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High demand for CHW services

Space and resource constraints

Transport a key need

Formal training required

Community Development

High workload services

Reduced fees can cause resentment from other general practices

Better integration between GP and some non-GP RICF services

Maori

Pacific people

Youth

Appointment systems

Other access barriers

Successful RICF services

Removing the cost barrier is crucial

Know your client population

Personal engagement

A non-judgmental approach

Flexibility in service arrangements

Reduce financial barriers

Improve transport

Develop CHW / primary care nurse outreach concept

Providers need support with new projects

PHO structure well suited to improve access

Community Health Worker Projects

Hutt Union and Community Health Services - Hutt Valley DHB

Newtown Union Health Centre - Capital Coast DHB

Otahuhu Health Centre - Auckland DHB

Union and Community Health Centre - Canterbury DHB

Wai Health - Waitemata DHB
Executive Summary

Introduction

1. This is the final in a series of reports that have followed the Reducing Inequalities Contingency Funding (RICF) projects since May 2003. This report is based on all research to date including initial site visits and two rounds of follow-up interviews with all projects, the findings from six cases studies, and an analysis of quantitative data from the projects themselves and from national data collections. Appendices provide summaries of each individual project and the full text of each case study.

Background

2. In 2002 the Government allocated $2.4M to fund the development of innovative services to reduce inequalities in health. DHBs were responsible for screening applications for funding according to specific criteria. Final decisions were made by the Ministry. Thirty six RICF projects were originally approved, however one did not proceed and one project was not renewed by its DHB, leaving 34 currently active projects. The 35 originally funded projects were classified as: general practice based community health workers (6), free or low cost access (12), establishing special facilities (2) and outreach services (15), including nursing services, transport, health assessment, youth drug and alcohol services and a medical support service.

3. RICF projects evolved over the evaluation period. Some projects continued to develop according to original proposals but many were reconfigured as the services RICF was to fund (such as cheaper visits for children aged 6-18) became directly funded as a result of the progressive implementation of the Primary Health Care Strategy. Quantitative outcome measurement was difficult in a rapidly changing policy environment. Qualitative data has been critical to the evaluation.

Findings

4. The success of an RICF service was often directly related to a provider’s existing skill and experience in managing services, and their understanding of the wider health sector. Good IT infrastructure was a feature of most successful services (except the very small providers). Services that had good relationships with their DHB often had a distinct advantage in terms of accessing planning and management resources from the DHB.

5. Cost is a very important barrier to services. While the roll-out of the Primary Health Care Strategy has significantly reduced financial barriers to access even very low fees can...
prevent some people accessing primary health care. All RICF funded services were free or charged very low fees.

6. Transport was found to be a key unmet need, both for traveling to primary care and to hospital appointments. Due too costs associated with providing transport it is not usually an efficient use of health worker time to provide this service, although many RICF projects did.

7. It is clear that for many clients factors other than financial or transport barriers must be operating to explain reduced utilisation of services. Clients may live close to services and face zero or very low fees, yet still be obviously underutilising appropriate services. Exploring this in more detail with providers, we have been surprised at how often clients were described as being isolated in other than geographical terms. Home visiting services, nursing outreach projects and the kaumatua centre-based service all mentioned social (and sometimes cultural) isolation as key access barriers when asked to identify ways in which their service was reducing inequalities. Two particular groups that experience this isolation were elderly clients living alone and “gang families” in both rural and urban settings.

8. A related but separate theme was the extreme discomfort a small proportion of people feel in a traditional primary care setting. The waiting room environment was seen as officious and intimidating. Some people do not wish to risk being confronted with unpaid fees. Requests for personal information can be uncomfortable. The doctor patient interaction can be very stressful for some patients and perceived differences in status can make the exchange of sensitive information impossible. Interactions with nurses are usually less frightening, but can still be difficult for some patients.

9. Community Health Workers and outreach nursing services can successfully overcome many of these intangible barriers to access by building trusting, often quite personal, relationships with marginalized clients.

10. Community Health Workers need a context for safe professional practice. Some projects employed untrained workers. Boundaries for practice must be specified. It could be useful if the Ministry were to develop a set of guidelines for CHW practice, including training requirements and expected workloads.

11. There has been no increase in the proportion of Maori and Pacific clients enrolled in RICF services since the beginning of RICF funding, although absolute numbers increased. Consultation rates have increased in the RICF projects, for all ethnic groups. Emergency Department (ED) attendances have increased, although this may indicate appropriate
utilisation and interpretation is difficult. Outpatient attendance patterns suggest improved access to appropriate services. Did Not Attend (DNA) rates have not improved overall, despite the focus of some projects on improving linkages with secondary care (although the best result was achieved in one such project) Admission rates for ambulatory sensitive conditions and for diabetes have not changed, although asthma admission rates have reduced slightly. Of some concern is that overall cervical screening rates for Maori and Pacific women enrolled with RICF providers have declined slightly over the last two years.

**Conclusions**

12. The “hard to reach” groups within a population are not homogeneous. Projects identified Maori clients, Pacific clients, and the poor as “hard to reach”. Some projects also identified people with chronic illness and the socially isolated, especially the elderly, as also being difficult to deliver services to. It must be emphasised that there are of course many people in these groups that are perfectly happy to use existing services, and do so successfully. People are also not always uniformly disengaged from primary care. They may have no difficulty in attending for trauma, but are terrified of seeing a health service for preventive care.

13. There were a range of views as to why some Maori clients might not access services:
- Individuals often have more urgent priorities that must take precedence over their own health needs.
- The reception staff at primary care services can appear to be “unwelcoming” towards Maori patients because of bad debts and/or appearance (e.g. tattoos, rough clothing). Some providers reported that these attitudes are felt intensely by some Maori and essentially mean the service is inaccessible.
- Even low cost access fees may be unaffordable for some.
- Other barriers to access facing some Maori that were identified by providers included past difficulties in the relationship between services and individuals, mental health issues, social skills problems and the incongruity between seeking health care and the male “macho” image.

14. Pacific patients were reported to experience similar access issues to Maori, but there are some unique features:
- English was a second language for many patients over 40 years old in these practices.
- Pacific people often have heavy family commitments that can take precedence over the need for health care.
- Providers reported that Pacific patients often have problems with appointment times, getting to the venue, and understanding the nature and/or necessity for the appointment.
Often the process of accessing care involves multiple agencies and procedures that are more complex than some Pacific people are willing to navigate.

Some younger Pacific people avoid Pacific providers and/or services that employ a Pacific person, because they fear that their confidentiality will not be respected.

15. Providing services for young people has its own set of issues:
- Young people aged between 15 and 24 years have widely ranging levels of independence which can make targeting services difficult.
- Some young people find it difficult and intimidating to engage with the “adult” procedures involved in accessing health providers.
- Many young people have limited access to transport and finance.
- In many cases young people do not want their parents, friends and/or relatives to know that they are seeking health services and they may harbor misconceptions and fears about privacy and confidentiality.
- Typically the health needs of young people include sexual health and family planning and this can be an area that they find difficult to discuss with providers.
- Young people using RICF (or other) services can have disorganised lives that preclude them from planning ahead.
- Young people often fear being judged by adults that their health priorities may not seem important to an adult.

16. Strategies which appear to be successful in the RICF projects include:
- Removing or reducing the fees barrier.
- Know the features of the client population and their community networks, and wherever possible employing staff that belong to this community.
- Personal engagement – either by home visiting or providing sufficient time and frequency of contact to build trust.
- A friendly, non-judgmental approach to all aspects of service delivery.
- Flexibility in service arrangements.

Implications

17. The data reported here strongly supports the continuation (and expansion to working age adults) of increased consultation subsidies as a key component of the Primary Health Care Strategy for hard to reach patients. Some sections of the population will still find even low fees a barrier to access. Special needs funding might still be required for these groups, for example areas with high numbers of very poor rural Maori.

18. The development of a nationally or regionally coordinated approach to providing transport services, for example supplying volunteer drivers, is worth exploring.
19. The prevalence and importance of non-financial barriers to accessing services supports
the Ministry considering ongoing funding, targeted to high needs populations, for nursing
or community health worker home visiting or other outreach services, provided this
person is closely linked with clinical services. It is not a sensible use of resources to make
a major investment in time and transport to visit a client, potentially geographically
isolated, establish trust and rapport, and then not deliver all the possible appropriate
services. For the hard-to-reach, the health services potential of every contact must be
maximized.

There are around 1300 active general practices in New Zealand, with an average practice
size of 3 GPs. Funding each practice to have an extra home visiting nurse and a transport
allowance of $10K would cost $72M. If a home visitor was shared between practices that
costs would be proportionately less. The potential impact of such a person in reaching the
hard to reach, improving diabetes care and other chronic care management, and
providing immunisations (where NZ trails the world) could be enormous.

20. Providers need support with new projects. While there are examples of practices that can
smoothly integrate new initiatives into their business processes, most general practices
do not have sufficient spare management capacity (including IT skills) to implement new
projects. Primary care project implementation can be assisted by an “IT health check” by
a knowledgeable health IT professional, familiar with a providers PMS. The concept of the
DHB toolkit could be applied to the management of specific projects. For example, the
MoH could make a web based template for incorporating a home visiting community
nurse into a primary care service available to PHOs or directly to practices.

21. The PHO structure is well suited to improve access. The barriers identified in this
evaluation, and the ways in which they are being overcome, can be addressed within the
PHO structure. Most practices will have small numbers of truly hard to reach patients. It
may not be financially viable for a single practice to maintain systems (such as home
visiting or transport) for delivering services to a small proportion of patients, but by pooling
resources with other practices such systems can become viable. This approach has been
used by PHOs to deliver, for example, IT support and chronic care management (typically
for diabetes). Where PHOs already have experience of this nature it would be relatively
easy to expand the services provided by the PHO to include CHW / nurse home visiting.
Background to RICF funding

The New Zealand Health Strategy recognises that improving the overall health of New Zealanders required a focus on improving the health of people with the poorest health. The Strategy proposed a major reorientation in the way in which health services were delivered that would help address current health inequalities, in particular the development of intersectoral and population based health approaches. The Primary Health Care Strategy operationalised this in primary care with the establishing of PHOs which provided primary health care to a registered population. Initially PHOs received capitation funding based on the age, ethnicity and deprivation structure of their enrolled population. As a result, subsidies for the provision of medical services increased significantly for practices serving high needs populations. The goal is to have all practices receiving the same level of subsidy from July 2007. In addition, PHOs are required to have community linkages (including with local Maori) to assist the development of intersectoral initiatives to improve health status.

To further assist the development of innovative approaches to health services delivery while PHOs were being established, the government allocated specific funding of $2.8 million per annum in 2001-2002 and $2.4 million on an ongoing basis to help providers develop or enhance services that could reduce inequalities. The funding was available to services that were moving into a PHO funding environment and was available through an application process, administered by each DHB. Proposals that were supported by a DHB were then submitted to the Ministry of Health for consideration. Funding was allocated in two rounds, in May and October 2002.

To be eligible for funding a service provider had to meet a number of criteria. The provider had to:

- be serving an enrolled population with known poor health status, typically at least 50% Maori, Pacific or deprivation index 9 and 10.
- already have, or be planning, services that increase access using a range of providers
- be working towards PHO membership
- be committed to providing low cost access for all enrolled patients
- have community and DHB support
- have a register of patients with good quality ethnicity and address data

A panel from the Ministry selected projects for funding and the Ministry provided each relevant DHB with a variation to their Crown Funding Agreement to provide RICF funding to the DHB for payment to each successful provider. A large variety of projects were funded. Most of the providers that received RICF project funding were involved in providing a broad...
range of other primary care services, usually in a general practice setting. Typically, though not exclusively, RICF projects aimed to reduce inequalities by increasing access.

After funding was approved the RICF projects operated in a very fluid policy environment. Over the period of the evaluation significant health policy changes have been implemented as part of the Primary Health Care Strategy. The most important of these have been increases in consultation subsidies and the development of Care Plus, which provides increased funding for patients with chronic illness. PHOs have also received additional funding for Services to Improve Access and for health promotion. Many providers also participated in other projects (funded by DHBs and from other sources) that had objectives that overlapped with those of RICF.

Some RICF projects associated with general practices that were eligible to become “Access” funded found that their RICF project had become redundant as subsidies increased. Funding changes introduced in July 2004 increased subsidies for children aged 6-18, and RICF projects that had been using RICF funds to subsidise visits for these children were required to resubmit proposals for other ways to utilise funding. Other RICF projects that had been funding free visits for people with diabetes found that funding from Care Plus was now potentially available to fund some of this activity. In these and other circumstances DHBs and providers renegotiated the terms of RICF contracts.

The Ministry requested that RICF projects be independently evaluated, with a focus on gaining insight into the best ways of improving access to services for high needs populations. The evaluation was not to be an audit, but a broad based piece of research to help improve the delivery of services. After the advertising of a Request For Proposals, CBG Health Research was selected as the evaluator following an assessment of responses in April 2003.
The 35 RICF projects

The thirty six projects that were approved covered a wide range of service delivery models. Projects were distributed throughout New Zealand. Funding allocations ranged from $7000 to $122,000 per annum. The names and funding of the projects are shown in the following table, and the map shows their locations.

Figure 1 Location of RICF projects
### Table 1 Projects and annual funding

<table>
<thead>
<tr>
<th>ID</th>
<th>Provider</th>
<th>Annual Funding</th>
<th>DHB</th>
<th>First client under RICF</th>
<th>OP / ED tracking possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Best Care (Whakapai Hauora) Charitable Trust</td>
<td>$75,000</td>
<td>MidCentral</td>
<td>not started</td>
<td>Y</td>
</tr>
<tr>
<td>2</td>
<td>ChCh Union and Community Health Centre</td>
<td>$45,050</td>
<td>Canterbury</td>
<td>3/03/2003</td>
<td>Y</td>
</tr>
<tr>
<td>3</td>
<td>Community Medical Centre Trust</td>
<td>$85,850</td>
<td>CM</td>
<td>8/10/2002</td>
<td>Y</td>
</tr>
<tr>
<td>4</td>
<td>Hauora O Puketapapa</td>
<td>$45,000</td>
<td>Auckland</td>
<td>1/07/2002</td>
<td>Y</td>
</tr>
<tr>
<td>5</td>
<td>Hutt Union &amp; Community Health Service</td>
<td>$49,300</td>
<td>Hutt Valley</td>
<td>2/07/2002</td>
<td>Y</td>
</tr>
<tr>
<td>6</td>
<td>Kingdom Clinic &amp; The Freedom Clinic</td>
<td>$81,600</td>
<td>Canterbury</td>
<td>1/07/2002</td>
<td>Y</td>
</tr>
<tr>
<td>7</td>
<td>Newtown Union Health Service</td>
<td>$80,000</td>
<td>CC</td>
<td>3/04/2003</td>
<td>Y</td>
</tr>
<tr>
<td>8</td>
<td>Ngati Porou Hauora Incorporated</td>
<td>$97,750</td>
<td>Tairawhiti</td>
<td>1/07/2002</td>
<td>Y</td>
</tr>
<tr>
<td>9</td>
<td>Ngati Ruanui Health Tahua Iwi Authority</td>
<td>$20,400</td>
<td>Taranaki</td>
<td>6/06/2002</td>
<td>Y</td>
</tr>
<tr>
<td>10</td>
<td>Oraka Aparima Health &amp; Social Services</td>
<td>$65,000</td>
<td>Southland</td>
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</tr>
<tr>
<td>11</td>
<td>Otahuhu Union Health Centre Ltd</td>
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<td>Auckland</td>
<td>1/6/2003</td>
<td>Y</td>
</tr>
<tr>
<td>12</td>
<td>Otara Union Health Centre</td>
<td>$90,000</td>
<td>CM</td>
<td>31/07/2002</td>
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<tr>
<td>13</td>
<td>Pasifika Healthcare</td>
<td>$81,600</td>
<td>Waitemata</td>
<td>1/07/2002</td>
<td>N</td>
</tr>
<tr>
<td>14</td>
<td>Rakirua Health Limited</td>
<td>$40,000</td>
<td>Otago</td>
<td>1/1/2005</td>
<td>Y</td>
</tr>
<tr>
<td>15</td>
<td>Rotorua General Practice Group</td>
<td>$81,600</td>
<td>Lakes</td>
<td>1/6/2003</td>
<td>No NHIs</td>
</tr>
<tr>
<td>16</td>
<td>Te Atiawa Health Runanga Medical Trust</td>
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<td>Taranaki</td>
<td>1/11/2003</td>
<td>Y</td>
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<tr>
<td>17</td>
<td>Te Ha O Te Oranga O Ngati whatua</td>
<td>$56,950</td>
<td>Waitemata</td>
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<td>Y</td>
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<tr>
<td>18</td>
<td>Te Hauora Runanga O Wairarapa Inc</td>
<td>$7,000</td>
<td>Wairarapa</td>
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<td>No NHIs</td>
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<tr>
<td>19</td>
<td>Te Korowai Hauora O Hauraki</td>
<td>$45,050</td>
<td>Waikato</td>
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</tr>
<tr>
<td>20</td>
<td>Te Korowai Trust</td>
<td>$55,000</td>
<td>NM</td>
<td>1/08/2003</td>
<td>Y</td>
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<tr>
<td>21</td>
<td>Te Manu Tora</td>
<td>$81,600</td>
<td>BOP</td>
<td>PMS conv</td>
<td>Y</td>
</tr>
<tr>
<td>22</td>
<td>Te Oranganui Iwi Health Authority</td>
<td>$53,550</td>
<td>Wanganui</td>
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<td>Y</td>
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<tr>
<td>23</td>
<td>Te Puna Hauora O Te Raki Paewhenua</td>
<td>$60,000</td>
<td>Waitemata</td>
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<td>N</td>
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<td>24</td>
<td>Te Rapakau Health Services</td>
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<td>Waikato</td>
<td>not started</td>
<td>No NHIs</td>
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<tr>
<td>25</td>
<td>Te Rohe Potae O Rereahu Maniapoto Trust</td>
<td>$20,400</td>
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<td>1/08/2003</td>
<td>Y</td>
</tr>
<tr>
<td>26</td>
<td>Te Runanga O Te Whanau</td>
<td>$40,800</td>
<td>BOP</td>
<td>1/07/2002</td>
<td>Y</td>
</tr>
<tr>
<td>27</td>
<td>Te Tai Tokerau</td>
<td>$122,400</td>
<td>Northland</td>
<td>1/10/2002</td>
<td>Y</td>
</tr>
<tr>
<td>28</td>
<td>Te Taiwhenua o Heretaunga</td>
<td>$21,250</td>
<td>HB</td>
<td>9/07/2002</td>
<td>No NHIs</td>
</tr>
<tr>
<td>29</td>
<td>Te Wakahuia Manawatu Trust</td>
<td>$50,000</td>
<td>MidCentral</td>
<td>12/09/2003</td>
<td>Y</td>
</tr>
<tr>
<td>30</td>
<td>Te Whanau O Waipareira Trust</td>
<td>$65,000</td>
<td>Waitemata</td>
<td>17/10/2002</td>
<td>N</td>
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<tr>
<td>31</td>
<td>Tongan Health Society</td>
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<td>11/09/2003</td>
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<tr>
<td>32</td>
<td>Turangi Community</td>
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<td>Lakes</td>
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<td>33</td>
<td>Waihi Health Centre</td>
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<td>10/06/2003</td>
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<td>34</td>
<td>Waitakere Union Health</td>
<td>$81,600</td>
<td>Waitemata</td>
<td>1/10/2002</td>
<td>N</td>
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<tr>
<td>35</td>
<td>Whai Oranga O Te Iwi Health Services</td>
<td>$49,300</td>
<td>Hutt Valley</td>
<td>8/07/2003</td>
<td>Y</td>
</tr>
</tbody>
</table>

Summaries of each project are provided in Appendix 1, classified into four service delivery models, developed after the initial site visits. Six cases studies were also undertaken and the reader is referred to these for more details on those six projects. The following tables give brief sketches of each project.
**Community Health Worker projects**

Six projects employed a community health worker (CHW) associated with a general practice service to improve service delivery in the community. CHWs were usually involved in facilitating linkages between clients and health and social services. They visited clients in their homes, provided explanations and assistance with using services, and helped with advocacy (including translations) and transport.

<table>
<thead>
<tr>
<th>Community Health Worker</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hutt Union and Community Health Services (Hutt Valley DHB)</td>
<td>Operate from two premises in Hutt Valley. Funds a CHW closely linked with the service delivering home visiting and runs chronic care management clinics and education sessions targeting smoking, exercise promotion, parenting, and child health issues. High demand for services and could easily use a further 0.5FTE.</td>
</tr>
<tr>
<td>Newtown Union Health Centre (Capital Coast)</td>
<td>CHW delivers (a) regular Pacific lifestyle exercise group (b) Maori diabetes support services (c) rugby league club associated community health initiative to reach marginalised families. Tightly integrated with community and successful in engaging clients that had previously been excluded from formal care.</td>
</tr>
<tr>
<td>Otahuhu Health Centre</td>
<td>Community liaison CHW role for first 18 months reassigned to supporting CHW and nursing cervical screening, diabetes monitoring and immunisation catch up activities.</td>
</tr>
<tr>
<td>Union and Community Health Centre</td>
<td>CHW provides home visiting and transport to predominantly Samoan patients, including advocacy and translation services. Also runs education sessions for chronic disease management and monthly exercise group.</td>
</tr>
<tr>
<td>Wai Health</td>
<td>Health provider arm of Waipareira Trust. CHW provided home visiting for patients (a) that did not attend secondary services or (b) can not get to health centre. CHW focused on acute needs and refers to many other social services.</td>
</tr>
</tbody>
</table>
Whai Oranga O Te Iwi Health | Operates two primary care clinics. CHW works 30 hrs / week providing home visiting services, advocacy and support in dealing with other social agencies. Includes transport, diabetes support group and opportunistic health promotion activities.

Centre-based projects

Two projects delivered services to specific client groups at special premises. By focusing on one well defined client group services could be better targeted to the needs of that group. The two projects were a youth health service and a kaumatua support programme.

Rotorua General Practice Group | Youth Health Centre set up in existing youth facility. Confidential service, strongly youth friendly. High growth, now 400 consults / month, with no reported drop in utilisation from other primary care providers.

Te Taiwhenua Heretaunga | Kaumatua programme provides centre and marae based activities for elderly clients every two weeks. Educational and recreational activities provided with a health theme. Food provided. Iwi provides main funding. Strong support from the 160 regular clients.

Free / Low Cost Access

Twelve RICF projects involved using funds to reduce patient charges. All these projects were initially designed to provide increased subsidies for services, or to support the continued provision of low cost services by providing debt relief to the service provider. Since the commencement of RICF funding the Government has significantly increased primary care subsidies, first for children aged 6-18 and then for adults aged 65 and over. As a result some projects were asked to suggest other uses for funding that had been initially used to reduce financial barriers for patients in these categories.

Arai Te Uru Whare Hauora | Provides heath, social and educational services to registered clients. RICF funding used subsidise access to existing GP services for registered clients. Commenced operations in 2005.
<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingdom and Freedom Clinic</td>
<td>Provides GP services to very high need clients, often transient mental health patients. RICF funding increased GP FTEs by 0.6 with consequent increase in consultation times.</td>
</tr>
<tr>
<td>Mt Roskill Union and Community Health Centre</td>
<td>Provides GP services to low decile migrant population. RICF funding used for debt relief initially, then to maintain existing free access for 6-18 yr olds. After increased subsidies for 6-18 extended nationally funding used for Muslim receptionist.</td>
</tr>
<tr>
<td>Ngati Ruanui Health Tahua Iwi</td>
<td>Iwi owned health service with low fees. RICF helped maintain low fees till April 2003, then funded free cervical screening, transport, free visits for 65+ and a podiatry service. Documented increased utilisation and reduced did not attends.</td>
</tr>
<tr>
<td>Te Ha Ngati Whatua</td>
<td>Health Provider of Ngati Whatua. RICF funded subsidised access to private GP clinics (max $5 fee) in Wellsford, Kawaiaka and Pakari, via nursing triage. Funded 465 visits in Q2 2005.</td>
</tr>
<tr>
<td>Te Korowai Hauora O Hauraki</td>
<td>Hauraki / Coromandel Maori health provider. Registered clients access subsidised access to private GP services via nurse triage administered vouchers. Focus changed in 2005 to providing access to clients with diabetes.</td>
</tr>
<tr>
<td>Te Korowai Trust</td>
<td>Urban health and social services provider with low income Maori and Pacific clients in relatively wealthy areas. RICF funds subsidised access to private GPs in Nelson where high fees are significant barrier. GPs bill service after the consultation.</td>
</tr>
<tr>
<td>Te Puna Hauora</td>
<td>Urban Maori health provider in North Shore Auckland, in relatively affluent area. High workload in 2003 and not able to service population without overflow to local AE. RICF funded 0.5FTE GP. Fees maintained at levels significantly less than surrounding providers.</td>
</tr>
</tbody>
</table>
Te Rohe Potae O Rereahu

Maori health service in Te Kuiti. Initially funded to maintain reduced fees. RICF funds reallocated to 0.5 CHW concentrating on facilitating access to services for diabetic patients.

Turangi Community

RICF funding was used to clear debts to Turangi general practice to ensure GP services maintained. Funding reallocated in December 2003 to transport subsidies, free ear checks, providing contraception services, increased subsidies for people with complex health problems, including subsidised prescriptions.

Waitakere Union Health Centre

RICF funding used to provide free doctor visits for under 18 year olds, free nursing visits and charging $10 for an adult doctor consultation.

Outreach Services

The largest group of RICF projects were classified as outreach services, of which nursing outreach was the most common. There are fifteen projects in this group covering a wide variety of projects including nursing outreach, health assessment, transport, youth drug and alcohol and a medical support service:

Best care (Whakapai Hauora)

Health and social provider of Tanenuirangi Manawatu Incorporated, the mandated iwi of Rangitaane O Manawatu. RICF funds 1FTE outreach nurses who clinics in Shannon and Foxton, for predominantly Maori clients with chronic illness.

Community Medical Centre Trust

Medical service associated with Peoples Centre in Auckland. RICF funds 1FTE nurse home visitor. Clients are very high needs, often transient with limited personal skills, migrants or refugees.

Oraka Aparima Health and Social

Provides health and social services for West Southland. RICF funds nursing outreach to predominantly elderly, Maori population in
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Otara Union Health Centre</td>
<td>The Centre provides health care to a predominantly Maori and Pacific “hard to reach” urban population. RICF funds nurse home visiting to approximately 30 clients per week that have DNAed primary or secondary appointments or been recently discharged from hospital but also takes referrals from within the practice.</td>
</tr>
<tr>
<td>Pasifika HealthCare</td>
<td>Pasifika HealthCare is a West Auckland Trust established to provide health and social services to Pacific people. RICF has funded a centre-based diabetes nursing service, now including diabetic specialist clinic.</td>
</tr>
<tr>
<td>Te Atiawa Medical Trust</td>
<td>Iwi based trust that runs two medical clinics providing GP services for registered clients. RICF funds tightly specified and very well managed service providing home based nursing and disease management services to predominantly elderly Maori with chronic illness.</td>
</tr>
<tr>
<td>Te Manu Toroa</td>
<td>Maori health provider based in Tauranga. RICF funded nursing outreach services providing home-visiting, triage, follow-up and community liaison / advocacy services. Funding was redirected to PHO in 2005.</td>
</tr>
<tr>
<td>Tongan Health Society</td>
<td>Dedicated Tongan health services provider based in Onehunga. RICF has funded a 1 FTE diabetes nurse to provide diabetes care in the community and at clinics at Langimalie health centre.</td>
</tr>
<tr>
<td>Waihi Health Centre</td>
<td>A general practice in Waihi. RICF funded a free nursing and general practice service for under 22 year olds, to meet their sexual and family health needs in a school based clinic. Service recently extended with funding from PHO.</td>
</tr>
</tbody>
</table>
Ki a Ora Ngati Wai | A community based nursing service holding a number of service delivery contracts in Northland, often in isolated rural settings. RICF funded a 1 FTE “Kaupapa Maori Medical Support Officer”, available to support the nursing service by phone or in person, and to assist with education and community development services.

Te Hauora Runanga O Wairarapa | A drug and alcohol programme provider in the Wairarapa. RICF supports resources and travel for college based educational sessions.

Te Rapakau | Cook Island community health provider based in Hamilton. RICF funds a van used for transporting clients to and from medical services, including hospital appointments.

Te Wakahuia Manawatu Trust | A community based health service that delivers a CHW-based youth outreach service, including clinic and home visits, hui, and church liaison to help young Maori males, typically with substance abuse problems.

Ngati Porou Hauora | Iwi based health provider for Ngati Porou. RICF funding collection of diabetes and cardiovascular risk health data from 70% of the population by end of 2005. 48% collected by July 2005. Outreach nursing being used to access remote clients.

Te Whanau a Apanui, Te Kaha | Tribal based health provider for Te Whanau a Apanui rohe. RICF is part funding the “Te Kaharoa” health assessment programme, a sophisticated monitor of 13 health measures including calculation of physiological age and feedback with advice on interventions.
Access barriers addressed by RICF projects

Models of Access

Although the eligibility for RICF funding did not specify that projects reduce access barriers (the objective was to reduce inequalities) this was the explicit focus of many projects. This section provides a brief overview of the concept of “access”, and a set of headings for the barriers that projects addressed.

There are a large number of models for access to primary care in the literature. One model is suggested by the Declaration of Alma-Ata 1978, which discusses "access" under the heading "accessibility". Four components are identified - geographic, financial, cultural and functional accessibility (functional accessibility means "...that care is available on a continuing basis to those who need it, whenever they need it, and that it is provided by the health team required for its proper delivery"). Barbara Hulkai in her widely utilised conceptual framework for epidemiological applications to health services research uses the three dimensions accessibility, availability and acceptability.

Access may be regarded as something possessed by an individual - "the average person has access to a large and sophisticated system of medical care" or as a feature of the system - "delivery organisations assume access to be important for effective marketing" This distinction has policy implications. If "access" is strictly something possessed by an individual, then the guaranteeing of certain "access rights" to a person would be sufficient to ensure that a person had "access", and any inequality of outcomes which resulted from under-utilisation (say) of services would be the responsibility of the individual. If "access" is something provided by a health care system then unequal health outcomes which derive from unequal utilisation are objective failings of the health system, and warrant interventions at the systems level. The reducing inequalities approach is closely aligned to this second perspective.

Early research on "access" to health services quantified "access" using probabilistic models. For example, Taylor, Aday and Andersen developed a "social indicator of access" by calculating a ratio of actual to "appropriate" utilisation and Salkever described a technique for quantifying "access" differences between groups by comparing probabilities of entry to the health care system for a given level of need. These approaches demonstrated methods for quantifying inequalities in "access", but did not help policy makers determine the best ways to improve it. For this purpose models which are analytic rather than operational are required - models which identify specific components of "access".
In an attempt to provide a testable framework for thinking about the different aspects of "access", Penchansky and Thomas\textsuperscript{iv} proposed a definition "in which access is regarded as a general concept which summarises a set of more specific areas of fit between the patient and the health care system". After a review of the literature they proposed five separate dimensions:

**Availability**: The relationship of the volume and type of services to the clients' volume and type of needs; a measure of adequacy of supply.

**Accessibility**: The relationship between the location of supply and the location of clients, taking account of travel time and transportation resources.

**Accommodation**: The relationship between the manner in which the supply of resources are organised to accept clients and the clients' perceptions of their appropriateness. This includes appointment systems, telephone services and waiting room facilities.

**Affordability**: The relationship between the cost of services and the clients' ability and willingness to pay.

**Acceptability**: The relationship of clients' attitudes about the personal and practice characteristics of providers to the actual characteristics of the existing providers.

This framework has been tested in New Zealand \textsuperscript{v} and seems to have some validity in that the different components can be distinguished. Further, satisfaction with different components of access was able to related to consultation rates. It has been recently employed in a New Zealand investigation into access to asthma care \textsuperscript{vi}

The importance of barriers to access has been quantitatively explored using data from the 1996 National Health Survey. Scott, Marwick and Crampton \textsuperscript{vii} found that, after controlling for self-perceived health need, Maori and low income New Zealanders were less likely to visit a doctor in 12 months, although the probability of being a high attender (more than six visits a year) was unrelated to ethnicity and income.

The NatMedCa study produced a series of reports based on data collected from a representative sample of practices in 2001/2002. The third report \textsuperscript{viii} the authors suggest Māori providers are increasing access to care for those who live in high deprivation areas through improvements in organizational/governance/management, ethnicity profile of staff, utilisation of community health workers, and the patient register profile.
Based on the data collected at the initial site visits the range of access barriers that were being addressed were identified and classified. Projects usually addressed more than one barrier.

Figure 2 Barriers to Access addressed by RICF projects

While most of these are obvious some are not. A cluster of barriers emerged around “dignity and identity”. One service identified that clients would not go to a GP because they knew they would be embarrassed in the waiting room by being asked about unpaid fees. Another project described clients being unwilling to let the true state of their poverty be known. In some cases clients were wanted on police business and did not want to attend for care in a public venue. Maori providers described older clients that really were not comfortable in a traditional doctor / patient interaction, feeling constrained by differences in perceived status.
When the access factors identified in our analysis of the initial visit interviews are compared with the various access models in the literature it is remarkable that the cultural / acceptability aspects of access feature strongly. As some of the research presented later in this report shows, the degree of isolation, or marginalization from primary care that some people demonstrate does not seem to be adequately captured in the definition of acceptability presented above. The prevailing access discourse assumes some degree of willingness to engage with services and then describes barriers to the successful utilisation of services as decreasing the effectiveness of this engagement. For some of the populations served by RICF projects this might be assuming too much.

The services themselves used a wide range of service delivery models to address these barriers. We identified four broad models, with a number of variations. The following table shows the four models and the numbers of projects in each variation. This classification is used throughout this report to organise projects into similar groups, although there is some overlap between categories. In particular community health worker projects are generally outreach projects, but because they all face similar issues they have been considered a single category.

Table 2 Service delivery models

<table>
<thead>
<tr>
<th>Service delivery model</th>
<th>Variations</th>
<th>Number</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community health worker</td>
<td>Working with a general practice</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Free or low cost access</td>
<td>Now PHO (5 submitted new proposals)</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Will become PHO</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-PHO iwi led</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Centre-based</td>
<td>Youth centre</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Kaumatua centre</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Outreach</td>
<td>Nursing</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Health assessment</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transport</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Youth drug and alcohol</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medical support service</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

The organisations providing the services identified the RICF projects as addressing many different barriers to access, summarised in the following table. This table shows clearly that multiple approaches are needed to address all barriers.
### Table 3  Access barriers versus delivery model

<table>
<thead>
<tr>
<th>Barrier/Inequality</th>
<th>Community Health Worker</th>
<th>Low cost / free GP visits</th>
<th>Centre based</th>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic setting</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cost and debt</td>
<td>Possible</td>
<td>Yes</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>Pride and dignity</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Transport</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Beliefs and values</td>
<td>Possible</td>
<td>Possible</td>
<td>Yes</td>
<td>Possible</td>
</tr>
<tr>
<td>Language, ethnicity, age, gender</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Concept of primary care</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Work hours</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Transient lifestyle</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Residency status</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fear of identification</td>
<td>Possible</td>
<td>No</td>
<td>Yes</td>
<td>Possible</td>
</tr>
</tbody>
</table>
Methodology

The overall goal of the evaluation is to understand what types of approaches were successful in reducing inequalities and why. The evaluation describes how RICF programs worked, how they fitted with other health care activities and how generalisable the various approaches might be. Although detailed monitoring data has been collected and provided to the Ministry, it is not the purpose of the evaluation to audit the activity of specific providers (although data collected may have been used for that purpose by DHBs). The evaluation is concerned with establishing a resource that can be used to improve the range of services for reducing inequalities and how they can be delivered.

Where possible the report has given “voice” to the experience of providers. All data collected has been validated by providers, who have seen all reports prior to reporting to the Ministry of Health. In many projects the evaluation team has provided significant training and support in the use of IT systems and reporting, from simple reporting to modifying practice management systems. The evaluation also established an email network so that providers could share experiences if they so wished.

The evaluation consisted of an initial round of site visits, a series of monitoring reports based on six monthly data collection, a series three in depth interviews with each provider, including a final interview completed in July 2005, and six case studies, chosen in conjunction with the Ministry, that explored particular service delivery models in more depth.

Initial site visits

The evaluation started with visits to all providers and DHBs. Thirty six projects were initially approved. A total of 52 visits to Reducing Inequalities Contingency Funded (RICF) stakeholders were completed in May and June 2003, 34 to primary care providers ("providers") and 18 to District Health Boards (DHBs). One RICF provider and one DHB took part in telephone interviews. One RICF provider declined to take part in the evaluation, but the project was in any case subsequently discontinued by the DHB for unrelated reasons. In one case, funding was also recently redirected from a specific project to a PHO wide approach, leaving 34 currently active projects.

At the initial visit background information was collected about each provider, their model of RICF project delivery, key features related to access and reducing inequalities, the level of community participation in the service, and the current state of play regarding funding, IT and patient registers. All providers agreed to provide routine data on numbers of clients and volumes of services provided. When relevant, additional performance measures were
negotiated from the proposed set of Primary Health Organisation (PHO) quality indicators and additional measures, specific to the project, were added.

This information was collated into a series of individual reports for each provider. The reports were sent to providers for validation, which was completed by mid-June. The validation process involved emailing the report and a thank you letter to each provider with a request for feedback in one week. A follow up phone call was made within 24 hours to check that the report had been received. A reminder for feedback email was sent out to all providers who had not responded by the day before the due date. All but three providers provided feedback on their reports, and minor corrections were noted.

Thirty of the 35 providers gave their permission to add the RICF service name to a contact list of RICF providers for circulation among RICF providers. The list contained the contact details and service delivery model of each provider. This was requested during the initial visits by some providers who wished to promote the sharing of RICF experiences. District Health Boards were asked to formally acknowledge, with or without comment, the proposed performance measures during the last week of June 2003.

**Monitoring data**

As described, this evaluation collected a range of quantitative monitoring data, decided in agreement with each provider and relevant DHB. The rationale for collecting these data was to determine if projects had any impact on service utilisation patterns. Table 5 summarises these measures for each provider. We collected data from PMS systems, ED and Outpatient systems at local hospitals and from the National minimum Dataset on hospital discharges. Using national and secondary care data sources we examined utilisation patterns for every RICF service, but identified projects that might be expected to have impacted on particular services in our reporting tables (e.g. diabetes projects). We tracked Ambulatory Sensitive Hospitalisations by coding ICD discharge codes to ASH codes using the latest available algorithms.

At the initial visit to each provider information was collected about data sources including Practice Management System (PMS) type, version and IT literacy. In some cases data were collected in proprietary databases, typically written in Access. The data collection systems used by RICF providers at the time of final data extraction are summarised below (some providers have changed or upgraded systems since the evaluation commenced):
Table 4 Frequency of different PMSs

<table>
<thead>
<tr>
<th>PMS</th>
<th>Total 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>MT32</td>
</tr>
<tr>
<td>N</td>
<td>NextGen</td>
</tr>
<tr>
<td>P</td>
<td>Profile</td>
</tr>
<tr>
<td>X</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

The three proprietary systems are: written notes and feedback forms from educational sessions with summary attendance figures (Wairarapa), sophisticated Access application that produces risk calculations and graphical displays (Kaharoa) and an Excel spreadsheet of client contacts for a community health service (Rapakau). Even though a provider might have a particular PMS that did not necessarily mean that they are using it for tracking RICF services (eg Otahuhu).

Having identified the PMS one of the first tasks was to establish systems with each provider for identifying when a service was delivered with RICF funding. This was often difficult as the following examples illustrate:

- Existing service maintained. Many services received funding to enable them to maintain existing fee levels, having produced evidence that they were running at increasing deficits as a result of their low fee structures. Other services eg Turangi, had funding approved to strengthen a balance sheet so that the service could continue as a viable business.
- Service part funded by RICF. Whai Oranga O Te Iwi Health Services and Hutt Union & Community Health Service each received $49K for a Community Health Worker, having applied for $120K for a Community Health Worker and a Community Nurse. It would be completely arbitrary to say which patients were funded by RICF.

The data to be collected from each provider was tailored to the project being funded by RICF and to the size of the funding. For example, Te Runanga O Te Whanau (a Apanui) received $40,800 to support their Te Kaharoa Health Assessment programme, which collects 13 pieces of clinical data and provides tailored preventative health advice. The impact of the programme can be assessed using these data, indicated as “Unique1” in the following table, and described in their project summary. Te Hauora Runanga O Wairarapa Inc received $7000 to assist with the provision of sessional based youth health services. Considering the small sum involved it was considered reasonable to collect only a minimal amount of data.
### Table 5: Data elements for monitoring

<table>
<thead>
<tr>
<th>ID Provider</th>
<th>Clients</th>
<th>Services</th>
<th>% ethnicity</th>
<th>% NHI present</th>
<th>Asthma</th>
<th>Breast screening</th>
<th>Child imms</th>
<th>Cx smear in 3 yrs</th>
<th>DM case detection</th>
<th>Flu imms</th>
<th>Ref on ACE</th>
<th>Smoking status</th>
<th>Unique1</th>
<th>Unique2</th>
<th>Unique3</th>
<th>Unique4</th>
<th>Number of indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Care (Whakapai Hauora) Charitable Trust</td>
<td>M</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>A</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Christchurch Union and Community Health Centre</td>
<td>M</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>A</td>
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<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Community Medical Centre Trust</td>
<td>N</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>A</td>
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<td>Hauora O Pukelapapa</td>
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<tr>
<td>Hutt Union &amp; Community Health Service</td>
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</tr>
<tr>
<td>Kingdom Clinic &amp; The Freedom Clinic</td>
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<td>Newtown Union Health Service</td>
<td>M</td>
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<td>Ngati Porou Hauora Incorporated</td>
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<tr>
<td>Ngati Ruanui Health Tahua Iwi Authority</td>
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</tr>
<tr>
<td>Oraka Aparima Health &amp; Social Services</td>
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Query A: Entire register, NHI, dob, age, ethnicity, gender, CSC, decile
Query B: = encounters for RICF eligible
Query C: = Query B - but only for RICF funded encounters
Query D: childhood imms
Query E: flu imms
Query F: smoking status
Interviews

After the initial site visits all providers participated in two further telephone interviews. Interviews lasted 20-30 minute and followed a discussion guide. They were conducted in July 2004 and in July 2005 (excluding case study participants; these were visited in person). The interviews were conducted by a nurse researcher with considerable knowledge of each project. The interviews contained sections on:

- the services that were being provided
- targeting mechanisms
- barriers to access
- methods of improving access
- collaboration with other services
- problems with the RICF project
- support received from DHB or other providers
- impact on existing services
- training requirements
- service outcomes

The final interview also asked providers for their own thoughts about the best ways primary care could reduce inequalities.

Case studies

In consultation with the Ministry of Health we selected 6 RICF projects to take part in the case study workstream. Projects agreed that they could be identified to assist interpretation of findings and assessment of generalisability. The selected projects agreed to take part in a series of more in-depth interviews and collect additional information. We are very grateful for their assistance.

The first interview was completed during a site visit and subsequently 2 further 6 monthly in-depth follow ups were conducted by telephone. Semi-structured interview guides were supplied to participants, and were used to lead discussions. Between interviews, providers were asked to keep a record of incidents to illustrate service successes (or otherwise) in removing barriers to access, increasing utilisation of health services or otherwise reducing inequalities; all providers competed these diaries. During the interviews, participants were encouraged to analyse the recorded incidents with the help of a qualified researcher.
Case study interviews developed the material covered in earlier interviews, particularly focusing upon:

- Service features, associated strategies and level of success
- Improving access and health
- The fit of the initiative with existing services for the provider and the wider primary health care environment
- Lessons for future PHOs and the communities that they will be serving

The six case study projects were:

Table 6 Case Studies

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<tr>
<th>Service delivery model</th>
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<td>Free/Low cost access (GP’s)</td>
<td>3. Te Korowai Hauraki (voucher system)</td>
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<td>Centre based activities</td>
<td>4. Rotorua General Practice Group Rotovegas youth centre.</td>
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</table>

**Using all data sources**

All these data sources contributed to the evaluation. Generally qualitative information from visits, interviews and case studies (including incident diaries) was more useful than quantitative data. Most services could provide a patient register and some consultation information, but identifying services as “RICF” was not consistently implemented, as discussed in the next section. However, taken together it was possible to develop a good sense of success of a project in addressing access barriers.
Quantitative data

Data were collected from all RICF projects to attempt a quantitative assessment of the impact of RICF on the provision of services, and where possible on outcomes. Table 4 describes the measure that it was agreed each project would provide. The following section describes these data, presenting analyses of register composition, consultation rates, ED and OP attendance rates and Did Not Attend rates, an analysis of data from the National Minimum Dataset on hospital discharge rates and an analysis of data from the National Cervical Screening Programme database. Data is reported whenever it is available. In some cases services were not able to provide requested data, and sometimes DHB-level data sources could not be accessed due to workforce issues at specific DHBs. Individual project reports contain further data on service volumes specific to each project, when these were available.

The collection of project specific data was limited by familiarity with practice management systems functionality. It was possible in all PMSs to set-up a service code for RICF projects and to use this code when providing an RICF service. The evaluation team assisted all projects to set these up if appropriate, but these codes were generally not utilised consistently enough to provide useful additional evaluation data.

It is usually not possible to attribute observed changes to RICF projects. The health policy environment since the evaluation started has been extremely fluid, with many changes in service delivery and funding, including large subsidy increases and the introduction of CarePlus. In addition, the outcomes from increasing access for hard to reach populations may take many years to eventuate, particularly for lifestyle interventions. As a result, while quantitative data must be collected and examined if available, and has been very useful in many cases, the assessment of the impact of project over a short time frame must consider all data sources.

Register composition

Hypothesis: The quality of data recorded in registers should improve. Improved linkages with primary care for hard to reach clients may be reflected in changes in register demographic profiles

26 of the 33 projects that supplied data had formal age sex registers that could be used to define a project denominator. The first table shows the changes in register composition for projects that maintained a practice register. Earlier reports showed coding rates for ethnicity and whether patients had NHIs. Since the RICF projects started these rates have steadily
improved, following the trend in other practices (as financial incentives for recording these data have been implemented) and they are now over 90%, and sometimes 100%, for all projects. CSC recording rates have dropped as geocoded addresses form the basis of socio-economic targeting and the financial incentive to maintain CSC records have decreased.

The hypothesis that is being tested here is that improved access to services for targeted ethnic groups should be reflected in increased enrolments of those groups. We have tested this hypothesis by comparing ethnicity profiles before and after the commencement of the delivery of RICF services. The table shows the change of the composition of registers at two periods. The registration date for a given client was used to partition clients into two groups – clients that were registered before RICF funding started and those registered after RICF commenced. The ethnicity composition of each subset is compared in the table. In 8 of 26 projects the proportion of Maori and Pacific clients has increased. In the other 18 the proportion has decreased, that is, the practice had relatively fewer Maori and Pacific clients after RICF funding commenced, although in 11 of these 18 projects the absolute number of Maori and Pacific clients increased.

All these projects provide services to disadvantaged populations. Changes in ethnicity profiles can have many causes. In one case it is likely that a service being provided by a Maori provider is becoming increasingly accepted by non-Maori clients. It would have been very useful to consider client deprivation independently, however CSC recording rates are now low and relatively unreliable, and NZDep scores are not consistently available in practice registers (although the ability to backload these codes to practice registers is commonly available in practice computer systems).

It has been anecdotally reported that Access funded practices became preferred by sections of the population that were not previously enrolled at the practice, as fees at these practices reduced as a result of increased government subsidies. Because Access practices could be located in areas that also had non-Access practices in close proximity there was at times a strong financial incentive for non-Maori non-Pacific clients to change to an nearby Access practice. All the RICF practices were Access funded. The pattern of changes in register composition observed may therefore be reflecting this activity.
Table 7 Registers – Change in Maori and Pacific proportion

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<td>35 GP Whai Oranga O Te Iwi</td>
<td>1384</td>
<td>1449</td>
<td>390</td>
<td>394</td>
<td>1771</td>
<td>818</td>
</tr>
</tbody>
</table>
Consultation rates

Hypothesis: Hard to reach populations have been historically under-served by primary care. Although the need for primary care may reduce in the long term, in the short term encounter rates should increase if access is improved.

The data presented here are the numbers of encounters recorded with the service in the year before the RICF project started and the date of practice data download in July 2005. As indicated in the table, visits have been recorded by specific subsets of patients, matched to RICF. When we also collected data from the entire register, or have matched visits to the RICF eligible population subset, we have calculated a visiting rate. The data has been restricted to registered patients.

To establish a “before” rate we counted the number of days of data collection before the first RICF client was seen (which was always 365), and the number of days after the first client was seen to the date of data download. To eliminate the confounding effect of later enrolling patients having a higher consultation rate (as one would expect) the analysis is based on a fixed cohort of patients registered at least one year before RICF funding started.

As can be seen in the following, there is strong evidence of increased consultation rates at most of these practices. This is true for all ethnic groups.

These data provide good support for the hypothesis that access has improved in these practices. Attribution of this to RICF is, as mentioned previously, not possible, as a wide range of other interventions have been taking place, in particular increasing subsidies to general practice and CarePlus funding.

As patients age they consult more often, but the increases observed are much greater than those expected with three years of aging.
### Table 8 Consultation rates

<table>
<thead>
<tr>
<th>Project</th>
<th>Maori</th>
<th>Pacific</th>
<th>Other</th>
<th>Days after</th>
<th>diff</th>
<th>diff</th>
<th>diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 GP Whakapai Hauora</td>
<td>790</td>
<td>42</td>
<td>299</td>
<td>3736</td>
<td>0.6</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>2 GP ChCh Union</td>
<td>150</td>
<td>163</td>
<td>1497</td>
<td>15071</td>
<td>1.0</td>
<td>2.4</td>
<td>1.2</td>
</tr>
<tr>
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<td>1961</td>
<td>579</td>
<td>4046</td>
<td>12431</td>
<td>0.5</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>4 GP Mount Roskill Union</td>
<td>41</td>
<td>122</td>
<td>251</td>
<td>1237</td>
<td>0.3</td>
<td>1.4</td>
<td>1.9</td>
</tr>
<tr>
<td>5 GP Hutt Union</td>
<td>1183</td>
<td>1074</td>
<td>904</td>
<td>4521</td>
<td>2.0</td>
<td>1.7</td>
<td>2.3</td>
</tr>
<tr>
<td>6 GP Kingdom and Freedom</td>
<td>194</td>
<td>41</td>
<td>745</td>
<td>9877</td>
<td>-1.2</td>
<td>-5.4</td>
<td>-1.9</td>
</tr>
<tr>
<td>7 GP M Newtown Union</td>
<td>573</td>
<td>933</td>
<td>2343</td>
<td>746</td>
<td>6.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>9 GP S Ngati Ruanui Health</td>
<td>4043</td>
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<td>7851</td>
<td>2512</td>
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<td>0.2</td>
</tr>
<tr>
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<td>1.8</td>
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</tr>
<tr>
<td>12 GP Otara Union</td>
<td>741</td>
<td>2400</td>
<td>726</td>
<td>2983</td>
<td>0.9</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>13 GP DM Pasifika Healthcare</td>
<td>89</td>
<td>3775</td>
<td>894</td>
<td>2941</td>
<td>0.2</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>16 GP Te Atiwa Medical Trust</td>
<td>672</td>
<td>5</td>
<td>285</td>
<td>3927</td>
<td>0.3</td>
<td>0.9</td>
<td>0.2</td>
</tr>
<tr>
<td>19 GP Te Korowai – Hauraki</td>
<td>1363</td>
<td>11</td>
<td>326</td>
<td>390</td>
<td>0.7</td>
<td>-0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>20 Sp Te Korowai Trust</td>
<td>122</td>
<td>4</td>
<td>17</td>
<td>533</td>
<td>-2.1</td>
<td>0.7</td>
<td>-0.2</td>
</tr>
<tr>
<td>21 GP Te Manu Toroa</td>
<td>1053</td>
<td>19</td>
<td>173</td>
<td>1157</td>
<td>-1.2</td>
<td>-1.5</td>
<td>-0.8</td>
</tr>
<tr>
<td>23 GP Te Puna Hauora</td>
<td>994</td>
<td>274</td>
<td>266</td>
<td>1296</td>
<td>1.7</td>
<td>1.3</td>
<td>2.0</td>
</tr>
<tr>
<td>25 GP DM Te Rohe Potae</td>
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<td>56</td>
<td>577</td>
<td>5098</td>
<td>0.0</td>
<td>-0.4</td>
<td>0.0</td>
</tr>
<tr>
<td>29 Sp Te Wakahua Manawatu</td>
<td>283</td>
<td>17</td>
<td>27</td>
<td>923</td>
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<td>-1.9</td>
<td>-1.7</td>
</tr>
<tr>
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<td>159</td>
<td>589</td>
<td>3441</td>
<td>0.3</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
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<td>87</td>
<td>9392</td>
<td>170</td>
<td>587</td>
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<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>33 GP F22 Waihi Health Centre</td>
<td>419</td>
<td>8</td>
<td>3835</td>
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<td>-0.3</td>
<td>0.0</td>
</tr>
<tr>
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<td>488</td>
<td>5878</td>
<td>0.3</td>
<td>-0.2</td>
<td></td>
</tr>
<tr>
<td>35 GP Whai Oranga O Te Iwi</td>
<td>1380</td>
<td>389</td>
<td>1768</td>
<td>19080</td>
<td>-0.9</td>
<td>-0.2</td>
<td>-0.7</td>
</tr>
</tbody>
</table>

This table shows the change in consultations per annum, by ethnic group, for a fixed cohort of patients registered at least one year before the RICF project started. The table compares the rate in the year before RICF with the average rate after RICF commenced. Bold (black) values in the final three columns indicate increases. See main text for further interpretation.

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CBG Health Research December 2005
ED and Outpatient attendances

The data in this section use hospital databases to measure Emergency Department (ED) and Outpatient clinic (OP) utilisation. The NHIs for all patients in each RICF project were supplied to all DHBs that had projects within their catchments. Data for the period 1/6/2000 through to 1/6/2005 were requested. Ten DHBs were able to supply data that could be used for these analyses. Data were not available for analysis from three DHBs. one due to workload issues (Waitemata) and two others (Waikato and Taranaki) in which historical data appeared anomalous. The absence of Waitemata data means cross boundary flows from Auckland / Counties Manukau to Waitemata can not be allowed for.

DHBs use a wide variety of systems for recording data. Every download was different and it took considerable time to process the data. The data is extractable, which bodes well for a national project to assemble these data into a database similar to the National Minimum Dataset of hospital discharges.

In analysing both ED and OP data we have split the measures into the period before and the period after a project saw its first RICF client.

ED attendance rates

*Hypothesis: Many ED attendances represent inappropriate utilisation or the consequences of poor primary care. ED attendance rates should fall as linkages with primary care improve.*

Overall ED attendance rates increased. As can be seen in the following table there are some quite large increases in ED attendances (up to 44%) for clients of individual providers. Interpreting these data is difficult however. The largest increase was recorded for clients of a service that experienced a withdrawal of after hours services – requiring patients to attend ED.

A more general difficulty is how to interpret a genuine change in rate? It was planned at the start of the evaluation that we would examine individual presentations for asthma and diabetes where relatively early changes in ED attendance should be possible as a result of improved care. The lack of consistent coding in ED databases meant that this has not been possible. Even within a relatively well defined sub group of conditions it is possible to interpret increased utilisation as a sign of appropriate care. Early attendance for severe asthma at ED may avoid an admission for example. Increased awareness of meningococcal disease may also have increased ED attendances.
## Table 9 ED attendances

<table>
<thead>
<tr>
<th>Project</th>
<th>NHls</th>
<th>Days</th>
<th>Attendances</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>1 GP Whakapai Hauora</td>
<td>1789</td>
<td>1521</td>
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<td>2488</td>
</tr>
<tr>
<td>2 GP ChCh Union</td>
<td>4007</td>
<td>1157</td>
<td>798</td>
<td>6831</td>
</tr>
<tr>
<td>3 GP Community Medical Trust</td>
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<td>2900</td>
<td>912</td>
<td>1106</td>
<td>1018</td>
</tr>
<tr>
<td>5 GP Hutt Union</td>
<td>6516</td>
<td>913</td>
<td>1105</td>
<td>5349</td>
</tr>
<tr>
<td>6 GP Kingdom and Freedom</td>
<td>2838</td>
<td>912</td>
<td>1034</td>
<td>5572</td>
</tr>
<tr>
<td>7 GP Newtown Union</td>
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<td>5375</td>
</tr>
<tr>
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<td>6274</td>
<td>912</td>
<td>1106</td>
<td>6429</td>
</tr>
<tr>
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<td>942</td>
<td>1076</td>
<td>3455</td>
</tr>
<tr>
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<td>9520</td>
<td>912</td>
<td>1105</td>
<td>1641</td>
</tr>
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<td>867</td>
<td>1308</td>
<td>634</td>
<td>985</td>
</tr>
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<td>1185</td>
<td>780</td>
<td>123</td>
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<td>912</td>
<td>1106</td>
<td>1163</td>
</tr>
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<td>27 Sp Te Tai Tokerau</td>
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<td>973</td>
<td>876</td>
</tr>
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<td>607</td>
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<td>30 GP Wai Health*</td>
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* Data capture incomplete due to data not available from closest DHB (Waitemata)
### Table 10 OP attendances and DNA rate

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<th>Project</th>
<th>NHIs</th>
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<th>After</th>
<th>Attend</th>
<th>DNA</th>
<th>After</th>
<th>Attend</th>
<th>DNA</th>
<th>Ref rate Before</th>
<th>Ref rate After</th>
<th>DNA rate</th>
<th>Change</th>
<th>Change</th>
</tr>
</thead>
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<td>498</td>
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<td>1740</td>
<td>3533</td>
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<td>474%</td>
<td>6%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2 GP ChCh Union</td>
<td>4007</td>
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<td>816</td>
<td>23758</td>
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</tr>
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</tr>
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<td>-44%</td>
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<tr>
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<td>911</td>
<td>1034</td>
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<td>19159</td>
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<td>-26%</td>
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</tr>
<tr>
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<td>104%</td>
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<td>637</td>
<td>1958</td>
<td>473</td>
<td>1399</td>
<td>344</td>
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<td>1.61</td>
<td>186%</td>
<td>0%</td>
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<td>112</td>
<td>31</td>
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<td>0.04</td>
<td>252%</td>
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<td>1.10</td>
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</tr>
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<td>-26%</td>
<td>10%</td>
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<tr>
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<td>735</td>
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<td>1940</td>
<td>11262</td>
<td>1508</td>
<td>0.59</td>
<td>1.41</td>
<td>141%</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Attendances are per patient per annum, DNA rate is per appointment made.

* Data capture incomplete due to data not available from closest DHB (Waitemata)
Outpatient attendances and DNAs

*Hypothesis*: Outpatient attendances will initially increase as problems are identified in new patients. DNA rates should fall as client linkages with primary care improve. *Specific services such as community health workers and nursing outreach should be most effective.*

The analysis of OP data was not as confounded by cross boundary flows as ED data because patients are expected to attend the clinic in the area covering their area of residence. The data are however still confounded by patients travelling across a DHB boundary to see a particular clinic. OP clinic attendance rates are presented for each provider.

Data from the outpatient clinic records were also analysed to measure the “did not attend” rate. The working hypothesis is that improved primary care linkages, especially the use of outreach services might improve attendance rates (for example, transport difficulties are often cited as a reason for missing clinic appointments.)

These data are interesting. Newly established services for Maori have large increases in outpatient attendances, including specifically established or rapidly growing Maori providers (Whakapai Hauora, Te Korowai Trust, Te Manu Toroa, Te Wakahuia Manawatu, Whai Oranga O Te Iwi) and services with a Maori community focus (Newtown Union). These services are likely to have accessed Maori clients that were previously excluded from organised care, many of whom would have required referrals. The Tongan Health Society with a focus on diabetes care provided by an outreach nurse also recorded large increases.

In established services referral rates declined. At the service that recorded the largest fall in outpatient rates (Pasifika – 67%) an on site specialist clinic was established for diabetes patients, with RICF funding a diabetes nurse clinic.

These data must be interpreted cautiously, but appear to indicate positive changes in service utilisation.

There appears to be no evidence of improvement in DNA rates. If anything they have increased. Perhaps encouragingly, the smallest increase was in the project that specifically engaged in improving linkage with hospital services.
Admissions to public hospitals

Hypothesis: admissions to hospital for ambulatory sensitive hospitalisations should decrease. Decreases are most likely for conditions that can respond quickly to improved primary care, such as asthma and diabetes.

The NHIs for the patients of the 27 services that maintained registers were supplied to NZHIS for matching against the discharge data held in the National Minimum Dataset. We wrote a programme to code these discharges according to the latest Ministry of Health algorithm for Ambulatory Sensitive Hospitalisations (ASH). The idea of an ASH is that primary care should be able to deliver services that reduce the probability of admission, or prevent disease from occurring at all. Primary care can do little to prevent brain tumours but can do a lot to help patients better control their asthma.

The following table shows rates of discharges for ASH diagnoses, asthma and diabetes for each service, before and after the start of RICF service provision. The rates reported are discharges per year per registered client that had an NHI (NHI rates are typically over 95%)

As part of our evaluation of RICF we offered to provide each provider that gave us their registers with a description of their ASHs. This data is useful at an aggregate level, but can also provide a more focused assessment of services targeted by disease condition. The commonest example is diabetes. For example, the Tongan Health Society receives $65,000 RICF funding per annum to provide a diabetes specialist nurse. One would predict a range of outcomes, including reduced admissions for diabetes.

This analysis is now quite robust. Data capture is 100%. The tracking of data through national systems means the complete health care experience of clients is recorded. There remains the small possibility that some patients still have multiple NHIs which would have caused artefactual increases in rates. However all NHIs were mapped to "master hcus" before checking the NMDS. The effect of multiple NHIs is therefore likely to be very small.

The major finding of these analyses is a relative lack of impact of RICF on these discharge rates. If there is an effect it is perhaps most clearly evident in the asthma figures, where at least some of the projects show a decrease in asthma admissions.
### Table 11: NMDS – ASH, Diabetes and Asthma discharges
Note: rates are discharges per 1000 registered clients with NHI

<table>
<thead>
<tr>
<th>Project</th>
<th>ALL ASH</th>
<th>ASTHMA</th>
<th>DIABETES</th>
<th>Days</th>
<th>Change in annual admit rate</th>
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<td>1500</td>
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<td>167</td>
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<td>2684</td>
<td>258</td>
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<tr>
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<tr>
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</tr>
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<td>17 GP Te Ha Ngati whatau</td>
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<td>2128</td>
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<td>1680</td>
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<td>1079</td>
<td>722</td>
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</table>
Cervical screening

Hypothesis: The proportion of women that are up to date for cervical smears should increase.

We are very grateful that the NCSP Kaitiaki Group approved a request for us to access record level screening data for women in RICF projects. This allowed us to undertake much more rigorous analyses than possible previously.

We examined the date of smear for each woman since 1999. Using these dates we were able to determine if a woman of a given age and ethnicity was “up to date” at any given time. Because we did not access actual histology results we could not determine the recommended cervical screening interval for each woman but defined “up to date” as having had a cervical smear in the last three years, the longest recommended screening interval. Our estimate will therefore overestimate the number of women who are “up to date” as the recommended screening interval will have been less than three years for some women.

For each project we counted the number of the women aged between 23 and 65 registered with the project that were “up to date” at the time the RICF project commenced, and the number that were up to date in this same cohort in July 2005. There were 84000 women in the cohort.

The following table shows the results for each provider. For 21 of the 27 providers the number of Maori women up to date for their cervical screening has decreased slightly. Rates for Pacific women have also fallen. The pooled results by ethnicity are:

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maori</td>
<td>38</td>
<td>35</td>
</tr>
<tr>
<td>Other</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>Pacific</td>
<td>35</td>
<td>34</td>
</tr>
</tbody>
</table>

There is some inaccuracy in this analysis due to inability to exclude woman who do not have a cervix or are not sexually active from the denominators. The setting of the lower limit of the cohort at 23 (so that women were likely to be sexually active when RICF started) will mitigate this to some extent.
Like the NMDS data these data are highly reliable. Cervical screening rates have not increased and in fact have worsened slightly for Maori and Pacific women. Nationally cervical screening rates have been steady at around 73% for the last few years, with analyses by ethnicity indicating rates around 60% for Maori women and around 50% for Pacific women.

This analysis should precipitate further research, in particular an examination of the time series of overall screening rates for Maori and Pacific women. The low screening rate before the commencement of each RICF project suggest the possibility that the clients of RICF projects experience other social disadvantages that have an impact on their overall cervical screening rates. Another possibility is that services that are culturally more sensitive may in fact deliver fewer services due to their unwillingness to cause discomfort.
## Table 13 Cervical Screening

<table>
<thead>
<tr>
<th>Key</th>
<th>Denominator</th>
<th>UTD Before</th>
<th>UTD After</th>
<th>Rate</th>
<th>Change by ethnicity</th>
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<tr>
<td>M P O M P O</td>
<td>M P O</td>
<td>Before</td>
<td>After</td>
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<td>Pacific</td>
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<td>431</td>
<td>262</td>
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<td>311</td>
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<tr>
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<td>2249</td>
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</tbody>
</table>

Note: Denominator is a fixed cohort of women aged 23-65 in June 2005. Before and After refer to date of first RICF client.
Case studies

In consultation with the Ministry of Health, six RICF projects were selected to represent four service delivery models:

1. **COMMUNITY HEALTH WORKER**
   - Newtown Union Health
   - Christchurch Union Health

2. **FREE/LOW-COST ACCESS**
   - Te Korowai Hauraki (voucher system)

3. **CENTRE BASED ACTIVITIES**
   - Rotorua General Practice Group (Rotovegas Youth Centre)

4. **OUTREACH**
   - Peoples Centre (Community MCT)
   - Tongan Health Society

Each case study begins with a description of the project. In each case, the interview and diary data is analysed to examine the project’s main features including: the way the project functions; any barriers to access for patients; any other operational problems; and any successes that have been achieved to date. There is also discussion on what has been learned from each case study that may assist other health providers who wish to develop and establish similar projects. Finally, there is a an overview of the findings across all six case studies.

1. **COMMUNITY HEALTH WORKER**

Two projects were selected as case studies to illustrate the Community Health Worker (CHW) model. In each case, a CHW was funded to provide services to a specific community to support the delivery of health services. Both of the chosen services are free to the user and
provide activities in the community in an environment that is culturally acceptable to their target groups.

Newtown Union Health Centre

Newtown Union Health Centre (NUHC) in Wellington provides low-cost access to primary health care. For the first nine months of RICF, the funding was used to maintain free access for under 18-year-olds to general practice services. On the 1st April 2003, the organisation became part of a PHO. The RICF funding was subsequently devoted to community health work.

The RICF-funded CHW at NUHC delivers (a) regular Pacific lifestyle exercise group (b) Maori diabetes support services (c) a rugby league club associated community health initiative to reach marginalised families. The delivery of services is tightly integrated with community and has been successful in engaging clients that had previously been excluded from formal primary health care.

At the initial site visits interviewees described the CHW role as providing “hard to reach”, high-need, low-income families with access to general practice services. The approach of the CHW included several community-based initiatives including an outreach clinic: a “drop in” facility at the general practice; and a Pacific People’s exercise programme.

A range of possible barriers were identified that might prevent low-income families accessing regular health services in the area:

- the cost of services
- cultural issues
- social isolation
- mobility problems
- mental health issues
- lack of transport
- poor understanding about how and when to approach general practice
- fear of identification at enrolment

Interviewees noted that CHW outreach needed to be both flexible and diverse in its approach, aiming to integrate home visits, “drop in” facilities, community outreach activities, and clinics with a friendly, accessible primary health team. It was strongly felt that the local community should be engaged in the development of the CHW model to ensure that the service meets their needs.
A Maori CHW service was established that had many features of a community development project. This service developed as a result of a relationship between Miramar Rugby League Club and NUHC. It focused on building relationships with males (often gang members) and their families that had been marginalised from structured primary health care. This service was described as very successful, having established access to primary health care services for some families who had not previously accessed services at all.

Diary entries extended the interviewees’ list of possible barriers to access noting that social isolation, low self-esteem and feelings of embarrassment about a problem often prevented patients accessing care. Interviewees felt that in some cases, patients feared that they would be “judged” by health professionals, especially doctors. In one example the CHW worked closely with a range of other providers to provide information about breast screening to the Maori women of NUHC in a culturally comfortable setting, using a Maori Breast Screening Coordinator.

The CHW role was viewed as being critical in accessing “hard to reach” families and regarded as an important link between the primary health team and the community. It was also reported that, through the CHW efforts, women and children from 50 gang-related families had registered with the PHO. A smaller number of males had also registered, representing a significant achievement in engaging with this group. In the last 6 months of the evaluation, with support from the community, the CHW worked with gang families to complete a health needs survey, with support from the PHO and DHB.

As a result of feedback from this community it was felt that primary care registration process was continuing to present barriers to access for some families, in particular the men in these families. As a result the service adapted the enrolment process to allow the use of generic addresses and phone numbers for clients who were of no fixed abode, or who move around and do not wish to record contact links.

The service emphasised that ‘silo funding’, such as obtained from RICF, does not fit well with the PHO model of community care and the desire to integrate a variety of primary health care services. In this instance the CHW is not solely funded by the RICF, but also receives support from the PHO. Many aspects of the CHWs role require additional support from other sources. The team expressed concerns that RICF funding might not be continued and stressed that this CHW role is now an integral part of the work of the organisation.
Christchurch Union and Community Health Centre

The Christchurch Union and Community Health Centre is part of the Canterbury Community PHO that was established on 1st July 2003. It is an established primary care service that has proven acceptability in a high need area. It targets Pacific patients of all age groups, but in particularly older, more socially isolated people or families with mobility and/or transport issues.

Interviewees stated that the main aim of the CHW project was to provide free community care to all age groups of Pacific patients but in particular, older, more socially isolated people with mobility and/or transport issues. The project also aimed to reduce patients’ social isolation and increase their uptake of health services by offering exercise and nutrition sessions in community venues.

A range of barriers to access for Pacific communities were identified by interviewees:

- Lack of transport
- Cost of services
- Difficulty with location of services
- Difficulty with appointment times
- Language barriers
- Social isolation
- Lack of community support

It was reported that the CHW had engaged many isolated people in the community who would not otherwise have accessed health services by providing assistance with transport, support, and interpretation.

There was consensus among interviewees the cost of CHW transport cost was high and therefore problematic because it was not fully covered from RICF funds.

Interviewees also expressed some concern around the integration of the CHW into the wider general practice team. Whilst the CHWs were attending team meetings and working closely with individual’s nurses and GPs, it was thought that they still positioned themselves outside the team. This experience led to comments that prior to developing a CHW project, a PHO should consider ways in which the CHW can be fully integrated into the wider team.

Over the course of the project Interviewees reported that the CHW role had steadily developed, continuing to lead activities and exercise for older age groups, while becoming more active in trying to access younger families through the school networks.
Diary entries confirmed that those patients not attending appointments were being successfully targeted by the CHW for intervention. Follow-up with patients that “did not attend” secondary care appointments (DNAs) highlighted various access problems:

- Difficulties with the appointment system
- Patients being misunderstood
- Patients feeling intimidated
- Patients feeling their needs had not been addressed

The CHW’s ability to track, find and access families was reported to have increased access to services.

It was suggested by interviewees that having a CHW who is matched in terms of ethnicity, age and gender will further improve successes in this area, particularly if the CHW can speak in the language of the Pacific community.

Diary entries noted that the Samoan communities had responded positively to the family-based approach. The one-to-one personal approach of the CHW had overcome communication and institutional barriers that many Pacific families had previously faced when trying to access health services. The CHW had managed to bridge the perceived gap in communications, - exacerbated by language difficulties - between health professionals and the older Samoan generation. For interviewees, the CHW had become a vital part of the primary care team. The success of the CHW with older Pacific people was closely linked to the perceived status of the worker within the Samoan community.

Interestingly, interviewees felt that while the CHW’s status assisted access to older Pacific people it was also identified as a barrier preventing them from accessing younger families. It was reported that younger Samoan people may be more responsive to a CHW from outside their own community.

**COMMUNITY HEALTH WORKER CASE STUDIES: A discussion of findings**

The CHW services successfully address a wide range of access barriers. At a practical level CHWs are able to overcome patients’ simple access barriers such as lack of transport, cost of services, and lack of convenient appoint times or clinic locations and mobility problems, by providing free services in a community setting.

More importantly, the acceptance of CHWs within their communities and the networks that they have developed enable them to address less tangible barriers including:

- Fears that patients will not be understood due to language barriers
- Fears that patients will not understand advice given
• Social isolation of patients
• Patients mental health issues
• Lack of understanding about when to approach a doctor
• Fear of being identified

A positive factor which will help overcome these intangible barriers is the ability of the CHWs to engage clients at a more personal, non-clinical level.

It is clear that an effective community health worker is a talented person with good interpersonal skills. It is these skills that enable each CHW to develop and establish very supportive community networks that assist them greatly with their work.

The CHW projects are not “stand alone” projects, each is affiliated with a general practice, PHO and a specific targeted community. The CHW role is viewed as a valuable resource for practice teams on many levels including the willingness of the CHW to share the knowledge they have about the health needs of their community with other health services providers. Practices report that the workers are very successful in following up people who do not keep doctors’ appointments. They are able to assess the difficulties that prevented the attendance and link the patients and their families back into the system. Practice teams also observed that CHW intervention within a community, results in better attendance at scheduled appointments and improved chronic care management, screening and immunisation outcomes.

The provision of transport by the community health worker is considered to be an essential part of the role, allowing the worker to directly address one key underlying barrier to accessing services. However, transport is a costly budget item. One of the projects is encountering real issues covering the costs associated with community health work. The transport bill is estimated to be in excess of $15,000 far in excess of original projected CHW transport budget. Consequently, the practice team reports that they are struggling to continue to cover these costs.

Diary incidents highlight that CHWs have had great success in successfully following up patients who did not attend doctors’ appointments (known as DNAs) are The CHWs help patients to keep future appointments by ensuring they fully understand the events taking place and by assisting families to systematically negotiate their way through the often complex processes of both health and social services.

In addition to the more visible access barriers, the CHW case studies reveal some hidden barriers that can often underpin DNAs. The CHWs reported that social isolation, depression, low self-esteem, fear of showing weakness and feelings of embarrassment about a problem, often prevented patients keeping appointments. Some patients reported their fear that they
will be judged by service professionals, especially doctors. The CHWs are able to help patients overcome such barriers through personal contact with them and empathizing with the patient, rather than assessing them from a clinical professional standpoint.

CHWs also appear to be more able to effectively operate at a whanau / family level than traditional-clinic based providers, building rapport and trust between them and primary care services. This can lead to the engagement of “harder to reach” families, who have traditionally rejected offers of help from other health services.

It is suggested that any health service wishing to employ a CHW to access “hard to reach” clients should find a worker with good local networks or who has a knowledge of the different cultures that make up the local community. Primary care teams should identify the skills and services required by the CHW that could complement existing offerings and work closely with the chosen person to ensure that the job has a more community orientation than the traditional model of service delivery. There is also a role for local communities to be involved in the development of CHW services.

It was strongly recommended that, prior to employing a CHW, organisations consider how best to integrate the CHW into the primary care team and that the CHW job description clearly identifies integration with the clinical team as a key factor. The ongoing professional education for the CHW is also an important issue to be addressed.

It was further suggested that wherever possible the CHW to be employed should be the best match to the target group both in terms of ethnicity, age and gender. CHWs success is linked to the “trust and recognition” of the worker which allows patients to share experiences. Discussing health and social issues can be much less intimidating for patients when the listener is of a similar ethnic background, age and gender.
2. FREE/LOW-COST ACCESS

Te Korowai Hauora O Hauraki

*Te Korowai Hauora O Hauraki was established in 1995 to provide early intervention whanau-focused wellness support service based around nursing and counselling care. In 1996, general practitioner services commenced through a mobile clinic. The service has always provided free/low cost access to primary care. In 2001 satellite clinics were established in Paeroa, Whitianga, Whangamata and Coromandel.*

Service providers described the aim of the Te Korowai Hauora O Hauraki project as being to provide free access to GPs for high need, low-income, Maori families. The project uses a voucher system to facilitate the access to free care. Through the voucher system, the interviewees claimed to have increased service utilisation for many high-need, low-income patients who were living in lower socio-economic areas.

Several barriers to low-income families accessing health services were initially identified by interviewees including:

- The cost of health services
- Lack of access to funded practices in certain locations
- Patients' previous bad debts with services and fears of recrimination as well as ability to meet further costs of care

Even low-cost GP fees were deemed by interviewees to be unaffordable by the poorest sections of this population. It was felt that the voucher system had addressed this issue and provided access to primary care, for the most deprived families in the local area.

However, interviewees noted early problems with the administration of the voucher system. Some practices had refused to accept the vouchers and/or collaborate with the lead organisation in anyway. It was felt that those practices perceived that interim funded practices were losing patients to access funded providers.

Interviewees suggested that any other service wishing to employ a voucher scheme should secure and administer a discretionary fund to provide other assistance to very poor families. Establishing a fund to bridge the gaps for the neediest was seen as a vital addition to current funding arrangements.

After the introduction of reduced fees at Access funded practices, the project was renegotiated with the DHB from facilitating access for all high needs, low-income families, to
focusing on improving access to health services for Maori with diabetes. Through the voucher system, individuals with diabetes are now assisted to access general practice and nursing services.

Interviewees felt that it was too early to assess the level of success of this new focus in terms of its impact on diabetes. It was noted with caution that the new contract had meant the loss of reduced cost access for 70 per cent of people who had previously benefited from the voucher system, as now only patients with diabetes were benefiting.

Diary entries highlighted further “hidden” barriers preventing patients accessing health services.

- Cost of services
- Relationship difficulties between patients and health services
- Mental health issues
- Problems with patients’ social skills
- The “macho” image of some male patients.

It was felt that while the voucher system was addressing and supporting the cost barrier, there were often layers of other unarticulated hidden barriers preventing access.

Interviewees reported that the project had retained its focus on improving access to health services for Maori patients with diabetes. It was felt that offering free and unlimited consultations had positively impacted on the disease burden of diabetes. A diabetes support group had been established through the project which had also increased community awareness about diabetes.

Diary entries of interviewees also noted that providers felt that some Maori patients, particularly Maori men, ignore the presence of the diabetes because of its association with sickness and death. Interviewees felt that this psychological barrier was now being addressed through the project by providing multiple opportunities to work with families (both in the clinical setting and non clinical environment) thereby allowing patients to better accept the diagnosis. In many cases this denial was often associated with complex psychological barriers that took time and multiple approaches to address.

3. CENTRE-BASED

Rotorua General Practice Group - Rotovegas Youth Clinic
The Rotovegas Youth Clinic was developed to address youth and community concerns and expand on the general practices’ experience of providing youth health care via schools and the health centre. The service is free and runs from an established youth centre.

Interviewees reported that the service aimed to teach adolescents how to use health services and link them into general practice services. The service was perceived to be very successful in that it was completing more than 200 consultations per month and seeing a steady increase in use by young males.

Several barriers to youth accessing regular health services were identified by interviewees:

- Lack of transport
- Cost of services
- Lack of accessibility in terms of location and appointment times
- Lack of knowledge about when and how to approach services
- Fear of identification
- Intimidated by the clinical environment

Interviewees emphasised the real fears that young people have about privacy and confidentiality and concerns about some sexual health treatments. Transport and time were also highlighted as issues that typically prevented youths from accessing services.

It was felt that the service, through its location and the skills and attitudes of staff, had gained its own credibility and its resulting growth had largely been through “word of mouth” within the youth community.

There were early problems in getting young males to use the facilities, mostly due to stereotypical male adversity to health services prevalent in the age group targeted and similarly difficult to engage young people in the governance of the centre. There were also some difficulties overcoming the prescription charge barrier, especially for youths requiring STD treatments.

Interviewees believed that such a project can improve youth access by networking with local and national, youth, school and, community organisations. It is also considered imperative that staff who are employed to work with young people have both interest and skills in that area and can provide care in an environment that is youth-friendly and easily accessible.

As the project developed there was increased utilisation by all targeted age groups and, significantly improved attendance rates for male youth. The changes in utilisation were thought to be related to the service starting to integrate “drop-in” times with appointment scheduling.
Diary entries noted an increasing predominance of youths seeking help for sexual health problems that are not being addressed by other providers. Young people were finding out about the service from their friends and through “word of mouth” in the local community. In many instances, the service was being accessed by young people for help on issues that they had not explored with anyone else.

The positive features of the service identified by interviewees as having made the service more attractive to young people include:

- Free service
- Accessible location
- Youth-oriented staff
- Youth-friendly environment
- Confidential service
- Non judgmental approach

To improve the establishment of this type of service elsewhere, interviewees emphasized the importance of bridging the gap between young people and adults. This means recognising that young people have different interests, perspectives and priorities and limited resources (access to transport and finance). It is therefore important for any effective youth health service to be non-judgemental and welcoming to young people who will be at various stages of developing independence from their parents or caregivers.

CENTRE-BASED: A discussion of findings

There are several barriers to youth accessing regular health services: lack of transport; cost of services; inaccessible locations; inconvenient appointment times; a lack of knowledge about when or how to approach services; fear of identification and feeling intimidated by the surgery environment. Youth often fear general practice because they feel that they will not be understood and/or understand the health professional, or that their complaint will be seen as trivial.

Many young people accessing the project were seeking help with sexual health problems that are not being addressed by other providers. The Youth Clinic provided health care in many other areas, for example general health, mental health, and substance use. The service was being accessed by young people who are socially withdrawn and/or isolated by circumstances beyond their control, such as extreme poverty. In many cases, it is evident that the individual has not disclosed their situation to others. Project staff have been able establish a relationship with such young people by providing care in a non-traditional, welcoming environment.
This project also identified that young people often present with seemingly easy issues to test a service. Approaching such young people with an open and non-judgmental approach is a major prerequisite to establishing and maintaining contact with the patient and helping the service pass the youth’s first exploratory contact and gain access to the real problems.

Other services should be aware from the experience of this youth clinic that there is a big cultural gap between young people and adults and a distinct “youth health” approach should be employed and that to ensure youth uptake there are several important prerequisites:

- Networking with the local and national youth, school and community organisations
- Employing staff with youth interest and skills
- Providing a “youth friendly” facility that is easily accessible
- Outreaching to young people
- Providing easy access to treatment for more personal adolescent problems.

4. CASE STUDIES: OUTREACH

Two nursing outreach projects were selected as case studies. Both of the projects include a provision for nurses to complete home visits. The service is free to the user and largely centres on a “walk in” clinic. The Tongan Health Society project targets Tongan patients enrolled with the PHO who have diabetes and aims to provide diabetes chronic care management. The Community Medical Centre Trust facilitates access for high-need, low-income, predominantly newer immigrant individuals to general practice and nursing services.

**Tongan Health Society**

*The Tongan Health Society was established in 1997. Langimalie is a health centre that provides health care to a predominantly Tongan population. The service has three FTE GPs, 1 nurse and 11 community workers. Langimalie become part of a PHO structure on July 1st 2003.*

Interviewees described the aim of the project as being to provide free diabetes management services to Tongan patients; to teach Tongan patients in their language about how to manage diabetes and to have respect for Tongan traditions and methods of learning. The service provided diabetes screening, care planning, one-on-one education, exercise sessions and co-ordinating specialist and dietician input.
Several barriers to Tongan patients accessing regular diabetes care were identified by interviewees:

- Lack of transport
- Cost of services
- Lack of accessibility in terms of location and appointment times
- Patients being intimidated by the surgery and/or hospital environment
- Multiple providers providing care in lots of different places
- Language difficulties

English is a second language for many Langimalie patients. In the past this has significantly hindered their engagement with health services. A key health issue central to the good health of the Tongan people is the complex issue around quantity of food consumed.

Interviewees felt that there had been increased patient access to care through being easily accessible, centrally located and inviting people to drop in between 9am and 5pm. It was reported that the service had seen a steady increase in use with many patients electing to “drop in” to talk about their diabetes. Clinic staff described the service as a “one stop shop” that provides education, monitoring, access to medications and advice, activities for weight loss, home visits, screening and specialist follow up.

An early problem identified was around getting older people to attend clinic sessions and/or appointments. That was solved by staff providing transport for the patients.

Three main areas of project development are identified by interviewees: (1) The use of community health workers; (2) Home visiting; and (3) The provision of exercise classes. Another positive development noted was the integration of the exercise component with a PHO “green prescription” initiative.

According to interviewees, the service was very successful in terms of achieving its aims, and in particular in helping patients who have previously had a history of “uncontrolled” diabetes. Interviewees report that this is due to the Tongan community’s increasing awareness and acceptance of the service.

Following up on DNAs, the service found that patients – especially patients for secondary care appointments – had frequently had not received communications or not understood the communications received. The latter leads to patients feeling intimidated. The appointment letters are written in English and the process of appointment-making assumes that the appointment time is convenient to the patient and/or that they will be able to get to the venue. When it is not convenient or the patient cannot get to the venue, the chances are the patient will simply not turn up at the appointed time.
Three positive features of the service were identified as being crucial in increasing patient access to services:

1. The clinic’s “drop-in” facility
2. The “one-stop shop” approach
3. Having Tongan-speaking staff

In addition, the service’s ability to track people and outreach into the community via networks, home visiting and community health workers was seen to afford improved access to “harder to reach” families.

At the final interview in July 2005, interviewees reported that the project had continued to provide one-to-one education, monitoring of all diabetes patients, facilitation of access to exercise and nutrition and specialists clinics and home visits. However, in an attempt to work within the available resources, the number of home visits has been reduced. The home visit is now reserved for those patients with no other option.

Some additional barriers to access were identified through interviewees’ diary entries. The symptoms of uncontrolled diabetes often contribute to patients feeling depressed, tired and hopeless. It was felt that these types of hidden barriers were often difficult for health professionals to access and overcome.

Transport remains a key problem for the project, especially given the resource restrictions on home visiting. This issue was seen to be the most common reason for non-attendance of a service or activity, particularly in the older population. The service has introduced a system of car-pooling to support its clinics but the provision had not been found to work for everyone.

**Community Medical Centre Trust**

The Community Medical Centre Trust, established in the late 1980’s, is affiliated to the People’s Centre. The service has always provided free/low cost access to primary care for members of the People’s Centre and their families. Prior to becoming a PHO, “The People’s Health Care Trust” on April 1st 2003, the health centre was a capitated practice with various other sources of income including grants.

Interviewees described the aim of the project as being to provide free access for high-need, low-income, predominantly immigrant individuals to general practice and nursing services. It was reported that 35 per cent of the people targeted by the service had English as a second language and were living in extreme poverty. The project aimed to increase access for these individuals via, nurse home visits, a “walk in” clinic, and through providing transport. The
project was claimed to be successfully attracting high-need, low-income patients through its “walk in” clinics.

Several barriers to low income families accessing regular health services in the area were identified by interviewees:

- The cost of services
- Language issues
- Dysfunctional family environments
- Social isolation
- Mobility problems
- Mental health issues
- Lack of transport
- Poor understanding about how and when to approach general practice
- Fears of being intimidated in the clinical environment

At our first interview the project was still planning to provide home visits, but had established a “walk in” facility, at the surgery, for nurse visits. This was considered to be providing valuable “first contact” opportunities.

A further barrier to access identified through interviewees’ diaries is the formality of the traditional appointment system. This is highlighted by the informality of the “drop in centre” and its use by people who would have found it difficult to make and complete an appointment. There appears to be a good fit between the more “informal” arrangements to access care, with the lives of people who were struggling with complex health and social issues. This, combined with a “one-stop shop” approach to health and social care that the Peoples Centre providers, helps ensure that patients needs are met on presentation and access problems are found and solved

Interviewees suggested that other services who wish to extend their services to immigrant people, should trial “drop in” times as a means of creating “first contact” opportunities.

In 2005 the wal-in facility was extended to include GP visits. This option is proving helpful to those patients who were unable to engage with the formal appointment processes. Many of the more isolated, less mobile people, who seem at first glance to be ideal candidates for home visiting, prefer to access the “walk in” service at the clinic venue. Typical patients at the walk-in patients often had a chronic condition, and, in the opinion of interviewees, would not have presented if an appointment had been necessary. The walk-in service was also providing some acute emergency care.

Interviewees feel that the walk-in facility has improved access to both nursing and medical care for the most disadvantaged people. Walk-in patients are prepared to wait to see the GP
or a nurse. Such an informal drop in service suits people who do not have access to a telephone or a car.

OUTREACH: A discussion of findings

Both of these nursing services appear to be able to deliver more continuous, regular care to their target groups than they had previously experienced. The “walk in” facility was regarded as very successful in terms of helping people access medical care who do not have the resources, such as transport, phone or the ability to otherwise comply with an appointment processes.

In both cases interviewees observe that many patients who previously presented in the late stages of a problem are accessing help at an earlier stage. Staff are also successfully capturing “walk in” patients for other health interventions, other than the one they presented for.

Several barriers for low income families accessing regular general practice services are evident including: the cost of services; language issues; dysfunctional family environments; social isolation; mobility problems; mental health issues; lack of transport; poor understanding about how and when to approach general practice; and fears of being intimidated in the clinical environment. It is noted that even the new low-cost fees charged at access-funded practices are unaffordable by the poorest sections of their population.

Patients are triaged and provided with chronic disease management and wound care. Staff describe working, often in a coordinating role, as part of a multi-disciplinary team that included GPs, specialists, dieticians, podiatrists and community health workers. Typically nursing staff are able to deal with presenting problems and then facilitate access to other services or professionals. They describe working with community health workers to access “harder to reach” patients.

Transport and time are highlighted as issues that continue to prevent people using health services. Both of the projects provide some transport for those who could not get to the clinic and home visits for those with mobility problems.

Diaries typically demonstrate that psychological barriers to accessing help often underpin neglect of health and well-being. Staff often work with patients who are depressed, and with patients that feel isolated and “hopeless”. These patients have limited resources to devote to clinically indicated lifestyle changes. In some cases it is evident the personal approach taken by the nurse is successful in building sufficient trust and rapport to engage these clients in wide ranging conversation and, in the process, reveal underlying psychological problems.
Experience from these projects would suggest that PHOs who wish to further facilitate access for low-income families, could consider providing a nursing outreach service that includes, if possible, home visiting, transport provision and a “walk in” one-stop-shop type of clinic in a friendly, accessible surgery.

There was a theme that staff should use any available “first contact” opportunity to identify the difficulties/barriers that are preventing access by individuals. When dealing with “harder to reach” people professionals must investigate all aspects of the treatment plans and not assume that everything is alright merely because a patient has failed to identify a problem. Every possible patient contact should be well-used - since hard to reach clients might only irregularly come into contact with services.

SUMMARY OF THE CASE STUDIES

The six selected projects all reported success in achieving their service aims and tailoring the service to overcome the barriers to access they had identified for their targeted clients. Throughout the evaluation period, there was continued growth in utilisation rates. There was in all cases a sense of a service evolving and running more smoothly and effectively as time went on.

At the start of all six projects, the providers emphasised the need to establish a friendly and welcoming environment in which to deliver care as a prerequisite for improving access. Other features included free service, provision of transport, home visits, interpreter services and “walk in” clinics. As services developed providers also reported on the importance of the team’s ability to find and engage individuals and/or communities using an open-minded, and non-judgmental approach.

All of the projects appeared to be community focused and driven. They often adapted the place or process of service delivery so that services could be provided on the community’s terms. All of the projects had been integrated into a PHO and were seen to fit well with other services to increase access, supporting the population based health approach and community driven nature of the PHOs. Some of the case study providers had integrated their RICF service with the delivery of Care Plus, using RICF resources to improve access to services for clients with chronic illness.

The case studies described some difficulties in implementing the projects. The problems were typically resource-related. Transport remains a key problem area for all of the services, both in terms of patients accessing project activities and patients getting to appointments with
other primary and secondary care services. This area was described as one of the most
difficult and risky aspects of the projects from both a funding and staffing perspective.

The projects were not independent of the wider health sector - all case study projects
reported good networks both at a local and national level. The projects appeared to be
integrating well and coordinating health and social services for their target groups within the
local community. It appears that the projects have largely been welcomed by other health
providers and regarded positively as helping the target groups reach existing care.

The projects funded training opportunities for staff involved in delivering services. It was noted
that there is little or no funding for training available via the project budgets and, to the extent
that training was required, the services were dependent on other resources.

All staff working on the projects had access to and support from, clinical teams through their
immediate affiliation to a general practice, associated PHO and/or other local primary and/or
secondary care teams

Overall, the projects identified that services which aim to increase access for “hard to reach”
clients should employ staff that are sympathetic to the needs of clients and have the networks
and skills appropriate to the target groups. Providers felt that services which aim to increase
access should focus on developing a flexible approach to care including “walk in” services
and an appropriate, friendly and welcoming environment. The notion of seamless delivery
was described in which practice and PHO services were integrated so that outreach
initiatives, such as home visits, transport provision, centre based activities/clinics were
accessible through a “one stop shop” approach to care.

Some of the project participants wanted reassurance that RICF would continue. They
reported that there these services had in many cases, has become critical to delivering core
care to “hard to reach” clients. Providers requested a review of the funding to better
accommodate inflation and professional development of the staff involved. Finally it was
recommended that more national and local solutions were needed to address the transport
issues that prevent many people from accessing services.
Conclusions

This section attempts to bring together the material from the 35 project interviews, quantitative data and case studies to provide a summary of what was learned over the course of the evaluation.

Transport a key unmet need

The provision of transport was regarded by many providers (for CHW visits and for travel to and from clinics or hospital services) as a prerequisite for a successful health service, particularly one focused on reducing inequalities. While home visiting is one solution to lack of transport there are times when a client needs to travel to see a provider, typically an outpatient clinic for a consultation with a specialist or for a minor procedure. DHBs did not in general fund projects that were only involved with providing transport (there is one project that does fall into this category).

Isolation

It is clear that for many clients factors other than financial or transport barriers must be operating to explain reduced utilisation of services. Clients may live close to services and face zero or very low fees, yet still be obviously underutilising appropriate services. Low immunisation rates in some population groups is an excellent example. Immunisations can be available free at a provider within walking distance, yet still not be accessed.

Exploring this in more detail with providers, we have been surprised at how often clients were described as being isolated in other than geographical terms. Home visiting services, nursing outreach projects and the kaumatua centre-based service all mentioned social (and sometimes cultural) isolation as key access barriers when asked to identify ways in which their service was reducing inequalities. Two groups that got particular mention were elderly clients living alone and “gang families” in both rural and urban settings.

Reaching these populations is resource intensive, usually involving an extended period of trust building. A nurse or community health worker will typically require multiple contacts with clients, usually in their own home, to establish trust. The next step may be acting in an advocacy capacity, or accompanying a client to a contact with a health service. Only slowly are these clients linked with services, and once they are receiving services it can be very easy for them to disengage unless treated with respect and sensitivity.
**Limited IT capacity**

Overall the IT capacity of services has increased dramatically over the course of the evaluation, with only few exceptions. Running queries, opening attachments, saving results are all tasks that still present difficulties for some providers, but over 24 months the general level of IT literacy has improved noticeably. Involvement with the evaluation process itself has been responsible for significant upskilling of some providers.

Most providers are now aware of the facilities available in their PMS for recording different items of service. This has been the major IT challenge of the evaluation to date. It is necessary to identify which services have been provided through RICF funding and this sometimes requires the use of coding. We have assisted providers in establishing systems for such coding. This was only done if no other mechanism is available, as we have been very conscious of the need to reduce the “evaluation burden” (to zero if possible).

**Fees and financial viability**

It is evident from accounts submitted with RICF applications that some traditional practices were not viable businesses without ongoing subsidies from (for example) unions, iwi, special programmes, and staff prepared to accept lower than market salaries and/or working unpaid hours. The introduction of Access funding has solved these problems for many practices, allowing services to charge the low fees they have always charged, but on a much more secure financial footing. However the accumulated deficits both financial and in terms of resources – deferred maintenance, equipment, training, software – cannot be met from this new revenue. In these cases RICF funds have, as requested and approved, been used for debt relief.

Evaluating the impact of this expenditure is very difficult as these practices have often survived precariously for many years. It can not be assumed they would have failed without RICF expenditure. The issue is really whether such services should have to rely upon multiple, often charitable, funding streams, to survive.

**Contract management**

Some of the delay in developing RICF projects can be attributed to the wide variation in levels of DHB engagement with the RICF process. There were big differences in the amount of resource DHBs devoted to managing the RICF contracts. There was a general impression that many DHBs regarded the money as a one-off opportunity to be passed on to the most worthy recipients, usually judged by a transparent, sometimes points based, assessment.
Having had their proposals for candidates accepted by the MoH only minimal contract management was considered to be necessary.

A related issue is that of compliance costs. Although we tried to minimise the effort required to collect information for evaluation, many providers felt that the effort required was not commensurate with level of funding RICF was providing.

**Community Health Workers (CHW)**

Six practices used RICF funding to provide CHW services. The levels of experience of CHW and the level of integration into the clinical team varied widely. The key themes from these diverse projects are presented below.

**High demand for CHW services**

Five of the six practices that used RICF funding to provide a CHW reported very high demand for the service. The CHW typically provided home visits to targeted populations, such as those with chronic illness or a history of non-attendance, on the basis of referral from within the practice, self referral, or from an external agency, including secondary care. There was no difficulty finding patients that fitted the criteria specified in the original RICF proposals made by these providers. Two services reported they could easily double the FTEs doing this work, and one provider was funding expansion of the service independently.

**Space and resource constraints**

Many of the RICF providers are expanding the services they provide and a lack of physical space to accommodate extra practice personnel was commonly reported. A CHW also often required access to a terminal for entering data, which was sometimes difficult in busy practices. Most project plans had included provision for transport for CHW to provide home visiting and taxi services, however in all cases the estimated amounts had been less than actually required. Most services were planning to replace reimbursement systems with provision of a vehicle.

**Transport a key need**

The demand for transport remains very high. Providers were in no doubt that this was a very common reason for non-attendance at secondary care services. Although most obvious in the CHW projects, transport was a recurring access barrier in most projects, and is mentioned above under general themes also.
Formal training required

All providers described a requirement for more formal specification of the role of CHWs. The lack of professional peer review, or a professional association, was often mentioned. A CHW is often a single individual in an otherwise established practice, in which doctors and nurses enjoy professional support.

CHWs may need to have the scope and limits on their practice clearly defined. Some providers thought that training should include the performance of simple nursing tasks, such as blood sugar monitoring and taking blood pressures. What was clear was that a framework for practice was often lacking, and that this was a cause for concern.

A related issue is establishing systems for integrating the work of CHWs with that of other professionals involved in providing health care at the same practice. Without a formal framework within which to operate the rights and responsibilities of CHWs are not clear. In some practices CHW activity was not reported because the CHW was not given permission to access the clinical record, while at others CHW were fully integrated into clinical teams, including attending clinical meetings.

A recurring theme throughout the RICF evaluation is the lack of IT knowledge of many health workers. Providers reported that this was true for CHWs as well – this was often important as, without access to clinical systems, CHWs often had to do their own reporting, and this was limited by a lack of operational knowledge of spreadsheets.

Community Development

The role of CHWs frequently involved community development work for example setting up communications between councils and community groups and organising events such as health days or exercise groups. The role of CHW is already significantly skilled and demanding, especially in terms of staying current with the health and social services resources available in a small geographical area. There are perhaps two distinct roles here, a more individually oriented CHW role and a Community Development Worker. Community development work might be better placed at a PHO level, and a CHW could service a practice, or group of practices. Naturally these distinctions would depend upon the size of a PHO and the communities being served.
Free or low cost access

Twelve projects were initially approved to provide free or low-cost services. RICF funds were sometimes approved for debt relief for services that had provided free or low-cost services in the past, provided supporting financial data was available.

High workload services

All the services that were providing GP services described high workloads and/or staff shortages. Often these services had been providing low cost services relative to neighbouring providers for many years. Clients were typically very high need, including Maori and Pacific diabetes patients, refugee populations, and patients with mental illness. In addition to the inability of these populations to pay average co-payments, the extra time required to provide care for these patients places a further limitation on the income a practice can generate in patient charges.

As observed in the first annual review, these services often relied upon subsidies from other sources to continue operating. Support for services came from iwi, unions and staff willing to work for less than market rates, including working unpaid hours. The introduction of increased subsidies for 6-18 and 65+ patients has provided some financial relief for many of these services, but workloads still remain high.

Reduced fees can cause resentment from other general practices

Because of the increased funding available to RICF projects some of these projects were able to charge, or continue to charge, lower fees than neighbouring practices. In some cases this caused significant resentment as patients were thought to be switching to cheaper providers (the RICF service). The reactions from neighbouring providers were varied ranging from resigned acceptance of perceived injustice to threatened legal action to recover lost income.

The accelerated introduction of universal increased subsidies will reduce the differences between fees charged by Access and Interim funded practices, but will not remove RICF–related differentials.

Better integration between GP and some non-GP RICF services

In cases where RICF services have been delivered by non-GP services the RICF providers reported much improved communication with general practice. Providers described the development of a more trusting relationship, in which GPs, as a result of accessing subsidies administered by RICF providers, developed more functional relationships with the RICF
providers. It was reported that in the past there had often been an air of suspicion or competition between traditional general practice and providers of Tamariki Ora and other services.

**Centre-based services**

There were two projects that provided services at special sites. These projects provided services for youth and the elderly.

The services emphasised the importance of tailoring delivery to their target groups. Both services dealt with populations that are in some sense isolated or disconnected from mainstream services, and special care was taken to make sure the RICF service was culturally appropriate. In the case of youth, services reported a need for a youth friendly, confidential service. For the elderly services project the site that services were delivered from alternated between an iwi building and a regional marae, and included the provision of food and recreational opportunities.

**Outreach Services**

Fifteen projects delivered outreach services of various types. The most common was nursing outreach, typically involving nurses making home visits for chronic disease management. Interviews with these providers emphasised the advantages of having a nurse provide home visiting services. Obviously nursing tasks could be undertaken, such as disease monitoring and wound management, but nurses were also able to respond to a wide range of unexpected events. Nursing training also meant that the home visitor could assess clinical situations accurately, and communicate effectively with doctors and hospital services. An important aspect of a nursing outreach service was the ability to administer immunisations if necessary. Given the low levels of immunisation in targeted populations this was often valuable.

The cost of visiting people in their homes is high – over $100 per visit (for four well documented RICF services) and it seems sensible to get the best possible value for this contact.

Community Health Workers are also involved in delivering what are in effect outreach services. However, the services delivered by CHW do not have a clinical focus, and at present the roles are distinct. Expanding the range services a CHW can provide would maximize the potential health impact of each individual patient contact.
Why are some people hard to reach

The “hard to reach” groups within a population are not homogeneous. Projects identified Maori clients, Pacific clients, and the poor as “hard to reach”. Some projects also identified people with chronic illness and the socially isolated, especially the elderly, as also being difficult to deliver services to. There are of course many people in these groups that are perfectly happy to use existing services, and do so successfully. People are also not always uniformly disengaged from primary care. They may have no difficulty in attending for trauma, but are terrified of seeing a health service for preventive care.

Some groups do however often under-utilise primary care. Effective primary care has the potential to significantly improve health and reduce avoidable hospitalisations. Why then do more people in these groups not use primary care services? This is a complicated question, but the combined experience of RICF providers provides some insights. Some common themes coming through from the interviews with providers addressed reasons why some groups were sometimes hard to reach.

Maori

Providers offered a range of views as to why some Maori clients might not access services:

- Individuals are often restricted in the value they can place on their own health needs through other, more immediate priorities for survival.
- The reception staff at mainstream services were sometimes perceived to be “unwelcoming” towards Maori patients because of bad debts and/or appearance (e.g. tattoos, rough clothing). These attitudes are felt intensely by some Maori and essentially mean the service is inaccessible.
- Even low cost access fees have been observed to be unaffordable by the poorest sections of this population.
- Past difficulties in the relationship between services and individuals, mental health issues, social skills problems and the male ‘macho’ image were also cited as barriers to access for this sector.

Pacific people

Providers suggested similar barriers for many Pacific patients to those affecting Maori, but there are some unique features:

- English is a second language for many patients who are over the age of 40 years.
Pacific people often have heavy family commitments that are a priority and typically supersede the need for health care.

Providers reported that Pacific patients often have problems with appointment times, getting to the venue, not understanding the nature and/or necessity for the appointment.

Often the process involved in accessing the care, involves multiple agencies and procedures that are more complex than some Pacific people are willing to engage with.

Some younger Pacific people avoid Pacific providers and/or services that employ a Pacific person, because they fear that their confidences will be breached given the 'close knit' nature of the Pacific community.

**Youth**

Young people aged between 15 and 24 years old can be a difficult group to reach because they are at varying levels of gaining independence from their parents and/or carer. The case studies highlighted that many young people have not fully made the transition from “being cared for” into effective use of general practice where they take responsibility for their own health.

Some other specific reasons youth experience difficulty accessing services are:

- Some young people find it difficult and intimidating to engage with the "adult" procedures involved in accessing health providers.
- Young people typically have limited access to transport and finance.
- In many cases young people do not want their parents, friends and/or relatives to know that they are seeking health care and they harbor misconceptions and fears about privacy and confidentiality.
- Typically the health needs of young people include sexual health and family planning and this is an area that they can find difficult to discuss.
- Young people commonly have relatively disorganised lives that preclude them from planning ahead.
- Young people often fear being judged by adults, believing that their health priorities may not seem important to an adult.

**Appointment systems**

The use of appointment systems can be problematic for the “hard to reach”. The appointment system and reception environment can be very intimidating for many people. Participants in the case studies observed that ‘harder to reach’ people typically have busy and chaotic lives that make scheduling appointment attendances difficult. Often this group does not have easy
access to transport and/or telephones. In many of the case study diary incidents, the process of appointment making assumed that the appointment time would be convenient to the patients and that they could get to the venue. It was reported by community health workers that some providers (usually secondary care) assumed that patients had accepted, understood, and could complete a treatment plan, merely because they did not actively indicate difficulties.

Other access barriers

High-need, low-income new immigrant populations are a particularly difficult group to reach. The case studies reported that many of these patients do not have phones and/or are unsure if the problem is significant enough to warrant an appointment. Others are too busy with other priorities to schedule appointments and are not used to making appointments.

Language and communications difficulties are faced by many “hard to reach” people. The case studies highlight that, because of these issues, primary care providers are often unaware of the real reasons that the family or individual requires help. Thus, they treat only the presenting issue and can not access the more important underlying problem/s. The case study findings are that typically, more psychological than physical barriers to care exist for this population. These barriers are very difficult for providers to address and/or people to articulate and, in the experience of the case study participants; they result in people being unable to access and/or accept and/or act on clinical advice.

Some individuals in the “hard to reach”, high-need, low-income populations do not feel comfortable providing demographic and enrolment details in the registration process. The case study findings highlight that many of these people have never been to see a doctor, may fear the possibility of a diagnosis and/or have a shyness that inhibits them approaching clinics. This group suffers from social isolation, low self-esteem and fears that service professionals, especially doctors, will judge them.

What seems to work and why

RICF funding has enabled a wide range of innovative service delivery approaches to be trialed, addressing many different barriers to access. Reaching hard-to-reach populations is expensive, barriers are generally not financial and successfully linking these clients with health services takes time.
Successful RICF services

It was not surprising that successful services have also been successful RICF services. This can be attributed to skills and experience in managing services, and a good understanding of the health sector. Good IT infrastructure was a feature of most successful services (except the very small providers). Services that had good relationships with their DHB often had a distinct advantage in terms of accessing planning and management resources.

Removing the cost barrier is crucial

Most RICF projects provide free or low cost services. The removal of the cost barrier is crucial for some patients. Even low fees of a few dollars can prevent a very poor client from attending. With more frequent consultations, health workers are likely to be able to build trust and consequently develop a much more complete picture of a client’s particular needs. Clients are more likely to disclose sensitive information and psychosocial issues can be explored.

Know your client population

Services can increase access for the “hard to reach” by clearly defining their target audience. If providers know their target populations well, for example by employing staff closely linked with specific populations, they can design services which address the specific access barriers faced by those groups. Aggregated area level statistics do not generally provide the level of information about sub-populations that is required to overcome access barriers – the required knowledge comes from working closely with specific communities.

Personal engagement

Psychological barriers to care can be overcome by employing a personal face-to-face approach that conveys to the family that they can safely disclose their priorities. The barriers are often overcome by services or professionals who demonstrate a willingness to work with people on their own terms.

Community health workers and outreach nurses often successfully employ personal face-to-face, approaches that gain access to “hard to reach” families. They can reach families who reject other offers of help and typically this contact leads to more regular use of services. The community links that nurses and CHW are able to establish create trust that supports their work and leads to community input into, and acceptance of, services.
A non-judgmental approach

Engaging individuals and/or communities with an open minded, and non judgmental approach demonstrates willingness to work with communities. Employing this approach, services can achieve community acceptance, that in turn increases access to services for some of the “hard to reach” groups. Good community relationships also underpin the teamwork required to address the complex inter-related problems presented by many of the “hard to reach” sector.

Flexibility in service arrangements

The RICF services commonly facilitated access to services by not assuming that patients will be able to make, access, and keep appointments, as well as working to overcome the difficulties that they have with appointment procedures. When services investigated all aspects of treatment plans and recognised that there were access problems, they often found ways of removing procedural barriers. Problems around appointment time, getting to the chemist, and paying for a prescription or consultation could often be solved. Barriers to registration and enrolment can be overcome by offering to accept a generic address and phone numbers for clients who are of ‘no fixed abode’, and/or move around and/or do not wish to record contact links.

‘Walk in’ clinics provide access for the most disadvantaged sectors of the population. The approach fits well with the people who do not have access to transport and/or telephones and/or are precluded from planning ahead by their living or social circumstances. Services who create and use this ‘first contact’ opportunity to engage families and identify the difficulties/barriers, improve access for those hardest to reach

RICF services work as an integral part of PHOs, working with other providers contained within the PHO to support services access to “hard to reach” families within their geographical area. PHO’s can integrate outreach initiatives, such as home visits, transport provision, centre based activities/clinics with ‘walk in’ facilities that are easily accessible and can offer a ‘one stop shop’ approach to care. It may be more cost effective, in some areas, to employ the CHW at a PHO level so that they can work to support a number of practices.

Professionals can support and educate “hard to reach” people to use health and social services effectively. Many people can be effectively transitioned from RICF-type services to utilisation of regular services.
Implications

This section highlights some implications of the findings of this evaluation in the context of the Primary Health Care Strategy as a whole. It must be remembered that these projects were often run by small providers that were atypical and findings may therefore have limited application to the wider primary health care sector. Practices in larger PHOs, or with IPA affiliations, often have access to management, quality monitoring and IT support resources that provide a different context for delivering services. Nevertheless the barriers to access faced by hard to reach patients are likely to be similar regardless of which provider they use.

Reduce financial barriers

This evaluation has not attempted a cost-benefit of RICF expenditure. The Primary Health Care Strategy Evaluation being conducted for the Ministry of Health by the Health Services Research Centre at Victoria University will be undertaking an analysis of the cost-benefit of reducing patient co-payments overall, with larger sample sizes and more complete data capture. This evaluation has found that providers are in agreement that a necessary (but not sufficient condition) for appropriate utilisation for the hard to reach is a zero or minimal patient co-payment. The consultation rate data shows increases in consultation rates for the subset of registered patients that have been with services for more than few years (there was no comparative consultation data for more recently registered patients). The data reported here thus strongly supports the continuation (and expansion to working age adults) of increased consultation subsidies as a key component of the Primary Health Care Strategy, at least for hard to reach patients.

As has been noted, some sections of the population will still find even low fees a barrier to access. Special needs funding might still be required for these groups, for example areas with high numbers of very poor rural Maori.

A regular national fee survey could be implemented to assess and monitor the level of the financial barrier being faced by high needs patients. Such a survey should distinguish the schedule fee from the fee actually charged as significant discounting occurs. For a regular user of a service it is the fee a person expects to be charged that determines financial accessibility.

Improve transport

Transport was commonest non-financial barrier mentioned by projects.
Many DHBs provide buses or vouchers systems to assist patients with transport to outpatient services. While these meet the needs of some patients they are often not accessed. Nor do they usually provide transport to primary care.

The costs involved in providing a transport service could be large for a single provider. Given the recurring importance of transport in such a wide range of projects the Ministry of Health could consider scoping the development of a system of “voluntary drivers”. New Zealand is not very densely populated and public transport is often infrequent, however there are an increasing number of older people that may enjoy providing a transport service if it were safe and well coordinated. It could be telephone or internet based (as broadband coverage rolls out) and coordinated from a single central point within each DHB catchment, and possibly run in conjunction with the police.

**Develop CHW/ primary care nurse outreach concept**

The evaluation of RICF projects suggests that the Ministry could consider providing ongoing funding, targeted to high needs populations, for nursing or community health worker home visiting or other outreach services, closely linked with clinical services. Of course there are a considerable number of smaller projects that are performing well, but these are probably best supported on a case-by-case basis, at a DHB level.

For many other clients the barriers are more intangible than the relatively easy to identify financial and transport barriers (though these may also be there), and have resulted in disengagement from structured primary care. For these clients it is likely that a home visiting service of some sort would be beneficial. This service could be closely linked to clinical services. The person delivering such a service would be a nurse or a community health worker that has had specific health training and was able to deliver some basic nursing procedures. These might include immunisations and diabetes monitoring. Training for community health workers is essential and, in the view of the evaluators, evidence of successful completion of approved courses should be a pre-requisite to employment. The current community health work qualifications\(^1\) do not include clinical components – existing courses would have to be expanded.

It is not a sensible use of resources to make a major investment in time and transport to visit a client, potentially geographically isolated, establish trust and rapport, and then not deliver appropriate services. As has been emphasised in various sections of this report, for the hard-to-reach the health services potential of every contact must be maximized.

There are around 1300 active general practices in New Zealand, with an average practice size of 3 GPs. Funding each practice to have an extra home visiting nurse and a transport allowance of $10K would cost $72M. If a home visitor was shared between practices that costs would be proportionately less. The potential impact of such a person in reaching the hard to reach, improving diabetes care and other chronic care management, and providing immunisations (where NZ trails the world) could be enormous.

**Providers need support with new projects**

This has been a recurring theme of many evaluation projects with which the authors have been involved, reinforced again in our work with the RICF projects. While there are examples of practices that can smoothly integrate new initiatives into their business processes, most providers do not have sufficient spare management capacity to implement new projects. A wide range of complex administrative tasks have to be performed to run a primary care service, with the recent addition of following up patients using other providers and (increasingly) finding locum (or replacement) doctors and nurses, and new projects often have a relatively low priority compared to these essential activities.

Primary care project implementation can be assisted by an “IT health check” by a knowledgeable health IT professional, familiar with a provider’s PMS. It is unusual for providers to effectively use available functionality in their PMS systems. Providers that write their own databases or that use a spreadsheet for tracking clients usually use inefficient techniques that do not allow easy reporting or information retrieval.

The concept of the DHB or MOH toolkit for primary health care services could be applied to the management of specific projects. For example, the MoH could make a web based template for incorporating a home visiting community nurse into a primary care service available to PHOs or directly to practices.

The successful implementation of the Primary Health Care Strategy will require that community service delivery and traditional general practice approaches to primary care delivery be more closely integrated. Some institutional support for information and training programmes could be very helpful. The amounts involved would not need to be large but the payoff could be substantial. A condition of accessing certain funding could be that the project manager, or other workers, be required to demonstrate certain competencies, and one way of doing this could be attending approved courses, preferably involving some assessment.
**PHO structure well suited to improve access**

The barriers identified in this evaluation, and the ways in which they are being overcome, can be addressed within the PHO structure. Most practices will have small numbers of truly hard to reach patients. It may not be financially viable for a single practice to maintain systems (such as home visiting or transport) for delivering services to a small proportion of patients, but by pooling resources with other practices such systems can become viable. This approach has been used by PHOs to deliver, for example, IT support and chronic care management (typically for diabetes). Where PHOs already have experience of this nature it would be relatively easy to expand the services provided by the PHO to include CHW / nurse home visiting.

The financial mechanisms already exist to pay PHOs for delivering these services. A specific RICF funding stream might not now be the most logical way of funding RICF services. Services to Increase Access (SIA) funding is probably appropriate for most of these services now. Some DHBs have not been able to utilise SIA funds to date. Funding PHOs to provide well specified home visiting services would be an obvious use of these funds. Services could include home care to patients with common chronic illnesses such as diabetes and asthma, where rapid changes in health status are possible, and providing cervical screening and immunisations in the home.

It is important that home visiting services be integrated with clinical teams. Thus, even in a large PHO, it would be sensible for a home visitor to work closely with only a few (say 5 - 10) practices.
Appendix 1 Project Summaries

Community Health Worker projects

Six projects employed a community health worker (CHW) associated with a general practice service to improve service delivery in the community. Two of these projects are examined in more depth in case studies.

Hutt Union and Community Health Services - Hutt Valley DHB

Hutt Union and Community Health Service operates two health centres that include midwifery services. The organisation has always provided low cost access to primary health care. On 1st October 2003, they became part of a PHO that had Access Funding. The service received funding for a CHW closely linked to the health service, targeting an enrolled population and providing an outreach service for home visits for primary care and secondary care Did Not Attends (DNAs). The CHW runs chronic care management clinics and education support sessions targeting smoking, exercise promotion, parenting, and child health issues. The service itself describes the role as comprising provision of transport, assistance with accessing services (including advocacy), health education and a broader focus on community development. The clients of the service are overwhelmingly Maori and Pacific, low income families, often with significant transport difficulties and social isolation. Service contacts are often out-of-hours. The service describes the process that consumers overcome fear of engagement with health services as a significant aspect of their work, by working through misperceptions of what services are and what they can do. The level of engagement with the community has remained high, with community representation on the HUCHS Board being an important feature of the governance model. Demand for the service is high, and HUHCS estimates that they could easily utilise a further half time person in this role, although there are space constraints in the existing facility. A wide range of skills are required by the CHW, and a number of areas for training were identified including IT, clinical knowledge, types and eligibility criteria for various forms of income support and an improved knowledge of community law.

The service cited their MeNZB data as good evidence of their successful integration with their community - 95% on MeNZB first imms after 10 weeks.

Newtown Union Health Centre - Capital Coast DHB

Newtown Union Health Centre has always provided low cost access to primary health care. For the first 9 months of RICF, the monies were used to maintain free access for under 18 year olds to general practice services. On the 1st April 2003, the organisation became part of a PHO. The RICF monies were subsequently devoted to community health work.
They provide a Pacific lifestyle/exercise group that started 2.5 years ago. The numbers attending necessitated resources that RICF has been able to provide ($11,000 per annum). Another service facilitated by the CHW is the Maori diabetes support group which supports the chronic care management of the service and is facilitated by the CHW. This group has continued to meet monthly with good attendance, with the emphasis being on diabetes / healthy living / health promotion and maintaining well-being. The third initiative is a rugby league / community health initiative which targets a high need group of predominantly Maori males (and whanau) who did not access health care very often, who approached the service for help to complete a needs assessment and develop strategies to meet the health and social needs of the group.

The Maori CHW has established a good relationship with the Mirimar Rugby League Club and has identified major issues of under utilisation of services. Accessing this group has been a notable success of this RICF project, facilitating access to males, often with gang associations, and their families who have been disconnected with traditional primary care services. RICF funds are also being used to fund the provision of medical care at a drop-in facility.

As a result of RICF funding the service reported that information on available services was more widely available in the community, access to services had increased for specific patient subgroups with very high needs, and that community support networks had been enhanced.

Please see the Case Study section for an in depth review of this project.

**Otahuhu Health Centre - Auckland DHB**

The Otahuhu Health Centre is an extremely busy urban practice in central Otahuhu, providing care to a predominantly Pacific population. The practice has a commitment to quality and has recently (July 2005) participated in RNZCGP accreditation trial processes. At the time of first interview, the then Otahuhu Union Health Centre was in a state of transition awaiting the outcome of a bid to purchase the service. The OUHC was part of a PHO, established in April 2003, which had Access Funding. They received funding in 2003 to fund a CHW to provide an outreach service that included school and home visits to the enrolled general practice population to support the work of the health centre and local schools. In 2003, the new practice manager reported that the main role performed by the CHW had been that of providing a Pacific voice at a wide range of community meetings, a function she has performed well judging by supplied supportive documentation. There had been little clinical work performed. Liaison with the clinical staff of the practice has been minimal, and was considered to be a lost opportunity. Until July 2004 RICF funding continued to support the CHW at the Otahuhu Health Centre (renamed after purchase by Ngati Whatua o Orakei). The roles performed included reception, community liaison and provision of translation services in
clinical encounters. The ADHB renegotiated the contract in July 2004 to allow for the provision of “advanced primary care services”, by CHW and other staff members. This provided support for staff to leave the premises and attend community events / meetings, and to provide advocacy and support services to clients needing services in three areas – cervical screening, diabetes care and in immunisation catch-ups. For the last year RICF funding has provided 0.7 receptionist time and 0.3 FTE nurse funding.

Union and Community Health Centre - Canterbury DHB

The Union and Community Health Centre became part of Canterbury Community PHO that commenced on 1st July 2003. Their RICF service provides a CHW closely linked to the general practice. The CHW targets an enrolled population and proves an outreach service that includes home visits and provision of transport. The work predominantly targets the Pacific community (10% of the practice enrolled population identifies as Pacific). The role also includes the running of education support sessions to support the chronic care management of patients (particularly those with diabetes) enrolled with the general practice. Home visits have provided for the observation of the family situation and the provision of care in a safe, culturally acceptable, non threatening environment. At the final interview the work of the CHW continued to be focused on the provision of home visits, transport, but had expanded to increasingly include access facilitation (including Samoan translation services). The CHW also runs a regular exercise group in a community hall. Services are targeted at Pacific clients of all ages, and include provision of immunisation liaison. Language and other cultural factors have meant that while the service is very well accepted by the Samoan community, it has not been so well utilised by people from other Pacific cultures.

The main difficulties with providing the service related to funding and training. The cost of providing transport for the CHW to undertake their home visiting services was much higher than expected. UCHC was not aware of any national training program for Pacific health workers, or professional association. They would have ideally liked some degree of peer supervision for the service.

Please see the Case Study section for an in depth review of this project.

Wai Health - Waitemata DHB

Wai Health, established in 1990, is the health provider arm of the pan tribal Te Whanau O Waipareira Trust. When the service began RICF they employed 5 GP’s, 9 nurses and 20 community health workers. Wai Health offers a wide range of health and social services. The practice became part of the Waiora Amataga PHO on April 1st 2003.

The service provides a community health worker (kaimahi whanau) who is closely linked to the general practice, targeting high needs patients in the enrolled population to provide
support and outreach services that include home visits. The community health worker provides a home visit follow up where patients did not attend a planned primary or secondary care appointment and/or have no means of getting to the clinic. The goal is to understand the reasons for non-attendance and to help facilitate future attendances. Approximately 150 clients DNA per month (“did not attend”) and they are all followed up by the CHW. Ninety percent of clients are Maori.

Services are also provided for clients with chronic illness and terminal illness, although the CHW also works with clients that need assistance with a single illness episode. Providing transport is a key intervention, but a lot of time is devoted to explaining the process of interacting with the health system, building trust and reducing fear. As a result of gaining an understanding of the circumstances of a whanau the CHW provides referrals to a large range of social agencies, including WINZ, Housing NZ, food co-ops, budgeting services, early childhood education services and Maori organisations.

**Whai Oranga O Te Iwi Health - Hutt Valley DHB**

Whai Oranga O Te Iwi Health service operates two community based primary care clinics. The organisation has always provided low cost access to primary health care. On 1st October 2002, they became part of Piki te Ora ki Te Awakairangi PHO that has access funding. 50% of their enrolled population was under 25 years old at the start of RICF. RICF funded provision of a community health worker closely linked to primary care clinic teams.

The CHW has been employed for 30 hrs per week, providing home visiting services, advocacy and support in dealing with other social agencies, facilitating or providing transport to health and other services, running a diabetes support group and taking opportunities for health promotion activities as they arise. Services are targeted at Maori and Pacific clients with chronic illness or risk factors. The clients of the RICF service were considered to experience a wide range of barriers to accessing services successfully, including lack of income, social isolation, feelings of fear, and lack of transport. The extent of transport difficulties was reported to exceed even the known high levels. The service felt that the RICF service was overcoming these barriers based upon reported increased attendance rates and feedback from clients. The DHB approved a second CHW position in 2005 (not funded through RICF).

**Centre-based projects**

Two projects delivered services to specific client groups at special premises:

**Rotorua General Practice Group - Lakes DHB**

The youth centre based Youth Health clinic was developed by Rotorua General Practice Group to address youth and community concerns, and the general practitioners’ experience
of providing youth health care via high schools. The youth health clinic is located in an established youth facility – Rotorua Youth Centre, known as Da Bomb Shelter.

A full spectrum of health care, appropriate to and targeting 15-24 year olds, is offered by the youth health service. Usage of the service has grown steadily in its three years of operation, with only word-of-mouth as promotion. At the end of 2005 there are around 400 consultations per month, compared to 200 per month in 2003. This has been reflected in a growth of provider hours. Nurse hours continue at the original 25 hours per week, but GP hours have increased from 6 hours per week to 15 hours per week. The increased doctor time was required as more complex medical and social issues presented.

The service aims to see young people that are not engaged with any other health services, and Maori youth, although the clinic sees any young people presenting. The service reports relative under-utilisation by males, which is said to be similar to other services of its type in New Zealand. It also mirrors accessing of General Practice services by males. Rotorua doctors have reported no appreciable decrease in young people attending General Practice over the time that the clinic has operated. This supports the view that the clinic is seeing young people who were previously not attending other health services.

Although cost is a barrier for many young people, the clinic also reports that the absence of a youth friendly environment and perceived possibility of confidentiality breaches are important barriers that the Rotovegas clinic addresses. The clinic has a number of features that they believe increase access - central city location, free service, youth specific, everyone welcome, highly confidential, high quality care. In October 2004 the clinic reported extensive community networks, receiving referrals form a wide range of agencies including local health providers, psychological services, after hours medical centres, the hospital ED, care-givers, Police, WINZ, and CYFS. These networks continue to work well with the youth health clinic.

The service felt that utilisation was the best measure of their appropriateness and effectiveness at the present time. They commented that there is frequently a delay between intervention and measurable health outcome for clients in a service like the Rotovegas clinic. Review of the spread of ages, ethnicities, and presenting complaints, also indicate appropriateness of the service. While growth in utilisation speaks strongly for the confidence of the client group, it presents challenges in terms of the service keeping up with growth. There are issues of need for more staff time, more space, and more funding. Within one year of opening, the RICF funding was supplemented by PHO Services to Improve Access funding. Further growth and need for more funding continue to challenge the service. A new service such as this would struggle to survive without support and high level administration from umbrella organisations such as Rotorua General Practice Group (IPA) and Health Rotorua (PHO).
Please see the Case Study section for an in depth review of this project.

Te Taiwhenua Heretaunga - Hawkes Bay DHB

Te Taiwhenua Heretaunga is a major provider of Maori health services in Hawkes Bay, running a medical clinic and providing community services such as well child and outreach services. RICF funding supports their Kaumatua Program, which were originally fully resourced and funded by Te Taiwhenua Heretaunga. The initiative proved increasingly popular and funding became an issue. A decision was made to reduce the number of sessions provided and cut transport provision in order to try to continue the service to increased numbers of clients. RICF funding enabled the service to continue without reducing services. The service targets people aged 60+, living in isolated circumstances and those with chronic diseases. The “Kaumatua hui” are located at local marae (in the wider Hawkes Bay) and at Te Taiwhenua Heretaunga facilities. Regular health measurements, BP, BM’s etc, are recorded in a health check book that is retained by kaumatua who can elect to share the information with other health providers.

The service continues to provide transport for kaumatua to centre-based and marae based activities although in 2005 transport has had to be reduced due to cost. Free twice monthly health hui, continue to be held at the iwi buildings or at regional marae. Participants are assisted with transport and food is provided. Hui are attended by a CHW and have an educational and recreational component. The numbers of participants has remained constant at around 160.

The service continues to be only part-funded by RICF funds, with iwi resources making up the major component of revenue.

Free / Low Cost Access

Twelve RICF projects involved using funds to reduce patient charges or maintain them at an existing low level. In some cases this included using funds for relief of accumulated debt. Since the commencement of RICF funding the Government has significantly increased primary care subsidies, first for children aged 6-18 and then for adults aged 65 and over. As a result many projects were asked to suggest other uses for funding that had been used to reduce financial barriers for patients in these categories.
Arai Te Uru Whare Hauora - Southland DHB

Arai Te Uru Whare Hauora provides health, social and education services. The health component is focused on nursing, midwifery and community outreach work. Prior to RICF, the organization did not have a general practitioner service. At the time of first visit, the organisation was in the early stages of developing the service delivery model for the RICF project. It was thought likely that the service would become part of a PHO within 12 months of starting. At final interview in July 2005 the service had been in talks with Southlink to collaborate on a variety of contracts but had not actually joined any PHO stating that they wished to have some autonomous governance as they provided services to members of several PHO's.

RICF funding allows Arai Te Uru Whare Hauora clients to use existing general practices services and the Trust reimburses the GP with the required subsidy. General practice services in the area have a “fee for service” that is beyond the reach of most of the Arai Te Uru Whare Hauora enrolled patient group. Many patients have debts with existing practices and as a result, are reluctant to use the primary care services. In July 2005 this GP fee reimbursement service had been operating for six months.

There are 1800 registered clients, who belong to various PHOs. General practice staff can also refer clients to have this service. The staff felt that the service was having a big impact. They reported that many clients had debts with local GPs and had not attended because of this. Under the reimbursement system practices knew they would be paid, and patients felt able to start attending again.

Kingdom and Freedom Clinic - Christchurch DHB

The Kingdom Clinic was established in 1995 and the Freedom Clinic was set up in 2002. Both clinics have always provided low cost access to primary care services. The clinics have provided free or very low cost consultations for all normal length consultations for enrolled patients with CSC/HUHCs, unless funding support is available from other sources eg medical insurance or WINZ. Non-cardholding enrolled patients are generally subsidized as well. As well as maintaining zero / low fees opening hours have been extended – before RICF there were 2.25 FTE GP increasing to 2.85 after RICF funding.

In 2004 as a result of increases in levels of primary care subsidies generally the clinics have applied RICF funding to reduce fees for adults 18-65. In addition, consultation times have been increased by 50%, which is seen by the clinic as a major contributory factor to a 26% drop in hospital outpatient attendances and 10% drop in Ambulatory Hospital Admissions by patients of the clinics (reported by this evaluation). The clinic feels that more complex medical problems are now being able to be dealt with in the primary care setting.
The clinics have joined Partnership Health PHO, and are now negotiating funding streams through the PHO. Unfortunately the clinics were not, as of October 2004, access funded, as the application for this funding was not made by the PHO. In April 2004, when PHO funding commenced, the clinics did meet the criteria, however their registers now sometimes fall marginally below the "as of right" access funding eligibility threshold. The ministry & the DHB have been supportive in principle of an application for access funding for the clinics, which, if approved, would then enable the clinics to apply for their RICF funding to be utilised for other projects consistent with the objectives of the RICF programme. However, Partnership Health has decided not to apply for access funding for any of its eligible practices. In 2005, the clinic is struggling financially. RICF funding continues to be crucial to financial viability. The last update (in July 2005) the clinic reported that the PHO would not applying for Access funding on their behalf. The situation appears to be one of very high need clients missing out under current funding arrangements, due to circumstances outside the control of the practice. The clients of this service are extremely high need (e.g. mental health patients) and very poor – even small co-payments appear to present a barrier.

Mt Roskill Union and Community Health Centre - Auckland DHB
The Mt Roskill Union and Community Health Centre was established as an incorporated society in September 2000 to provide low cost access to health care. It began providing general practice services in February 2001 under a capitation fee for service model. On April 1st 2003, the service became part of a PHO. In 2003, RICF money was used for debt relief and to maintain free access for 6-18 year olds.

Over the period July 1 2002 - June 30 2003 the contractual targets of 200 patients per quarter was exceeded. An agreement was been reached with the DHB to use further RICF funding to employ a receptionist to work effectively with the large migrant community served by the clinic. Through 2004, and continuing into 2005, the clinic continued to use RICF funds for debt relief and to provide free visits for 6-18 yr olds. An Islamic receptionist was employed, recognizing the large proportion of the population, including refugees, who are Muslim. The clinic is operating at very high doctor: patient ratios (1:2000) and has recently moved in to new premises. Demand for services has remained high. The clinic reports that they have maintained / strengthened community links. The locations of new premises have meant fewer migrants and more Maori and Pacific clients.

Ngati Ruanui Health Tahua Iwi - Taranaki DHB
Ruanui Health Centre is owned and operated by Ngati Ruanui Tahua. It provides primary care services to iwi members and their families. On the 1st April 2003, it became a PHO following 7 years of providing low cost general practices services to high need people. The
service delivery model for RICF was free / low cost access to General Practice from June 2002 to April 2003. At the time of the initial visit, the service was developing a new proposal for the use of ongoing funding. This included initiatives to improve cervical smear rates, transport services, free visits for 65+ patients and to support the continued use of RICF funding for fee reduction. In addition, and within the present RICF budget, a podiatry service was developed.

Through 2004, RICF funds continued to be used for maintaining free visits for 65+ patients, a podiatry service, free cervical screening and transport services. Detailed reporting has been provided and the service has exceeded targets. The podiatry service was successfully established. Extra funding was sought from the DHB to provide orthotics. The service has reported success in targeting Maori, low income non Maori and those without transport with a marked reduction in DNA’s for appointments, in particular for cervical smears. They report that there has been a 23% increase in the number of cervical smear tests. In 2005, service reports demonstrate that the clinic is delivering on contracted services, and continues to provide primary services at considerably lower cost than other providers.

**Te Ha Ngati Whatua - Waitemata DHB**

Te Ha, established in 1997, is the health provider of Ngati Whatua. The service has always provided free access to nursing care. The service became a part of the Wellsford PHO that was commenced on July 1st 2003. The GP providers have clinics in Wellsford, Kaiwaka and Pakari. Te Ha has built good links with Kaipara Care Incorporated in Dargaville.

RICF has provided Free/Low cost access to General Practice services targeting enrolled patients from located in the 4 regions. A nursing triage system assists the appropriate referral of Te Ha patients for a free or low cost consultation with the general practitioner.

The service's highest priorities are at risk Maori and those with chronic conditions. They report that success in targeting this group are reflected in their data on chronic co morbidity and the numbers and types of client access. In 2005 Te Ha described how RICF funding is still used to subsidise GP visits as originally proposed however as GP fees have increased slightly clients now have a small co-payment ($5 for CSC holders). From an evaluation perspective the data quality has improved significantly in recent quarters with full records of clinic attendances and age / ethnicity data being reported.

In the April-June quarter of 2005 RICF funded subsidised access for 494 patients, typically after triage from a Te Ha nurse. Te Ha reported in final interviews that the Wellsford service is often full, with patients unable to access service under the scheme due to inability to get an appointment.
Te Korowai Hauora O Hauraki - Waikato DHB

Te Korowai Hauora O Hauraki was established in 1995 to provide an early intervention whanau-focused wellness support service based around nursing and counseling care for Maori in Hauraki / Coromandel. In 1996, general practitioner services commenced through a mobile clinic. The service has always provided free/low cost access to primary care. The satellite clinics became part of the Hauraki PHO that commenced on July 1st 2003. RICF funds were used to fund low cost access of Te Korowai CSC clients to a consultation with a general practitioner (using a voucher system), with the client paying a small co-payment of $5. Eligibility to a subsidised consultation was determined by a triage system run by Te Korowai nurses.

The service operated throughout 2003 and 2004 enabling predominantly Maori clients to access services at reduced rates. The voucher system operated in Coromandel, Whangamata and Whitianga and has been successful in increasing access, with the service reporting that 60% of the Maori population had accessed practices in 2004, up from 24% in the previous year. The target is 75%.

The service involved nurses making contact with high needs clients in various settings, including home visits and Marae based contacts, and assessing health need. Only acute conditions are eligible for funding; routine chronic care is not covered.

In 2005 a variation in the RICF agreement with the DHB changed the focus to increasing access to GP and nursing services for those with Type 1 and 2 diabetes.

Please see the Case Study section for an in depth review of this project.

Te Korowai Trust - Nelson/Marlborough DHB

Te Korowai Trust, established in 1991, is located in an urban Maori community. It is provides well child services and is an approved provider for Child, Youth and Family and was accredited by Quality Health NZ / Te Taumata Hauora. RICF has allowed Te Korowai clients to utilise existing general practice services with the Trust reimbursing the GP. The service has targeted a predominantly urban Maori population who have high unmet needs and live in pockets of poverty within high decile areas.

In 2003 and through 2004, Te Korowai funded GPs in Nelson-Tasman to provide services for the approximately 900 Te Korowai, predominantly low-income Maori and Pacific, clients. The service was in contact with 24 GP surgery’s and have 34 doctors registered with the service. GPs billed Te Korowai directly instead of receiving payment from the patient.
In 2005, the service continued to subsidise visits for clients to local GPs, up to $30 per visit. Some local GPs now charge $15 for child visit. Budget has been overspent by approx $2K last quarter and DHB has started close monitoring. Thirty six GPs now access the service for at least some of their patients. Te Korowai client numbers have increased to 1356, of which 871 are Maori. Relationships with some local GPs have been problematic with trust / ownership / confidentiality issues not clarified.

**Te Oranganui Te Iwi - Wanganui DHB**

Te Oranganui was developed in 1992 with the amalgamation of Te Korimako and Te Waipuna O Te Awa to establish a health authority trust to provide health services. Te Waipuna, the medical centre, opened in 1993. The service has always provided low cost health care where payments are tailored to the individual’s resources. The service adopted a PHO structure on July 1st 2003. The funding provided was used to reduce deficits and maintain financial viability. Evaluation of the RICF per se thus depends upon a judgment about the relative impact of losing the service. The approach adopted was to compare fees with other providers. The RICF contract with Te Oranganui was not renewed by Wanganui DHB to continue into 2004, however the service has continued to operate.

**Te Puna Hauora - Waitemata DHB**

Te Puna Hauora was established in 1995 to offer health and social services. The service has always provided low cost access to primary care. On April 1st 2003, the service became part of the North Harbour PHO. RICF funding has been fully utilised to employ 0.5FTE of a 0.95FTE GP position through to 2005. RICF funding has assisted Te Puna maintain fees at levels significantly below those of surrounding practices. The number of clients being seen by the service increased in 2003/2004 as new clients were enrolled, at a rate of 70-80 per month, predominantly low income Maori. The main challenges in delivering an expanded GP service have been workflow related. It has been necessary, in the view of providers, to provide “drop-in” facilities for patients that attend without appointments.

In 2005, RICF funding continued to fund 0.5 of a (now) 0.9 FTE doctor position. Total GP FTEs are now 4.8. Workloads remain high, and fees have been kept lower than nearby practices. The increased capacity of Te Puna has meant after hours overflows are no longer the problem they had been in 2003. Patients typically make appointments although emergencies are seen immediately. A major issue for the clinic has been the collapse of the previous PHO, with Te Puna forming a new PHO.

In 2005 approximately 180 new clients are enrolling each month. Te Puna opened another clinic at Birkdale in April this year. Charges for under 18 year olds remain at zero.
Te Rohe Potae O Rereahu - Waikato DHB

Te Rohe Potae O Rereahu is a health service established in 1987 to provide drug and alcohol services. A general practice clinic was added in 1994. Since its inception the service has provided low cost health care where payments are often discounted or waived. On April 1st 2003, it became part of a PHO. At the time of the initial visit, the service was developing a new proposal for the use of ongoing funding.

Since April 2003 Te Rohe Potae has used its $20K per annum TICF funding for a 0.5 CHW position to assist with providing increased diabetes to all diabetes patients over 13 yrs old. The CHW is involved in managing a diabetes register, organising attendances at regular clinic reviews for diabetes patients including providing transport, providing some patient education and liaison with secondary care.

Formation of a diabetic database has greatly improved delivery of services including the sharing of information and communication with other providers for example secondary care diabetic services. Advocacy is reported to play a large non-measured part of the service, focusing on reducing client fears to accessing healthcare, through explaining procedures and accompanying clients to appointments. The service considered they could easily employ another 0.5 CHW across the organisation.

Turangi Community - Lakes DHB

Details of the service were provided by the District Health Board and associated Primary Care Organisation (FirstHealth) negotiating on behalf of the service. RICF funding was initially used to clear debts to the Turangi general practice service and the funding allowed the retention of GP services. The service became a PHO on 1st January 2003. A collaborative initiative between health providers and the local community (developed after public meetings) saw the establishment of a Health Trust to oversee new initiatives and produce the conceptual framework for emerging PHO. Plans to use the ongoing funding were being developed at the time of the first visit.

Lakes DHB and the Turangi GPs agreed to use funding from December 2003 for a variety of projects – transport subsidies, free ear checks, providing contraception services and increased subsidies for people with complex health problems. In 2005, RICF funds were accessed for all these services. Ear clinics have been established and equipped and these are now no longer funded by RICF. Transport remains the most utilised service, and is provided by a local provider, up to 12 trips per month being provided to take clients to Taupo for clinics. Funding for prescriptions has been made available to particular clients on the recommendation of providers. The contraception service has not been utilised – only 2
services provided in the last year. This may be because of the use of locum doctors in health services. The use of funding is under continual review.

**Waitakere Union Health Centre - Waitemata DHB**

Waitakere Union Health Centre was established in 1988 to provide low cost primary health care. On 1st April 2003, the service became part of the Waiora PHO. Waitakere Union Health has used RICF funding to main free / low cost access after becoming a PHO on Access funding, providing free doctor visits for under 18 year olds and charging $10 for an adult doctor consultation. Practice nurse visits are free of charge. From 01 July 2003 to 30 September 2003 the Practice Nurses provided 1441 free consultations to a total client population of 4777 registered patients. Since Dec 2003 RICF funding has continued to be used to fund free nurse visits for all patient groups while maintaining adult fees at $10. Subsequent SIA funding has been used to complement the nursing service with a home-visiting nurse service. RICF funding is approximately $8.70 per nurse visit.

The clinic’s highest priority has been to reach elderly with chronic conditions, increase child immunisations and increase access to Pacific (26% population) and Maori (24% population) clients. This has reportedly been reflected in the high numbers of nursing contacts. Unfunded transport has played a role in increasing access as has allowing clients to “walk-in without appointments. In 2005, RICF funding continued to be used to subsidise free nurse visits, with the same service priorities as above.

**Outreach Services**

The largest group of RICF projects were classified as outreach services, of which nursing outreach was the most common. There are fifteen projects in this group covering a wide variety of projects including nursing outreach, health assessment, transport, youth drug and alcohol and a medical support service.

**Best care (Whakapai Hauora) - Mid Central DHB**

Whakapai Hauora, established in 1993, is an iwi owned health, disability support and social service provider. It is the health and social provider of Tanenuirangi Manawatu Incorporated, the mandated iwi of Rangitaane O Manawatu.

The outreach nursing service became operational in February 2004, after a two month set up phase. The service is provided by a single 1 FTE nurse. Clinics are held in Shannon and Foxton and good networks have been established with the local communities. Rooms are provided by Plunket and a local general practice. Clients are predominantly Maori with chronic illness (typically diabetes) and people requiring immunisation or cervical screening services. Services are frequently provided in clients’ own homes.
Services have been recorded in a retrievable format in MedTech since August 2004. In the three months Aug-Oct 67 client contacts were recorded with 28 mainly female clients, with many clients having multiple visits.

In 2005, the service mainly provides free home visits to high need clients. The 1 FTE nurses also continues to run drop in clinics at remote locations as above. A recent audit showed the service was being utilized successfully. From July 2004-31st March 2005 70% of clients were Maori. Fifty one percent of all clients accessed early intervention (health intervention / promotion) 21% access nursing assessment and treatment, 6% accessed sexual health services, 6% accessed cardiac managed care, diabetes and asthma managed care 4%, mental health 4% and the remaining 8% were referred to other services. 260 clients accessed care, usually on multiple occasions over 7 month period. Client satisfaction surveys and other feedback have indicated high levels of satisfaction with the service.

**Community Medical Centre Trust - CM DHB**

The Community Medical Centre Trust, established in the late 1980’s, is affiliated to the People’s Centre. The service has always provided free/low cost access to primary care for members of the People’s Centre and their families. Prior to becoming a PHO, “People’s Health Care Trust” on April 1st 2003, the health centre was a capitated practice with various other sources of income, including grants. It did not receive funding from the People’s Centre.

The nursing outreach provided by RICF targeted enrolled patients who can not get to the general practice, did not attend an appointment, can not be contacted via phone and require follow up and/or who require follow up in a home environment. CMCT provided spreadsheets of all the home visiting services provided by the RICF funded service and the reasons for visits. All visits appeared to be high intensity - significant numbers of visits were for palliative care and care of disabled patients.

The service continued to provider home visiting services in 2004, employing 1 FTE nurse with RICF funds. The service expanded the availability of nurse consultations at the clinic in the last year. Records were not available for many visits and it has been difficult to document actual numbers of patient contacts. The home visiting service maintained a focus on high needs patients, and provided care for a large number of highly transient patients, often living in marginal conditions. Staff safety has been an issue on occasion. The service sees a significant number of refugees from the Middle East, and translation services are often essential.

Please see the Case Study section for an in depth review of this project
Oraka Aparima Health and Social - Southland DHB

Oraka Aparima was established in October 2001 to coordinate health and social service provision for West Southland, an area of 800 square kilometres. This service coordinates health and social care to an enrolled population where 65% are over 50 years of age and a large proportion are living in isolated conditions. RICF has funded nursing outreach which has targeted patients who are identified for home visits, or follow-up at community clinics, on the basis of their previous non-attendance at a primary or secondary care clinic, and/or GP or practice nurse referral. As a person requiring follow up who is unable to attend the clinic. Existing general practices, with whom Oraka Aparima work, make referrals to the outreach nurse via an established referral process. Since October 2003, when the service began, the “Hetangata Tiakina a Rohe” (NZCRN) has interacted with a wide range of clients - some have been one on one lifestyle discussions, others have been establishing ongoing relationships. In the first three months of operation data was received reporting 13 individual client visits and 3 group sessions for 76 younger clients on the topic of contraception.

In 2004, the outreach nursing service continued to provide chronic disease management (including assessment and care plan development), falls prevention and service coordination services to the isolated rural 50+ population of Southland; with the target population being high needs Maori clients, particularly elderly patients, often with diabetes. The service worked closely with a wide range other services, including doctors and secondary care services. Transport is a key need for clients, and is often provided by the service. A well developed promotional campaign established the service in the community and ongoing development of IT systems has allowed for forecasting of trends and information sharing with other providers.

In 2005, OAHSS now have a drop in clinic at mobile nursing premises funded by RICF 3 days per week. There are 184 active clients for one FTE funded nurse, who is highly skilled NZCRN, cervical smear taker, gerontology, diabetes wound care, and nursing tutor. The proportion of Maori is now 86% because the service has moved into more rural based community and there is no public transport (town of Ohai). OAHSS emphasises the value of Maori health workers taking time to give the consumers the time they need. Maori clients require time to establish trust, and then deal with issues. They consider that this could not happen in a GP clinic in the same way.

Otara Union Health Centre - Waitemata DHB

The Otara Union Health Centre is part of the Tamaki PHO. The Centre provides health care to a predominantly Maori and Pacific “hard to reach” urban population living in a high need area. The RICF nursing outreach project provides a home visiting service targeted at enrolled patients who are identified on the basis of: non attendance at a primary or secondary care clinic, discharge summaries from secondary care, or GP or practice nurse referral as a person requiring follow up who is unable to attend the clinic. Existing general practices, with whom Otara Union work, make referrals to the outreach nurse via an established referral process. Since October 2003, when the service began, the “Hetangata Tiakina a Rohe” (NZCRN) has interacted with a wide range of clients - some have been one on one lifestyle discussions, others have been establishing ongoing relationships. In the first three months of operation data was received reporting 13 individual client visits and 3 group sessions for 76 younger clients on the topic of contraception.
requiring follow up who is unable to attend the clinic. The RICF funded nurse works 2 days a week doing home visiting. The remainder of her time is spent working within the clinic setting, working on issues related to outreach services, but also performing other practice nursing duties.

By September 2004, the outreach nursing service had built up the home visiting / contact rate and was running at around 30 per week. Referrals were predominantly from the practice itself or secondary care discharge planning services. The nurse provided a very wide range of services to clients in the community and reports considerable job satisfaction. The intensity of nurse involvement with a client was highly flexible, ranging from a single visit to twice weekly visits for palliative care and chronic disease monitoring. The nurse also provided transport and advocacy services when appropriate. It was emphasised that the tasks undertaken were usually nursing tasks, and the fact that medical care could be delivered “on the spot”, sometimes after communication with other medical professionals, was a key factor in the success of the project.

In 2005, patient volumes remain around 30 per week. The client mix was described as discharge from hospital, maternity, housebound elderly clients and psychiatric clients who can’t get out easily from home. Relatively few new referrals were received from within the practice, which was seen as an area that needed to be addressed by the nurse providing the service, who considered there were probably other clients that could use the service.

**Pasifika HealthCare - Waitemata DHB**

Pasifika HealthCare was established in 1986 as a general practice service for all Pacific people in Waitemata. Nearly all employees speak a Pacific language. Pasifika established a diabetes nursing service in 2001. This comprised of a practice nurse specialising in the care of diabetic patients. The identified diabetes patient numbers grew beyond the resources available and RICF has enabled the service to continue. The service that has been implemented is clinic-based nursing care for diabetes and other high needs chronic illness patients. The service is available whenever the clinic is open, and typically a newly diagnosed patient will be seen immediately by the nurse. The service reports that clients are often hard to contact and follow-up, and that the ability to immediately provide intensive education is important in linking a client with ongoing care. Transport is reported to be a major difficulty for many clients, especially the elderly.

The service reports some difficulty accessing eligible people on their register, and anticipates increases in the numbers of clients being seen once further eligible clients have been identified. The nurse (and the clinic in general) has extensive community networks, and these are utilised as a resource for discharge planning by secondary services. Reportedly, there is a need for more funding to provide more culturally appropriate learning tools for pacific clients.
and the clinic has identified that providing an after hours service might greatly increase the number of visits.

In 2005, Pasifika has continued to fund a diabetes nurse from RICF and covered associated costs of clinics. Services are still provided free to clients. Diabetic specialist clinic frequency has increased to 4 weekly and retinal screening is now done on site. The most recent annual audit of diabetes data showed significant improvements in average patient management.

**Te Atiawa Medical Trust - Taranaki DHB**

Te Atiawa Medical Trust was established in 1995. At the time of the first visit it had two clinics that delivered GP services via 2.5 FTE GPs and 3 nurses. The centre also used a number of Maori health providers to assist with the delivery of diabetes and home care. On April 1st 2003, Te Atiawa Medical Trust became part of a PHO which has access funding.

Te Atiawa and TDHB have developed a tight service specification for the Outreach Practice Nurse Service. The service is targeted at the enrolled clients of the Te Atiawa Health Runanga Medical Trust. The accumulated funds from the July – September quarter were used to set the service up in 2003. A project team was been set up to implement and monitor the project. The team comprised the two Outreach Practice Nurses, the senior nurse from the New Plymouth clinic, CEO from Te Atiawa and Project Manager from Te Tihi Hauora O Taranaki PHO.

The nursing outreach service targeted enrolled patients who are identified for home visits on the basis of: non-attendance at a primary or secondary care clinic or GP or practice nurse referral as a person requiring follow up who is unable to attend the clinic. In 2004, the outreach nursing service was shown to be successfully established and in the last quarter provided services to a wide range of clients, but predominantly elderly Maori with chronic illness, particularly diabetes. The importance of the nursing component of the service is obvious with clinical care being provided at home visits. Transport has been provided for clients when necessary.

The reporting for this project has been excellent, with financial and clinical reports providing a very clear picture of how the service operates. In the second quarter of 2004, 0.7 FTE nurses provided 107 client contacts with mainly cancer and diabetes patients, at a cost of $13K ($121 per contract). In late 2004 another clinic was opened in Bellblock. GP coverage is shared between here and New Plymouth. Nursing hours were increased to 4FTE across all the clinics. In 2005, the service continued to operate as planned and reporting remains of a high quality. A youth clinic for unregistered clients has been recently established.
Te Manu Toroa - Bay of Plenty DHB

The service was originally funded by RICF to lower patient co-payments and provide low cost health care. Te Manu Toroa then became part of a PHO on 1 April 2003. At the time of the initial visit, a new proposal for a nursing outreach service was being developed for a nursing outreach model. As of April 1 2003 RICF funding has been used to fund the nursing outreach programme. The service did not appear to be closely integrated with the existing medical service. Services provided include home-visiting, triage, follow-up and community liaison. Clients of the programme were not identified in clinic records and numbers of clients and services provided were not available. The services delivered by the outreach nurse might be provided to people that are not registered with Te Manu Toroa, as the focus of the contract was on the wider Maori community.

The performance monitoring returns provided to the Bop DHB in 2004 include itemised budgets, one of few services to provide this information. Salaries comprise 25% of costs with administration overhead and surplus comprising 50% of the $20K received each quarter.

In 2005, the service’s funding was redirected after an audit of case management activities and funding now goes directly to the PHO. IT systems never provided easy access to monitoring data, however a central records system has now been implemented. The service felt that RICF achieved a number of good outcomes – in particular in education re prevention and providing home visiting services to isolated kaumatua.

Tongan Health Society - Auckland DHB

The Tongan Health Society was established in 1997. Langimalie is a health centre that provides health care to a predominantly Tongan population. The service has 3 FTE GPs, 1 nurse and 11 community workers. Langimalie become part of a PHO on July 1st 2003. Since 2003, the 1 FTE diabetes nurse has been providing diabetes care in the community and at clinics at Langimalie. Patient contacts are recorded in the PMS with a special code. The outreach nurse has good links with other services involved in the care of DM patients, including medical staff, hospital clinic staff and pharmacies.

The key access barriers that the service feels it is overcoming are language and transport. They also reported that many of their clients felt that the secondary care services they came into contact with were unfriendly and rude – keeping people waiting a long time – and that once a person had bad experiences at a hospital clinic they did not want to go back without support.

Please see the Case Study section for an in depth review of this project.
Waihi Health Centre - Waikato DHB

On the 1st January 2003, Waihi Health Centre joined a PHO (Waikato PHO) that did not, at the time of the initial RICF visit, have access funding. RICF funded a free nursing and general practice service for under 22 year olds, to meet their sexual and family health needs in a non-confrontational, private and confidential setting. The service had been established previously but required more resources to maintain operations.

Since 2003, excellent quality data has been provider identifying nature of sexual health service provided, person providing it, age and gender of client and data of service. From mid-June 2003 to mid-September 148 clients were seen by the RICF funded service, including college clinics and subsidised GP visits. Reasons for client visits included contraception, emergency contraception, education and treatment of sexually transmitted infections. In 2004, the service continued to be fully utilised; and funding from Pinnacle PHO has extended the service to 25yr olds. The service provides a 2 hr nurse clinic at the school (and free clinic visits at the practice), but the service estimates a further 0.2 FTE could be employed in the role. Referrals have come from many sources, but most frequently from teachers.

The service continued to operate successfully in 2005. Total consultations at the college were 298 for 2003, 220 for 2004. The main barrier to access to services was considered to be environmental – the space made available for the clinic is in full view of College staff room. The service has received referrals from teachers but in the main has remained an anonymous, free, drop in service. The service has been extended to younger pupils with 100 year 12 students attending various sexual health sessions in 2005.

Kia Ora Ngati Wai - Northland DHB and MAPO

Kia Ora Ngati Wai, established in 2001, is a community based mobile nursing service that currently holds a number of public health / health promotion contracts. The service employs 3 registered nurses, one of whom acts as the clinical manager. Two community health workers support that nursing staff. The “Kappa Maori Medical Support Service” concept was originally developed to address the problems of providing care to rurally isolated populations. A medical practitioner works full time as a part of a nurse led outreach service to support health care.

The nursing service provides services to clients of two PHOs Features of this service include a nursing led assessment based outreach health care that is shared by the nurse and medical practitioner who refer to and liaise with other primary and secondary care organizations, community based health hui, planned meetings in various locations, where the full health care team is available, and home visits.
The Kappa Maori Medical Support Officer (KMMSO) started working in this role in October 2002. RICF funding has been used to fund three doctors (1 FTE) providing 395 health hui in the first year. There were 135 scheduled hui, 37 larger expo-type hui, 159 opportunistic hui and 64 clinic based hui in 2003.

Since October 2003 a single doctor has been employed as the KMMSO. The role is full time, with 266 client encounters in the second quarter of 2005, however these figures do not convey the nature of the role very accurately. Clients are typically isolated, poor, rural Maori, and the KMMSO can travel long distances to see clients. The KMMSO supports nurse contacts with Kia Ora Ngati Wai clients, and acts as a liaison between general practices and clients. Although the KMMSO can detect acute conditions and deterioration in chronic illness, her primary role is not in active disease management. The KMMSO, as previously, also has an active role in community education, and service development, for example planning for Men roll out. Kia Ora Ngati Wai provides a mobile primary nursing service with a CHW providing health promotion, client support and advocacy; the KMMSO has continued to provide support and advice for these services.

**Te Hauora Runanga O Wairarapa - Wairarapa DHB**

Te Hauora Runanga O Wairarapa provides drug and alcohol programs to youth living in the Wairarapa. RICF has provided resources for a service targeting all youth aged 12-16 years living in the local area. This has included college based courses providing support and education to address youth drug and alcohol abuse. The service has delivered session based drug and alcohol education services and delivered on service volumes. CBG has read the feedback forms from students that attended sessions in 2003 and these were very positive. This service continued through 2004 and 2005 to see College students as per their contract, with positive evaluations from students. In 2005 the DHB portfolio manager questioned whether the programme should be funded from Vote: Health.

The $7K pa from RICF does not pay salaries – only resources and travel for programme They report building numerous community links, e.g. in last 12 months they have worked with the Wairarapa Addiction Services and will be doing a joint programme with them at Kuranui College in Greytown, as well as Te Rerenga. The service also works closely with Whaiora with Auahi Kore (Smoke free).

**Te Rapakau - Waikato DHB**

Te Rapakau was originally set up in association with the Hamilton Cook Island Association to support the local Cook Island Community. In 1997, Te Rapakau Health Service commenced operations with a contract for the provision of sexual health and family planning services.
Currently, the service has a number of Ministry of Health and DHB contracts to provide nutrition, physical activity, sexual health and family planning and well child services. At the time of the initial visit, Te Rapakau was in the process of developing the service delivery model to match the allocated funding. As of the end October 2003 negotiations between the DHB and Te Rapakau were continuing; the service had not started operation.

Over 2004, Te Rapakau delivered a transport service to its members as per the RICF agreement. RICF funding was used to purchase a van. The general aim was to reduce transport barriers to accessing services. The van was available to other clients of Pacific services by agreement, with a formal protocol describing acceptable usage. The service is restricted to use in Hamilton, although records show trips outside Hamilton are common.

In 2005, Te Rapakau is under the umbrella of the Waikato Pacific Health Trust so now have a well child nurse co-coordinator going to Tokoroa and use the van 1 day per week for this purpose. They continue to target Pacific and Maori and low income people with no transport, and those with a Pacific language barrier who require advocacy. Use of the van is also tied into Te Rapakau's health promotion services.

**Te Wakahuia Manawatu Trust - Mid Central DHB**

Te Wakahuia Manawatu Trust provides a community based health service that delivers a number of DHB contracted services and provides a forum for consultation with a well defined local community. The CHW-based youth outreach service was started in September 2003 providing help, support and education to address rising youth crime, drug and alcohol abuse and youth and family violence. According to narrative reports provider by Te Wakahuia, between July and October 2004 the youth community service saw six clients on 17 occasions. However this report on services did not include liaison with other agencies involved in managing clients. The service has agreed to have a maximum of 30 clients under this programme. Clients are very high needs, with limited social support networks, and usually with substance abuse issues.

In 2005, the CHW has carried out clinic visits, home visits and family based hui in local churches. He reports a shift in focus from treatment to prevention and is specifically dealing with young Maori males, targeting 12-25 year olds typically with drug and alcohol addictions, and not engaged with health care services. The CHW brings in family networks early on and facilitates linkages with other support services.

**Ngati Porou Hauora - Tairawhiti DHB**

Ngati Porou Hauora was established in 1994 to provide general practices services to Ngati Porou people. An urban primary health service (Puhi Kaiti) was established in Kaiti, Gisborne,
in September 2000. The service has always provided low cost access to general practice services. In October 2002, it became a PHO that has access funding. The organisation noted a deficit in funding associated with the move to PHO and the maintenance of low cost access to primary care was raised as an issue. For the first three months RICF funding provided free access to general practice services for under 18 year olds. Funding was then allocated to the collection of health measurements and support of community health worker targeting Pacific Island families located in rural locations covered by the Ngati Porou service. Negotiations over the configuration of funding with the DHB were protracted.

Ngati Porou Hauora has provided practice registers and encounter counts from all its clinics from Gisborne and further up the East Coast. Considerable work was done to collect these data for the evaluation (reported in quantitative data section) However, as of 3 Nov 2003 the DHB had no reporting on the contract as details of the agreement were still being completed. In 2004 funding was approved with Tairawhiti DHB for a programme of data collection – smoking status, BP, weight, BMI and girth. The goal was that 70% of clients have these data collected by end 2005, 85% by end of 2006 The main challenges in collecting data would be accessing relatively isolated rural clients on the East Coast and establishing relationships with “gang families”.

By July 2005, 48% of clients had been screened; clinic attendees have been easy but non-attendees (men, forestry workers, gang families) harder to reach. Kaiawhina are main link with non-attenders. $50K of RICF annual funding was redirected to help fund a Pacific CHW service, which works closely with Ngati Porou

**Te Whanau a Apanui, Te Kaha - Bay of Plenty DHB**

Te Runanga o Te Whanau a Apanui provides health and social services to a high deprivation tribal based rural community along a 120km coastline of rugged terrain. The “Te Kaharoa” health assessment program was initiated in 2001 providing assessments for individuals aged 18 years and upwards living within the Te Whanau a Apanui rohe. There has been provision of outreach community screening using innovative Marae and hapu based approaches and ongoing monitoring of 13 specific health indicators including body fat %, waist / hip ratio, resting and exercise pulse, sit and reach flexibility, cholesterol and glucose levels. Clients receive feedback in an attractive “traffic light” format (with levels of various measurements identified as healthy, needing attention and dangerous) and are offered health advice and appropriate activities. Health assessments have been delivered and offered at various Marae and at community clinics, community events, schools and also home visits. RICF funding met approx 40% of the costs of the Kaharoa after July 2002, although the programme started at the beginning of 2001.
An analysis was carried out by the Runanga in January 2005 showed that the assessment had been delivered to the entire population of 18 years and over resident in Te Whanau a Apanui. Outcomes data is available for all clients with client files tracing a unique client id. Client files are able to track and co-ordinate advice offered by Runanga Health staff to individual client on a range of available activities, physical and sporting events, and nutritional advice. The collection of NHIs has been recently introduced.

The programme continues to see clients at Marae based centres along the coast. Over ninety percent of clients are from Te Whanau a Apanui iwi.
i Hulka BS, Epidemiologic applications to health service research. Journal of Community Health 1978;4:2


