is a relatively small portion of the total government budget for community-based health services. The total cost of laboratory tests and prescription medications to the government is greater than that of GPs (Ministry of Health 2002). Other community-based health services – funded by the DHB or by the Ministry of Health directly – include radiology, retinal screening, midwifery, district and public health nurses, the school dental services and mental health services. To this list could be added hospital services, such as outpatient clinics, provided to non-admitted patients.

GPs often claim that secondary service managers do not understand the community or how to service it. Given that PHOs are responsible for the health of their enrolled populations, they may have a *prima facie* case for being involved in the provision of many community health services. Historically, secondary care providers have been

reluctant to let go of services. They cite a number of reasons for this, such as the difficulty of paying for hospital and other overheads from a smaller budget when funding is devolved, and the perceived need for some services - for example, post-operative home nursing care - to be under specialist control. On the other hand, secondary service providers may have a positive incentive to transfer under-funded functions.

Policy Implications. The present policy is that management of services can be transferred from DHBs to PHOs when a case can be made in terms of effectiveness and efficiency. While such a permissive approach is understandable, it seems likely that, in all but the most obvious examples, budgetary and power issues may overwhelm the appeal of such gains.

One approach to this issue would be to construct a list of services which could be devolved to the PHO or to a DHB/PHO joint venture, to list additional principles (for example that the PHO involved provides a majority of the primary care in an area), and to require that inaction be justified.

A case in point is the provision of laboratory services and subsidisation of medication. In the recent past IPAs have held budgets for these services and have been allowed to use savings to provide additional services. GPs are responsible for ordering tests and prescribing medication and programmes are available to help them target the resources used in this area more effectively. It would seem advantageous to maximise value in this area by providing GPs with incentives to consider cost-effectiveness. The new PHO Performance Management Project will include payments for meeting some targets relating to prescribing, and the effects of this should be carefully evaluated once the project is in place. It may however be necessary to develop further measures. If budgets were assigned on the basis of population need, expenditure in over-serviced areas would be reduced and extra funds made available to under-serviced ones (see below).

Practice Level Changes

With small Access-funded PHOs, especially those originating in community-owned services, there is little division between PHO and practice management, and practice clinicians support innovative activities from belief or as employees. On the other hand, private practitioners within large, interim-funded PHOs, are independent and relatively invisible, and may feel little need to change the way they work.

However, it is at the practice level that the development of a team approach, with an expansion of the categories of people included in the team, takes effect. Similarly, advocacy for individual patients, either with secondary health services or with other agencies, originates with the discovery of need during a consultation. And the consultation is the starting point for individual approaches to prevention and lifestyle change. Furthermore, such need exists among the patients of all practices and the Strategy implies that it should be met at whatever practice people choose to attend.

Policy Implications. Incentives are needed at the practice level to ensure that the goals of the Strategy are achieved and that the government's investment in primary care generates maximum benefit. Community-owned practices indicate that the involvement of community representatives in the management of the actual practice has generated many beneficial changes. Private practices might be encouraged to seek feedback from their clientele, to make fuller use of nurses (and other providers), and to advocate for their patients, through a range of incentives, including simple recognition of their practice achievements, measurement through indicators in the quality programme or by monetary reward. As PHOs settle into their roles, they should be in a better position to influence their member practices in these ways.

Financial Barriers to Care

Removal of financial barriers to care is essential to the success of the Strategy. New funding has been provided to reduce fees for over 2 million New Zealanders (see Table 1, above). In general, those in Access-funded PHOs or practices are paying lower fees than people in Interim-funded practices; available data show that fees for younger people aged 6-17 are lower than adult fees, and Interim-funded practices reduced fees following the introduction of higher subsidies for older people aged 65 and over in July 2004 (Ministry of Health 2004). While subsidies will be available to all from July 2007, some practices charge substantial co-payments even to those in receipt of a subsidy and there is already pressure for fee increases. However, self-employed practitioners are fiercely attached to the right to set fees, seeing it as their only real protection against income loss or lack of practice viability. At present, most capitation funding for first contact services is passed through to practices based on their enrolled population[2]; should some of this income be needed to provide other services – for example, after-hours care – the pressure to increase fees could accelerate.

Another factor contributing to the upward pressure on fees could be the uneven distribution of GPs. Where there is a higher concentration of GPs, each enrolling a smaller population, practitioners may perceive a need to increase co-payments and service patients more intensively in order to maintain income levels.

Policy Implications. It has been suggested by PHOs and GPs that the fair cost of providing primary care should be independently established, making due adjustments for population health need and other factors beyond the control of practitioners, such as living costs (since neither the surgery nor the clinician's residence will cost as much in a small town as in a metropolitan area). We believe that this suggestion has merit and such research would provide evidence against which subsidies and co-payments could be negotiated.

[2] However, Services to Improve Access, health promotion and management services funding is retained by PHOs for collective use.

Another approach to the control of co-payments, suggested by a DHB informant, would be to arrange for the level of subsidy to reflect agreed co-payments, so that practices with higher fees attracted lower subsidies. Practices would then have to increase fees more to achieve the same increase in income and, if they lowered fees, would lose disproportionately less income while becoming more attractive to cost-conscious patients. The subsidy would have to be high enough to adequately reward practitioners who provided low co-payment care. The appropriate policy setting might be found by considering the fair cost of providing care, as noted above.

The Primary Care Workforce

The Strategy will generate more work in primary care and concern has been expressed that there are already too few GPs and practice nurses in New Zealand. There is no international agreement on the proper number of GPs needed to serve a population and the number would be affected by factors such as the health needs of the population, the functions fulfilled by the practitioners in a particular country and the degree to which work was shared with nurses and other members of the primary care team. Nevertheless, sufficient medical and nursing graduates must be attracted to general practice, given appropriate training and retained in practice[3].

There is evidence that less desirable areas are less easily able to recruit GPs and the effects of uneven distribution of GPs have been mentioned above. Practitioners may be reluctant to work in remote or deprived areas, with patients who seem difficult to care for or where remuneration is low. On the other hand, there may be practitioners who are attracted to work with people with more severe health needs, especially when supported by an appropriate team. In these circumstances, practitioners may prefer a guaranteed salary to an uncertain profit margin. Innovative approaches to recruitment and retention are needed to ensure appropriate service delivery. As an example, one Māori health provider operating in a relatively remote district has been successful in recruiting practitioners from overseas by offering a time limited contract, by providing good support and by mentoring graduates as they adjust to practice in New Zealand. Similarly, practices serving immigrant communities have been able to

[3] New Zealand's Health Workforce Advisory Committee is developing workforce recommendations through a sustained programme of research and policy development. See www.hwac.govt.nz

present their work in a positive light as socially valuable and interesting by providing team support and translation services. In general graduates will be attracted to high quality, high morale, workplaces.

Under the Strategy, nurses are being called upon to take on a larger share of primary care work. Many are enthusiastically taking up this challenge but, among practice nurses, there are those who do not wish to extend their role and, more generally, a significant number of nurses who choose not to work in nursing. Significant wage gaps can exist between primary care nursing, hospital nursing, and other non-nursing roles in New Zealand and the impact of these needs to be considered in policy development[4].

As with GPs, nurses need appropriate incentives to enter, and remain in, practice nursing. As discussed in the body of this report, many nurses interviewed find that the attitude of their employers – the GPs – can restrict nursing practice. Some GPs encourage nurses to expand their role and develop their independence; others wish to undertake all clinical activities themselves. Further, the costs of up-skilling may be prohibitive, particularly in view of the lack of financial recognition of increasing levels of skill.

As mentioned above, it is also apparent from our research that capacity is also likely to be an issue in relation to management, analysis and service development functions in PHOs. There is a question mark at present as to whether PHOs – particularly the smaller ones – will have the resources available to adequately undertake these tasks in order that the Strategy achieves its objectives. DHBs will also have a crucial role to play in working with and supporting PHOs and they too must develop the capacity to work towards achieving the goals of the Strategy.

[4] Recently, negotiations between unions and DHBs have settled on significant pay increases for hospital nurses. There are fears that primary care nursing will become less attractive as a result; a campaign for higher salaries for primary care nurses has now begun (NZPA 2005).

Policy Implications. The changes in the requirements being made of the primary care workforce must be figured into the assessment of training and workforce requirements. The models for attracting staff developed by community-based practices should be supported and developed. PHOs should also be encouraged to develop the role of nurses. Availability and access to management, analysis and service development training is also an issue for future consideration. The distribution of primary health service personnel may also need to be addressed.

References

Capital Strategy Ltd (2004). Review of Primary Health Organisation Management Services: A Report to the Ministry of Health. Auckland.

Coster, G. and B. Gribben (1999). Primary care models for delivering population based health outcomes. Discussion Papers on Primary Health Care. Auckland.

Crampton, P. (1999). Third sector primary health care. Discussion Papers on Primary Health Care. Wellington, National Advisory Committee on Health and Disability.

Crengle, S. (1999). Māori Primary Care Services. Discussion Papers on Primary Health Care. Wellington, National Advisory Committee on Health and Disability.

Cumming, J. and N. Mays (1999). "Shifting to capitation in primary care: what might the impact be in New Zealand?" Australian Health Review 22(4): 8-24.

Cumming, J. and A. Raymont (2003). Evaluation of the Implementation and Intermediate Outcomes of the Primary Health Care Strategy Project Plan. Wellington, Health Services Research Centre.

Health Benefits Review (1986). Choices for Health Care: Report of the Health Benefits Review. Wellington, Health Benefits Review.

King, A. (2001). The Primary Health Care Strategy. Wellington, Ministry of Health.

Malcolm, L. (1993). "Trends in primary medical care related services and expenditure in New Zealand 1983-93." New Zealand Medical Journal 106: 470-474.

Malcolm, L. (1996). "Inequities in access to and utilisation of primary medical care services for Māori and low income New Zealanders." New Zealand Medical Journal 109: 356-358.

Malcolm, L. (1998). Primary Care Utilisation and Expenditure in the Auckland Subregions. Wellington, Health Funding Authority.

Malcolm, L. and C. Clayton (1988). "Recent trends in the availability, distribution, utilisation and cost of general practitioner services." New Zealand Medical Journal 101: 818-821.

Ministry of Health (2002). Health Expenditure Trends in New Zealand 1990-2001. Wellington, Ministry of Health.

Ministry of Health (2004). General Practitioner Fees Information: A Summary of Key Findings from Five Reports. Wellington, Ministry of Health.

NZPA (2005). Primary health nurses seek same pay as colleagues. The New Zealand Herald. Auckland.

Poutasi, K. (2005). Moving in the Right Direction. Primary Focus 2, Wellington.

Tukiotonga, C. (1999). Primary healthcare for Pacific People in New Zealand. Wellington, National Advisory Committee on Health and Disability.

Appendix 1

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Appendix 2

Evaluations and Research Relating to the Primary Health Care Strategy

Other evaluations with particular relevance to the Strategy which are currently underway include:

- Monitoring and evaluation of initiatives to increase access funded through the Reducing Inequalities Contingency Fund. These initiatives were in many ways the precursors of Services to Improve Access. The evaluation will be completed this calendar year;

- A qualitative study of the experience and attitudes of users of primary health care services. The data was gathered at an early stage of the implementation of the Strategy and will act as a benchmark for changes in attitudes to health services;

- Evaluating the implementation of Care Plus. The evaluation is in its second and final year;

- An evaluation of eleven primary health care nursing initiatives. These initiatives are specific nurse led projects. The evaluation is in its second year;

- Evaluation of initiatives to provide primary mental health care services, which will begin soon;

- Analysing data collected through the New Zealand Health Survey to establish the relationships between utilisation of primary health care and health status over time.

Each of these evaluations and research projects focus on specific elements of the Strategy. At a later period it is expected that each will provide insight and data for the others and the overall picture of the success of the Strategy. Further information is available from the Ministry of Health (www.moh.govt.nz)

Appendix 3

Planned Quantitative Analyses

Our plan is to undertake a longitudinal analysis of the health care experiences of clients of PHOs. Data from before and after each PHO was founded will be compared; changes in utilisation and other measures of performance will be reported; and these changes will also be related to stages in the implementation of the Strategy.

It should, however, be noted that establishing causal relationships between policy changes and health system parameters is problematic. The Strategy itself includes many components and these have received different emphases in different parts of the country. In addition, the current policy environment remains very fluid, and further changes in funding and policies are likely in the timeframe during which this evaluation takes place. Further, a wide range of primary health care initiatives were being implemented by providers and provider organisations prior to the initiation of the Strategy.

Our original research design was to regard the myriad different components of the Strategy as comprising a single 'intervention' delivered by PHOs. A range of practices that did not belong to PHOs were to have been taken as a control group against which this impact was to have been assessed. However the establishment of PHOs has proceeded at a rapid pace, and, at the time of data collection (October 2004) 3.7 million (90%) of the population were enrolled in a PHO. As a result any control group would have been a very significantly biased sample and features other than membership of a PHO would have been likely to have determined the results of the comparison.

Quantitative Research Questions

- How have fees changed over time?
- How has utilisation of primary health care services change over time? (includes GP and nursing services, ACC claims and injury services)
- What has been the impact on rates of injury care provision?
- Have admission rates for ambulatory care sensitive conditions changed (intermediate outcomes)?
- Has quality of care being delivered changed?

Data Sources

A range of data sources will be used for this research. This will include national data sources – PHO register data, National Minimum Data Set (hospital) discharge data, PHO utilisation data and clinical performance indicator data – and practice level data from practice management systems (PMS).

Analyses

The following types of analyses will be undertaken when the data are available:

Register and NMDS data

Rates of admission for ambulatory sensitive conditions, diabetes and asthma

- By age, gender, ethnicity and NZDep of residence
- By time and PHO characteristics.

PHO Utilisation data

Utilisation data

- By age, gender, ethnicity and NZDep of residence
- By time and PHO characteristics.

Clinical performance indicators

Quality measures, over time and by PHO characteristics (for example, childhood and 65 year and over flu immunization rates, diabetes detection rates, prescribing indicators, appropriate treatment of microalbuminuria in diabetes, cervical screening and breast screening rates, smoking rates).

Practice level data sets

Average GMS co-payment 2000 to 2004/05 by quarter

- By age group and by PHO affiliation (Access, Interim and none)

Average ACC co-payment 2000 to 2004/05 by quarter

- By age group and by PHO affiliation (Access, Interim and none)

Consultation rate by PHO affiliation (Access, Interim and none)

- For second year before, first year before and since joining PHO

Per cent of encounters with nurse by PHO affiliation (Access, Interim and none)

- For second year before, first year before and since joining PHO

Per cent of claims which are from ACC by month relative to joining PHO.