

## **16 PRIMARY HEALTH CARE**

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### **KEY FINDINGS**

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- Overall, 94% of Waikato DHB's population is enrolled with a PHO;
- Māori and Pacific people have significantly lower enrolment rates with PHOs than other ethnicities;
- Children aged 00-14 years in 'Other' ethnicities appear to be over enrolled. Some of this can be explained in differences in data collection methods and slightly different time periods. There may be some misclassification of Māori and/or Pacific people as 'Other' ethnic groups;
- For all ethnic groups, the enrolment rates are highest in the youngest age group (00-15 years).
- The youth age group (15 to <25) have the lowest enrolment rates of any age group and the rates from 25 to 45 are very similar but rates gradually increase after the age >45 years.
- At almost all age groups, the enrolment rates for Pasifika patients are lower than those for the other two ethnic groups. This may be due to the small numbers of Pasifika people in the population, especially in the older age groups.
- Around 90% of the population living in the highest NZDeprivation quintile 5 are enrolled with the PHOs. This may be due to PHO funding being weighted more heavily for enrolments from this high needs quintile.
- As around 86% of the population in the Waikato DHB area is enrolled with Waikato Primary Health, it is possible to build a collective and comprehensive assessment of Waikato population health needs by extrapolating the PHO enrolled population with relevant information from other sources.
- Through the PHO Performance Programme indicators, Waikato DHB has achieved improvements in key areas, such as chronic care, prevention of infectious diseases and process indicators.
- Acute shortage of GP and other primary health workforce issues need to be addressed through developing innovative health service structures that enable effective deployment of scarce workforces and allow recruitment of workforce to meet the acute shortages in service areas of high demand.

### **Recommendations for Strategic Consideration**

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As primary health care sets the basis for accessible, continuous, integrated and comprehensive care for chronic care management and management of most other illnesses, it is recommended that the Waikato DHB strategic initiatives focus on the:

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**Collaboration across health sector agencies:** Establishing strategic partnership and service delivery frameworks across the primary, secondary and tertiary sectors is paramount for achieving positive health outcomes. It is imperative for the partnership and information sharing infrastructure to focus on the following key components to deliver “end to end” management of patient care to the population of Waikato:

- **Reduce Inequality:** Equity of access to health care irrespective of age, income, culture, language, religion, that achieves equitable outcomes.
- **Chronic Care Management:** Focus on evidence based chronic care management that delivers positive outcomes and includes “self management” of health care by individual.
- **“Raise the Bar” in Service Delivery:** Delivery of care to patients, utilizing currently available and newly developed technology advancements, ensuring the “the way we deliver care” reflects the “precise needs of the patients”.
- **Integrated Information Infrastructure:** Focus on integrating and synchronizing information that is fragmented across health sector organizations and work towards an integrated and easily accessible electronic health information sharing environment.
- **Integrated Communications Infrastructure:** Establish an integrated communication network infrastructure that provides a dynamic link across the primary, secondary, tertiary sectors. Ensure the infrastructure is scalable and resilient to meet the future health demands.
- **Shared Strategic Goals and Targets:** Developing shared/common strategic goals and targets for the health sector organizations that facilitate collaboration, co-ordination and delivery of care using the full spectrum of health professionals across the continuum of care. This will support health sector organizations to jointly develop strategic projects/programmes and provide governance to monitor progress and timely achievement of strategic targets.
- **Virtual Consultation Support:** Explore alternative pathways for providing advice to primary providers (using enabling technologies), where face to face special consultation is not required.

A systematic approach and a carefully planned “road map” of strategic initiatives aligned to the above recommendations are crucial for “making a difference” in the health of Waikato population.

## 16.1 Introduction

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In February 2001, New Zealand government released the “Primary Health Care Strategy<sup>94</sup>” document, which defines primary health care as “health care based on practical, scientifically sound, culturally appropriate and socially acceptable methods that is:

- Universally accessible to people in their communities
- Involves community participation
- Integral to, and a central function of, New Zealand’s health system
- The first level contact with our health system.

The definition of primary health care covers a broad range of services that are centred around improving the health of the people in the community- although not all of them are Government funded:

- Participating in communities and working with community groups
- Health improvements and preventative services, eg. Education and counseling, disease prevention and screening
- Generalist first-level services, such as general practice services, mobile nursing services, community health services and pharmacy services that include advice as well as medications.
- First level services for certain conditions (such as maternity, family planning and sexual health, and dentistry) or those using particular therapies (such as physiotherapy, chiropractic and osteopathy services, traditional healers and alternative healers).

The Primary Health Care Strategy (PHCS) follows on from the New Zealand Health Strategy and the New Zealand Disability Strategy. The PHCS has two key goals: (a) improve health and to reduce inequalities in health.

The strategic vision planned to be achieved over a five to ten year period:

*“People will be part of local primary health care services that improve their health, keep them well, are easy to get to and co-ordinate their on-going care.*

*Primary health care services will focus on better health for a population, and actively work to reduce health inequalities between different groups”.*

The six key directions for achieving the vision and new arrangements as outlined in the Primary Health Care Strategy document are:

- Work with local communities and enrolled populations
- Identify and remove health inequalities

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<sup>94</sup> Primary Health Care Strategy, February 2001, Ministry of Health (MoH). This document is available on the website: [www.moh.govt.nz](http://www.moh.govt.nz)

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- Offer access to comprehensive services to improve, maintain and restore people's health
- Co-ordinate care across service areas
- Develop the primary health care workforce
- Continuously improve quality using good information.

The implementation of the PHCS has involved following changes to policy:

- Government funding increased in order to reduce the fees patients pay to use the primary health care services
- Supporting the development of PHOs as local non-governmental organizations that serve the needs of an enrolled population
- Changes to the funding of primary care from fee-for-service subsidies at the practitioner level to capitation funding of PHOs.

The report on the "Evaluation of the implementation and intermediate outcomes of the Primary Health Care Strategy<sup>95</sup>" stated that fee reductions had improved access to primary care and there are opportunities to improve patient care through more flexible service delivery with a focus on prevention. At a practice level, many practices would be better resourced, and pointed to the advantages of co-operation with other practices and with others such as *iwi*. However, some GPs were concerned that their role had been inadequately recognised in the strategy and worried about the long term financial implications for themselves and their practices, and about the perceived moves towards greater control of general practice by government.

## **16.2 Primary Health Care in the Waikato**

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In the Waikato, there are four Primary Health Organisations (PHOs):

- Waikato Primary Health;
- Three Māori PHOs: Toiora PHO, Hauraki PHO, and North Waikato PHO.

## **16.3 Demography of PHO Enrolment**

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The total resident population of the Waikato DHB in 2006 Census was 353,460, an increase of 2.71% from 2001 Census.

### **Enrolment numbers for Waikato DHB based PHOs**

The enrolment levels with PHOs can be examined in many different views and compared to the population. Enrolling with a PHO is a key mechanism for an individual to receive full access to primary health care services.

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<sup>95</sup> Evaluation of the Implementation and Intermediate Outcomes of the Primary Health Care Strategy, First Report, May 2005, Health Services Research Centre, Victoria University of Wellington. The report is available on the website: [www.vuw.ac.nz/hsrc](http://www.vuw.ac.nz/hsrc)

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**Table 279 Enrolment numbers by PHO**

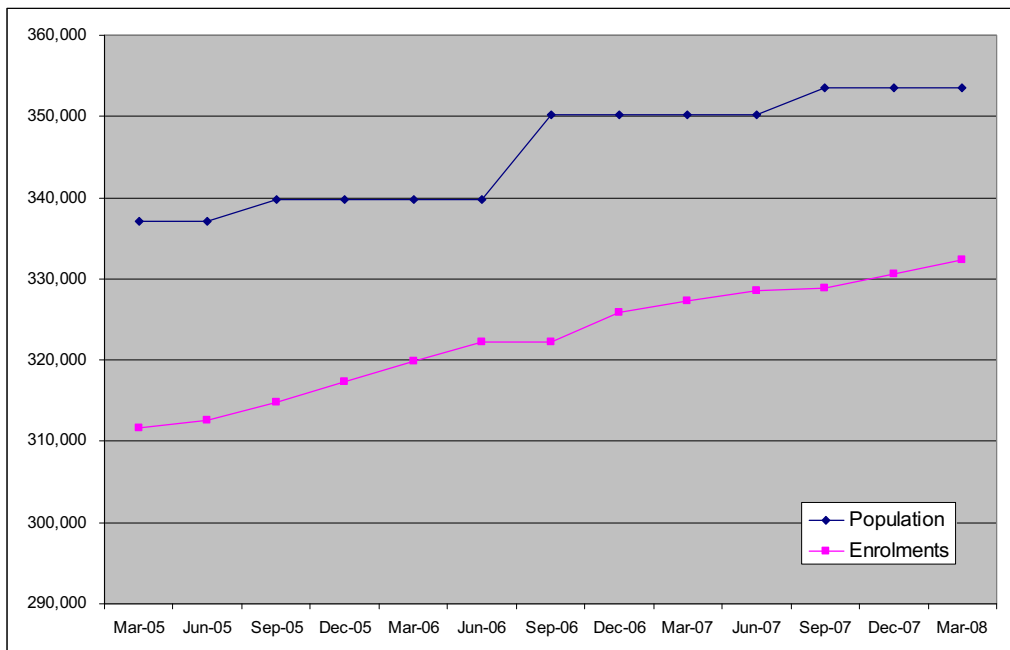
Waikato Primary Health Organisations	Enrolment Total	% of Population
Hauraki PHO	6,278	1.8%
North Waikato PHO	6,899	2.0%
Waikato Primary Health	305,090	86.3%
Toiora PHO	14,150	4.0%
<b>Total</b>	<b>332,417</b>	<b>94.0%</b>

Source: Statistics NZ 30 June 2007 Population Estimates prepared for MoH  
HealthPAC quarterly enrolment details report for the Jan-Mar08 funding period

Around 6% of the Waikato population is still not enrolled with a PHO.

The graph below shows the enrolment levels over the last 3 years. Enrolment numbers have increased steadily over this period and the latest trend shows the percentage of the population that are enrolled increasing as well, as it was before the large population jump in 2006 due to rebasing population estimates on the 2006 Census.

**Graph 108 Enrolments over Time vs Population**



Source: Statistics NZ Population Estimates, HealthPAC quarterly enrolment details report

### PHO Enrolment numbers for Waikato DHB by prioritised ethnicity

In the Waikato DHB area, PHO enrolments of Pacific People and Maori are lower than Other, as shown below.

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**Table 280 PHO enrolment numbers by prioritised ethnicity**

<b>Ethnicity</b>	<b>PHO Enrollments</b>	<b>2007 Population</b>	<b>Enrolment %</b>
Maori	65,907	75,080	87.8%
Pacific	7,052	8,330	84.7%
Other	259,458	270,050	96.1%
<b>Total</b>	<b>332,417</b>	<b>353,460</b>	<b>94.0%</b>

Source: Statistics NZ 30 June 2007 Population Estimates prepared for MoH  
HealthPAC quarterly enrolment details report for the Jan-Mar08 funding period

**Table 281 PHO Enrolment numbers for Waikato DHB by prioritised ethnicity and age group**

<b>Ethnicity</b>	<b>Age Group</b>	<b>PHO Enrollments</b>	<b>2007 Population</b>	<b>Enrolment %</b>
<b>Maori</b>	0 to <5	7,645	9,030	84.7%
	5 to <15	15,225	16,810	90.6%
	15 to <25	12,229	14,560	84.0%
	25 to <45	17,181	19,630	87.5%
	45 to <65	10,706	11,810	90.7%
	65 to 120	2,921	3,240	90.2%
<b>Maori Total</b>		<b>65,907</b>	<b>75,080</b>	<b>87.8%</b>
<b>Pacific</b>	0 to <5	785	830	94.6%
	5 to <15	1,598	1,780	89.8%
	15 to <25	1,176	1,640	71.7%
	25 to <45	2,018	2,390	84.4%
	45 to <65	1,124	1,280	87.8%
	65 to 120	351	410	85.6%
<b>Pacific Total</b>		<b>7,052</b>	<b>8,330</b>	<b>84.7%</b>
<b>Other</b>	0 to <5	16,232	15,610	104.0%
	5 to <15	34,989	34,510	101.4%
	15 to <25	33,637	36,060	93.3%
	25 to <45	65,162	70,610	92.3%
	45 to <65	68,817	71,650	96.0%
	65 to 120	40,621	41,610	97.6%
<b>Other Total</b>		<b>259,458</b>	<b>270,050</b>	<b>96.1%</b>
<b>Grand Total</b>		<b>332,417</b>	<b>353,460</b>	<b>94.0%</b>

Source: Statistics NZ 30 June 2007 Population Estimates prepared for MoH  
HealthPAC quarterly enrolment details report for the Jan-Mar08 funding period

The above data shows that:

- Overall, 94% of Waikato DHB's population is enrolled with a PHO;
- Māori and Pacific people have significantly lower enrolment rates with PHOs than other ethnicities;
- Children aged 00-14 years in 'Other' ethnicities appear to be over enrolled. Some of this can be explained in differences in data collection methods and slightly different time periods. There may be some misclassification of Māori and/or Pacific people as 'Other' ethnic groups;
- For all ethnic groups, the enrolment rates are highest at the youngest age groups (00-15 years).

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- The youth age group (15 to <25) have the lowest enrolment rates of any age group and the rates from 25 to 45 are very similar but rates gradually increase after the age >45 years.
- At almost all age groups, the enrolment rates for Pasifika patients are lower than those for the other two ethnic groups.

## PHO Enrolment numbers for Waikato DHB by Deprivation Quintile

Table 282 PHO enrolment numbers by deprivation quintile

Deprivation Quintile	PHO Enrolments	Waikato DHB Census Count	% Enrolled
not available	26,156	0	0%
1	57,344	50,886	113%
2	55,433	63,645	87%
3	55,547	69,522	80%
4	64,697	73,389	88%
5	73,240	81,759	90%
<b>Total</b>	<b>332,417</b>	<b>339,201</b>	<b>98%</b>

Source: Statistics NZ 2006 Census Counts  
HealthPAC quarterly enrolment details report for the Jan-Mar08 funding period

The table above shows the percentage of the population who live in each NZDeprivation quintile (quintile combines two deciles, e.g. deciles 9 + 10 equals quintile 5) and are enrolled with a PHO in the Waikato. 2006 Census counts have been used as a population comparison as up to date population estimates were not available at a DHB level for deprivation.

The number of enrolments where deprivation information is not available makes direct comparisons to population levels difficult. But the information provided does give some indication of the different enrolment numbers across each quintile.

Intuitively it might be expected that enrolment levels for the most deprived socio-economic areas would be lower than other areas. However this does not appear to be the case in the data, showing 90% enrolment in quintile 5. An explanation for this may be that PHO funding is weighted more heavily for enrolments from a quintile 5 area, thus helping to drive enrolments for those with high needs. Increased subsidies to patient co-payments in areas of high needs over the last few years will also have helped drive enrolments in these groups due to a reduction in the cost barriers.

## **16.4 Comparative Analysis - Waikato Primary Health Enrolment with 2006 Census population**

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The report “Changing Faces<sup>96</sup>” presents a comparative analysis of key demographic characteristics between the enrolled population of Waikato Primary Health and the resident population in the Waikato DHB area enumerated in the 2006 Census.

Note: due to lack of information from the other PHOs based in the Waikato DHB area, this section of the HNA 2008 focuses on the Waikato Primary Health enrolled population with the Census 2006 population.

### **Enrolled Population of Waikato Primary Health**

- Majority of the (86%) of the population resident in the Waikato DHB area are enrolled with Waikato Primary Health.
- While the majority of Maori in the Waikato DHB area are enrolled with Waikato Primary Health, the Maori enrolment is lower than the coverage of non-Maori and may reflect enrolment with other Maori providers in the region.
- The age structure of the Maori and total enrolled populations of Waikato Primary Health are identical to those of the Waikato DHB census populations, therefore Waikato Primary Health can be considered to be highly representative in terms of the demographic characteristics.

The report findings and the data analysis presented above have shown that the Waikato Primary Health provides primary care services to the overwhelming majority of the population in the Waikato DHB area and is highly representative of the population of that area for both Maori and non-Maori. Therefore by incorporating Waikato Primary Health enrolled population with the wide range of population statistics, in addition to including socio-economic indicators from the census, mortality and morbidity data from the MoH datasets, and other statistical analysis from other relevant agencies, such as the Ministry of Social Development and the Ministry of Education, it is possible to build a collective and comprehensive understanding of the factors affecting the Waikato DHB population and their access to primary health care services.

## **16.5 PHO Performance Programme**

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The PHO Performance Programme has been designed to improve the health of enrolled populations and reduce inequalities in health outcomes through supporting clinical governance and rewarding quality improvement within PHOs. Improvements in performance against a range of nationally consistent indicators result in incentive payments to PHOs. In order to participate in the programme and be eligible for the incentive payments, PHOs are expected to

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<sup>96</sup> “Representativeness of PHO Enrolled Population Compared with 2006 Census Population, Primary Health Intelligence Unit (PHIU), Pinnacle Group Limited, July 2007

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meet a number of pre-requisites demonstrating how they intend to implement the programme, including clinical governance structures.

Participation in the programme is voluntary, however all four PHOs in the Waikato DHB area have chosen to participate.

The current set of programme indicators and their associated payment weightings are:

Table 283 PHO Performance Programme Indicators and Weightings

Indicators	Total or High Need	Weighting
<b>Chronic Conditions Indicators</b>		
Inhaled Corticosteroids	Total Population	4
Cardiovascular Disease and Diabetes Capability As	Total Population	16
Cervical Cancer Screening Coverage	Total Population	4
Cervical Cancer Screening Coverage	High Needs	8
Breast Cancer Screening Coverage	High Needs	8
<b>Total Chronic Conditions Indicators</b>		<b>40</b>
<b>Prevention of Infectious Diseases Indicators</b>		
65+ Flu Vaccine Coverage	Total Population	4
65+ Flu Vaccine Coverage	High Needs	8
Age appropriate vaccinations for 2 year olds	Total Population	4
Age appropriate vaccinations for 2 year olds	High Needs	8
<b>Total Prevention of Infectious Diseases Indicators</b>		<b>24</b>
<b>Process Indicators</b>		
Percentage Valid NHI on Register	Total Population	3
Utilisation by High Need enrollees	Total Population	3
<b>Total Process Indicators</b>		<b>6</b>
<b>Financial Indicators</b>		
GP Referred Laboratory Expenditure	Total Population	15
GP Referred Pharmaceutical Expenditure	Total Population	15
<b>Total Financial Indicators</b>		<b>30</b>
<b>Total Score</b>		<b>100</b>
<b>Information Only Indicators</b>		
Metformin:Sulphonylureas	Total Population	Info only
Acute Phase Response	Total Population	Info only
Thyroid Function	Total Population	Info only
Breast Cancer Screening Coverage	Total Population	Info only
Utilisation by High Need enrolees - GP Consults	Total Population	Info only
Simultaneous Testing Acute Phase Response	Total Population	Info only
Nurse Consults-Utilisation by High Need enrolees	Total Population	Info only

Indicators and their weightings are adjusted at times based on advice from the programmes advisory group. For more detailed information on the

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Performance Programme and on how each indicator is calculated please visit the programme website at

[http://www.dhbnz.org.nz/Site/SIG/pho/Programme\\_Documents.aspx](http://www.dhbnz.org.nz/Site/SIG/pho/Programme_Documents.aspx)

It is important that the basis for each indicator is understood before drawing inferences from the end results.

### 16.5.1 Performance Programme Results - Waikato DHB

From the latest quarterly progress report the results for Waikato DHB in total were as follows:

Table 284 PHO Performance Indicators - Waikato DHB

Indicators	Total or High Need	Waikato DHB Result	National Average	Long Term Goal
<b>Chronic Conditions Indicators</b>				
Inhaled Corticosteroids	Total Population	882.4	888.4	< 1000
Cardiovascular Disease and Diabetes Capability As	Total Population	NA	NA	Complete
Cervical Cancer Screening Coverage	Total Population	71.7%	70.7%	> 80%
Cervical Cancer Screening Coverage	High Needs	61.2%	59.5%	> 80%
Breast Cancer Screening Coverage	High Needs	46.5%	48.5%	> 70%
<b>Prevention of Infectious Diseases Indicators</b>				
65+ Flu Vaccine Coverage	Total Population	61.1%	63.4%	> 75%
65+ Flu Vaccine Coverage	High Needs	58.2%	59.6%	> 75%
Age appropriate vaccinations for 2 year olds*	Total Population	62.6%	68.0%	> 85%
Age appropriate vaccinations for 2 year olds*	High Needs	59.9%	60.6%	> 85%
<b>Process Indicators</b>				
Percentage Valid NHI on Register	Total Population	98.9%	98.6%	> 99.5%
Utilisation by High Need enrollees	Total Population	1.19:1	1.09:1	> 1:1
<b>Financial Indicators</b>				
GP Referred Laboratory Expenditure	Total Population	104.9%	86.8%	<= 100%
GP Referred Pharmaceutical Expenditure	Total Population	99.4%	98.3%	<= 100%
<b>Information Only Indicators</b>				
Metformin:Sulphonylureas	Total Population	15.4	16.3	NA
Acute Phase Response	Total Population	4.4	3.9	NA
Thyroid Function	Total Population	30.5	30.4	NA
Breast Cancer Screening Coverage	Total Population	58.3%	59.9%	NA
Utilisation by High Need enrollees - GP Consults	Total Population	1.1:1	1.05:1	NA
Simultaneous Testing Acute Phase Response	Total Population	1:1	1:1	NA
Nurse Consults-Utilisation by High Need enrollees	Total Population	2.12:1	1.14:1	NA

Source: DHBNZ PHO Performance Programme Quarterly Progress Report released 31-Jan-08 for data period Jul07 – Oct-07

Notes: Cardiovascular Disease and Diabetes Capability Assessment indicator is not available as it is an annual indicator based on the PHO completing a report that is signed off by their DHB that is due by June-08.

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Information only indicators do not have associated long term programme goals as they are provided on an information only basis and have no targets or payments assigned to them.

The PHO Performance Programme focuses on continuous improvement against all indicators by asking PHOs to achieve targets set on each year based on the starting baseline for that indicator. All of the indicators have improved for Waikato DHB since the start of measurement.

### **16.6 General Practice Workforce Current Situation**

This, and the following, sections of the HNA 2008 present the findings from the report “The General Practice Workforce in the Midland PHO Network 2006<sup>97</sup>”.

In August 2006, the Primary Health Intelligence Unit (PHIU) in Pinnacle Group Limited, carried out a survey on the general practitioner (GP) and practice nurse (PN) workforce and published this report in April 2007.

Pinnacle General Practice Network (referred as the “Network”) works across five Primary Health Organisations in the Midland region. The following table presents the PHOs, proportion of resident population enrolled and the number of practices in each region.

Table 285 Midland Network PHOs

Network PHOs	DHB Area	% Coverage of Total Population	No. of Practices
Kawerau PHO	Bay of Plenty DHB	89%	2
Lake Taupo PHO	Lakes DHB	100%	6
Pinnacle Taranaki PHO	Taranaki DHB	51%	18
Turanganui PHO	Tairāwhiti DHB	77%	6
Waikato Primary Health	Waikato DHB	85%	68

More than 420,000 people are enrolled in the 100 practices across the Network. Within each of the DHB areas, the PHOs provide primary health care services to a high proportion of the resident population.

The purpose of the survey was to present the demographic characteristics and working arrangements of the general practice workforce to supplement information available from other sources held nationally or by the Network. The survey achieved a response rate of over 90%. Around 72% of the GPs and 68% of the practice nurses in the Network are from Waikato Primary Health.

Summary of findings as outlined in the above report were:

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<sup>97</sup> Workforce Analysis - Volume 1, Primary Health Intelligence Unit (PHIU), Pinnacle Group Limited, April 2007

## **16.6.1 Demographic Characteristics - General Practitioners**

### **Gender and Age Group**

- In both the national and the Network GP workforces, the age group for both male and female GPs is 45-49 years.
- There are proportionately fewer male GPs under the age of 40 years and more over the age of 55 years compared to female GPs.
- The Network female GP workforce is older than that nationally: almost half (47%) of the Network female GP workforce is clustered in the 45-54 age group compared to only 37% nationally. In contrast, more than half (53%) of the national female GP workforce is under the age of 40 years compared to 45% in the Network.

### **Ethnicity**

- In both the national and the Network workforces, Maori and Pacific People are under-represented in the GP workforce compared to the enrolled population it serves.

### **Place of Qualification**

- Less than half of the Network GPs are New Zealand trained and proportionately this is much lower than in the New Zealand GP workforce as a whole: 47% as compared to 66%.
- In Waikato Primary Health, slightly less than half (46%) of the GPs are NZ trained.
- There is no significant difference in the average age of overseas and NZ trained GPs in the Network.
- Overseas trained GPs in the Network are more likely to be working in rural practices.
- 24% of the GPs received their first medical qualification in the UK/Ireland, followed by 14% African-trained (all trained in South Africa), 8% trained in India, Pakistan or Sri Lanka.
- In terms of GP training location, Waikato Primary Health has the greatest diversity.

### **Rural and Urban Practices**

- In the Network a far higher proportion of GPs work in a rural setting (32%-43%) compared to 17% of GPs nationally.
- GPs working in urban practices are generally younger than those in rural practices, with 65% of urban GPs under age 50 compared with 57% of rural.

### **Work Arrangements**

- The majority of GPs work as owner operators. Around 29% work as permanent employees or long-term locums.
- Owner operator GPs are on average older than GPs who are permanent employees. More than two-thirds of permanently employed GPs are below the age of 50 years.

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- Male GPs tend to stay longer in the current practice than female GPs: 12.7 years compared to 8.4 years for female GPs.
- Average length of stay in the current practice is slightly longer for GPs in rural areas: 12.7 years compared to 10.7 years for urban GPs.

### Work Hours

- In the Network, three quarters of the GPs work eight or more sessions per week in their current practice.
- 92% of male GPs work 8 or more sessions per week compared to 38% for female GPs.
- On average female GPs work significantly fewer sessions (6.4) compared to male GPs (8.9).
- The proportion of GPs working eight or more sessions per week is higher in rural practices: 85% compared to 71% in urban practices.
- The ratio of patients per FTE GP varies from 2,016 in Lake Taupo PHO to 1,753 in Waikato Primary Health.
- Similarly, the ratio of FTE GPs/100,000 population also varies across the Network with the lowest ratio being in the Lake Taupo PHO.
- The national estimate of the ratio of patients per FTE GP is 1,350:1 for rural practices. This ratio would seem to be considerably higher in rural practices in the Network, but as noted, the national estimates are based on different assumptions and definitions and are therefore not directly comparable.
- There is some variation in the patient/FTE GP ratio across the Network with 25 practices with 3,000-5,000 enrolled patients on average having the highest and six practices with less than a 1,000 enrolled patients on average having the lowest ratio.

## 16.6.2 Demographic Characteristics - Practice Nurse

### Gender and Average Age

- Out of 353 practice nurses in the Network, only one is male.
- The average age of the PN workforce is 46.3 years and this does not vary greatly between the PHOs, except for Kawerau PHO where the numbers are very small.
- The Network PN workforce is older than the national nursing workforce with 40% over the age of 50 years compared to 30% nationally.

### Ethnicity

- Only 4% of the PN workforce recorded their ethnicity as Maori, all but two of whom are in Waikato Primary Health. There are no Pasifika PNs in the Network.

### Rural and Urban Practices

- 62% of nurses in rural practices are below the age of 50 years compared to 58% in urban practices. The average age of nurses in rural and urban practices is almost the same: 46 years.

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### Work Arrangements

- More than half of the PN in rural and urban areas have been in their current practice 3 years or less, and about one-fifth have been there for less than a year. By contrast, relatively few have been in the same practice 12 years or more.

### Work Hours

- 44% of nurses in urban practices work eight or more sessions per week compared to 27% in the rural practices.
- Average number of sessions by urban practices is 6.8 compared to 6 in rural practices.
- Across the Network, the number of FTE PN per 100,000 enrolled patients is 52 which is slightly lower than that for GPs which is 56 FTE GPs per 100,000 enrolled patients.
- In the Network the number of patients per FTE PN is 1,927, which is higher than that for GPs which is 1,794 patients per FTE GP.
- In the Network, there is no difference between urban and rural practices in either the number of patients per FTE PN or in the number of FTE PN per enrolled population.
- Across the Network, there is less than 1 FTE PN per FTE GP. This ratio is lower in Kawerau PHO and the highest in Pinnacle Taranaki PHO where there is slightly more than 1 FTE PN for each FTE GP.
- Practices with more than 3,000 enrolled patients have similar patient/nurse ratio -- around 2,000 patients per FTE PN.

### 16.6.3 Implications for GP Workforce

The health workforce issues are proving to be one of the greatest challenges facing the New Zealand health system today and in the future. The Health Workforce Advisory Committee examined the future direction of the health workforce and identified the following factors driving future demands on our health workers and our health care services:

- Ageing of the population
- Changing ethnic composition
- Technological advances
- Changing disease patterns

The “General Practice Workforce in the Midland PHO Network 2006” report claims that using New Zealand demographic data the Institute of Economic Research predicted that an increase of between 40% and 70%<sup>98</sup> in health workers will be needed to maintain current health service levels to 2021. The report raises some of the key issues with the GP workforce and suggests potential solutions, as outlined below<sup>99</sup>:

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<sup>98</sup> The NZ Institute of Economic Research (NZIER) 2005 Ageing New Zealand and Health and Disability Services Demand Projections and Workforce Implications 2001-2021

<sup>99</sup> Dr David Maplesden, Medical Advisor, Pinnacle Group Limited

#### **16.6.4 Ageing Workforce**

**Issues:**

Significant lack of GP numbers in the younger age groups to compensate for those nearing retirement and this trend is consistent across rural and urban practices.

Drift of GPs into sub-specialities, such as appearance medicine, GP with special interest (GPSI) - potential reduction in time spent in general practice

**Potential Solutions:**

Additional financial support for rural GPs and bonding of GP trainees.

Increasing the number of GP training in the region.

GP attachments for medical students early in the clinical training pathway.

Increasing the attractiveness of GP practice through:

- Better financial compensation
- Improved after-hours coverage
- Assistance with administrative and managerial tasks
- Retirement retention scheme allowing GPs nearing retirement to work flexibly or at a different pace to extend their time of service.
- Collaborations between rural practices and between large and small urban practices to generate economies of scale and shared expertise.

#### **16.6.5 Feminisation of the Workforce**

**Issues:** As mentioned above, the female GP workforce tended to practice for a shorter duration and is less likely to own their own practices.

**Potential Solutions:**

Development and support of health policies that encourage family-friendly work patterns may improve the recruitment and retention of female GPs, in addition to providing business and budgeting support for practices to allow for parental leave, lobbying for capitation structures that acknowledge arrangements for paid maternity leave, sabbaticals and improved locum services.

#### **16.6.6 Overseas Recruitment**

**Issues**

There are increased international competitions for medical professionals with First World countries offering more competitive packages than New Zealand and also attracting NZ trained graduates with high student loans from going overseas where higher earnings may be obtained.

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### **Potential Solution:**

As any changes to the national policy to increase intake of medical students and increased focus on GP training will result in a time lag of at least a decade, it is essential to understand the factors that would make the overseas graduates choose the Midland region over other parts of New Zealand, and New Zealand over other countries.

### **16.6.7 Primary Care Team**

#### **Issues**

The key issue is the need for more skilled resources to meet the specific requirements of the population, and not just that more doctors and nurses are required in the Midland region.

#### **Potential Solution**

The resolution of this issue requires addressing the health workforce shortages and developing innovative health services structures, work and staff distribution frameworks in the short to medium term.

### **16.6.8 Implications for Practice Nurse Workforce<sup>100</sup>**

Currently the New Zealand Government is focusing on recruiting more Maori and Pasifika students into schools of nursing and this drive may increase the number of students moving into primary health care sector.

#### **Recruitment, Retention and Succession Planning**

Development of a framework that supports the under graduate and graduate practitioners in the primary care setting through:

- Establishment of general practice sites for undergraduate and graduate nursing students that are supported by the practice team and mentored by skilled nurses.
- Industry support for graduate primary health care new entry to practice pathway.

#### **Addressing Population Health Needs and Health Inequalities**

The data mentioned above (<1 FTE nurse per 1FTE GP and approximately 2000 patients per 1 FTE PN) raise concern about the capacity of the workforce to undertake emerging models of care around patients with chronic conditions.

In order to effectively address the issue of capacity, it is essential to gain a through understanding of nurses' work in general practices and then to

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<sup>100</sup> Report: "The General Practice Workforce in the Midland PHO Network 2006", Hilary Graham Smith, Director of Nursing, Primary Health Intelligence Unit, Pinnacle Group Limited

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differentiate what skills and abilities are actually required and what could be managed safely and effectively by others.

Practice nursing workforce is an integral part of delivering quality primary care services hence the funding stream and the employment arrangements need to reflect the critical role the practice nurses play in the health care service framework.

### **16.7 Projected Workload and Workforce - Midland PHO Network 2006-2016**

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This section of the HNA 2008 draws the information from the report "The impact of projected population changes on workload and workforce of the Midland PHO Network<sup>101</sup>".

Some of the key findings on the health workforce in the Midland region, based on the projected demographic changes and the magnitude of change across the ethnic groups and age groups are as follows:

#### **Demographic Changes:**

- In ten years time (2006-2016) there are likely to be slight decline in the numbers in each functional age group under the age of 45 years, and significant increase in the numbers of older age groups of 45 years and over, constituting the single largest age group, replacing 25-44 year olds.
- During the same ten year period, in the Maori and Pasifika enrolled population there is estimated to be little change in the population of 00-15 year olds, but a steady increase in the numbers at all other age groups, particularly 45-65+ years.
- Across the Network it is estimated that more than 80GPs will need to be recruited by 2016 to replace those who have retired and to cope with the extra workload. If barriers to access for Maori and Pasifika are removed then the number increases to 90, which equates to about 8 or 9 new GPs per year.
- From 2006 to 2016, the total enrolled Maori/Pasifika population of Waikato Primary Health is estimated to increase by 13% compared with only 4% increase in numbers in the Other ethnic group.
- Waikato Primary Health is most affected, as the projected demographic changes could add 11% - 13% extra consultations to the workload by 2016.
- An estimated 100 to 105 PN need to be recruited across the Network, but the majority will be needed in the Waikato Primary Health which will experience both an increase in workload and ageing nursing workforce.

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<sup>101</sup> Workforce Analysis Volume 2, Prepared by the Primary Health Intelligence Unit (PHIU), Pinnacle Group Limited, September 2007

## **16.8 Information System**

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Information sharing across the health professions in the continuum correlates with improved continuity and quality of care, administrative and management processes for service delivery and improved patient safety. Information and communications technology provides the critical pathways. The Electronic Health Records (EHR) system that is slowly evolving in the DHBs in New Zealand sets the foundation for effective and efficient end-to-end administration and management of patient's health records. Some of the key issues such as the interoperability, privacy and security of EHR will be fundamental to the ability of the health professionals across the continuum of care to collaborate and deliver quality health care.

## **16.9 Summary**

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In New Zealand and around the world the health services of tomorrow are faced with providing care and support for the ageing population, delivering services based on new models of care, eg Chronic care management, reducing disparities and meeting the changing needs and expectations of the consumer. It is essential for the DHBs to establish interdisciplinary collaboration with primary health care that focuses on the following:

- The patients and their families being actively engaged in decisions and management of their health
- Effective balancing of the health needs of the wider population with the more specific needs of the local community served by the primary health care team
- Through collaboration, the team is always inspired to deliver high quality and optimum health care
- Equity of access to health care irrespective of age, income, culture, language, religion, risk and protective factors and any other differences.
- Encouraging uptake of technology systems and processes for effective knowledge management across the health professions.