

pacific perspectives

Primary Care for Pacific People

A Pacific and Health Systems View

15 August 2011

ISBN 978-0-473-20875-2

Acknowledgements

This report was prepared by:

Dr Debbie Ryan
Principal
Pacific Perspectives

Dr Margaret Southwick QSM
Director Pacific Health Research Centre
Dean of Health Faculty
Whitireia Community Polytechnic
Chair New Zealand Nursing Council

Dr Tasileta Teevale
Research Fellow
Pacific Health
University of Auckland

Dr Timothy Kenealy
Associate Professor of Integrated Care
University of Auckland

We would like to acknowledge the contribution of Dr Alexandra Vranjac-Wheeler and members of the Project Advisory Committee who have reviewed the report. We would like to thank Tara Ross for her editing skills.

As always, the primary authors are responsible for any omissions or errors of interpretation.

This research was supported (in part) by a contract from the Health Research Council of New Zealand.

For further information please contact Debbie Ryan.

Pacific Perspectives

P O Box 5834

Lambton Quay

Wellington 6145

New Zealand.

pacificperspectives@clear.net.nz.

Contents

Executive Summary	5
Background	10
Literature Review Methods.....	11
Domain One Findings	12
Defining terms.....	13
Overview of Health Status	14
Significant studies on Pacific Peoples’ health status, needs and use of services	14
Priority Health Areas.....	21
District Health Boards.....	37
Counties Manukau District Health Board.....	38
Barriers and Facilitators to Health Service Delivery: Identifying Successful Practice That Engages Pacific Peoples.....	41
Priority Service Areas	44
Summary of Review of Targeted Initiatives for Pacific People.....	48
References – Domain One.....	53
Domain Two Findings.....	72
A Summary of the Demographic Status of Pacific Populations.....	73
Age	73
Population Growth	74
Geographic distribution.....	74
Migration and settlement patterns	75
Socio-Economic Status and Health.....	76
The Question of Ethnicity in Relation to Pacific Peoples.	80
Health Literacy.....	83
References – Domain Two.....	86

Executive Summary

Background

Compared to the total New Zealand population, Pacific peoples have poorer health status and appear to have gained least from changes in primary care delivery, and yet there is a paucity of information to support health service improvements for Pacific peoples. The aim of this research is to examine current primary care trends and use by Pacific peoples, through two perspectives – the perspective of the health system and a Pacific consumers’ perspective. With this approach, we aim to identify more effective ways to improve Pacific peoples’ access to and utilisation of primary care.

Literature Review

This Literature Review is divided into two domains to reflect the two perspectives above. As such, Domain One reviews the literature on primary health for Pacific peoples from a health systems view, while Domain Two deals with the literature on Pacific peoples views and understandings per se and how we might better understand health issues from their point of view.

Domain One Findings

The health system view of Pacific peoples’ use of primary health care presented here is based on an overview of the health status of Pacific peoples (which applies health system performance measures for Pacific people), health needs analysis and District Health Boards (DHBs) reports, and an overview of barriers to and facilitators of health service delivery. Successful practices that engage Pacific peoples are identified.

As well as providing trends on Pacific health and primary care utilisation, the health data reviewed for this project also gives some insight into a health systems view of Pacific people. The focus on health indicators in much of the literature results in a long list of Pacific peoples’ poor health outcomes. The picture is that of a “Pacific problem”, which, we suggest, potentially impedes health providers’ self-examination of problems with their own services, cultural assumptions, and culturally framed delivery.

Recent attempts to provide an overview of Pacific health and/or primary healthcare have identified poorer health status, greater exposure to risk factors for poor health, and access barriers to health care for Pacific people, and a Pacific population that is experiencing unmet health needs and variations in the quality of primary care. The first national study of primary care which included

Pacific analysis, Natmedca, provided valuable overviews, but too small a sampling of the Pacific population and the grouping of all Pacific peoples as one ethnicity limited its usefulness.

However, Natmedca and more recent studies included in this review do highlight a potential disconnect between primary health care providers and Pacific patients: General Practitioners (GPs) were less likely to record high levels of rapport with Pacific patients, and Pacific patients had low uptake of subsidised care, high use of Accident & Medical (A & M) clinics, and lower levels of satisfaction with their experiences of primary health care.

Across key priority health areas for Pacific people – child and youth health, reducing prevalence of risk factors, and preventing and managing chronic conditions – significant inequalities persist compared to the total New Zealand population. They include:

- higher rates of Pacific hospitalisations for close contact infectious diseases and respiratory conditions, including asthma;
- high rates of avoidable Ambulatory Sensitive Hospital Admissions (ASH), including high child ASH rates for respiratory infections, asthma and skin infections;
- higher rates of severe asthma symptoms, yet lower prevalence of diagnosed asthma and use of preventer medications (suggesting poor management of asthma among Pacific children);
- a higher burden of mental illness, yet poor uptake of mental health services;
- higher rates of diabetes and diabetes mortality and complications, yet little or no attempt to change the “usual care” mainstream approach to tailor healthcare to Pacific people’s greater health needs;
- higher rates of stroke and stroke mortality, and greater dependence after stroke; and
- higher cancer mortality, despite lower cancer incidence.

A desktop review of seven DHB annual reports for the year ending June 2010 found that Counties Manukau DHB was the only DHB to have completed a detailed Pacific health needs analysis, including a breakdown by specific Pacific ethnic groups. It also found that Pacific people are concentrated in a few DHBs, and mostly registered with a select few Primary Health Organisations (PHOs). Although the reports demonstrate some gains in primary care, such as improved screening and immunisation rates, indicators of unmet need and less effective primary care remain (for example, increased Pacific attendance at emergency care for less urgent issues, high ASH admission rates, and the failure of programmes to engage effectively with high needs populations, including Pacific peoples).

The top three barriers to primary health care for Pacific peoples are identified as cost, transport and language. Other barriers include family commitments, difficulty in meeting appointment times, difficulty in understanding the nature/necessity of an appointment, lack of access to after hours services, communication barriers, inflexible employment, and feeling cultural discomfort when discussing health issues with non-Pacific practitioners. Structural problems associated with long waiting times, lack of discussion time with the doctor, crowded clinics, and the bringing and minding of other children, have also been reported as barriers.

Measures that have been suggested and/or proven to improve Pacific health outcomes include:

- providing culturally appropriate health education, in an appropriate language;
- providing language-specific resources to overcome language barriers and improve communication;
- focusing on family, that is, involving family members, especially family carers;
- supporting culturally competent care and/or Pacific health providers, many of whom have demonstrated success with integrated services, single sites or “one-stop-shop” premises, and church-based delivery;
- supporting new/alternative modes of health care delivery, such as mobile services, transportation for patients, workplace-based healthcare, church-based initiatives, culturally competent and “embracing” school-based nursing practices, community health workers, and opportunistic services, such as opportunistic immunisation in hospital;
- flexible provision, for example, flexible appointment scheduling;
- nurse-led programmes;
- collaborative efforts, such as between providers and communities;
- personal engagement, that is, knowing participants and having a personal rapport with them;
- role modelling; and
- effective recording and tracking systems, and improved monitoring of outcomes.

Although health is strongly linked to socio-economic status in New Zealand – and Pacific people are over-represented in the lower social groups – New Zealand evidence suggests that socio-economic explanations do not account for all of the disparities in Pacific health outcomes. There is a joint effect of socio-economic status and ethnicity through multiple complex pathways, emphasising the need to urgently target improvements in primary care services for Pacific people.

Domain Two Findings

The second part of this research project focuses on Pacific peoples' perceptions and understandings of health, illness and primary health care systems in order to provide insights into the best ways to improve health outcomes. There is relatively little written in this area. As a result, this part of the Literature Review focuses on broader key areas that underscore the need to focus on Pacific people's *own views* of primary healthcare and suggest how we might better understand what those views might be.

The first area is the demographic status of Pacific peoples in Aotearoa/New Zealand. The most recent and authoritative data shows that the Pacific population is now one of considerable size and social significance, and, unlike the general New Zealand population, one that is characterised by its youthfulness, rapid growth and, high level of urbanisation. The Pacific population is also characterised by social networking and transnational mobility. Significantly, the data also reveals key differences within the Pacific population, particularly between ethnic groups, suggesting a 'one-size-fits-all' approach to Pacific health care is possibly not the best approach.

The second key focus is on the low socio-economic status of Pacific peoples in relation to their comparative poor health status. According to the National Health Committee (1998), the most significant determinants of health are people's income levels, employment rates, education achievement, and housing experiences – and Pacific peoples, as a whole, fare poorly in each of these categories. Subsequent reports show the Pacific population's socio-economic situation has barely changed, and Pacific people are still over-represented in the unemployed, lower skilled and low income earners, and economic disparities between Pacific people and the wider New Zealand population remain.

However, while broader socio-economic determinants play a significant part in the health inequalities experienced by Pacific peoples, various health reports state that health equity is not reducible to socio-economic determinants alone. Equity of access to health services and equity of use with regard to need are also important – and there is evidence that improving access and quality of care does make a difference. Tellingly, the Ministry of Health's *'Ala Mo'ui* report notes that Pacific peoples want not just high-quality but also *culturally competent* health care services, which suggests that the cultural perspectives and assumptions underpinning health care delivery are crucial.

The third key focus is on the ethnic diversity of the Pacific population in New Zealand, which must be understood by health providers if they are to improve their services to Pacific peoples. The

Pacific population comprises diverse ethnic groups that differ subtly in language, religion and, potentially, their health beliefs and expectations of health services. Indeed, the literature demonstrates differences between Pacific groups in various health data. The literature makes clear, too, that Pacific identities are fluid, multiple (the proportion of Pacific peoples with more than one ethnicity is increasing) and contested. This presents challenges not only for this research, but also for health care providers who want simple remedies for complex Pacific health issues.

Finally, we explore the issue of health literacy. As a concept and goal, improved health literacy, according to the literature, must be empowering, must recognise the voice of the patient/consumer, and must better align with patients' own world views and levels of knowledge. As such, we have adopted Nutbeam's (2008) concept of health literacy, which is patient-centred and usefully problematises health providers' views, and thereby provides an organising framework for this research that is more open to the potential disconnects between health providers and Pacific patients/consumers.

Background

The Health Research Council (HRC) and the Ministry of Health (MoH) have commissioned research to improve health outcomes and the delivery of primary health care to Pacific peoples. The aim of the research is to improve knowledge about the most effective ways to improve Pacific peoples' access to and utilisation of primary care.

The government vision for improving primary health care through the achievement of a strong and vibrant patient-centred health system is outlined in *Better, Sooner, More Convenient Health Care in the Community or BSMC* (Ministry of Health, 2011) and *'Ala Mo'ui: Pacific Health and Wellbeing 2010-2014* (Minister of Health and Minister of Pacific Island Affairs, 2010), and provides the strategic policy settings for how this will be achieved for Pacific peoples.

The aims of BSMC and 'Ala Mo'ui for primary care for Pacific peoples are that high-quality services are to be provided closer to home; effective Pacific providers and models of care will be supported; and improved health of Pacific peoples and communities will be facilitated through effective health care delivery.

Compared to the total New Zealand population, Pacific peoples have poorer health status across a wide variety of measures and appear to have gained least advantage, compared with other ethnic groups, from changes to primary care delivery in the last decade (Minister of Health and Minister of Pacific Island Affairs, 2010; Tobias and Yeh, 2009). The HRC and the MoH have recognised the paucity of information to support health service improvements for Pacific peoples and this provides the rationale for health research that supports both the reduction of inequalities and improvements in health outcomes.

This research will explore current and potential trends in Pacific primary care access and utilisation, as well as factors that might act as barriers or enablers to Pacific people accessing primary care and improved health outcomes. The literature review, which underpins this research, focuses on two research domains: firstly, *a health system view of Pacific peoples' use of primary care*; and, secondly, *Pacific peoples' own views of primary care*. It identifies, consolidates and analyses the evidence relevant to both domains. For the health systems domain, relevant research builds on trends in primary care utilisation by Pacific peoples' since NatMedCa (Davis et al., 2005), as well as drawing together available analysis from DHBs. For the Pacific peoples' views of primary care, the focus is on summarising demographic information about the diversity of Pacific

peoples in New Zealand and on consolidating research that articulates Pacific peoples' views, including research methodologies designed to access these views. This then forms the rationale for the narrative methodology that will be used in the qualitative research.

Literature Review Methods

The following electronic databases were searched: PubMed, MEDLINE, Index New Zealand: INNZ, EBSCO, JSTOR and ProQuest. We searched for unpublished (grey) literature on New Zealand Ministry of Health and District Health Board websites, and used Google and Google Scholar for general internet searches. As relevant documents were identified we searched their reference lists for further relevant citations. Software Endnote X1 was used to store and manage references and abstracts.

Keywords used for searches were: primary care, primary health care, general practice, Pacific or Polynesian, New Zealand (NZ), Samoan, Tongan, Cook Island, Fiji, Tokelau, Tuvalu, Kiribati and Maori. Electronic searches were limited to the English language and material published between January 1990 and March 2011. Searches were conducted in March and April 2011.

Domain One Findings

To provide a *health system view of Pacific peoples' use of primary care services* we have included the following:

- an overview of the health status of Pacific peoples (that applies the system performance measures for Pacific people), health system views of Pacific peoples' health needs and use of services, via health needs analysis and DHB reports;
- an overview of successful practice that engage Pacific peoples, by identifying barriers and facilitators to health service delivery.

A health system view includes information collected at various levels of the health system, and the nature of the information reflects the different roles of the organisations involved.

At a national level, the Ministry of Health aggregates health information and reports on:

- Health outcomes – morbidity (quality of life) and (premature) mortality (quantity of life).
- Health risks – biological, behavioural and environmental
- Health services utilisation – prevention, treatment and support/rehabilitation (Ministry of Health, 2002).

The Director General of Health reports to Parliament on the state of public health through the Director General's Annual Report on the State of Public Health (Annual Report). The 2010 Annual Report provides a snapshot of overall progress towards achieving health outcomes, and where data is given on Pacific health, this has been used to provide an overview of Pacific health status.

DHBs are required to regularly investigate, assess and monitor the health status and the need for services of their resident populations. A significant part of that process is Health Needs Assessments (HNA), an assessment of the health needs of a community, used to prioritise investment and funding of health services. HNA are meant to be done by DHBs annually (Coster, 2000). As part of this literature review, a desktop review of DHB annual reports was carried out to assess the specific data and analysis that DHBs have undertaken in relation to the health and health needs of Pacific peoples. This is reported in the section on DHBs.

The final section includes other health systems information about Pacific peoples' health status and primary health service utilisation found in research publications and grey literature. Summary themes provide a picture of current knowledge about health care barriers and facilitators, and what works to engage Pacific people.

Defining terms

The literature requires some interpretation because the terms used often lack a common definition. The terms we use are defined below.

Primary care

Primary care is the first point of contact people have with a health practitioner when they are unwell. It is the entry point to the healthcare system for new problems or when specialised investigations or interventions are required (Forrest & Starfield, 1998). Primary health care includes a broad set of activities, such as community engagement, needs assessment, prevention, and health promotion, along with primary medical care. The majority of New Zealanders have access to primary care, with 93.3 percent of adults able to name a specific primary care provider (GP, nurse clinic or 24 hour A & M clinic) that they would go to if injured or ill; 81.3 percent of all adults have seen their GP at least once in a 12 month period (Ministry of Health, 2008d). New Zealand's primary care sector comprises multiple agencies and includes general practices and PHOs, non-government organisations (NGOs), voluntary agencies and informal care. These agencies and functions range in nature from fully private business models through to non-government, non-profit (third sector) entities, and to communities and family/whanau.

Access

Access, in this context, means the capacity to obtain necessary health care. Access requires: availability, affordability, accessibility, and acceptability of care. A broader understanding of access addresses a further dimension – an assessment of need (Mandelberg, Kuhn, & Kohn, 2000).

Need

'Need' for service can be defined as including an objective component, which can be independently assessed (for example, by rates of illness), and a subjective component, which can be assessed only by a patient (for example, fear of illness and need for information or reassurance) (Mandelberg, Kuhn, & Kohn, 2000). Coster (2000), in a background paper and literature review prepared as a guide for Health Needs Assessment (HNA) by DHBs, explored the concept of need

and the relationship between need, demand and supply. Need in this context is defined as the ‘capacity to benefit’, and health care need as the ‘capacity to benefit in some way from health care’. The term, therefore, refers to service needs assessment, using a population-based approach, and *not* personal needs assessment. Coster notes that an integral part of the definition used by DHBs for HNA includes cost-effectiveness and prioritisation of services for purchasing.

Health system

A health system is “... all the activities whose primary purpose is to promote, restore or maintain health...” (WHO, 2000) In addition, there is an implicit responsibility of any health system to achieve a fair distribution of health across the population and make it more accessible to those who are excluded from any benefit.

Overview of Health Status

In each of its annual reports, the Ministry of Health reports against a number of indicators¹ that measure health system performance. These indicators provide a view of the performance of the whole health system and cover the full spectrum of health issues. This section includes a summary of the relevant indicators for primary care, where data for Pacific ethnicity is available. This is used to compare Pacific peoples’ health status (as defined by these indicators) to the total New Zealand population over time.² In all instances the most up-to-date data is presented, although some important data sources (such as the New Zealand Health Survey) are not refreshed annually.

Significant studies on Pacific Peoples’ health status, needs and use of services

The health status of Pacific Peoples has been analysed and documented in four main studies - The Pacific Health Chart Book, Tupu Ola Moui (2004), the National Primary Medical Care Strategy (NatMedCa) 2005, the National Health Survey (2006/2007) and most recently in the Health and Pacific Peoples in New Zealand (in print) study produced in collaboration by Ministry of Pacific Island Affairs (MPIA) and Statistics New Zealand. While the focus of our research is on Pacific

¹ Health expectancy, life expectancy, infant mortality, disability requiring assistance, mental health status, inappropriate emergency department use, smoking prevalence, improved diabetes and cardiovascular disease services, avoidable mortality, amenable mortality, ambulatory sensitive hospital (ASH) admissions, cancer survival rates, cardiovascular disease mortality, obesity, alcohol consumption, immunisation, primary health care utilisation, oral health, patient engagement, timely access to medical care.

² The information has been collected from a range of sources, including the Ministry’s Annual Report 2010 and some of the studies noted above.

people's health status in the context of primary health care, these studies have considered all outcomes as detailed above in the Ministry of Health's Outcomes framework.

The Pacific Health Chart Book: Tupu Ola Moui (2004)

The Pacific Health Chart Book: Tupu Ola Moui (2004), a stocktake of health needs, brought together information on more than 150 health and social indicators of relevance to Pacific peoples. The report was one of the first to provide a baseline for future assessment of progress in Pacific Health. Through an analysis of health indicators comparing Pacific people and Non-Pacific peoples it identified poorer health status, greater exposure to risk factors for poor health, and access barriers to health care for Pacific people. While this study reports on a wide range of indicators, it lacks in-depth analysis and a trend analysis, and it does not report on ethnic variations within the Pacific population.

National Primary Medical Care Survey (NatMedCa 2001/02; Davis et al, 2005)

In 2005, the Ministry of Health, in collaboration with the University of Auckland, the HRC and the University of Otago published the findings of the National Primary Medical Care Survey (NatMedCa, 2001/02) relevant to Pacific patterns of primary health care (Davis et al., 2005). This was the first major study looking at Pacific patients' utilisation of primary health care. The study compared Pacific patient visits to doctors with non-Pacific visits, and aimed to describe primary health care in New Zealand, including the characteristics of providers and their practices, the patients they see, the problems presented, and the management offered. The study sought doctors' views of their practice with Pacific patients, and each was asked to provide data on themselves and on their practice. This study used prioritised ethnicity to assess Pacific ethnicity, which may undercount Pacific patients who are also Maori. The data included 536 visits by Pacific patients out of a total of 9272 visits (5.8 percent of visits).

The 2006/07 New Zealand Health Survey

The 2006/07 New Zealand Health Survey collected information on more than 17,000 New Zealanders (4921 children aged from birth to 14 years and 12,488 adults aged 15 years and over). The survey included 1831 Pacific peoples. The New Zealand Health Survey measures self-reported physical and mental health status (including doctor-diagnosed health conditions), risk and protective behaviours for health outcomes, and the use of health care services among the usually resident New Zealand population living in private dwellings (Ministry of Health, 2008d). The 2006/07 New Zealand Health Survey included a range of questions designed to monitor the primary health care system and, in particular, four components of primary health care were

measured: access to primary care providers; comprehensiveness of health care; continuity and co-ordination of primary healthcare; and experiences of primary health care.

Health and Pacific Peoples in New Zealand (MPIA, in print)

The Health and Pacific Peoples report builds on the Pacific Health Chart Book and draws conclusions on which improvements would make the most difference to Pacific peoples' health outcomes. It provides background data for policy-makers and researchers to enable them to design programmes and policies that are tailored to the needs of Pacific peoples.

Summary and Key Findings of the studies

A summary of the findings of the studies above indicate that the health status of Pacific peoples is still considerably poorer than the New Zealand non-Pacific population. A comparison of the health status of Pacific peoples over time and with non-Pacific peoples indicates:

- the gap in life expectancy for Pacific peoples compared with the total New Zealand population increased between 2000-2002 and 2006. The life expectancy for Pacific males in 2000-2002 was 71.5 compared with 76.3 for total New Zealand males, and in 2006 Pacific male life expectancy was 71.3 compared with 78 years. This difference in life expectancy increased from 4.8 years lower to 6.7 years lower between Pacific males and total New Zealand males. For Pacific females the life expectancy in 2000-2002 was 76.7 years compared with 81.1 years for non-Pacific females and this gap had increased in 2006 to 6.1 years. (Minister of Health and Minister of Pacific Island Affairs, 2004 & Ministry of Health, in print).
- Pacific neonatal and post neonatal deaths (4 and 3.1 per 1000 respectively) were higher than non-Pacific (2.8 and 2.3 per 1000 respectively). While the neonatal figure dropped for Pacific peoples over time, the post neonatal figure increased to 3.6 per 1000 (Minister of Health and Minister of Pacific Island Affairs, 2004).
- in 2004 Pacific peoples had a SF-36 score of psychological distress lower than that of non-Pacific Peoples (81.9 vs. 82.9; Minister of Health and Minister of Pacific Island Affairs, 2004), however more recent evidence suggests that Pacific People have a higher prevalence of mental health problems as compared to non-Pacific (24.4 percent vs. 20.7 percent) (Te Rau Hinengaro, 2006).
- over time there has been no change in the smoking prevalence of Pacific peoples 34.6 in 2004 vs. 35 in 2010 respectively, and in both cases the prevalence is considerably higher than that of European population 34.6 vs. 26.2 in 2004 and 35 vs. 23.8 in 2010 (Minister of

Health and Minister of Pacific Island Affairs, 2004 & Ministry of Social Development Social Report, 2010).

- screening for diabetes and Cardiovascular Disease (CVD) appeared to be significantly higher for Pacific peoples than for non-Pacific Peoples. For example, screening per 100 adults for blood pressure for Pacific people was reported to be 56.1, compared to 50 for non-Pacific, and for diabetes this was reported to be 30.4 vs. 16.8 for non-Pacific (Minister of Health and Minister of Pacific Island Affairs, 2004).
- avoidable mortality was considerably higher for Pacific males compared to European males in both 2004 and 2010 - 771 vs. 497. While Pacific peoples' avoidable mortality has decreased over time, it is still significantly higher than European males - 392 vs. 214 respectively (Blakely et al., 2007).
- amenable mortality was also significantly higher for Pacific males compared to non-Pacific males 131 vs. 70.6 per 100,000 (Blakely et al., 2007). Ministry of Health analysis in 2010 indicates that the standardised amenable mortality rate ratio is around 2 and the corresponding non-amenable ratio around 1.5 (both sexes). The fact that the relative inequality is wider for amenable than non-amenable causes is an indication of the contribution of health care to the ethnic inequality in health (Ministry of Health, 2010a).
- ASH rates for Pacific peoples were almost 2.5 times higher than for European/other people in 2008/09. The rate of ASH admissions for Pacific peoples increased noticeably between 2000/01 and 2008/09 - 3100 vs. 3700. Note numbers are estimates based on Ministry of Health graph- Fig 19 p. 126 Annual Report (2010).
- Pacific peoples show the lowest relative survival rates for female breast 0.71 vs. 0.83 and cervical cancers 0.57 vs. 0.79. Pacific people had lower colorectal survival rates than European peoples - 0.49 vs. 0.61. Note numbers are estimates based on Ministry of Health graph- Fig 19, p. 126 (Annual Report, 2010).
- Pacific peoples had significantly higher mortality rates than non-Pacific peoples in both 2004, 250 vs. 200 per 100,000 and 2010, 260 vs. 150 per 100,000; and this increased over time, 250 vs. 260 per 100,000 (Annual Report, 2010).
- Pacific children and Pacific adults were at least 2.5 times more likely to be obese than children and adults in the total population in 2006/07. Trends in childhood obesity over time show that obesity remained stable from 2002 to 2006/07, at around 9 percent of 5 to 14 year olds. There was no significant change in Pacific children (26 percent) over this period. For Pacific men, there was a significant increase in the prevalence of obesity from 1997 to 2006/07, while for Pacific women there was no significant change (Annual Report, 2010).

- in 2004, the hazardous drinking scores were similar between Pacific and non-Pacific peoples 8.6 vs. 18.9 (Minister of Health and Minister of Pacific Island Affairs, 2004); however most recently, the prevalence of hazardous drinking is higher in Pacific males than non-Pacific males 32.5 percent vs. 29 percent (Annual Report, 2010).
- the proportion of children fully immunised at 2 years has increased from 53 percent for Pacific children (63 percent total population, 1991 National survey) to 91 percent for Pacific children and 88 percent for the total population in February 2011 (Minister of Health and Minister of Pacific Island Affairs, 2004; and Immunisation Advisory Centre, February 2011).
- on average, Pacific peoples visited a primary health care facility more than non-Pacific peoples 3.6 vs. 3.1 (Davis et al, 2005).

Access and Quality of Primary Health Care for Pacific Peoples

In 2009, Tobias and Yeh suggested that improvements in access to and quality of health care for Pacific people will make a difference to Pacific peoples' poorer health status. The evidence suggests that for Pacific people, the rate of access to primary health care providers is comparable to other groups (National Health Survey, 2006). For example, the adult age-standardised average number of visits in the previous 12 months to a primary health-care service was 3.6 for Pacific peoples compared with 3.1 for the whole population – and Pacific children were as likely to access care as other groups (National Health Survey, 2006). The 2006 results relating to access to primary health care service appears to have improved from the NatMedCa results of 2001/2002 which suggested that on average, Pacific peoples visited GPs less than non-Pacific peoples in the previous 12 months (5.7 visits vs. 6.6 visits for the total sample (Davis et al, 2005).

In terms of access, it was reported in October 2007 that nearly 100 percent of Pacific peoples were enrolled with a PHO (CBRF, Risk Register, HealthPac, 2007)³. Furthermore, Craig et al., 2007 reported that Pacific children and young people had higher enrolment rates compared with non-Pacific people. In terms of comprehensiveness of health care, Pacific adults were significantly more likely than other adults in the total population to have had a discussion about smoking, nutrition, weight, exercise, oral health and alcohol use with their health provider. However NatMedCa 2005 noted that for Pacific peoples only 17.8 percent of the visits resulted in tests and investigations being ordered, compared to the total sample population average of 24.9 percent (Davis et al, 2005). Furthermore the NatMedCa Study also noted that Pacific patients received fewer treatments overall, expressed as a rate both per 100 visits (74.7 vs. 114.6) and per 100

³This data is from the Enriched CBF Register produced by HealthPac at the Ministry of Health.

problems (51.6 vs. 68.3), and the rate of referral was lower for Pacific (10.2 percent vs. 15.8 percent) (Davis et al, 2005).

This supports Tobias and Yeh's suggestion that the issue may be more one of quality of health care for Pacific people. This is also supported by the findings detailed in the New Zealand Health Survey 2006, which noted that satisfactory experiences of primary health care differed significantly amongst ethnic groups. Pacific adults (as well as Asian and Maori) were significantly less likely than adults in the total population who saw a primary health care provider in the previous 12 months to report that their health care professional treated them with respect and dignity 'all of the time'. In addition, Pacific adults (as well as Asian and Maori) felt there had been inadequate time for discussion of their health care with their health care professional 'all of the time' (Ministry of Health, 2008d).

Other findings from the National Health Survey 2006 suggest that the issues for Pacific peoples in primary care are more than access. Nearly all Pacific (98.5 percent, 97.3–99.6) and non-Pacific (97.8 percent, 97.2–98.3) children had a primary health care provider (a GP clinic, after-hours accident and medical centre or nurse clinic) that they go to first when feeling unwell or injured. After adjusting for age, there was no difference between Pacific and non-Pacific children in the proportion that had a primary health care provider. For most Pacific (98.4 percent, 97.1–99.6) and non-Pacific (98.5 percent, 98.1–99.0) children with a usual primary health care provider, this provider was a GP. In terms of children's access, four out of five Pacific (83.5 percent, 80.0–86.9) and non-Pacific (78.6 percent, 76.9–80.3) children had seen a GP in the previous 12 months. After adjusting for age, Pacific children were slightly more likely to have seen a GP in the previous 12 months compared with non-Pacific children (p-value = 0.04) (National Health Survey 2006).

Pacific patients were viewed by practitioners as much less likely to be fluent in English than all patients (22.4 percent not fluent vs. 4.1 percent), and practitioners were also less likely to record high levels of rapport (54.81 percent vs. 68.7 percent for the sample) (NatMedCa, 2005). Furthermore the NatMedCa Study reported an average visit time of 11.9 minutes for Pacific peoples, compared to 14.9 minutes for the total sample. The difference in the duration of the visits has also been reported in the study by Crampton, Jatrana, Lay-Yee, & Davis, 2007.

Future work and unmet need

Annual exposure to primary medical care is both a direct measure of the utilisation of primary medical care and an indicator of access – groups with high identified health care needs, regardless

of which population group they belong to, should have relatively high exposure to primary medical care. Crampton et al. (2007) used the NatMedCa survey data to estimate, among different population groups, the average duration of visits to a general practitioner, the average number of visits, and the average population exposure to primary medical care in New Zealand. While this study found that the number of visits were comparable to other populations, the study found that the duration of each visit was significantly lower than other populations.

The average time spent annually with GPs during visits is a key indicator of access and use of primary care. The NatMedCa Survey found that Pacific, Māori, and Asian people spent significantly less time with GPs, after controlling for a range of other variables (11.9 vs. 14.9 minutes). In a similar study, Crampton, Jatrana, Lay-Yee, & Davis, 2007 also reported that overall, Pacific patients spent an average of 18.8 minutes less time annually with GPs than European patients. This increased to an average of 24.1 minutes less time among those living in areas with the fewest economic resources (Crampton, Jatrana, Lay-Yee, & Davis, 2007). The significant difference in the amount of time Pacific peoples spent with GPs, as compared to other populations suggests that the nature and quality of the consultation may be an issue.

The quality of health care is in part determined by interpersonal care; the interaction between health-care professionals and health-care users or their caregivers. Underlying good interpersonal skill are communication skills, the building of trust, understanding and empathy, the discussion and explanation of the patients' symptoms, and involvement in decisions regarding management or treatment of a patient's condition (Campbell, Roland, & Buetow, 2000). Patient-centred care improves health outcomes, and encompasses concepts such as "shared decision making" and "informed choice" (Robb & Seddon, 2006).

Barriers and facilitators to health service delivery

In the New Zealand Health Survey 2006/07, just over 11 percent of Pacific peoples reported having an unmet need for GP services in the previous 12 months. The main reasons cited were:

- cost;
- lack of time;
- lack of availability of a suitable appointment; and
- not wanting to make a fuss.

Pacific peoples were significantly (33.4 percent) more likely than non-Pacific people to cite cost as a reason for an unmet GP need. Cost was also highlighted as a factor in the collection of prescribed medications (Jatrana, Crampton, & Norris, 2010). Although subsidies for primary care services have been increased, there is evidence that cost is still a barrier for Pacific peoples, and the consultation rate may not reflect the Pacific peoples' true level of health-care need.

While the above evidence suggests that access to care and the quality of care is improving, outcomes for Pacific Peoples are not equivalent to other ethnic groups. The Health and Pacific Peoples in New Zealand (MPIA, in print) study notes that the reasons for this are complicated, and seem to include a combination of late presentation, receiving appropriate medication and treatment less often, and less effective ongoing management. This is influenced by the cultural attitudes and expectations of both Pacific peoples and those in the health system, and by levels of financial resources. Improved cultural competence of services will improve the quality of consultations and services, promote improved health-care delivery, and improve health outcomes (MPIA, in print).

Evidence from Davis et al., 2005 suggests that GPs were less likely to report high rapport with Pacific patients (16.1 percent vs. 15.4 percent for the sample) and that this may reflect the difficulties of working through caregivers during the consultation, or generational or cultural differences (Davis et al, 2005). The New Zealand Health Survey 2006/07 showed continuing lower levels of interpersonal communication measures between Pacific peoples and their GPs, compared with the overall population. During primary care consultations, 87.2 percent of Pacific adults reported that they were treated with respect and dignity all the time, this was significantly lower than adults in the total population (SRR 0.95, 0.92-0.99). In addition 68.2 percent Pacific adults reported that their health-care professional had discussed their health care and treatment as much as they wanted (Ministry of Health, 2008d).

Priority Health Areas

The report *'Ala Mo'ui: Pathways to Pacific Health and Wellbeing (2010-2014)* (Minister of Health & Minister of Pacific Island Affairs, 2010) identifies the health areas of greatest concern for Pacific people. This section reviews the evidence for health issues in primary care for Pacific people in these priority areas, which are:

- child and youth health

- reducing the prevalence of risk factors, including obesity, alcohol and drug abuse, and smoking; and
- preventing and managing long-term conditions.

Child Health

Pacific child health is an important priority health area identified in *'Ala Mo'ui: Pathways to Pacific Health and Wellbeing (2010-2014)* (Minister of Health & Minister of Pacific Island Affairs, 2010). Pacific children were identified in 1998 as a priority population in the New Zealand *Child Health Strategy* (Ministry of Health, 1998) because they tended to experience poorer health outcomes and were exposed to more risk factors for disease and illness compared to non-Maori, non-Pacific children, yet significant inequalities persist.

There were 100,344 children in New Zealand aged 0-14 years identifying with a Pacific ethnic group in the 2006 Census. Pacific children aged 0-14 years make up over one third (36.5 percent) of the total Pacific population, of which most are concentrated in urban regions in Auckland and Wellington (Statistics New Zealand, 2006). Pacific children are more likely to reside in areas of high neighbourhood deprivation (NZDep 2006 deciles 9 and 10) compared to non-Pacific children.

Health systems data indicates the risk factors that impact on the health of Pacific children: many have poor nutrition, live in low-income crowded households, and are exposed to household smoking (Ministry of Health 2008a). The 2006/07 New Zealand Health Survey found Pacific children aged 2-14 years were more likely to be overweight (31.4 percent) or obese (23.3 percent) compared to non-Pacific children (19.6 percent and 6.4 percent respectively). Pacific children were also significantly less likely to eat breakfast at home every day and consumed more fizzy drink (52.8 percent versus 44.6 percent) and fast food (73.5 percent versus 62.1 percent) in a typical week compared to non-Pacific children (Ministry of Health, 2008d). The combination of these factors means Pacific children are particularly vulnerable to both non-communicable and communicable diseases.

Pacific children hospital admissions

Pacific children experience high rates of avoidable hospitalisations, particularly ASHs. Pacific child ASH rates are high for respiratory infections, asthma, and skin infections, and the high rates are thought to reflect inadequate access to quality primary care (Grey, unpublished). In 2008/09, the rate of Pacific children presenting with ASH was 2.6 per 100, compared to the New Zealand

population of 1.6 per 100 children (Ministry of Health Child Health Indicators, unpublished (2010).)

Higher ASH rates are also reported for Pacific people aged 0-74 years. The Ministry of Health Annual Report includes trends in ASH rates by ethnic group. The graph below shows that in 2008/09 ASH rates for Pacific peoples were almost 2.5 times higher than for European/Other people, and ASH rates for Māori were 2 times higher than those for European/Other (see Figure 1).

The rate of ASH admissions for Pacific peoples increased noticeably between 2000/01 and 2008/09, in contrast with Māori ASH rates, which trended slightly upwards, and European/Other rates, which trended slightly downwards over the same period (Ministry of Health, 2010).

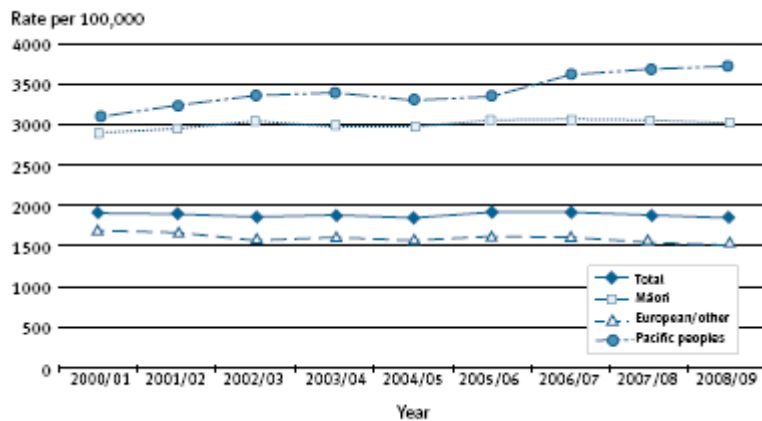


Figure 1 Ambulatory-sensitive hospital admissions for people aged 0–74 years, age-standardised rate per 100,000, by ethnicity, 2000/01 to 2008/09

Source: Ministry of Health, 2010

Craig’s review (Craig et al., 2008) of the health of Pacific children found that foetal and neonatal mortality rates were higher for Pacific babies than the total population, indicating improvement in antenatal care was needed. The report found that from 2002 to 2006 rates of hospital admissions for Pacific children for preventable conditions such as skin infections, gastroenteritis and respiratory illness remained static or increased, with rates 2 to 5x higher than for non-Pacific, non-Maori children, living in less deprived areas. The report makes the point that while many of these conditions may be considered avoidable, on the basis that early access to effective interventions in primary care may have prevented their occurrence, these disparities reflect differences in access to the underlying cultural and socioeconomic determinants of health (Craig et al., 2008).

Another study reviewing New Zealand hospitalisation data (Baker et al., 2010) shows evidence of a significant increase in hospitalisations from close contact infectious diseases in the twenty years

leading up to 2009, with the highest rates among children. Most of the hospitalisations for infectious diseases over these years were for lower respiratory tract infections, including influenza, pneumonia and bronchiolitis, and hospitalisations for infectious diseases made up just over a quarter of all acute overnight hospitalisations between 2004 and 2008 (Baker et al., 2010).

For Pacific people, hospitalisations from infectious diseases between 2004 and 2008 accounted for almost one third (32.9 percent) of all Pacific hospitalisations. Ethnic inequalities between Pacific people and NZ European/Others appears to have increased in the twenty years leading up to 2009, with the Pacific rate being almost three times the European/Other rate in 2009 (Baker et al., 2010). The greatest increase in ethnic inequalities over the same period, for both Pacific and Maori, was for post-streptococcal diseases, particularly rheumatic fever. Pacific people were 11 times more likely than European/Other to be hospitalised for rheumatic fever in 1989, but this had increased to almost 31 times the European/Other rate in 2009 (Baker et al., 2010).

High rates of Pacific hospitalisations for close contact infectious diseases (respiratory, skin, and faecal-oral infections) and non-close contact infectious disease rates was driven by rates from the Samoan group, the largest Pacific group in New Zealand. Inequalities in hospitalisation rates for close contact infectious diseases (compared to the European/Other reference) were higher for Samoans and Tongans, but lower for Cook Islanders and Niueans (Baker et al., 2010).

Cellulitis

ASH admissions for childhood cellulitis are three times that of non-Māori, non-Pacific children (Laws, 1998, Finger et al., 2004, Das et al., 2008, all cited in Grey, unpublished (2010)). This example demonstrates that common access issues to primary care (transport, cost, language) need to be addressed, along with the ‘normalisation’ of skin infections in some communities. Grey (unpublished (2010)) cites evidence for barriers to primary care as a cause for the high cellulitis ASH rates from a case control study by Leversha at Starship; 40 percent of the children admitted with cellulitis presented late to a GP and required immediate hospitalisation (cited in Morgan et al., 2004).

Evaluation of targeted projects to reduce ASH rates due to cellulitis in Wellington and Auckland identified the need to address systems issues such as improved coordination between community providers, primary care providers and secondary care services, as well as capacity building of community providers and the need for longer term projects. The study notes that communities and practitioners alike are wary of short-term ‘one-off’ projects, where no relationship or trust has been

established. It also recommends the involvement of primary care providers with a proven track record in reaching Pacific peoples', particularly children focused services (Grey, unpublished (2010)).

Respiratory diseases

Numerous studies have reported high rates of hospitalisation for respiratory conditions including asthma in Pacific children, compared to other ethnic groups (Tukuitonga et al., 2000; Grant et al., 2001). Young Pacific children are particularly affected, with respiratory conditions making up 31 percent of ASH admissions for Pacific children aged 0-4 years, compared with 24 percent for Maori and 21 percent for non-Maori, non-Pacific children. Hospitalisations for respiratory conditions including asthma made up 24 percent of ASH for all Pacific age groups in 2008 (Grey, unpublished (2010)). These higher rates of respiratory hospitalisations have been attributed to either poor access to effective primary care and/or overuse of hospital services for acute asthma (Mitchell et al. and Garrett et al. cited in Grey, unpublished (2010)). The predominance of respiratory symptoms among Pacific peoples presenting to primary care was also noted in the NatMedCa study; 32 percent of visits to primary care for Pacific peoples were for respiratory problems compared with 25 percent of visits of the total sample (Davis et al., 2005).

Asthma

New Zealand has one of the highest prevalences of asthma in the world, and most hospital admissions occur in children aged under five years (Ministry of Health, 2008a). Some studies show that Pacific children have higher rates of severe asthma symptoms. Pacific children reported more waking at night with wheezing than European children, but reported a lower prevalence of diagnosed asthma (Pattemore et al., 2004). This finding suggests there is poor management of asthma among Pacific children, and this is supported by the lower reported use of bronchodilators and preventer medications among Pacific children (Pattemore et al., 2004).

Grey (unpublished) notes that while there is significant evidence to support the use of disease management and education programmes to reduce ASH rates due to asthma, educational programmes require effective communication and as such the known language barriers in dealing with Pacific patients need to be considered (The study notes that in NatMedCa, doctors were more likely to report that Pacific patients were less fluent in English than patients overall – 22.4 percent of Pacific patients, compared with 4.1 percent of other patients (Davis et al., 2005).)

Pandemic influenza

Pacific children are particularly vulnerable to pandemic influenzas because of poor-quality crowded housing and socioeconomic deprivation. Pandemic Influenza A (H1N1) became a worldwide concern in 2009 when the World Health Organisation declared the first pandemic in 41 years (Bandaranayake & Huang, 2010).

Seroprevalence studies from 2009 show Pacific peoples had the highest seroprevalence of H1N1 of all ethnic groups, and had higher rates of hospitalisations and intensive care admissions compared to European and Others. The rates of H1N1 among Pacific peoples were 4 times the European/Other rates, and hospitalisation rates were almost 7 times (RR = 6.7, 95 percent, CI: 6.2–7.1) the European and Other rates (Baker et al., 2009). Other groups that were over-represented in hospitalisations and intensive care admissions were infants and the socioeconomically deprived. Multivariate analysis has revealed that young age is the most significant risk factor for pandemic influenza infection, followed by ethnicity, making young Pacific children under 5 years old particularly at risk (Bandaranayake & Huang, 2010).

The Pandemic Influenza Mortality and Morbidity Review Group (PIMMRG) found that those most likely to be admitted to intensive care for pandemic influenza were children aged under 5 years. Of those hospitalised for H1N1, obesity was a frequent co-morbidity, and people with pre-existing respiratory illnesses, particularly chronic respiratory disorders, as well as obese people were often affected more severely (PIMMRG, 2010).

Youth Health

The Ministry of Health (2008) found Pacific youth to be generally healthy but living in the most deprived NZDep areas in overcrowded housing with less than ideal diet and limited access to sporting and recreational facilities, and poorer educational attainment than other ethnic groups. These factors together with reservations about using conventional health services represent considerable challenges to improving health and social and economic status (Ministry of Health, 2008).

Young people have special needs in relation to their developmental stage, the transition between child and adult; and are often reluctant users of health services (Birks & Counties Manukau District Health Board, 2006; Counties Manukau District Health Board). They have high potential for behaviours identified as placing them 'at risk'; that may impact on their future health (Adolescent Health Research Group, 2008; Gluckman, Hayne, & Taskforce group, 2011).

Despite the positive picture of increased primary care access more generally, others point to a disappointing trend in primary health care services particularly for youth. Dutton (2006) states that

during the PHO establishment process, many youth services were not asked to be part of PHO set up and therefore missed out on funding.

Research on youth health finds that the current primary care services for youth may be insufficient (Winnard, Denny, Fleming, & Health, 2005). Scott's (Scott et al., 2006) audit of paediatric and adult hospital-based diabetes services for children and youth found many young people with diabetes in NZ had poor glycaemic control and a disturbing prevalence of early microvascular disease, despite introduction of intensive insulin therapy. Of those with a duration of diabetes >10 years, 25 percent had retinopathy and 27 percent nephropathy. Over the age of 12, microalbuminuria was more common amongst Maori and Pacific youth (43.8 percent) compared to Europeans (17 percent) or Others (17.8 percent) and this was independent of the type of diabetes. That there were significant differences between centres independent of other factors suggested opportunities for healthcare service improvement.

The study concludes that Type 2 diabetes (T2DM) in young people, (and Pacific more urgently) is becoming a major problem and is associated with early onset nephropathy and dyslipidaemia (Hotu, 2004). The study recommends a greater adherence to management guidelines in screening for complications. T2DM in young people requires earlier diagnosis, which is likely to be achieved by targeted screening of high risk children and adolescents.

In this respect, different service delivery models for youth health care is important (Birks & Counties Manukau District Health Board, 2006; Counties Manukau District Health Board, 2005b; Winnard et al., 2005). A recent study showed youth-specific primary care models of care that were intensive and coordinated showed higher engagement with Pacific young people (Kool et al., 2008). This study is discussed further in the section on primary care in school based settings, p. 48.

Reducing prevalence of risk factors

The major causes of premature death in adults in New Zealand are chronic diseases, such as cardiovascular disease and cancer (National Health Committee, 1998). These diseases are influenced by an individual's behaviour patterns or life-style factors in that the "the risk factors of today are the diseases of tomorrow" (Ministry of Health and Ministry of Pacific Island Affairs, 2004). Better Sooner More Convenient Health Care in the Community (Ministry of Health, 2011) emphasises the importance of prevention for addressing lifestyle-based risk factors, as well as the increasing role of integrated care approaches, which include primary and secondary prevention as well as health promotion in primary care. The risk factors requiring most urgent action for Pacific

people, identified in 'Ala Mo'ui (Minister of Health & Minister of Pacific Island Affairs, 2010), are obesity, alcohol and drug abuse, and smoking. The evidence for Pacific peoples' health and trends in relation to these risk factors is presented here.

Obesity

Obesity has severe health effects, including cardiovascular disease, some cancers and diabetes. New Zealand has one of the highest obesity rates among OECD countries (Ministry of Social Development (MSD), 2010). In 2006/07, Pacific people were at least 2.5 times more likely to be obese than the total population – for adults, the rates were Pacific 65 percent, Maori 43 percent, European/other 23 percent, Asian 12 percent. Among children aged 5-14 years, the pattern of obesity was similar to that for adults. Pacific children had the highest rate (26 percent), followed by Maori children (13 percent), Asian children (6 percent) and European/Other ethnic groups (5 percent). Trends in obesity over time show a significant increase in adult obesity in the total population in New Zealand from 19 percent in 1997 to 25 percent in 2006-07 (MSD, 2010), however, that increase is slowing and there was no statistically significant increase between 2002/03 and 2006/07. Trends in childhood obesity over time also show no change between 2002/03 and 2006/07 for children, including Pacific children. The graph below illustrates that after adjusting for age, Pacific males and females were significantly more likely to be obese than males and females in the total population across all age groups except the 2–4 years age group.

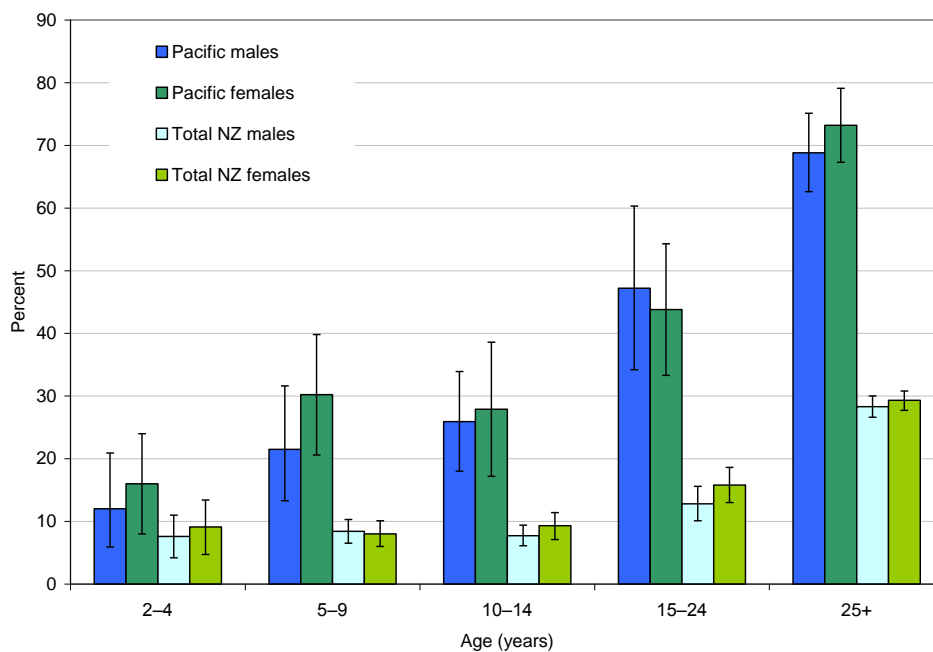


Figure 2: Prevalence of obesity, Pacific and total population, by age and sex, 2006/07 (age standardised)

Source: New Zealand Health Survey 2006/07.

Smoking

Smoking is the leading modifiable risk factor in New Zealand; it causes approximately 18 percent of all deaths and contributes to significant morbidity. Second-hand cigarette smoke is also a significant health hazard (Ministry of Health, 2005a). Overall there has been a significant decline in the prevalence of daily smoking – between 2002/03 and 2006/07; rates fell from 23.4 percent to 18.7 percent (MSD, 2010). Between 1999 and 2009, there was a significant decline in the rates of smoking among Pacific youth -- the daily smoking rates for girls fell from 23 percent to 7 percent and for boys from 17 percent to 6 percent (MSD, 2010). This trend has not occurred in Pacific adults, who had the second-highest cigarette smoking rate, after Maori, in 2008.

The Ministry of Health has identified smoking cessation as a performance indicator of the quality and effectiveness of health services, by adopting the health system target “Better help for smokers to quit”. Although this indicator relates to secondary care, primary care also has an important role to play in identifying smokers and offering smoking cessation advice and referral to smoking cessation services. The PHO performance management programme introduced indicators related to patients’ smoking status in January 2010; however, these results are not yet reported nationally. Research indicates Pacific peoples have lower access to smoking cessation services, such as Quitline and Nicotine Replacement Therapy (NRT). Litmus (2010) cites research by Thornley et al. (2010) that Pacific peoples in the Counties Manukau District Health Board (CMDHB) region were 60 percent less likely to claim NRT than European New Zealanders. This study also notes that in the CMDHB region (a region with a higher proportion of Pacific peoples than the national population) only an estimated 2.3 percent of smokers accessed NRT in 2007. This compares with The Quit Group’s log of calls from 8.2 percent of the smoking population in the same year (Litmus, 2010).

Alcohol and drug (AOD) misuse

Hazardous alcohol use is associated with higher risk of injury, damage to the central nervous, gastrointestinal and cardiovascular systems, harm to foetal development, and several cancers (Ministry of Health, 2010). Ministry and DHB plans indicate an increasingly central role for primary care in the prevention and earlier intervention for hazardous AOD use, and the care and treatment of people with mild to moderate AOD problems. Hazardous alcohol consumption is included as a performance indicator in the Ministry’s quality and effectiveness dimension of health system performance.

The 2006/07 Health Survey found that 21 percent of adults who reported having consumed alcohol in the past 12 months had a hazardous drinking pattern. Although fewer Pacific peoples drink alcohol compared with the general population, Pacific males who drink alcohol have high rates of hazardous drinking – 33 percent, compared with 41 percent for Maori males, 29 percent for European/other males, and 19 percent for Asian males (Ministry of Health, 2010). However, Pacific peoples have low rates of illicit drug use. In 2007 Pacific peoples comprised just 2 percent of frequent illicit drug users. Comparison of methamphetamine use from 2005 to 2007 showed the proportion of frequent Pacific users was consistent at 3 to 4 percent.

Preventing and Managing Long Term Conditions

Long-term conditions are the major cause of morbidity in New Zealand, and Pacific and Maori people are disproportionately affected. The high rates of lifestyle risk factors and the impact of population-aging means that chronic conditions will have a major impact on Pacific people's health and health care needs in the future. The conditions that impact most on Pacific people, and which are discussed here, are:

- diabetes
- cardiovascular disease
- stroke
- cancer
- mental health.

Diabetes

Diabetes is one of the most important health issues for Pacific peoples. In 2006/07, 10 percent of Pacific peoples aged over 15 years reported a diagnosis of diabetes. This is approximately three times the rate for the total New Zealand population (Ministry of Health, 2008d). Pacific people are diagnosed with diabetes ten years before European New Zealanders, and have higher rates of mortality and complications including renal failure and foot amputations (MPIA and Statistics New Zealand, in print).

A cross-sectional study on the primary care provided for Pacific people with Type 2 diabetes in South and West Auckland (Robinson et al., 2006), reported on the external audit of general practice diabetes care carried out by the Diabetes Care Support Service. The aim of the study, which included results of 5917 routine patient audits carried out in 2003, was to establish whether there were important differences in care provided to different ethnic groups. Number of visits,

recording of important information, risk factors, and treatments were compared between different ethnic groups. The study found usual care (number of consultations, regular examinations and investigations) was similar across ethnic groups, but Pacific people were not achieving the same outcomes of care because they presented with other risk factor conditions for diabetes, in particular, being a smoker (18 percent Pacific smoking prevalence compared to 13 percent European), having an HbA1c, blood glucose level, greater than 8 percent (56 percent Pacific vs. 23 percent European), and having microalbuminuria, protein in urine, (50 percent Pacific vs. 27 percent European). The study pointed to changes to “usual care” and more specific intensive diabetes care for Pacific to address the co-morbidity conditions that also pose a risk for diabetes.

A study in the South Island that reviewed the *Get Checked* programme for patients with diabetes confirmed Pacific people were receiving the same routine diabetes care as other groups, yet Pacific people presented greater health vulnerability with differences in seven of nine health status measures that complicated their diabetic outcomes (Tomlin, Tilyard, Dawson, & Dovey, 2006). Specifically, Type 2 Maori and Pacific patients were more likely than Type 2 New Zealand Europeans to be overweight, to smoke, have a higher HbA1c, have a higher diastolic blood pressure, and higher triglyceride levels. There was some evidence of lower systolic blood pressure, but total cholesterol was not significantly different. The study noted that the *Get Checked* programme (a MoH programme) aims were to increase the health of all patients with diabetes, but it was not clear that the “usual care” mainstream approach was specific or sensitive enough to address the greater Pacific health needs. The South Island study was large and able to cover 60 percent of patients with diabetes in the South Island, however, due to the small sample size of Maori and Pacific patients, Maori and Pacific data were combined to make up 5.8 percent of the sample (n = 759, 5.8 percent Maori and Pacific; n = 11,911, 90.3 percent European).

A more recent analysis of the *Get Checked* programme using a more complete national data set, including 2888 Pacific people, looked at CVD risk management across ethnic groups (Elley et al., 2008). This study found Pacific people (as well as Maori) within the diabetes *Get Checked* programme were receiving similar rates of appropriate CVD and preventive renal drug therapy to Europeans in 2004, though they had worse CVD and diabetes risk profiles. Among those attending the programme, Pacific people had higher levels of obesity, poorer glycaemic control and early renal damage compared with Europeans. Later work from this same group, which included 8559 Pacific peoples (Kenealy et al., 2008), found that although many Pacific people with diabetes progress to macrovascular and microvascular disease, the rate of progression was the same as for Europeans after adjusting for the (higher levels) of initial risk factors. This argues for a need to vigorously treat established risk factors and provide care that engages patients and supports

adherence to therapy. This study supports more integrated care models of primary care for chronic disease management, with specific orientation of current services for Pacific patients with diabetes and its related risk factors.

The high rates of Pacific enrolment in diabetes care in the *Get Checked* programme and the Counties Manukau Chronic Care Management (CMM) programme are encouraging. Of note, the *Get Checked* study above (Elley et al., 2008) found that Pacific peoples were more clustered than other ethnic groups into attending a limited number of primary care providers. Two thirds of Pacific people in this study attended only 10 percent of practices, suggesting that Pacific people with diabetes commonly prefer Pacific providers, and that these providers are providing good quality care.

Cardiovascular disease

CVD including heart, stroke and blood vessel disease, are the leading cause of death in New Zealand, accounting for 40 percent of deaths annually, and they are the leading cause of death in Pacific people (New Zealand Guidelines Group and National Heart Foundation, 2002). Cardiovascular disease mortality and morbidity can be substantially reduced with effective prevention and early treatment for those at moderate or higher risk (Ministry of Health, 2010), and the Ministry has included better cardiovascular services and cardiovascular disease mortality in its outcome indicators. Its national health target is that “an increased percentage of the eligible adult population will have had their CVD risk assessed in the last five years”.

Cardiovascular Risk Assessment (CVRA) is a tool for identifying individuals at risk of a CVD event (for example, stroke, heart attack or angina) and enable health providers to provide appropriate management and support. At the PHO level, the target is reported as part of the PHO Performance Management Programme Indicators (PHO Performance Programme and Ministry of Health, 2010). In 2010, 32.3 percent of the eligible population in PHOs had been assessed for their risk of developing cardiovascular disease, compared with 36.3 percent of the high needs population, which includes Maori, Pacific, and people resident in decile 9/10. This figure is well below the Ministry’s target of 80 percent, but the indicator was introduced only in 2008, and has a 5-year timeframe to reach its goal.

A study by Sinclair (Sinclair & Kerr, 2006) reports on the pilot for a database system for screening CVD risk in a cohort of patients from 3 general practices, one in Hawkes Bay and two in the South Auckland region. The two practices located in South Auckland had a high proportion of Maori and Pacific patients and those living in areas classified as ‘very deprived’ (deciles 9 and 10) – and

under-utilisation of primary care services and higher rates of disease for virtually every health condition. This primary care practice management software system was used to identify the patient cohort eligible for cardiovascular risk screening, calculate cardiovascular disease risk, and extract the data for reporting on screening outcomes and clinical management indicators in high risk patients. The results of the study showed a dramatic increase in cardiovascular risk assessment rates in the primary care setting. A total of 6570 eligible patients were identified, 20.1 percent of whom were Maori and 19.7 percent Pacific people, mostly of Samoan, Tongan, Niuean, or Cook Islands origin. Over 12 months, screening rates for cardiovascular risk assessment increased from 4.7 percent to 53.5 percent for the cohort.

Another important development for CVD assessment and management is PREDICT, a web-based clinical decision support programme. PREDICT has been implemented in primary care practices from nine PHOs in Auckland and Northland. Between 2002 and January 2009, over 70,000 CVD risk assessments were conducted (Grey et al., 2010). The PREDICT programme has already generated the largest cohort of Pacific peoples (10,301 Pacific peoples aged 35-74 years) ever to be studied in New Zealand. Grey's study found there were significant disparities in CVD risk factors for Pacific peoples, particularly for diabetes in both sexes and for smoking in men. Targeting these modifiable risk factors will be important in addressing the widening inequalities in CVD outcomes between Pacific peoples and other ethnic groups.

Primary care use of PREDICT has led to the development of a new secondary-care database system for CVD risk (AcutePredict) which appears to be improving treatment gaps amongst ethnic groups (Kerr, Looi, Garofalo, Wells, & McLachlan, 2010). This study showed in-hospital provision of cardiac rehabilitation has improved and appropriate discharge medication is high, and reported no differences in care between ethnic groups. The use of PREDICT as a database system for CVD risk is capturing useful information for Pacific groups, which seems to enhance their care within the system.

CVD mortality has declined steadily in New Zealand, reflecting the effectiveness of both prevention and treatment interventions – but not for Pacific peoples. For the total population, cardiovascular disease mortality rates declined by more than 25 percent between 1996 and 2007, from an age adjusted rate of nearly 200 deaths per 100,000 in 1996 to under 150 deaths per 100,000 in 2007. Of note, however, Figure 3 shows that cardiovascular disease mortality rates for Pacific and Maori, who have higher cardiovascular disease mortality rates than the total population, have *increased* since 2005 (Ministry of Health, 2010).

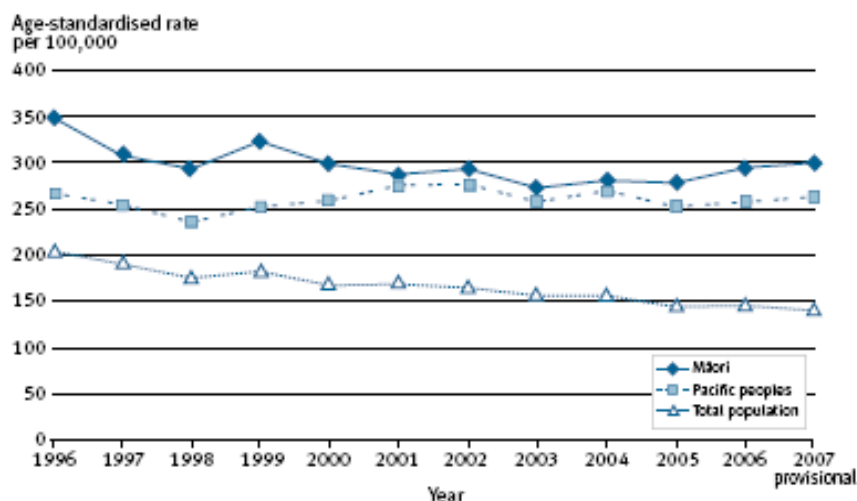


Figure 3: Cardiovascular disease mortality, all ages, age-standardised rate per 100,000, by ethnicity, 1996 to 2007

Source: Ministry of Health, 2010

Stroke

Pacific people have high rates of stroke compared to other New Zealanders, with research indicating that Pacific stroke mortality rates in 2001-04 were over two times the rates of European/Other New Zealanders (Blakely, 2009). In 2001-04, age-standardised stroke mortality rates were 27.3 per 100,000 for Pacific males and 19.9 per 100,000 for Pacific females. There was no significant difference in these stroke mortality rates between males and females (Blakely, 2009).

The Stroke Foundation of New Zealand (SFNZ) and New Zealand Guidelines Group’s clinical guidelines for stroke management (2010) provide an overview of the information available on strokes and their incidence in Pacific people. Specifically, the review notes that the incidence of stroke occurs at younger ages among Pacific people and, on average, 10 to 15 years earlier than for New Zealand Europeans. Similarly, another study also estimates that Pacific stroke incidence has increased by approximately 66 percent (CI = 11 - 225 percent), and is not aligned to the decreasing trends seen in New Zealand Europeans from 1981-2003 (Carter et al., 2006, cited in SFNZ, 2010 p.61).

The SFNZ guidelines have also reported that Pacific people have the highest rates of hospitalisation for stroke as compared to other groups, and there is some evidence to show poorer outcomes with greater dependence after stroke (SFNZ, 2010). This higher incidence of stroke among Pacific people is associated with the presence of more risk factors for stroke, including

diabetes, obesity, smoking, and hypertension. The guidelines also suggest that the lower use of primary and secondary preventive care (for example, use of cholesterol-lowering and blood pressure control medications) is likely to contribute to these poorer outcomes identified in Pacific peoples (SFNZ, 2010).

Cancer

Cancer was a leading cause of death in New Zealand in 2007, accounting for nearly 30 percent of deaths (Ministry of Pacific Island Affairs and Statistics New Zealand, in print). For Pacific people in New Zealand, cancer is a major cause of mortality and morbidity, and there is evidence that the burden of cancer, especially lung and colorectal cancer is increasing among Pacific people – and making an increasing contribution to health inequalities (Cancer Control Taskforce, 2005).

Cancer survival is a key outcome measure of cancer control and provides information on the effectiveness of health services in detecting and treating cancer. As such, the Ministry of Health 2010 Annual Report includes indicators for 5-year survival rates for the five major cancer sites: prostate, female breast, cervix, colorectal and lung cancer. Pacific people have a lower incidence of cancer – in 2004, the incidence of cancer was 10 percent lower for Pacific people than non-Maori, non-Pacific peoples (286.1 per 100,000) (Blakely et al., 2007) – but tend to have lower survival rates. The table in Figure 4 shows that Pacific peoples have the lowest relative survival rates for female breast and cervical cancers (Ministry of Health, 2010).

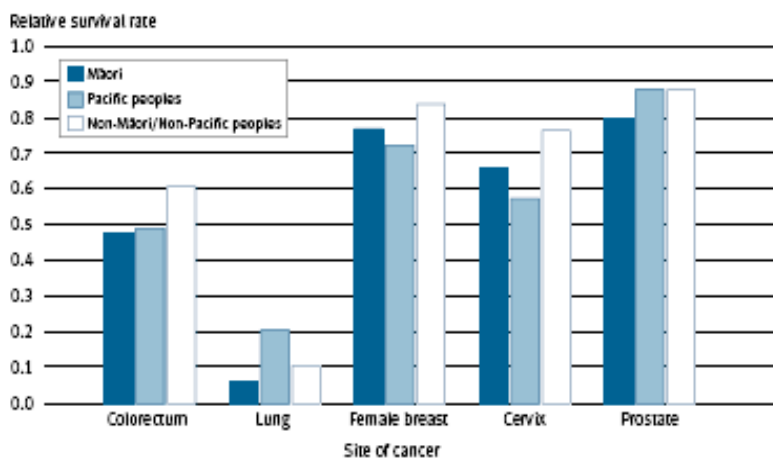


Figure 4: Five-year relative survival rates, by major cancer site and ethnicity, 1994 to 2006

Source: Ministry of Health, 2010

Ministry reports show that, in 2004, the age-standardised cancer mortality rates for Pacific people were 50 percent greater than non-Maori, non-Pacific peoples (168.1 per 100,000) (MoH, 2007a) and that inequalities in survival rates between Pacific and other ethnic groups increased between the three-year periods 1981-84 and 2001-04 (Blakely et al., 2007). Lung cancer was the most common cause of cancer deaths in Pacific men and the second-most common cause of cancer deaths in Pacific women in 2004. In the two decades between 1980 and 1999, the lung cancer mortality rate increased by 16 percent for Pacific men, in contrast to a 24 percent decrease for European men.

Mental Health

The first national mental health epidemiological study, Te Rau Hinengaro (Oakley Browne, Wells & Scott, 2006), provided the first reliable estimates of the mental illness prevalence rates for Pacific peoples (Ministry of Health, 2008b) – to ensure robust data, Pacific peoples had been significantly oversampled. The findings were that 25 percent of Pacific peoples experienced a mental health problem in the previous 12 months compared to 20 percent of the general population (Foliaki, Kokaua, Schaaf, & Tukuitonga, 2006; Suaalii-Sauni et al., 2009). Nearly half of Pacific peoples (46.5percent) had had some experience of mental illness in their lifetime (Foliaki et al., 2006). Further, only 25 percent of Pacific peoples who had been diagnosed with a serious mental illness accessed mental health services (Foliaki et al., 2006).

Suicide and suicidal behaviours are of growing concern in Pacific peoples, particularly those aged 16 to 24 years (Ministry of Health, 2008b). The MPIA report (MPIA, in print) notes that although young Pacific people are at higher risk, due to youth and poverty, the completed suicide rate for Pacific adults is 8.3 per 100,000 people compared with 13.5 per 100,000 for the overall New Zealand population. The report suggests that this lower rate is due to the protective effects of strong social structures such as church and family in Pacific communities (ibid.).

Pacific peoples have the highest average cost of adult inpatient and community episodes, being 25 percent above the national average for inpatient episodes and 44 percent above the national average for community episodes (Pulotu-Endemann, 2004). Additionally, although Pacific peoples comprise 6.9 percent of the population in New Zealand, they make up 12 percent of all involuntary inpatient mental health users (Pulotu-Endemann, 2004).

Mila, Schaaf & Hudson (2009) summarise the issues for Pacific people:

“... the combination of having a higher burden of mental illness, particularly in the area of serious mental illness, with high rates of involuntary, forensic and acute admissions, low or late

presentation to services which – once accessed –involve the longest and most costly stays establishes a fairly bleak vista of the state of Pacific peoples’ mental health in New Zealand”

(Mila, Schaaf & Hudson 2009, p.10).

Therefore, while the availability of robust data has allowed more reliable prevalence rates and a better understanding of Pacific peoples’ mental health needs, there still exist questions over what should be done and how should it be done. A recent report on primary mental health care (Collings et al., 2010) recommends that to answer these questions research needs to look at how mental health is viewed by Pacific peoples and to identify the critical factors to consider when working with Pacific peoples experiencing mental illness.

District Health Boards

Pacific people are highly urbanised, with 67 percent of the total population resident in Auckland region DHBs and 85 percent resident in seven urban DHBs including Counties Manukau DHB (CMDHB), Waitemata District Health Board, Auckland District Health Board (ADHB), Waikato District Health Board, Capital and Coast District Health Board (CCDHB), Hutt Valley District Health Board (HVDHB) and the Canterbury District Health Board (CDHB). The Pacific population distribution by DHBs is contained in appendix one. Similarly the majority of Pacific people belong to only a few PHOs – 73 percent of Pacific people are registered with one of 4 PHOs – Procare, Te Hononga O Tamaki Me Hoturoa Charitable Trust, Healthwest and Alliance Health Plus. Alliance Health Plus is the consortium of Pacific providers. The concentration of Pacific people residing in a few DHBs and registered with a few primary care providers suggests that intensive targeting is the most effective strategy for making significant changes in Pacific health status.

A desktop review was undertaken of the seven DHB annual reports for the year ending June 2010. The DHBs were selected as the districts that contained the majority of New Zealand’s Pacific population groups. The annual reports were reviewed for whether primary health care use was reported for Pacific populations and to assess the indicators used. Furthermore, DHB websites were searched for public access documents detailing HNA and specific health plans targeting Pacific Peoples.

Four out of the seven DHBs had Pacific health plans available in the public domain, either as separate documents (CMDHB, CCDHB), or as sections of annual strategic plans (ADHB; Waikato

DHB). Five out of the seven DHBs had Pacific health needs assessment documents available online (CMDHB, ADHB, Waitemata DHB, Waikato DHB, CDHB), although some were dated back to 2004 (CDHB). Some health needs assessments included Pacific community consultations as well as health data (Waitemata DHB), others consulted with Pacific advisory boards (CMDHB) and others presented only health data trends by region to highlight Pacific health needs (ADHB, Waikato DHB, CDHB). CMDHB is the only district to have completed a HNA within the Pacific grouping, detailing health and social indicators by specific Pacific Island groups, e.g., analysis by Samoan, Cook Island, Tongan and Niuean (Novak, 2007). This report found very few differences existed between Island groups and where differences were found, a pattern emerged between Samoans and Tongans sharing similarities on several indicators compared to Cook Islanders and Niueans. These differences may reflect the different migratory histories and cultural systems between the groups. Ethnic specific analysis is discussed in more detail in Part 2 of this report.

Counties Manukau District Health Board

Of the three Auckland district health boards, most Pacific people reside in the Counties-Manukau District Health Board (CMDHB) – 37 percent of all Pacific New Zealanders live in Counties-Manukau. As a consequence, significant primary care initiatives and reporting with a Pacific focus is now available from CMDHB. The inclusion of this regional specific data is also a reflection of the focus of primary healthcare literature in New Zealand, which draws on the health care experiences of CMDHB.

In 1998, CMDHB was experiencing rapidly increasing demands on its secondary services (Clarke, Howells, Wellingham & Gribben, 2003; Gribben, 2003), and was finding it increasingly difficult to meet the health needs of its relatively deprived population. There was widespread evidence of "systems failure", with poor coordination of primary and secondary services. It was suggested that up to 30 percent of hospital admissions could be prevented with more timely primary care intervention (Ministry of Health, 1999). Prevention of 30 percent of acute medical admissions during the fiscal year 2000/01 would have meant approximately 4000 fewer admissions to South Auckland Health. A strategic plan was devised to meet identified priorities and this was subsequently implemented with extensive community involvement (Gribben, 2003).

Several reports detail the experience of CMDHB in implementing a "disruptive change" model with a series of integrated care projects, some thirty separate projects undertaken to improve coordination and integration of health services (Clarke et al., 2003; Gribben, 2003; van Gessel,

2010; Wellingham, Tracey, Rea, & Gribben, 2003). Early evaluation results from these CMDHB projects were promising. After 10 years of sustained annual 9 percent growth in acute hospital admissions at Middlemore Hospital, in 2002 the growth in hospital admissions was zero, which the authors state is a result that is unlikely to be a statistical aberration (Gribben, 2003).

Positive outcomes for Pacific peoples, who have been part of the CMDHB’s CMM Programme, are reported by Sinclair, (2007). The CMM initiative was originally started as a component of diabetes management for enrolled patients of all eight PHOs in the DHB, and later expanded to cover congestive heart failure, chronic obstructive pulmonary disorder and CVD. A depression module was recently added.

The programme uses enrolment and engagement as measures of reach in the community (target of four visits a year). Pacific participants in the programme showed the greatest improvement in The HbA1c (see Figure 2). In addition, a non-significant but clear downward trend in reduced smoking prevalence was seen among Pacific patients. The report notes the importance of integration of service delivery and workforce, stating that ‘*integrated teamwork is fundamental to changing the current model of primary care from acute services to chronic care model*’ (section 9) (Sinclair, 2007).

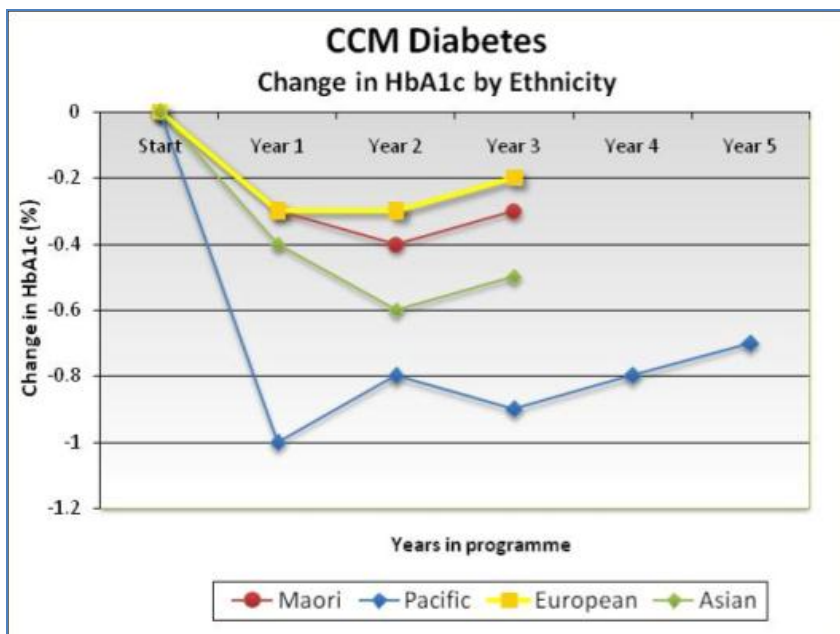


Figure 5: Chronic Care Management Diabetes – change in HbA1c by ethnicity
Source: Sinclair, 2007

A recent review of health services targeted at Pacific people (Pacific Perspectives, unpublished 2011) includes a summary of a CMDHB report (CMDHB, 2011) on community based services in primary health care. The focus is on lifestyle and health promotion programmes including nutrition and physical activity as part of chronic care management. Key anecdotal/participant case studies in the report include a community nutrition course (Franklin Tongan Community), gardening grants (Potu Makutafea, reaching 40 families/600 people in Pukekohe; Peteli Community Garden, reaching over 40 families plus a waiting list in Papakura), physical activity interventions (Ola'anga Lelei in Papakura; Fonua Mo'ui Health Project in Manukau Tongan Parish of Methodist church), general Lotu Mo'ui church-based health promotion grants (over 25 separate projects funded in 2010). The outcomes measured are largely output-focused (numbers attending programmes, or 'satisfaction' in the community), with very few clinical indicators. However, the authors (Pacific Perspectives, unpublished) assert that when read alongside 'Lalaga' (2010) examples from the same communities, the 'acceptability' and 'reach' outcomes may be linked to improved clinical outcomes (Ryan et al 2010).

Furthermore, the report concludes that these initiatives are characterised by the use of community leadership, family focus and a 'pass it on' style of delivery to health promotion to promote key messages and encourage behaviour change (Pacific Perspectives, unpublished(2011)).

Recent analysis of primary care in CMDHB for Pacific peoples is less optimistic. van Gessel's 2010 review of primary care in CMDHB from 2001 to 2009 concludes that incremental changes in primary care have occurred with changes in the model of care from episodic acute care to population based preventative approaches and widespread use of systematised care for chronic disease, as well as some recognition of the need to address the determinants of health and the need for intersectorial approaches. For Pacific people, there is evidence of improved screening and immunisation rates (e.g. the Pacific 2-year immunisation rate in 2009 was 79 percent) and increases in age specific pharmaceutical spending point to increased primary care utilisation (Pacific per capita pharmaceutical expenditure is 16 percent higher than the average in CMDHB; Maori is 18 percent higher). These gains in primary care are tempered, however, by other indicators of unmet need and less effective primary care. The report includes data on 'less urgent' emergency care (EC) presentations (triage levels 4-5) and ASH rates as areas of concern. Pacific attendance at EC for less urgent conditions has steadily increased over the past decade, with a 12 percent increase since 2007 compared with falls in rates of EC less urgent attendance for other ethnic groups. The report notes that there has been no closing of the gap between population groups: in 2009 Pacific people were 70 percent more likely, Maori 23 percent more likely and non-Maori, non-Pacific 30 percent less likely to attend EC for a less urgent condition than the total

population. Similar trends are reported for ASH rates with an increase of 25 percent for Pacific people aged 0 and 74 years old between 2001/2 and 2008/9. This compares with increases in ASH rates for Maori of 20 percent and non-Maori, non-Pacific of 8 percent.

The report also reviews the impact of CCM programmes and suggests that overall uptake of these programmes may have benefitted healthier populations, and that more effort is required to engage effectively with high needs populations, including Pacific peoples. For example, Pacific engagement is lower than the overall CMDHB population for all modules except diabetes – cardiovascular disease 11 percent, depression 6 percent, COPD 23 percent, CHF 31 percent and Diabetes 43 percent.

Other findings of concern from the CMDHB primary care review of primary care programmes (van Gessel, 2010) are that uptake of the Primary Options for Acute Care (POAC) programme, established in 2001 to reduce acute secondary care demand by funding GPs to provide investigation and treatment not generally affordable in primary care, was that despite significant growth in the programme, Pacific people made up 22-25 percent of POAC referrals (Maori made up 15-18 percent). The report notes that although this is proportional to the numbers of Pacific and Maori in the population, this does not reflect the DHB's expectation of uptake based on need.

Barriers and Facilitators to Health Service Delivery: Identifying Successful Practice That Engages Pacific Peoples

Access to primary care

Often-cited barriers to primary care for Pacific peoples include language, family commitments taking priority, difficulty in meeting appointment times, difficulty in understanding the nature/necessity of an appointment, and complicated or multiple providers (Gribben, 2003; Grey, unpublished). Other barriers identified in relation to health services and chronic care include the cost of services, lack of access to transport or after hours services, communication barriers, and feeling cultural discomfort when discussing health issues with non-Pacific practitioners (Ministry of Health, 2008b; CBG Health Research, 2005, cited in SFNZ, 2010).

Health Literacy

Pacific peoples are often unaware of the support available to them from government agencies and health practitioners or services (Ministry of Health, 2008b). The Ministry of Health has identified that supporting Pacific people to be healthy, through improving health literacy, is an important point of focus in the New Zealand health sector (Minister of Health & Minister of Pacific Island

Affairs, 2010). The term “health literacy” has been used to describe the relative capacity people have to obtain, process and understand the health information and services that they may require to be able to make appropriate health decisions with respect to their health (SFNZ, 2010). Education, culture and language all influence a person’s health literacy. These in turn impact on an individual’s health outcomes, and their ability to utilise the health services available to them (SFNZ, 2010). It has also been noted by both the Minister of Health and the Minister of Pacific Island Affairs that health literacy and the utilisation of health services, in ethnic minorities, and for people with English as a second language tend to be lower and result in poorer health (Minister of Health & Minister of Pacific Island Affairs, 2010).

To further strengthen this argument, there is evidence cited in the SFNZ 2010 which demonstrates that the provision of culturally-appropriate health education will improve the management and health outcomes for ethnic minorities with type 2 diabetes for example (Hawthorne et al., 2008, cited in SFNZ, 2010, p. 66). Culturally – appropriate health education has been detailed to include community-based health advocates delivering health education in an appropriate language, and using teaching and learning methods that suit cultural and community needs. For Pacific peoples, culturally – appropriate health education may be the provision of information on illness and symptom recognition in an appropriate language and delivered in appropriate modes tailored to their needs for example (SFNZ, 2010).

International literature has also suggested that an individual’s knowledge and understanding of stroke can be improved through well-designed community-specific education programmes that are culturally and age-appropriate (Williams & Noble, 2008, cited in SFNZ, p. 65). However, there is less evidence to support the theory that increased knowledge of a stroke will result in a more prompt and proactive interaction by an individual with appropriate medical services when symptoms are experienced (Moloczij et al, 2008, cited in SFNZ, p. 65).

The role of family

The SFNZ 2010 has highlighted the importance of family as a key enabler in ensuring that the care of an individual is effective. The National Health Committee (2007) has also noted that family is central to the care process for many Pacific peoples, and it is important to connect the family to the health worker treating an individual (National Advisory Committee on Health and Disability, 2007). The SFNZ (2010) have also identified that the cultural expectations of Pacific peoples results in Pacific families acting as advocates, translators and “errand runners” for the individual who has been diagnosed with the chronic condition. There was also a cultural expectation that

Pacific families would care for the affected family member directly, rather than use paid care services (SFNZ, 2010).

There are also challenges faced by Pacific families who have assumed the responsibility of care for an affected family member. These challenges are varied and include limited financial resources, poor housing, a lack of knowledge of available support services, and difficulties understanding information provided by medical practitioners. One solution suggested by the Stroke Foundation is the notion of patient networks, which would provide support and access to relevant benefits and entitlements to Pacific carers and their (SFNZ, 2010).

Pacific providers and cultural competence

As previously discussed, care must be provided in a way that is culturally sensitive and competent for the individual and their family. For Pacific families, culturally competent care can be an important element of addressing the cultural and language barriers that prevent some Pacific families accessing care (Ministry of Health, 2008c). The Ministry of Health has defined “culturally competent care” as integrating cultural practices, values, and concepts into the service delivery model (Ministry of Health, 2008c). There is some evidence to suggest that the effective culturally competent care can result in improved access and quality of health care for ethnic minorities (Bentancourt et al., 2003). While the majority of Pacific peoples access primary care through mainstream PHOs, it is acknowledged that some Pacific people desire services that reflect their culture and that are run by Pacific people for Pacific people (Mitikulena and Smith, 1996; Simmons, 1996). Pacific providers are mostly not-for-profit health providers servicing Pacific as well as non-Pacific families. In 2009 there were 39 Pacific providers, servicing an estimated 15percent of the Pacific population, most of whom reside in “high needs areas (NZDep deciles 8, 9, and 10).

Ryan et al. (2010) use health service case studies of Pacific providers’ targeted approaches to improving health outcomes. Most examples in this report describe Pacific models of care or targeted service delivery, and reveal that community-owned and/or Pacific providers have introduced new ways to address the health and cultural needs of populations they serve. For example, ‘Lagimalie’, a Tongan community-owned PHO, offers flexibility with longer appointments and unbooked appointments. Their philosophy is to provide services that ‘go to the people’ (Ryan et al. 2010, p.14), and targets the most at-risk segments of the population (NZ Deprivation Index 9–10). Lagimalie met 2009 targets for vaccination coverage of two year olds and detection of high-needs diabetes ahead of both ADHB and national levels for the same

measures. Other Pacific providers using similar models of service delivery (e.g. TaPasefika and Bader Drive) also reported improvements in chronic care/maintenance indicators for 2009 (HbA1c, statin use, blood pressure), again, ahead of overall CMDHB indicators. Common to the primary health providers included in the report are integrated services, single sites or ‘one-stop-shop’ premises, and church-based delivery (Ryan et al., 2010).

Use of community health workers and mobile nursing services

The MoH and Te Puni Kokiri’s recent unpublished report, *A Dynamic Evidence Base: Service and Clinical Quality Initiatives addressing Pacific Peoples Health Needs* (Pacific Perspectives unpublished, (2011)) includes a stocktake and literature review summarising a number of recent initiatives aimed at improving service delivery and/or clinical quality for Pacific peoples in New Zealand. One initiative detailed in the report describes an initiative targeted at Pacific, Māori and low-income families living in the Porirua area of Wellington which aimed to reduce health inequalities by improving access to general practice services through the use of mobile nursing services and community health workers. Five service contracts were held by the Wellington Independent Practitioners Association, Porirua Union and Community Health Service, the Pacific Health Service, the Maraeroa Marae Health Clinic and Ora Toa Health Services.

The initiative was evaluated in 2006 and the following outcomes were achieved:

- increased use of general practitioner and nurse services in the practices involved;
- a high annual check rate for diabetes detection and control endeavours; and
- no increase in use of the emergency department by Pacific populations between 2004 and 2005 when compared with Māori, non-Māori and non-Pacific.

Factors identified in the evaluation as critical to the success of these outcomes included leadership⁴, experience in working with Pacific communities, and workforce development (Pacific Perspectives (unpublished, (2011))).

Priority Service Areas

This section reviews the evidence for primary care for Pacific people and the barriers and facilitators in specific service areas, including:

⁴ Leadership referred to both vertical and horizontal leadership, and included leadership not only by the MoH, the DHB and the PHO, but also strong Pacific community leadership.

- preventive services – immunisation and cancer screening;
- after hours care;
- preventing ‘inappropriate’ emergency department use and ASH; and
- and primary care in school-based settings.

Immunisation

Paterson, Percival, Butler, & Williams’ study (2004) on the factors influencing Pacific infant immunisation aimed to identify the proportion of infants who had not received their first dose of the primary immunisation series at 6 weeks of age and the maternal and demographic factors associated with non-immunisation. Their study reports on the Pacific Island Families (PIF) study cohort of mothers and their Pacific children (n = 1,398) born at Middlemore Hospital, Auckland, in 2000. From this cohort of Pacific children, 27 percent of mothers reported that they had not had their infant immunised at approximately six-weeks of age. Factors significantly associated with non-immunisation were ethnic group (Tongan, Cook Islands Maori, Niuean, and Other Pacific mothers were significantly less likely than Samoan mothers to have had their child immunised), maternal birth place (Pacific-born were less likely to immunise), having more than 5 children, and having difficulty with transport. The study discussed a range of evidence-based interventions to increase immunisation rates for Pacific children, and contended that information and reassurance (pertinent to specific problems that parents are experiencing) have the maximum effect on parental commitment to immunisation. Furthermore, the study concluded that many parents lacked first-hand experience with diseases and those Pacific parents may underestimate disease communicability and potential harm. Structural health care service problems associated with long waiting times, lack of discussion time with the doctor, crowded clinics, and the bringing and minding of other children influenced immunization completions. Having opportunistic immunisation by doctors, flexible immunisation provision, and government incentives were suggested as interventions to increase immunisation levels. Accurate, accessible and current records and effective tracking systems were also identified as important issues.

An earlier study conducted in two Pacific health providers showed missed opportunities for immunisation at the primary care level significantly impacted on completion (Mafi, Toafa, & Grant, 2002). To determine the proportion of Tongan children with missed opportunities for immunisations and to estimate the impact of missed opportunities on delayed immunisation, a retrospective audit of 133 children in two Pacific primary care clinics in Auckland was undertaken. Primary care computer data files up to 31 December 2001 were reviewed. A missed opportunity was defined as a doctor visit at which an immunisation was due but not given. Results of the study

showed 34 percent of children had at least one missed opportunity for immunisation. Most missed opportunities occurred in acute care visits, and contra-indications to immunisation were almost never present. Having a missed opportunity was associated with an increased risk of delay of the six-week (OR = 48.75, 95 percent CI 6.82, 998.16), five-month and 15-month immunisations, but not the three-month immunisation (OR = 1.00, 95 percent CI 0.33, 3.45). The study concluded that missed opportunities were frequent and associated with an increased risk of delayed immunisation. This was likely to contribute to New Zealand's poor immunisation coverage and the excess burden of vaccine-preventable disease experienced by Pacific children in New Zealand. The study highlighted the need for better primary care systems for infant immunisation.

In contrast to these studies, recent DHB and PHO reports show marked improvement in Pacific childhood immunisation rates at age 2 years. In 2009, 85 percent of Pacific children were fully immunised (equal to European children), and in some DHBs (Waikato and Waitemata), 93 percent of Pacific 2 year olds were fully immunised in 2010 (BPAC, 2010). BPAC reports that initiatives at Waikato DHB that have contributed to the DHB's success include a mobile immunisation service with nurse vaccinator teams and an opportunistic immunisation service in hospital that targets children presenting to the emergency department as well as inpatients and even children in the hospital as visitors.

These achievements suggest that innovative and integrated approaches to childhood immunisation are occurring, building on the effective approaches for immunisation services for Pacific people developed during the successful MenzB (meningococcal vaccination) campaign (2004-2006). The MenzB vaccination campaign achieved high vaccination coverage for Pacific people, above those for other ethnic groups. Coverage for three doses for the under-5 age group accessed through primary care was 83 percent for Pacific people and 74 percent for the overall population. Similarly, for the 5-17 years age-group accessed through schools, the coverage was 97 percent for Pacific people and 86 percent for the population overall coverage (CBG, 2006).

Cancer Screening

Early detection of breast cancer can be achieved through breast cancer screening programmes. In New Zealand, a publicly funded organised breast cancer screening programme, Breast Screen Aotearoa (BSA), for women aged 50 to 64 years has been available since 1998, and was extended to include women aged 45–69 in 2004. High levels of participation in screening programmes and effective and timely follow-up of identified abnormalities are necessary for screening to lead to improvements in breast cancer outcomes and inequalities. An independent monitoring report on the

breast screening services noted ethnic inequalities in participation among eligible women, with 41 percent of Maori, 41 percent of Pacific, and 62 percent of Other ethnic groups participating in the programme (Page & Taylor, 2007). This paper noted an historical underuse of breast cancer screening services by Pacific women, and detailed some barriers for participation, such as access to transport, travel time and inconvenience. Twenty percent expressed concern or fear of the procedure, or were influenced by negative reports from other women (Page & Taylor, 2007). Maori and Pacific women report higher levels of worry about developing breast cancer than New Zealand European and Asian women (Brunton, Jordan, & Campbell, 2005).

After Hours Care

A study looking at PHO enrolment and utilisation reporting in primary care found Pacific, along with high deprivation users, Community Service Card (CSC) holders, and Maori, tend to use out-of-hours services and providers, with many patients consulting outside of the practice in which they are funded (MacRae, O'Malley, & Brown, 2006). Utilisation data was analysed for a 6-month period from 60 practices across four Wellington-based PHOs. This type of primary care use has implications for PHO funding and for Pacific groups (and others) not receiving continuity of care. Pacific use of after-hours care may reflect blue-collar employment which is generally inflexible in nature for sick leave, or Pacific people not wanting to take sick-leave during work hours or prioritising raising an income over loss of time for healthcare. It could also relate to lack of transportation, where Pacific families with one mode of transport have to wait for working family members to return with a vehicle to transport them to a health provider. These barriers could be mitigated by locating healthcare in workplaces or providing doctor home-visitations and transportation for Pacific patients.

Reducing presentations to emergency departments and ASH

An unpublished report prepared by Grey (unpublished, (2010)), for the MoH, highlights the lack of ethnicity data for national or DHB emergency department use in New Zealand, as well as the poor recording of diagnostic information in emergency departments. Both of these factors create a challenge in reviewing and monitoring emergency use and care for Pacific and other population groups. The author reviewed ASHs that might have been prevented if effective services had been delivered in the community – instead of using primary care services, patients present at secondary services once a condition is serious, thus ASH rates are commonly used as markers for the availability and efficacy of primary care in an area (Gresenz et al., cited in Grey, unpublished, (2010) p. 21). The ASH rate for Pacific people was almost twice the non-Maori, non-Pacific rate between 2000/01 and 2005/06.

Primary care in school-based settings

Kool et al. (2008) report on the effectiveness of interventions addressing under-achievement in low-decile schools in Auckland between 2002 and 2005. Specifically, the role and practice of the school nurse was investigated to identify their impact, if any, on academic outcomes of secondary school students and to determine the degree of effectiveness of the healthcare treatment they received. Nine secondary schools in Mangere with high proportions of Pacific and Māori students were targeted for the study, and specific types of school nurse practices were identified and examined. In addition to describing effective patterns of nursing practices, school nurse involvement in innovative health promotion activities was also reported (e.g. running a Health Focus week for students, developing health food policies for school shops and canteens, healthy lifestyle groups, Living 4 Life Programmes, breakfast clubs, weekly aerobics classes, removal of vending machines, and emphasis of healthy foods at staff functions). Two main types of nursing practice were identified: an embracing style, and a Band-Aid approach. The embracing style of nursing incorporated both the primary healthcare needs of students and school-based health and wellbeing promotion. The Band-Aid approach focused more on providing primary first-aid basics to the students. The use of 'embracing' nursing practice resulted in an increase in staff identification of students with health issues that might be impacting on academic performance, increased numbers of staff consulting with the school nurse regarding personal health issues, and healthier food being made available at the schools. The personal attributes of school nurses also contributed to the delivery of effective school healthcare, including attributes such as cultural sensitivity, an innovative and flexible nursing style, excellent communication skills, computer literacy, sound knowledge of the community services available, and the ability to work autonomously within a team environment.

Summary of Review of Targeted Initiatives for Pacific People

The recent review (Pacific Perspectives, unpublished (2011)) summarises a number of recent initiatives aimed at improving service delivery and/or clinical quality for Pacific peoples in New Zealand. Findings detailed in the report suggested that while New Zealand was investing in and implementing approaches to improved service and clinical quality to enhance Pacific health outcomes, the evidence-base related to initiatives and processes that can significantly improve health outcomes requires further analysis. A review of the international literature however has demonstrated that in countries like Australia more emphasis is being placed on the evaluation of current initiatives, rather than an increase in the number of initiatives that may result in positive

health outcomes for migrant communities. While the evidence-base here is incomplete, there is evidence of effective service delivery and clinical quality initiatives for Pacific peoples in some areas. The report referred above presents a summary of the current initiatives, the health outcomes achieved and the factors identified as contributing to an initiative's success. These factors are discussed in more detail below under the headings 'design factors' and 'implementation factors'.

Design factors

Overcoming barriers – cost, transport, language: The identification of barriers to access and suggestions for overcoming them have been highlighted in multiple evaluations and international reports (CBG Health Research Ltd, 2005, cited in Pacific Perspectives, unpublished (2011), p.20 refers). The top three barriers identified related to the cost of primary healthcare, transportation issues associated with accessing primary healthcare, and language barriers. Improving transportation to primary care and hospital appointments was one approach used to address these barriers. Other projects provided language-specific resources to overcome language barriers and improve communication (CBG Health Research Ltd, 2005, cited in Pacific Perspectives, unpublished (2011), p.20).

Flexibility: Retaining a degree of flexibility within primary care delivery was noted as contributing towards effective primary care delivery. For example, when appointment scheduling remained flexible to accommodate timing restrictions and issues for Pacific families, Pacific peoples increased their access to primary care (CBG Health Research Ltd, 2005; Kool et al., 2008, cited in Pacific Perspectives, unpublished (2011), p.20).

Mobile primary care services: The delivery of primary care in the home setting was identified as an effective component in a number of evaluations and was critical in overcoming transportation and cost barriers for Pacific patients/participants within the community. In addition, to be effective, home-visiting services needed to be closely linked with clinical services (CBG Health Research Ltd, 2005; Hotu et al., 2010, cited in Pacific Perspectives, unpublished (2011), p.20).

Nurse-led: Nurse-led programmes were noted within evaluations and provider information as contributing towards effective primary care delivery to Pacific communities (Hotu et al., 2010; Gifford et al., 2006, cited in Pacific Perspectives, unpublished (2011), p.21).

Strengths-based approach: Encouraging and empowering participants and individuals to implement and sustain positive behavioral changes was identified as a key factor (Utter et al., 2010, cited in Pacific Perspectives, unpublished (2011), p.21).

Collaboration: Collaborative efforts between different groups, including providers and communities, were seen as effective approaches when targeting Pacific populations (Compass Research, 2011, cited in Pacific Perspectives, unpublished (2011), p.20).

Implementation factors

Ownership and commitment: Instilling a sense of ownership, responsibility and commitment for the implementation of initiatives and participation was seen as an important factor for success and effectiveness of service delivery for Pacific peoples (Compass Research, 2011; Utter et al., 2010; ENUA OLA, 2010; Mahoney et al., 2008b, all cited in Pacific Perspectives, unpublished (2011), p.20).

Personal engagement: Knowing participants and having personal engagement with them was identified as a key factor for effective service delivery for Pacific peoples (CBG Health Research Ltd, 2005; Mahoney et al., 2008b, cited in Pacific Perspectives, unpublished (2011), p.20).

Communication: The ability to communicate effectively was noted as one of the factors contributing to effectiveness (Kool et al., 2008; Clinton et al., 2009, cited in Pacific Perspectives, unpublished (2011), p.20).

Family-focused: Initiatives that targeted the family as a whole were also seen as a factor contributing to effectiveness. Key to this was the support provided by family members and the encouragement of behavioral changes within the home setting necessary for successful implementation of specific initiatives (Mahoney et al., 2008a; Mahoney et al., 2008b, cited in Pacific Perspectives, unpublished (2011), p.20).

Role models: The importance of role models and role-modeling behavior by project leaders were identified as being important for effectiveness (Clinton et al., 2009; Mahoney et al., 2008a, cited in Pacific Perspectives, unpublished (2011), p.21).

Church-based: Church-based initiatives were seen as contributing to the successful implementation of selected targeted initiatives (Mahoney et al., 2008a; Clinton et al., 2009, cited in Pacific Perspectives, unpublished (2011), p.20).

Monitoring: The improved monitoring of outcomes was specifically referred to within the HEHA evaluation report (HEHA, 2009, cited in Pacific Perspectives, unpublished (2011), p.21).

Based on the details discussed above, the report concluded that the success of initiatives aimed at providing effective service delivery for Pacific peoples is multi-factorial. The evaluations demonstrated that a combination of factors create effective targeted initiatives, but at this point, the relative weighting of each factor in contributing to success is unknown. Furthermore, it is unknown whether the effectiveness of individual or combined factors differ across Pacific nations – for example, what will work for Tongans may or may not work for Samoans. Similarly it is also unknown how effective each initiative may be with respect to chronic disease versus primary or secondary care.

Socioeconomic status, ethnic inequalities in health, and the role of health services

There is an ongoing debate about the relative importance of ethnicity as a factor in health inequalities and whether ethnicity is simply a proxy for socioeconomic status. In summary, although health is strongly linked to socioeconomic status in New Zealand – and Pacific people are over-represented in the lower social groups – New Zealand evidence suggests that this does not account for all of the disparity. There is a joint effect of socioeconomic status and ethnicity through multiple complex pathways (Ministry of Health and University of Otago, 2006; Blakely et al., 2004; Blakely et al., 2009; Tobias et al., 2009).

Tobias and Yeh (2009) demonstrated that between 2001 and 2004 amenable mortality accounted for about 25 percent of the disparity between Pacific and non-Maori, non-Pacific people, and that amenable causes make a significant contribution to the differences between socioeconomic groups. Their study found that Pacific people have had the least improvement in mortality over the last 25 years. The significant increase in the gap between Pacific and non-Pacific, non-Maori mortality, which occurred between 1980 and 1999, is attributed to a decline in mortality for non-Pacific, non-Maori populations, while Pacific mortality remained steady. Of note, the reduction in CVS and respiratory disease mortality for Pacific peoples during this period was offset by an increase in cancer mortality, with colorectal cancer mortality increasing tenfold and the increase in breast cancer mortality even more so (Blakely, 2004).

These findings emphasise the urgent need to improve primary care services for Pacific people. The Ministry of Health (2002), citing research by Williams (2002) states that although health services may have only a small role in influencing overall health status “medical care may be an especially

important health-protective resource in the context of multiple vulnerabilities” (Williams, 2002, p. 593). Similarly, van Gessel (2010) warns, in response to the high rates of Pacific children’s hospital admissions due to swine flu in 2009, that “Pacific child rates of admission are often a barometer of what is to come” (van Gassel, 2010, p. 71).

In order to make the improvements that are needed, we first need a clearer understanding of the patterns of Pacific people’s access to and use of primary health care, as well as the factors that impede or facilitate that access and use. This requires a dual focus: first, from the point of view of the health system and its many practitioners (offered here in Domain One), and second, from the point of view of Pacific people’s themselves. It is this focus that follows in Domain Two.

References – Domain One

Abel, S., Park, J., Tipene-Leach, D., Finau, S., & Lennan, M. (2001) Infant care practices in New Zealand: a cross-cultural qualitative study. *Social Science and Medicine* 53(9): 1135-1148.

Adolescent Health Research Group. (2008) *Youth '07 The Health and Wellbeing of Secondary School Students in New Zealand*. Auckland: University of Auckland.

Agnew, F., Pulotu-Endemann, F.K., Robinson, G., Sua'ali'i-Sauni, T., Warren, H., Wheeler, A., et al. (2004) *Pacific Models of Mental Health Service Delivery in New Zealand ("PMMHSD") Project*. Auckland: Health Research Council in New Zealand.

Arroll, B., Bennett, M., Dalbeth, N., Hettiarachchi, D., Ben, C., & Shelling, G. (2009) More allopurinol is needed to get gout patients < 0.36 mmol/l: a gout audit in the form of a before-after trial. *Journal of Primary Health Care* 1(4): 315-318.

Auckland District Health Board. (2006) *Health improvement plan 2006-2010*. Auckland: Auckland District Health Board.

Auckland District Health Board. (2008) *Pasifika health needs assessment 2008*. Auckland: Auckland District Health Board.

Auckland District Health Board. (2010) *2010 Annual Report*. Auckland: Auckland District Health Board.

Baker, M., Barnard, L., Zhang, J., Verral, A., Howden-Chapman, P. (2010) *Close contact infectious diseases in New Zealand: Trends in ethnic inequalities in hospitalisations, 1989 to 2008*. Wellington: University of Otago.

Baker, P.T., Hanna, J.M., & Baker T.S. (eds.) (1986) *The Changing Samoans: Behavior and Health in Transition*. Oxford: Oxford University Press.

Bandaranayake, D, Huang, S. (2010) *Seroprevalence of the 2009 influenza A (H1N1) pandemic in New Zealand*. Wellington: Environmental Science and Research.

Barnes, L., Moss-Morris, R., & Kaufusi, M. (2004) Illness beliefs and adherence in diabetes mellitus: a comparison between Tongan and European patients. *New Zealand Medical Journal* 117(1188): 743.

Barwick, H. (2000) *Improving access to primary care for Maori and Pacific peoples: A literature review commissioned by the Health Funding Authority*. Wellington: Health Funding Authority.

Bathgate, M., & Pulotu-Endemann, F.K. (1997) Pacific people in New Zealand. In P.M. Ellis & S. Collings (eds.) *Mental health from a public health perspective*. Wellington: Ministry of Health.

Betancourt, J.R., Green, A.R., Carrillo, J.E., & Ananeh-Firempong, O. (2003) Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports* 18(4): 293-302.

Birks, B., & Counties Manukau District Health Board. (2006) *Counties Manukau Pacific Youth One Stop Shop: A review of research, best evidence and youth opinion*. Auckland: Youthline Auckland & Counties Manukau District Health Board.

Blakely, T., Ajwani, S., Robson B., Tobias M., Bonne, M., *Decades of Disparity: Widening of Ethnic Mortality Gaps From 1980 to 1999*. *New Zealand Medical Journal*. 2004; 117 (1199).

Blakely, T., Richardson, K., Young, J., Graham, P. J., Tobias, M., & Callister, P. (2009) *Does mortality vary between Pacific groups? Estimating Samoan, Cook Island Maori, Tongan and Niuean mortality rates using hierarchical Bayesian modelling*.

<http://www.statisphere.govt.nz/further-resources-and-info/official-statistics-research/series/volume-5-2009.aspx#1>

Bramley, D., & Latimer, S. (2007) The accuracy of ethnicity data in primary care. *New Zealand Medical Journal* 120(1264): 2779.

Brunton, M., Jordan, C., & Campbell, I. (2005) Anxiety before, during, and after participation in a population-based screening mammography programme in Waikato Province, New Zealand. *New Zealand Medical Journal* 118(1209): 1299.

Best Practice BPAC NZ. *Immunisation in Pacific children: a success story* <http://www.bpac.org.nz/magazine/2010/november/immunisation.asp> , accessed 29 July 2011.

Callister, P., & Didham, R. (2008) Emerging demographic and socioeconomic features of the Pacific population in New Zealand. In A. Bisley (ed.) *Pacific Interactions: Pasifika in New Zealand - New Zealand in Pasifika*. Wellington: Institute of Policy Studies, Victoria University of Wellington. pp 13-40.

Cancer Control Taskforce. (2005) *The New Zealand Cancer Control Strategy: Action Plan 2005–2010*. Wellington: Ministry of Health.

Canterbury District Health Board. (2004) *Canterbury Health Needs Assessment Summary 2004*. Christchurch: Canterbury District Health Board.

Canterbury District Health Board. (2006) *District Strategic Plan: A Healthier Canterbury: Directions 2010*. Christchurch: Canterbury District Health Board.

Canterbury District Health Board. (2010) *Report for the year ended June 2010*. Christchurch: Canterbury District Health Board.

Capital & Coast District Health Board. (2007) *Pacific Strategic Action Plan: Improving the Health of Pacific People 2007-2012*. Wellington: Capital & Coast District Health Board.

Capital & Coast District Health Board. (2008) *Capital & Coast DHB Health Needs Assessment*. Wellington: Capital & Coast District Health Board.

Capital & Coast District Health Board. (2010) *Annual report 2009/2010*. Wellington: Capital & Coast District Health Board.

Capstick, S., Norris, P., Sopoaga, F., & Tobata, W. (2009) Relationships between health and culture in Polynesia - A review. *Social Science and Medicine* 68(7): 1341-1348.

CBG Health Research Limited. (2006) *Evaluation of Meningococcal B Immunisation national Roll-Out: Final report*. Auckland: CBG Research Limited.

Clarke, D., Howells, J., Wellingham, J., & Gribben, B. (2003) Integrating healthcare: the Counties Manukau experience. *New Zealand Medical Journal* 116(1169): 325.

Collings, S., McKenzie, S., Dowell, A.C., Currey, N., Gandar, P., & Rees, D. (2010) *Toolkit for Primary Mental Health Care Development*. Wellington: University of Otago and Synergia Ltd.

Coster, G. (2000) *Health Needs Assessment for New Zealand: Background paper and literature review*. Wellington: Ministry of Health.

Counties-Manukau District health Board. (2005) *Lotu Moui: mind, body, spirit - Pacific Health Symposium*. Auckland: Counties-Manukau District health Board.

Counties Manukau District Health Board. Why Youth Health? http://www.cmdhb.org.nz/about_cmdhb/planning/youth-health-plan/attachments/why-youth-health.pdf Accessed 31 May 2011.

Counties Manukau District Health Board. (2005a) *Chronic Care Management Programme: Interim Programme Evaluation Report*. Auckland: Counties Manukau District Health Board.

Counties Manukau District Health Board. (2005b) *National Pacific diabetes initiative: Literature review*. Auckland: Counties Manukau District Health Board.

Counties Manukau District Health Board. (2006) *Tupu Ola Moui: Counties Manukau District Health Board Pacific health and disability action plan 2006-2010*. Auckland: Counties Manukau District Health Board.

Counties Manukau District Health Board. (2007) *Primary health care plan 2007-2010*. Auckland: Counties Manukau District Health Board.

Counties Manukau District Health Board. (2009) *Health Research Strategy for Counties Manukau District Health Board*. Auckland: Counties Manukau District Health Board.

Counties Manukau District Health Board. (2010) *Counties Manukau DHB Annual Report as at 30 June 2010*. Auckland: Counties Manukau District Health Board.

Counties Manukau District Health Board. (2011) *Creating a Better Future – Our Stories: July 2010 – April 2011*. Auckland: Counties Manukau District Health Board.

Craig, E., Seini, T., Jackson, C., Yeo Han, D., & New Zealand Child and Youth Epidemiology Service. (2008) *The health of Pacific children and young people in New Zealand*. Wellington: Ministry of Health.

Crampton, P., Davis, P., Lay-Yee, R., Raymont, A., Forrest, C.B., & Starfield, B. (2005) Does community-governed nonprofit primary care improve access to services? Cross-sectional survey of practice characteristics. *International Journal of Health Services* 35(3): 465-478.

Crampton, P., Dowell, A.C., & Bowers, S. (2000) Third sector primary health care in New Zealand. *New Zealand Medical Journal* 113(1106): 92-96.

Crampton, P., Jatrana, S., Lay-Yee, R., & Davis, P. (2007) Exposure to primary medical care in New Zealand: number and duration of general practitioner visits. *New Zealand Medical Journal* 120(1256): 2582.

Cumming, J., Mays, N., & Gribben, B. (2008) Reforming primary health care: is New Zealand's primary health care strategy achieving its early goals? *Australia and New Zealand Health Policy* 5(1): 24.

Davis P., Suaalii-Sauni T., Lay-Yee R., & Pearson J. (2005) *Pacific Patterns in Primary Health Care: A comparison of Pacific and all patient visits to doctors: The National Primary Medical Care Survey (NatMedCa): 2001/02. Report 7*. Wellington: Ministry of Health.

Dutton, J. (2006) Primary health care for youth in New Zealand. Are current health strategies working? *Nursing Praxis in New Zealand* 22(2): 12-20.

Elley, C., Kenealy, T., Robinson, E., Bramley, D., Selak, V., Drury, P.L., et al. (2008) Cardiovascular risk management of different ethnic groups with type 2 diabetes in primary care in New Zealand Diabetes. *Diabetes Research and Clinical Practice* 79(3):468-73.

Finau, S., A. (1996) Health, environment and development: towards a Pacific paradigm. *Pacific Health Dialog* 3(2): 266-278.

Finau, S. A., & Finau, E. (2007) Cultural democracy: the way forward for primary care of hard to reach New Zealanders. *Pacific Health Dialog* 14(2): 85-94.

Finau, S. A., & Tukuitonga, C. (1999) Pacific peoples in New Zealand. In P. Davis & K. Dew (eds.) *Health & Society in Aotearoa/New Zealand*. Oxford: Oxford University Press. pp. 129-143.

Foliaki, S., Kokaua, J., Schaaf, D., & Tukuitonga, C.F. (2006) Pacific People. In M.A. Oakley Browne, J.E. Wells & K.M. Scott (eds.), *Te Rau Hinengaro: The New Zealand Mental Health Survey*. Wellington: Ministry of Health. pp. 178-208.

Forrest, C.B., & Starfield, B. (1998) Entry into primary care and continuity: the effects of access. *American Journal of Public Health* 88(9): 1330-1336.

Fuamatu, N., Finau, S., Tukuitonga, C., & Finau, E. (2000) Sudden infant death syndrome among the Auckland Pacific communities 1988-1996: is it increasing? *New Zealand Medical Journal* 113(1116): 354-357.

Gentles, D., Metcalf, P., Dyall, L., Sundborn, G., Schaaf, D., Black, P., et al. (2007) Metabolic syndrome prevalence in a multicultural population in Auckland, New Zealand. *New Zealand Medical Journal* 120(1248): 2399.

Gifford, H., Crampton, P. & Bowers, S. (2006) *Improving Access to Primary Care in Porirua (PIA) Evaluation*. Report from the Public Health Consultancy, Department of Public Health, Wellington School of Medicine and Health sciences.

Gluckman, P., Hayne, H., & Taskforce group. (2011) *Reducing Social and Psychological Morbidity During Adolescence: A report from the Prime Minister's Chief Science Advisor*. Wellington: Office of the Prime Minister's Science Advisory Committee.

Grant, C.C., Pati, A., Tan, D., Vogel, S., Aickin, R., & Scragg, R. (2001) Ethnic comparisons of disease severity in children hospitalized with pneumonia in New Zealand. *Journal of Paediatrics and Child Health*, 37(1): 32-37.

Grey, C. (2010). 'Reducing presentations to emergency departments by Pacific Peoples'. A report prepared for the Chief Advisor, Pacific Health and the Pacific Innovations Team. (unpublished).

Grey, C., Wells, S., Riddell, T., Kerr, A., Gentles, D., Pylypchuk, R., et al. (2010) A comparative analysis of the cardiovascular disease risk factor profiles of Pacific peoples and Europeans living in

New Zealand assessed in routine primary care: PREDICT CVD-11. *New Zealand Medical Journal* 123(1309): 62-75.

Gribben, B. (2003) Implementing integrated care in Counties Manukau. *New Zealand Medical Journal* 116(1169): 1-3.

Hand, J., & Sheridan, N. (2010) National political representation and health inequalities in Aotearoa/New Zealand: could a Pacific woman be our Obama? *Race, Gender and Class* 17(3-4): 189-200.

Healthy Community Schools Initiative: a subset of the Achievement in Multi-cultural High Schools Initiative (AIMHI), Ministry of Education initiative to support nine low-decile schools in Auckland (Kool et al 2008).

Helu, S., Robinson, W., Grants, S., Herd, R., Denny, S. (2009). *Youth '07. The health and wellbeing of secondary school students in New Zealand: Results for Pacific young people*. Auckland: The University of Auckland.

Hefford, M., Crampton, P., & Foley, J. (2005) Reducing health disparities through primary care reform: the New Zealand experiment. *Health Policy* 72(1): 9-23.

Hotu, C., Bagg, W., Collins, J., Harwood, L., Whalley, G., Doughty, R., et al. (2010) A community-based model of care improves blood pressure control and delays progression of proteinuria, left ventricular hypertrophy and diastolic dysfunction in Maori and Pacific patients with type 2 diabetes and chronic kidney disease: a randomized controlled trial. *Nephrology Dialysis Transplantation* 25(10): 3260-3266. Epub April 6, 2010.

Hotu, S. (2004) Increasing prevalence of Type 2 Diabetes in Adolescents. *Journal of Paediatrics and Child Health* 40: 201-204.

Huakau, J. (2009) *Health Needs Assessment for Pacific People in Waitemata*. North Shore City: Waitemata District Health Board.

Hutt Valley District Health Board. (2006) *“Towards a Healthier Hutt Valley” Hutt Valley District Health Board’s Five Year Strategic Plan from July 2006*. Wellington: Hutt Valley District Health Board.

Hutt Valley District Health Board. (2010) *Annual Report 2010*. Wellington: Hutt Valley District Health Board.

Jackson, G., & Tobias, M. (2001) Potentially avoidable hospitalisations in New Zealand, 1989-98. *Australian and New Zealand Journal of Public Health*, 25(3): 212-221.

Kenealy, T., Carswell, P., Clinton, J., & Mahony, F. (2007) *Report of the Evaluation of Chronic Care Management in Counties Manukau: Phase One*. Auckland: Counties Manukau District Health Board.

Kenealy, T., Elley, C., Robinson, E., Bramley, D., Drury, P., Kerse, N., et al. (2008) An association between ethnicity and cardiovascular outcomes for people with type 2 diabetes in New Zealand. *Diabetic Medicine* 25:1302-1308.

Kerr, A.J., Looi, J.L., Garofalo, D., Wells, S., & McLachlan, A. (2010) Acute Predict: a clinician-led cardiovascular disease quality improvement project (Predict-CVD 12). *Heart, Lung and Circulation* 19(5-6): 378-383.

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

Kolbe, J., Vamos, M., Fergusson, W., Elkind, G., & Garrett, J.E. (1996) Differential influences on asthma self-management knowledge and self-management behaviour in acute severe asthma. *Chest* 110(6): 1463-1468.

Kool, B., Thomas, D., Moore, D., Anderson, A., Bennetts, P., Earp, K., et al. (2008) Innovation and effectiveness: changing the scope of school nurses in New Zealand secondary schools. *Australian and New Zealand Journal of Public Health* 32(2): 177-180.

Laing, P. (1985) *Talking health but doing sickness : studies in Samoan health*. Wellington: Victoria University Press.

Laing, P., & Mitaera, J. (1994) Samoan and Cook Islanders' perspectives on health. In J. Spicer, A. Trlin & J. Walton (eds.) *Social Dimensions of Health and Disease*. Palmerston North: Dunmore Press. pp. 204-218.

Litmus. (unpublished, 2010) *Ministry of Health Report: Brief review of evidence on access to, and use of, nicotine replacement therapy.*

Lui, D. & New Zealand Mental Health Commission. (2003) *Family - a Samoan perspective.* Wellington: Mental Health Commission.

Macpherson, C., & Macpherson, L. (1990) *Samoan medical belief and practice.* Auckland: Auckland University Press.

MacRae, J., O'Malley, C., & Brown, M. (2006) Patients consulting outside of funded practices within primary health organisations: implications for utilisation reporting. *New Zealand Medical Journal*, 119(1233): 1955.

Mafi, D., Toafa, V.M., & Grant, C. (2002) Missed immunisation opportunities among Tongan children in Auckland, New Zealand. *Pacific Health Dialog*, 9(2): 203-208.

Malcolm, L. (2010) Towards a reliable and accurate ethnicity database at district and national levels: progress in Canterbury. *New Zealand Medical Journal* 123(1314): 43-48.

Malcolm, L., & Barnett, R. (2009) Variation in Partnership Health general practice enrolment data related to need and hospital and national records on ethnicity. *Journal of Primary Health Care* 1(4): 297-301.

Malo, V. (2002) *Pacific People in New Zealand talk about their experiences with mental illness.* Recovery Series, 3. Wellington: Mental Health Commission.

Manchester, A. (2010) Delivering effective services to Pacific peoples. *Kai tiaki: Nursing New Zealand* 16(7): 20-21.

Mandelberg, J.H., Kuhn, R.E., & Kohn, M.A. (2000) Epidemiologic analysis of an urban, public emergency department's frequent users. *Academic Emergency Medicine* 7(6): 637-646.

Maua-Hodges, T. (2000) *Ako Pai Ki Aitutaki: Transporting or weaving cultures. Research report of field experiences to the Cook Islands.* Wellington: Wellington College of Education.

McGrath, B.B. (1999) Swimming from island to island: healing practice in Tonga. *Medical anthropology quarterly* 13(4): 483-505.

Meechan, G., Collins, J., & Petrie, K. (2002) Delay in seeking medical care for self-detected breast symptoms in New Zealand women. *New Zealand Medical Journal* 115(1166): 257.

Mila-Schaaf, K., & Hudson, M. (2009) *Negotiating space for indigenous theorising in Pacific mental health and addictions*. Wellington: Le Va, Pasifika within Te Pou.

Minister of Health and Minister of Pacific Island Affairs. (2010) *'Ala Mo'ui: Pathways to Pacific health and wellbeing 2010-2014*. Wellington: Ministry of Health.

Ministry of Health. (1999) *Our health, our future: the health of New Zealanders 1999*. Wellington: Ministry of Health.

Ministry of Health. (2002) *Reducing Inequalities in Health*. Wellington: Ministry of Health.

Ministry of Health. (2004) *Primary health organisations: Service development toolkit for mental health services in primary health care*. Wellington: Ministry of Health.

Ministry of Health. (2005) *The health of Pacific peoples*. Wellington: Ministry of Health.

Ministry of Health. (2005a) *Tobacco Facts 2005*. Wellington: Ministry of Health.

Ministry of Health. (2008a) *Pacific cultural competencies: A literature review*. Wellington: Ministry of Health.

Ministry of Health. (2008b) *Pacific Peoples and Mental Health: A paper for the Pacific health and disability Action Plan review*. Wellington: Ministry of Health.

Ministry of Health. (2008c) *Pacific provider development fund purchasing strategy 2008/09*. Wellington: Ministry of Health.

Ministry of Health. (2008d) *A portrait of health: Key results of the 2006/07 New Zealand health survey*. Wellington: Ministry of Health.

Ministry of Health. (2009) *Health Targets 2009/10*. Wellington: Ministry of Health.

Ministry of Health. (2010) *Annual Report for the year ended 30 June 2010: Including the Director-General of Health's Annual Report on the State of Public Health (Annual Report)*. Wellington: Ministry of Health.

Ministry of Health. (2010a). *Saving Lives: Amenable Mortality in New Zealand, 1996–2006*. Wellington: Ministry of Health.

Ministry of Health (2011) *Better, Sooner, More Convenient Health Care in the Community*. Wellington: Ministry of Health.

Ministry of Health - Child Health Indicators, 2010 (unpublished).

Ministry of Health and Ministry of Pacific Island Affairs. (2004) *Tupu Ola Moui: Pacific Health Chart Book 2004*. Wellington: Ministry of Health.

Ministry of Health and University of Otago. (2006) *Decades of Disparity III: Ethnic and socioeconomic inequalities in mortality, New Zealand 1981-1999*. Wellington: Ministry of Health.

Ministry of Pacific Island Affairs and Statistics New Zealand. (2011). *Health and Pacific Peoples in New Zealand* (in print).

Ministry of Social Development. (2010). *The Social Report 2010: Te Purongo Oranga Tangata 2010: Indicators of social wellbeing in New Zealand*. Wellington: Ministry of Social Development.

Minster, J., & Ryan, D. (2010) *Pacific child health: Quality care, health care equity and steps towards improvement: Report prepared for Clinical Director Pacific Programme Implementation* (unpublished).

Mitikulena, A., and Smith, R., (1996) *Views of Pacific Islands people with non-insulin dependent diabetes: a Wellington survey*. *New Zealand Medical Journal* 109: 467-469.

Morgan, C., Selak, V., Bullen, C. (2004) *Glen Innes serious infection prevention project. Final Report: 1 February 2003- 31 January 2004*. Auckland: Northern Region Health Consortium.

National Advisory Committee on Health and Disability (National Health Committee). (1998) *The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health*. Wellington: National Advisory Committee on Health and Disability.

Neuwelt, P., Matheson, D., Arroll, B., Dowell, A., Winnard, D., Crampton, P., et al. (2009) Putting population health into practice through primary health care. *New Zealand Medical Journal* 122(1290): 3494.

New Zealand Guidelines Group and Heart Foundation. (2002) *Cardiac Rehabilitation: Evidence-Based Best Practice Guideline*. Wellington: New Zealand Guidelines Group.

NHS Center for Reviews and Dissemination. (1995) *Review of the research on the effectiveness of health service interventions to reduce variations in health*. CRD Report 3. York: University of York.

Novak, B. (2007) *Ethnic-specific health needs assessment for Pacific People in Counties Manukau*. Auckland: Counties-Manukau District Health Board.

Oakley Browne, M.A., Wells, J.E., & Scott, K.M. (eds.) (2006) *Te Rau Hinengaro: The New Zealand Mental Health Survey*. Wellington: Ministry of Health.

Page, A., & Taylor, R. (2007) *BreastScreen Aotearoa: Independent monitoring report. July-December 2006*. Brisbane: School of Population Health, University of Queensland.

Pacific Perspectives (2011) *A Dynamic Evidence-base: Service and Clinical Quality Initiatives Addressing Pacific Peoples' Health Needs*. Report prepared for Te Puni Kokiri and Ministry of Health. (unpublished)

Pandemic Influenza Mortality and Morbidity Review Group (PIMMRG). (2010) *Report for the Minister of Health from the Pandemic Influenza Mortality and Morbidity Review Group*. Wellington: Ministry of Health.

Paterson, J., Percival, T., Butler, S., & Williams, M. (2004) Maternal and demographic factors associated with non-immunisation of Pacific infants living in New Zealand. *New Zealand Medical Journal* 117(1199): 994.

Pattemore, P.K., Ellison-Loschmann, L., Asher, M.I., Barry, D.M.J., Clayton, T.O., Crane, J., et al. (2004) Asthma prevalence in European, Maori and Pacific children in New Zealand: Isaac study. *Pediatric Pulmonology* 37: 433-442

PHO Performance Programme & Ministry of Health. (2010) *National Summary of PHO Performance 1 January 2010 – 30 June 2010*. Wellington: Ministry of Health.

Pulotu-Endemann, F.K. (2004) Fonofale model. In *Primary Health organisations: Service development toolkit for mental health services in primary health care*. Wellington: Ministry of Health.

Robinson, T., Simmons, D., Scott, D., Howard, E., Pickering, K., Cutfield, R., et al. (2006) Ethnic differences in Type 2 diabetes care and outcomes in Auckland: a multiethnic community in New Zealand. *New Zealand Medical Journal* 119(1235): 1997.

Rogers, A., Hassell, K., & Nicolaas, G. (1999) *Demanding patients: analysing the use of primary care*. Buckingham: Open University Press.

Ryan, D., Beckford, N., & Fitzsimons, M. (unpublished, 2010) *Lalaga: Pacific providers making a difference*. Wellington: Ministry of Health

Scott, A., Toomath, R., Bouchier, D., Bruce, R., Crook, N., Carroll, D., et al. (2006) First national audit of the outcomes of care in young people with diabetes in New Zealand: high prevalence of nephropathy in Maori and Pacific Islanders. *The New Zealand Medical Journal* 119(1235): 2015.

Scott, K.M., Sarfati, D., Tobias, M.I., & Haslett, S.J. (2000) A challenge to the cross-cultural validity of the SF-36 health survey: factor structure in Maori, Pacific and New Zealand European ethnic groups. *Social Science & Medicine* 51(11): 1655-1664.

Sheehan, N.A. (2005) *Analysis of issues that may influence healthcare service delivery for Pacific peoples communities in Counties-Manukau District Health Board*. Manukau: Counties-Manukau District Health Board.

Sheridan, N., Kenealy, T., Salmon, E., Rea, H., Raphael, D., & Schmidt-Busby, J. (2011) Helplessness, self blame and faith may impact on self management in COPD: a qualitative study. http://www.thepcrj.org/journ/view_article.php?article_id=805. Accessed 20 June 2011

Simmons, D., & Voyle, J. (1996) Psychological and behavioural aspects of NIDDM among Pacific islanders in South Auckland. *Pacific Health Dialog* 3(1): 100-106.

Simmons, D., Voyle, J.A., Rush, E., & Dear, M. (2009) The New Zealand experience in peer support interventions among people with diabetes. *Family Practice*.

Simmons, D., Weblemoe, T., Voyle, J., Prichard, A., Leakehe, L., & Gatland, B. (1998) Personal barriers to diabetes care: lessons from a multi-ethnic community in New Zealand. *Diabetic Medicine* 15(11): 958-964.

Sinclair, G., & Kerr, A. (2006) The Bold Promise Project: a system change in primary care to support cardiovascular risk screening. *New Zealand Medical Journal* 119(1245): 2312.

Sinclair, G. (2007) *Evaluation of the Chronic Care Programme*. In Chronic Care Management & Let's Beat Diabetes Open Day, November 2007. Auckland. Presentation based on report by Kenealy et al. (2007).

Sofaer, S., & Firminger, K. (2005) Patient perceptions of the quality of health services. *Annual Review of Public Health* 25: 513-559.

Statistics New Zealand. (2006) *Quick Stats About Pacific Peoples: Census 2006*. www.stats.govt.nz Accessed 3 May 2011

Stroke Foundation of New Zealand and New Zealand Guidelines Group. (2010) *Clinical Guidelines for Stroke Management 2010*. Wellington: Stroke Foundation of New Zealand.

Suaalii-Sauni, T., Wheeler, A., Etuate, S., Robinson, G., Agnew, F., Warren, H., et al. (2009) Exploration of Pacific perspectives of Pacific models of mental health service delivery in New Zealand. *Pacific Health Dialog* 15(1): 18-27.

Suaalii-Sauni, T., & Samu, K.S. (2005) *Cultural competency: An exploratory study of cultural competency in Pacific mental health*. Auckland: Waitemata District Health Board.

Sundborn, G., Metcalf, P.A., Gentles, D., Scragg, R.K., Schaaf, D., Dyal, L., et al. (2008) Ethnic differences in cardiovascular disease risk factors and diabetes status for Pacific ethnic groups and

Europeans in the Diabetes Heart and Health Survey (DHAH) 2002-2003, Auckland New Zealand. *New Zealand Medical Journal* 121(1281): 28-39.

Tamasese, K., Peteru, C., & Waldegrave, C. (1997) *O le Taea Afua - The New Morning: A qualitative investigation into Samoan perspectives on Mental health and culturally appropriate services*. Wellington: The Family Centre, Lower Hutt.

Taufe'ulungaki, A.M. (2004) *Fonua: Reclaiming Pacific communities in Aotearoa*. Paper presented at the LotuMoui Pacific Health Symposium.

Thornley, S., Jackson, G., McRobbie, H., Sinclair, S., and Smith, J. (2010). Few smokers in South Auckland access subsidised nicotine replacement therapy. *New Zealand Medical Journal* 123(1308): 16-27.

Tobias, M., Blakely, T., Matheson, D., Rasanthan, K., Atkinson, J. (2009) Changing trends in indigenous inequalities in mortality: lessons from New Zealand. *International Journal of Epidemiology* 38(6): 1711-1722.

Tobias, M., & Yeh, L.C. (2009) How much does health care contribute to health gain and to health inequality? Trends in amenable mortality in New Zealand 1981-2004. *Australian New Zealand Journal of Public Health* 33(1): 70-78.

Tomlin, A., Tilyard, M., Dawson, A., & Dovey, S. (2006) Health status of New Zealand European, Maori, and Pacific patients with diabetes in 242 New Zealand general practices. *New Zealand Medical Journal* 119(1235): 2004.

Torsch, V.L., & Ma, G.X. (2000) Cross-Cultural Comparison of Health Perceptions, Concerns, and Coping Strategies among Asian and Pacific Islander American Elders. *Qualitative Health Research* 10(4): 471-489.

Tukuitonga, C.F. (1999) *Primary healthcare for Pacific People in New Zealand*. University of Auckland, Pacific Health Research Centre: Discussion paper for the National Health Committee, August 1999.

Tukuitonga, C.F., Bell, S., & Robinson, E. (2000) Hospital admission among Pacific children Auckland 1992-97. *New Zealand Medical Journal* 113(1116): 358-361.

University of Auckland Pacific Health Research Centre. (2003) *The Pacific Island primary health care utilisation study*. Auckland: Pacific Health Research Centre.

van Gessel, S. (2010). *CMDHB: Changes in Primary Health Care between 2001 and 2009*. Auckland: Counties Manukau District Health Board.

Waikato District Health Board. (2006) *District Strategic Plan 2005-2015*. Hamilton: Waikato District Health Board.

Waikato District Health Board. (2008a) *Health needs assessment and analysis*. Hamilton: Waikato District Health Board.

Waikato District Health Board. (2008b) *Supplementary health needs assessment Waikato Pacific People HNA2008*. Hamilton: Waikato District Health Board.

Waikato District Health Board. (2010) *Annual report 2009/10*. Hamilton: Waikato District Health Board.

Waitemata District Health Board. (2009) *Implementing the Waitemata District Primary Health care plan*. Auckland: Waitemata District Health Board.

Waitemata District Health Board. (2010) *Annual Report 2009 / 2010*. Auckland: Waitemata District Health Board.

Wellingham, J., Tracey, J., Rea, H., & Gribben, B. (2003) The development and implementation of the Chronic Care Management Programme in Counties Manukau. *New Zealand Medical Journal* 116(1169): 327.

Wilson, P., Simmons, D., & on behalf of the South Auckland Community Diabetes Planning Group. (1994) The development of community orientated recommendations for diabetes care in south Auckland. *New Zealand Medical Journal* 107: 456-459.

Winnard, D., Denny, S., Fleming, T. & Kidz First Community Health - Centre for Youth Health. (2005) *Successful School Health Services for Adolescents Best Practice Review*. Manukau: Kidz First Community Health - Centre for Youth Health.

World Health Organization (2000) *The World Health Report 2000. Health System Improving Performance*. Geneva: World Health Organization.

Young, N. (1997) Pacificans' access to primary health care in New Zealand: A review. *Pacific Health Dialog* 4(2): 68-75.

Young, N. (2001) The pre-hospital experience of Samoan families who had a child admitted to hospital with pneumonia: a qualitative investigation. *Pacific Health Dialog* 8(1): 20-28.

Appendix One

Pacific People by DHB		
DHB	Pacific People	%
4 Counties Manukau	92,882	35.0%
3 Auckland	50,166	19.9%
2 Waitemata	35,890	14.2%
14 Capital and Coast	21,954	8.8%
13 Hutt	11,745	4.4%
5 Waikato	10,828	4.0%
10 Canterbury	10,476	3.9%
10 Hawke's Bay	5,271	2.0%
12 MidCentral	4,605	1.7%
7 Bay of Plenty	3,714	1.4%
1 Northland	3,702	1.4%
6 Lakes	3,651	1.4%
20 Otago	3,021	1.1%
16 Nelson Marlborough	1,686	0.6%
21 Southland	1,584	0.6%
9 Taranaki	1,366	0.5%
11 Wanganui	1,353	0.5%
8 Tairāwhiti	1,299	0.5%
15 Wairarapa	849	0.3%
19 South Canterbury	444	0.2%
17 West Coast	282	0.1%
99 Area outside DHB	6	0.0%
Total respondents	265,974	100.0%

Appendix Two

LEAD DHB	PHO NAME	Pacific Enrl
Auckland DHB	Procure Networks Limited	75306
Auckland DHB	Auckland PHO Limited	5994
Auckland DHB	Te Hononga O Tamaki Me Hoturoa Charitable Trust	69618
Bay of Plenty DHB	Western Bay of Plenty Primary Health Organisation Limited	1876
Canterbury DHB	Rural Canterbury PHO	1018
Canterbury DHB	Partnership Health (Canterbury)	9361
Capital Coast DHB	Capital PHO	12726
Capital Coast DHB	Ora Toa PHO Limited	4589
Capital Coast DHB	Well Health Trust	4553
Counties Manukau DHB	East Health Trust	1878
Counties Manukau DHB	Mangere Community Health Trust	5162
Counties Manukau DHB	Alliance Health Plus Trust	38101
Hawkes Bay DHB	Hawkes Bay PHO Limited	4696
Hutt DHB	Piki te Ora ki Te Awakairangi	3144
Hutt DHB	Valley Primary Health Organisation	5869
Lakes DHB	Health Rotorua Limited	1788
Mid Central DHB	Central Primary Health Organisation	3596
Northland DHB	Manaia Health PHO Limited	1164
Otago DHB	Southern Primary Health Organisation	4445
Waikato DHB	Toiora Primary Health Organisation Coalition	2751
Waikato DHB	North Waikato PHO	1536
Waikato DHB	Midlands Health Network - Waikato	5984
Waitemata DHB	HealthWest	14114
Waitemata DHB	Waiora Healthcare Trust	8647
Waitemata DHB	Harbour PHO Ltd	3151
Waitemata DHB	Te Puna PHO Limited	1331

Domain Two Findings

The second part of this research project focuses on the health and wellbeing of Pacific peoples from a Pacific perspective. We seek to understand Pacific people's worldviews, perceptions and attitudes, and particularly what "health" and "illness" look like from Pacific knowledge paradigms. Interpreting the utilisation data from within this framework may provide insights into current behaviours and practice, and thereby inform the question: how can health outcomes be improved. Our inquiry will be focused around two key questions:

- what makes some health providers "hard to reach" from a Pacific perspective; and
- what understandings of health and illness do Pacific people hold, and how do they negotiate issues of self care and utilisation of both health care systems and alternatives to orthodox primary health care.

Unsurprisingly, there is little written on this area (as already stated in Domain One, the HRC and the MoH have both recognised the paucity of any information supporting health service improvements for Pacific peoples), further highlighting, if that was necessary, the need for more research such as mooted in this project. As a result, this part of the literature review is organised into key areas that, taken as a whole, underscore the rationale for focusing on Pacific people's own views of primary healthcare, and hint at what those views might be.

What follows, then, is:

- a summary of the demographic status of Pacific peoples within Aotearoa/New Zealand, categorised by age, geographic distribution, ethnic/cultural diversity and migration/settlement patterns;
- a discussion of the impact of Pacific populations' socio-economic status in relation to the social determinants of health;
- a discussion about ethnicity and diversity within the Pacific population, which have a bearing on how health care services might be better delivered and/or targeted; and
- a discussion about the concept of health literacy adopted for this project, which problematises health providers' views and is more patient-centred, and thereby provides an organising framework that is more open to the potential disconnects between health providers and Pacific patients/consumers.

A Summary of the Demographic Status of Pacific Populations

Except where otherwise indicated, this summary of Pacific peoples' demographic information has been sourced from the Statistics New Zealand and Ministry of Pacific Islands Affairs paper (2010), *Demographics of New Zealand's Pacific Population*. According to Census data, the overall size of the Pacific population in 2006 was 266,000 people, which accounted for 6.9 percent of the total population. Through migration and a high rate of natural increase, the Pacific population has grown from a small migrant population of 2,200 in the mid-1940s into a population of "considerable size and social significance" (ibid., p.1). It is also a population with unique characteristics, which need to be taken into consideration both for this research project and for effective health care delivery.

Age

One of the striking differences between the Pacific and total New Zealand population is the relative youthfulness of the Pacific population, which is illustrated by the two contrasting age /sex pyramids in Figures 1.6 and 1.7.

Figure 1.6

Age-sex pyramid of Pacific population

2006 Census

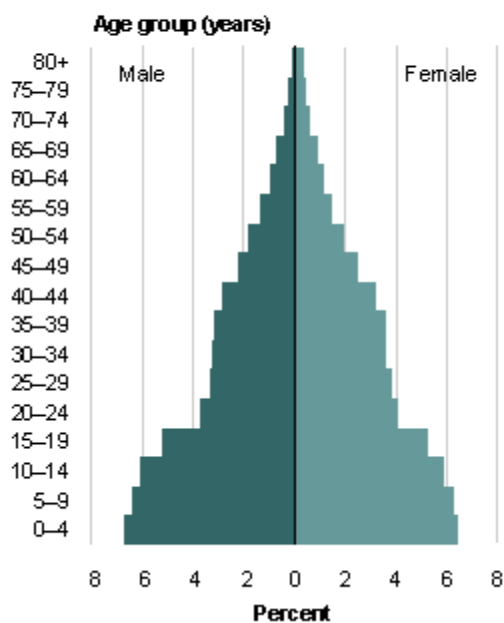
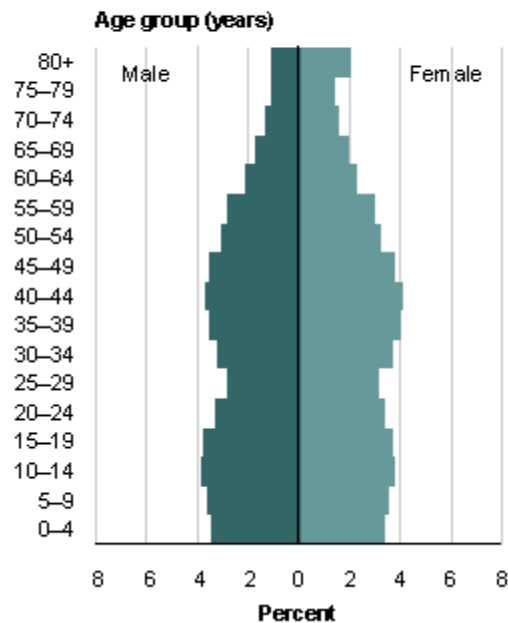


Figure 1.7

Age-sex pyramid of New Zealand population

2006 Census



(Statistics New Zealand, 2010, p1)

The median age for Pacific people in 2006 was markedly lower than that of the total population (21 years versus 36 years), with 38 percent of Pacific people aged under 15 years of age (compared

with only 22 percent of the total population) and just 4 percent of Pacific people aged 65 and over (compared with 12 percent of the total population). Within the Pacific population, however, age structures differ between ethnicities; the Cook Islands, Tongan and Tokelauan populations, for instance, have a median age of 19 years, while the Fijian population, which has the oldest age profile of Pacific groups in New Zealand, has a median age of 24.

Population Growth

The Pacific population is also one of the fastest growing groups in New Zealand (Finau & Tukuitonga, 1999; Statistics New Zealand, 2010). That growth was fuelled initially by migration, particularly in the 1960s and 1970s, but since the mid-1990s, when migration levels dropped, population growth has been fuelled primarily by high rates of natural increase. Because of their younger age structure, Pacific people are more likely than others to be in age groups when most childbearing takes place and they have a lower crude death rate. Pacific women also tend to have more children, with three births per woman compared with two births per woman in the total population (Statistics New Zealand, 2010).

The Samoan population, numbering 131,000 people in the 2006 census, is by far the largest Pacific group in New Zealand, accounting for almost half the Pacific population. This group grew by 98 percent between 1986 and 2006, compared with a growth rate of 23.4 for the total population. The Cook Islands population is the second largest group, with 58,000 living in New Zealand in 2006, an increase of 24,900 since 1986. The Tongan group, which grew almost threefold between 1986 and 2006 from 13,600 to over 50,500, represents the fastest growing group during this period. The size of the three other main Pacific ethnic groups at the 2006 census numbered 22,476 for Niue, 9,861 for Fiji and 6,822 for Tokelau. Other Pacific ethnic groups grew from a total of just under 2,000 in 1986 to almost 9,000 in 2006. Of these the three largest groups in 2006 were Tuvaluans (2,600), Tahitians (1,300) and I-Kiribati (1,100).

The *Demographics of New Zealand's Pacific Population* report makes the point that there are now more Pacific people from Niue, the Cook Islands and Tokelau living in New Zealand than in their home lands. In particular, the Niuean population in New Zealand is 10 times greater than the population living in Niue (Statistics New Zealand, 2010, p.3 of 3).

Geographic distribution

The Pacific population is highly urbanised and largely reflects historic migration and settlement patterns. The result is that 92 percent of the Pacific population live in 25 of the main urban areas of

New Zealand, with Auckland areas alone accounting for 66 percent of Pacific people. The second largest grouping resides in the Wellington area (12.4 percent).

Within Auckland, the Pacific population is concentrated in particular areas and makes up a high proportion of the population in areas such as Otara (79.2 percent), Harania (76.5 percent) and Favona (66.4 percent) (ibid., p.2 of 4). There are differences in the distribution of different ethnic groups, with, for example, the greatest concentration of Tongan people (78 percent) and Niueans (77 percent) residing in Auckland, while only 26 percent of Tokelauan people live in Auckland and another 50 percent live in Wellington. The balance of the Tokelauan population, along with Cook Islands people, are more likely than others to live in secondary urban areas (ibid., p.1 of 4).

Migration and settlement patterns

New Zealand has been, and continues to be, a significant recipient of Pacific peoples as permanent and long-term immigrants, in part, because of the right of residence of Cook Islanders, Niueans and Tokelauans, as well as the demand for labour from Pacific countries. Pacific people come to New Zealand for many reasons, including education and work, and as visitors, who come mostly to stay with relatives. Often temporary forms of movement for education and work become pathways to permanent residence, especially since changes to immigration policy in the 1990s made it easier for people to gain residency approval while in the country either as visitors or while studying or on a temporary work permit (Bedford, 2007; Macpherson, 2008). Pacific migration rates are lower than in the 1960s and early 1970s (largely because of more restrictive immigration policies), but, despite that, there is no reason to assume that Pacific migration will cease (Bedford, 2007; Statistics New Zealand, 2010). Indeed, since 2001, Pacific migration to New Zealand has experienced a resurgence, largely as a result of the changes to residency approval mentioned above, recovering to levels not seen since the late 1980s.

For a myriad of reasons, Pacific peoples have experienced, as Bedford observes (2007), “astounding mobility”, particularly in the last half of the 20th century, which has touched almost every person directly or indirectly (through their families), here and in their home lands. Bedford (2007) says that:

Circulation of population, as well as immigration and emigration, has been of considerable interest to Pacific researchers and policy analysts for many years – the linkages maintained by overseas populations of Samoans, Tongans, Niueans, Cook Islanders, Tokelauans, Fijians, Fiji Indians and, more recently, Tuvaluans are very important drivers of economic and social transformation in their ‘home’ countries. Transfers of money, commodities, knowledge and labour

between home-based and the overseas-based components of Pacific populations are at the heart of the debates about development in Polynesia no economic analysis of Island countries in the Pacific makes sense without reference to their diaspora (p.50).

Hau'ofa (2005) describes “a world of social networks” that stretch throughout Oceania from New Zealand and Australia to the United States and Canada, through which many Pacific families conduct “transnational lives”, circulating money, commodities, knowledge and labour – and people. Of significance for this study, there is evidence to show that, having arrived and settled in New Zealand, Pacific peoples do not stop moving. Bedford's (2007) study has shown that 60percent of Pacific citizens have made at least one move out of New Zealand since taking up residence in this country. Pacific peoples resident in New Zealand are frequent travellers back to their Pacific home states and/or to Australia (Bedford, 2007, pp. 50-51).

It is worth noting, also, that the post-World War II Pacific migration that resulted in the largest migration of people from Pacific Island states, was driven by rising demands for labour from Pacific rim countries, including New Zealand. Indeed, Pacific migration to New Zealand has reflected the boom and bust cycles of the New Zealand economy. In the boom times, Pacific migration provided an economic boost to landlords in city locations where demand for housing, particularly in Auckland and Wellington, had been declining (Spoonley, 1998); during the bust, the downturn in manufacturing in the late 1980s, huge job losses among Maori and Pacific peoples contributed to net losses of Pacific peoples from New Zealand as they returned to Pacific home States.

This striking movement of Pacific peoples (Bedford, 1997; Cook, Didham and Khawaja, 2001; Hau'ofa, 1993; Loomis,1990; Macpherson, 1997; Macpherson, Bedford & Spoonley, 2000), however, should not obscure the fact of many Pacific people's long-term and relatively stable residency. From 1991, 50percent of Pacific people living in New Zealand were born in New Zealand (Finau & Tukuitonga, 1999), and those numbers are increasing; the proportion of Pacific people born in New Zealand as at the 2006 census was 60percent.

Socio-Economic Status and Health

The National Advisory Committee on Health and Disability 1998 (now the National Health Committee)'s report, *The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health*, sets out the major social, cultural and economic factors that impact on peoples levels of health and well being, or burdens of illness and ill health. It states that the low socioeconomic status of Pacific peoples explains much of their comparative poor health status

(National Advisory Committee on Health and Disability, 1998, p.1). According to this report, the most significant determinants of health are people's income levels, employment rates, education achievement, and housing experiences; and Pacific peoples in New Zealand, as a whole, fare poorly in each of these categories (National Advisory Committee on Health and Disability, 1998). The report states that:

Income.

- Income is the single most important determinant of health and is strongly related to health and wellbeing; conversely, the link to illness and ill-health and levels of poverty are clear.
- On average, New Zealand incomes declined after 1993, with Pacific households amongst those who experienced the greatest income reduction.

Employment

- The main contributor to adequate income is paid employment, particularly full time paid employment, which has intrinsic values as well as contributing to a person's sense of self worth and well-being; unemployment is detrimental to a persons' physical and mental health.
- Pacific people (along with Maori and young adults) have higher unemployment than the general population.

Education

- There is a clear link between peoples' education achievement, social and economic position, and their health status.
- In 1996, 27 percent of Pacific students left school with no qualifications (compared with 14percent of all other ethnic groups), and more 60percent of Maori and Pacific are functioning below the literacy levels needed to effectively meet the demands of everyday life.

Housing

- Overcrowding, damp and cold housing has direct detrimental effects on physical and mental health; increased hospital admissions for childhood diseases are associated with overcrowding and damp housing.
- There is a shortage of high-quality, low-rental accommodation available in New Zealand, in part due to a move to market rentals for State housing.
- Many families, especially low-income families spend a much greater proportion of household income on housing costs than in the past; high housing costs leave less money for items essential for good health: nutritious food, education and access to health services.

The National Advisory Committee on Health and Disability 1998 report links these determinants of health and the health status of Pacific peoples in New Zealand, stating that Pacific people living in New Zealand have the highest rates of meningococcal disease, rheumatic fever, rheumatic heart disease and obesity, and high rates of ASH for pneumonia, asthma, middle ear infections and skin infections. It adds that, while there is evidence of some improvement in Pacific peoples' health, the population still experiences a heavy burden of morbidity and mortality.

Subsequent reports show that Pacific populations' socio-economic situation has changed little since the publication of the National Advisory Committee on Health and Disability 1998 report (Statistics New Zealand & Ministry of Pacific Islands Affairs 2002 and 2011). The 2002 report says Pacific people remain over-represented in the unemployed, lower skilled and low income earners. The proportion of Pacific adults who were employed fell from 62 percent to 42 percent between 1986 and 1991, and, while there was a subsequent level of recovery to 55percent employment, the proportion still remained lower than the national rate of 62 percent (Statistics New Zealand & MPIA, 2002, p.4). Pacific *unemployment*, which peaked at 28.8 percent in 1992, was recorded at an improved 11percent, but this was still nearly twice the total unemployment rate of 5.7 percent (*ibid.*, p.4).

The report argues that the youthful age structure of the Pacific population, coupled with lower overall qualification levels and higher representation in less skilled occupations, means that the Pacific population is proportionately more likely than the national population to be in lower income bands (*ibid.*, p.84). Citing the New Zealand Income Survey, the report shows that the median hourly wage and salary earnings of Pacific peoples rose from \$10.50 in 1997 to \$11.70 in 2001. During this same timeframe, the median rate for the national population rose from \$12.50 to \$14.00; Pacific peoples' median hourly earnings therefore represented just 84percent of the national median in both 1997 and 2001. Again, the report states that the younger age structure of the Pacific population is a factor in the lower median hourly and weekly rates (*ibid.*, p.85).

More recent trends show that while some improvement is discernable, particularly for young New Zealand-born Pacific people, on the whole economic disparities between Pacific people and the wider New Zealand population remain. The agencies' 2011 report, *Health and Pacific Peoples in New Zealand: Pacific progress 2010* (Statistics New Zealand & MPIA, 2011), states that the Pacific rate of unemployment of 14.4percent was not only higher than the rate reported in 2002, but was also higher than for all other ethnicities (2011, p.28). The continuing unemployment rates, under-employment, and low paid, low skilled work continues to be reflected in the lower incomes of Pacific peoples. In June 2009, the average hourly wage rate for Pacific was \$18.92, compared

with a median rate of \$22.96 for the total population; the average weekly income was \$761, compared with a total population average rate of \$930 (ibid.). Citing White, Salmond, Atkinson and Crampton (2008), the report states that on average, Pacific peoples have worse economic circumstances than the overall population, with “the majority of Pacific peoples living in areas with the fewest economic resources” (ibid.).

In summary, this section of the literature review shows that, in contrast to the total population in New Zealand, the Pacific population is youthful, based mostly in Auckland or other urban areas with the fewest economic resources, and experiences the highest unemployment rates and (for those in employment) lower median income rates than the total population. Their lower than average income levels are related in part to the youthful age of the Pacific population, but are also attributable to poor educational achievements that allow Pacific people entry to only the most lowly skilled work. The population’s lower economic base, in turn, accounts in large measure for their overreliance on substandard housing and accommodation choices. These issues are noted here because much of the burden of poor health experienced by Pacific peoples can be attributed to health inequalities resulting from these socioeconomic determinants.

Critically, the National Advisory Committee on Health and Disability 1998 report that draws this same link also states that health equity is not reducible to socioeconomic determinants alone; health equity includes “equity of access to health services, equity of utilisation with respect to need, and equity of health outcomes” (National Advisory Committee on Health and Disability, 1998, p.53). While also noting that Pacific people are worse off than other New Zealanders across a range of socioeconomic indicators, the Ministry of Health report, *‘Ala Mo’ui: Pathways to Pacific Health and Wellbeing 2010 – 2013*, argues that Pacific people want high quality *and culturally competent* primary health care services (2010)⁵. This last point is significant as it

⁵ The whole question of health inequalities is a subset of the broader conceptual principle of health equity, which is commonly defined by the “idea that certain health differences (most often called inequalities in health) are unfair or unjust” (Macinko & Starfield, 2002, p.2). The International Society for Equity in Health defines health equity as the absence of potentially remediable systematic differences on one or more aspects of health across socially, economically, demographically or geographically defined population groups or subgroups (ibid., p.19). Debates have focused on questions such as whether equity in health involves vertical equity – preferential treatment for those with the greatest health needs – or horizontal equity – equal treatment for equivalent needs – and whether health equity should be measured at the individual or group level (ibid., p.2). While these issues are pertinent here, the practical implications and limitations of this project narrows our focus to questions of *access* and the *cultural appropriateness* of primary health care services.

suggests the cultural perspectives and assumptions underpinning primary health care delivery are, for Pacific peoples at least, crucial.

The National Advisory Committee also fully acknowledge that the broader socio-economic determinants noted here play a significant part in the health inequalities experienced by Pacific peoples. However, these issues, while pertinent, are largely outside the ambit of this literature review, which is more directly concerned with the interface between Primary Health Care services and Pacific communities and individuals within these communities. We are particularly interested in identifying *barriers to access, the appropriateness of care and treatment, and successful interventions* that are working to address the negative influences of health determinants (Ministry of Health, 2010, p.17). Citing the statement from Tobias and Yeh (2009), that Pacific amenable mortality improved the least of any ethnic group between 1981-84 to 2001-04, Talemaitoga (MoH, 2010) argues that improvements in addressing the negative influences of health determinants will make a significant difference to Pacific peoples' health across a wide variety of measures (pp. 1 & 17).

The Question of Ethnicity in Relation to Pacific Peoples.

In order to improve access to and quality of care for Pacific peoples, health services must know the populations they are dealing with, and that means understanding the cultural and ethnic diversity of the Pacific population. Without this understanding, health care will continue to be delivered by a “one size fits all” approach and/or shaped by the cultural assumptions of the health providers. Neither approach, we argue, has been particularly effective in addressing the poor healthcare outcomes of Pacific peoples to date.

Describing people as “Pacific” is a convenient social construct that has been used within the New Zealand context to distinguish this population from other major ethnic groups, such as European, Maori and Asian. The problem with this categorisation is that while it allows for the group to be distinguished from the others it suggests a level of coherence and internal homogeneity that is problematic. The Pacific population in New Zealand is made up of people from many Pacific nations. The largest groups in New Zealand are from Samoa (who comprise over 50 percent of the total Pacific population), Cook Islands Maori, Tongan and Niuean, with smaller communities from Tokelau, Tuvalu, Fiji and Kiribati. As Tuimaleali'ifano (1990, cited in Grey, 2001, p.157) states:

Even if some community can exist in very general terms at a high level for political purposes, the daily reality for most is a sense of identity which links people to family, village and nation before the Pacific region in any way.

In fact, Grey (2001) argues, most Pacific communities work hard to maintain their cultural differences. Likewise, Macpherson (1999) says few people see themselves as members of a coherent Pacific Islands community, with most well aware of social distinctions both within and between various migrant groups. Official figures have captured some of the subtle cultural differences between Pacific groups. In the last Census, for example, substantially lower proportions of Cook Island Maori (16 percent) and Niuean (25 percent) spoke their language compared to Samoan (63 percent) and Tongan (61 percent). Similarly, lower proportions of Cook Island Maori and Niuean reported having a religion compared to Samoan and Tongan populations, and ethnic intermarriage was much higher among Niuean and Cook Island Maori (Blakely et al., 2009). These nuanced differences imply that underlying health beliefs, and the needs and expectations of quality health services, may differ between Pacific groups. Indeed, the Counties Manukau DHB 2007 Pacific Health Needs Assessment identified differences between Pacific groups in hospital and primary care data (Novak, 2007), while differences are seen also in markedly elevated deaths from cardiovascular disease for Cook Island Maori compared to Samoan, Tongan and Niueans (Blakely et al., 2009).

Furthermore, ethnic identities, Grey says, are flexible and overlapping – “because of the complexities of their lives and the importance of kinship and other networks, people may choose one identity in one situation and another identity in another” (2001, p3). Depending on the context, a person may self identify with a village, a kinship network, a particular Pacific nation or, in the New Zealand context, with Pacific peoples as a whole.

Despite the problematic nature of “Pacific” identity, Pacific writers have attempted to articulate the essential characteristics of those covered by the term, engendering both contrary points of view and several recurring themes (Grey, 2001). One of the strongest themes asserts the centrality of language fluency to maintaining strong cultural values, and thereby identity (Mulitalo-Lauto, 2001; Hekau, 1995; Hunkin-Tuileufuga, 2001); another argues the centrality of knowledge of one’s genealogy, with its attendant understanding of social structures, family, and kinship networks.

For Pacific people living in New Zealand, claims to a Pacific identity are strongly articulated through attributing greater status to those who are Pacific born and reared, because they retain fluency in a home language and have socially acknowledged lines of descent. However, claims to a “Pacific identity” become problematic as these attributes are weakened by settlement and enculturation in the New Zealand context. This process is not unique to migrant Pacific people. In discussing the relationship between language and cultural identity for Greek migrants to Australia

and America, Papademetre (1994) argues that people's attitudes towards the language-identity link are constantly modified as the shared cultures evolve. He shows that while language competency is an important part of group inclusion/exclusion, particularly for first and second generations, it becomes less significant with succeeding generations – but other criteria develop in place of language.

Boundaries are used by all social groups to include and exclude members from a group or subgroup, creating in the process multiple memberships for individuals ... In time, the demarcation shape will change but **not** the *demarcation process*, which will continue to provide the structural concept of boundary (Papademetre, 1994, p. 511. Bold and italics in the original).

The negotiation of boundaries that permit or deny claims of membership to the group can, according to Giddens (1991), create an ontological and existential anxiety for people. It may be argued that this existential anxiety lies at the heart of concerns expressed in the writings of younger, New Zealand-born people of Pacific descent, such as Mailei (1999), Tiatia (1998), Mila-Schaaf and Hudson (2009), and Mila-Schaaf (2010). These authors articulate the position of many of their contemporaries, who have been described by Fairbairn and Makisi (2003, p. 40) as a generation in limbo, unable to find adequate expression of themselves in either traditional Pacific custom or the contemporary New Zealand, that is, Pakeha context.

One of the criticisms one can make of those writing about Pacific identity maintenance within the New Zealand context is the apparent failure by many authors to understand the essential part the passage of time has on all cultures. "Culture" is an adaptive mechanism by which groups both maintain their cohesion and identity and, at the same time, enable change. Such adaptive change is currently evidenced in the New Zealand context, where New Zealand-born Pacific peoples and long term residents, who though they may identify strongly with a particular ethnic group, are taking their New Zealand experience into account in their cultural identity (Fieras and Spoonley (1999), cited in Grey, 2001). In attempting to provide a conceptual framework to organise the increasing diversity between and within different ethnic groups, Macpherson (1984) helpfully describes three groups or environmental positioning within the Samoan community, which can be equally applied to other Pacific ethnic groups:

- a strong traditional environment that produces young people whose primary orientation is to Samoan values and institutions;

- an environment where Samoan culture exists alongside a non-Samoan culture and children move between the two; these young people share a common belief that in some way they are Samoan and that this is a valued identity; and
- an environment where life is orientated to and dominated by non-Samoan language, values and activities; the children brought up in this environment typically reflect this.

Macpherson’s framework allows for the increasing reality of New Zealand-born Pacific peoples who identify with more than one Pacific ethnic group. The growing proportion of Pacific peoples with multiple ethnicities – in 1996, six out of ten Fijians and four out of ten Cook Islands people had affiliations with other ethnic groups, and almost one in three Samoans was married to a non-Samoan (Grey, 2001) – adds to an already complex picture. In those families with a non-Pacific parent, both the Pacific parent and their part-Pacific children were being intimately exposed to new cultures and world views (Grey, 2001, p.8).

A variety of factors influence an individual’s choice of ethnicity. These include nationality, birthplace, length of residence, return migration, intermarriage and exposure to different lifestyles and values. Cultures themselves are not static, but change to accommodate new influences. People’s perceptions of their ethnic identity will also change as communities in New Zealand and the Pacific develop. In other words, what it means to be Samoan or Tongan or Niuean may change over time and vary from place to place (Grey, 2001, p.9).

Thus, the literature on Pacific identity, particularly as it applies to the New Zealand context, shows that people’s “Pacificness” is contestable and fluid. The challenge for this research project is to examine, within this moving terrain, how people’s different world views and belief systems impact on their health-seeking behaviours, and identify ways that health care providers can better tailor their services to reduce the dissonance between competing normative value systems.

Health Literacy

As an organising framework, the research team is interested in testing the applicability of Nutbeam’s health literacy framework (1998), which distinguishes three levels of analysis:

1. Functional health literacy.
2. Interactive health literacy
3. Critical health literacy

Health literacy, Nutbeam (2000) argues, means more than simply transmitting information; by improving people's access to health information and their capacity to use the information effectively, health literacy becomes critical to people's empowerment (ibid., p.259.). In this vein, we argue, Pacific peoples must be more than passive recipients of improved health care – rather, their active participation and contribution is vital for the development of health care systems that can work within the framework of Pacific cultural perspectives, and thereby better meet Pacific peoples' needs. The spectacular failure of health promotion approaches for Pacific populations, we would argue, results from the failure of those doing the promoting to question both their assumptions and their concept of 'health' – and their relevance or resonance with other cultural groups. As Sofaer and Ferminger (2005) demonstrate, *patients'* perceptions and attitudes towards primary care are powerful drivers of health outcomes.

The approach of this project not only recognises that the voice of the patient/consumer must be heard in order to adequately measure access (Rogers et al., 1999), but also that a patient's decision to seek health care is both socially constructed and subject to multiple influences, including health beliefs, physical and social circumstances, and advice from others (Young, 2001; Kolbe et al., 1996; Meechan et al., 2002). The beliefs held by Pacific people about individual health, family and community needs do influence health choices and behaviours (Ministry of Health, 2008). Previous New Zealand research has identified that "fatalistic" beliefs of many Pacific people with diabetes was a barrier for effective treatment and self management (CMDHB, 2006). A study of Tongan people with diabetes found that Tongan patients were more likely to attribute their illness to external factors such as poor medical care in the past, environmental factors and God's will (Barnes et al., 2004). Our approach will further explore how Pacific people's world views impact on access, self care and their understanding and expectations of the health care system. It has been argued that public health strategies are increasingly reliant on individuals and communities having the ability to recognise and successfully or accurately interpret the early signs and symptoms of illness, and have the knowledge to know how to act (Wilson, 2001). We argue that in order to develop better self-care strategies for Pacific populations, more research needs to be undertaken to determine the baseline levels of knowledge and skills that exist in these communities. Understanding people's lived and lay understandings and meanings are a necessary prerequisite to developing effective ways of translating knowledge (Lavis et al., 2003).

Hence, for the purposes of this research project, we favour the World Health Organisation's definition of health literacy, as cited by Nutbeam (2000), which states:

Health literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health. [and]

Health literacy means more than being able to read a pamphlet or successfully make appointments. By improving people's access to health information and their capacity to use it effectively, health literacy is critical to empowerment (ibid., pp. 4 & 9).

It is this understanding of health literacy that provides a useful framework for organising the potentially disconnected communication patterns between health providers and Pacific patients/consumers.

References – Domain Two

Bedford, R. (2007) *Pasifika Mobility: Pathways, Circuits and Challenges in the 21st Century*. Report for the Pasifika Project. Institute of Policy Studies, Victoria University of Wellington.

Bertram, G. (1987) The political economy of decolonisation and nationhood in small pacific societies. In A. Hooper, S. Brotton, R. Crocombe, J. Huntsman & C. Macpherson (eds.) *Class and culture in the South Pacific*. Suva: Centre for Pacific Studies, University of Auckland, and Institute of Pacific studies, University of the South Pacific.

Blakely, T., Richardson, K., Young, J., Graham, P. J., Tobias, M., & Callister, P. (2009) *Does mortality vary between Pacific groups? Estimating Samoan, Cook Island Maori, Tongan and Niuean mortality rates using hierarchical Bayesian modelling*. At <http://www.statisphere.govt.nz/official-statistics-research.aspx>. Accessed 20 June, 2011.

Cook, L., Didham, R. & Khawaja, M. (2001) The shape of the Future: On the demography of the Pacific people. In C. Macpherson, P. Spoonley & M. Anae (eds.) *Tangata O Te Moana Nui: the evolving identities of Pacific peoples in Aotearoa/New Zealand*. Palmerston North: Dunmore Press. pp 21-43.

Counties Manukau District Health Board. (2006) *Tupu Ola Moui: Counties Manukau District Health Board Pacific health and disability action plan 2006-2010*. Auckland: Counties Manukau District Health Board.

Fairbairn-Dunlop, P. & Makisi, G. (eds.) (2003) *Making our Place: Growing up PI in New Zealand*. Palmerston North: Dunmore Press.

Fleras, A., Spoonley, P. (1999) *Recalling Aotearoa: Indigenous Politics and Ethnic Relations in New Zealand*. Auckland: Oxford University Press.

Finau, S.A. and Tukuitonga, C. (1999) Pacific peoples in New Zealand. In P. Davis and K. Dew (eds.) *Health and Society in Aotearoa New Zealand*. In association with Te Ropu Rangahau Hauora a Eru Pomare. Auckland: Oxford University Press. pp 129-143.

Giddens, A. (1991) *Modernity and Self-Identity. Self and Society in the Late Modern Age*. Cambridge: Polity Press.

Grey, A. (2001) *The Definition and Measurement of Ethnicity: A Pacific Perspective*. A discussion paper . Wellington: Statistics New Zealand.

Hau'ofa, E. (1993) *A New Oceania: Rediscovering Our Sea of Islands*. Suva: School of Social and Economic Development, University of the South Pacific.

Hau'ofa, E. (2005) The Ocean in Us. In A. Hooper (ed.) *Culture and Sustainable Development in the Pacific*. Canberra: Asia Pacific Press. Canberra. pp 32-43.

Hekau, M. (1995) Being Niuean. *Pacific Perspective* 12(2): 11-12.

Hunkin-Tuiletufuga, G. (2001) Pacific Languages and Pacific Identities: Contemporary and Future Challenges. In C. Macpherson, P. Spoonley, & M. Anae (eds.) *Tangata O Moana Nui: The evolving identities of Pacific peoples in Aotearoa/New Zealand*. Palmerston North: Dunmore Press.

Kolbe, J., Vamos, M., Fergusson, W., Elkind, G., Garret, J. (1996) Differential Influences on Asthma Self-Management Knowledge and Self Management Behaviour in Acute Severe Asthma. *Chest* 110(6): 1463-1468.

Lavis, J., Ross, S., McLeoad, C., Gildiner, A., (2003) Measuring the Impact of Health Research. *Journal of Health Services Research and Policy* 8(3): 165-170.

Loomis, T. (1990) *Pacific Migrant Labour, Class and Racism in New Zealand*. Aldershot: Avebury.

Macinko, J., and Starfield, B. (2002) Annotated Bibliography on Equity in Health, 1980- 2001. *International Journal for Equity in Health*. At <http://www.equityhealthj.com/content/1/1/1>. Accessed 20 June, 2011.

Macpherson, C. (1984) On the Future of Samoan Ethnicity in New Zealand. In P. Spoonley, C. Macpherson, D. Pearson, and C. Sedgwick (eds.) *Tauwiwi: Racism and Ethnicity in New Zealand*. Palmerston North: Dunmore Press.

Macpherson, C. (1996) Pacific Islands Identity and Community. In P. Spoonley, D. Pearson, & C. Macpherson (eds.) *Nga Patai: Racism and Ethnic Relations in Aotearoa/ New Zealand*. Palmerston North: Dunmore Press.

Macpherson, C. (1997) The Polynesian Diaspora: New communities and New Questions. In K. Sudo & Y. Yoshida (eds.) *JCAS Symposium Series 3: Contemporary Migration in Oceania: Diaspora and Network*.

Macpherson, C. (1999) Will the “Real” Samoans Please Stand Up? Issues in Diaspora Samoan Identity. *New Zealand Geographer* 55(2): 50-59.

Macpherson, C. (2008) Migration and Social Transformation in the Contemporary Pacific. *New Zealand Sociology* 23(1): 30-40.

Macpherson, C., Bedford, R., & Spoonley, P. (2000) Fact or Fable? The consequences of Migration for Educational Achievement and Labour Market Participation. *The Contemporary Pacific* 12(1): 57-82.

Mailei, F. (1999) Identity as Concept. A New Zealand-Born Samoan’s Perspective. In Proceedings of the Pacific Vision Conference, July. Auckland.

Meechan, G., Collins, J., Petrie, K. (2002) Delay in Seeking Medical Care for Self Detected Breast Symptoms in New Zealand Women. *New Zealand Medical Journal* 115(1166): 257.

Melzoff, S. & Lipuma, E. (1986) Hunting for tuna and cash in the Solomons: a rebirth of artisan fishing in Malaita. *Human Organisation* 45: 53-62.

Mila-Schaaf, K., Hudson, M. (2009) The Interface Between Cultural Understandings: Negotiating New Spaces for Pacific Mental Health. *Pacific Health Dialog* 15(1): 113-119.

Mila-Scaaf, K. (2010) Lights on the Bridge to Recovery. In Building Bridges National Community Mental Health and Addictions Conference, April. Wellington.

Minister of Health and Minister of Pacific Islands Affairs. (2010) *Ala Mo’ui: Pathways to Pacific Health and Wellbeing 2010 – 2014*. Wellington: Ministry of Health. At <http://www.moh.govt.nz/pacific>. Accessed 20 July, 2011.

Ministry of Health. (2008) *A Portrait of Health. Key Results in the 2006/07 New Zealand Health Survey*. Wellington: Ministry of Health.

Mulitalo-Lauta, P. (2001) Pacific People's Identities and Social Services in New Zealand: Creating New Options. In C. Macpherson, P. Spoonley & M. Anae (eds.) *Tangata O Te Moana Nui: The Evolving Identities of Pacific Peoples in Aotearoa/ New Zealand*. Palmerston North: Dunmore Press.

National Advisory Committee on Health and Disability (National Health Committee). (1998) *The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health*. Wellington: National Advisory Committee on Health and Disability.

Novak, B. (2007) *Ethnic-specific health needs assessment for Pacific People in Counties Manukau*. Auckland: Counties-Manukau District Health Board.

Nutbeam, D. (1998) Health Promotion Glossary. *Health Promotion International* 13(4): 70-78.

Nutbeam, D. (2000) Health Literacy as a Public Health Goal: a Challenge for Contemporary Health, Education and Communication Strategies for the 21st Century. *Health Promotion International* 15(3): 259- 267.

Nutbeam, D. (2008) The Evolving Concept of Health Literacy. *Social Science and Medicine* 67(12): 2072-2078.

Papademetre, L. (1994) Self- defined, Other-defined Cultural Identity. Logogenesis and multiple group membership in a Greek Australian Sociolinguistic Community. *Journal of Multilingual and Multicultural Development* 15(6): 507-525.

Rogers, N., Hassell, K., Nicolaas, G. (1999) *Demanding Patients: Analysing the Use Of Primary Care*. Buckingham: Open University Press.

Sofaer, S., & Firminger, K. (2005) Patient perceptions of the quality of health services. *Annual Review of Public Health* 25: 513-559.

Spoonley, P. (1988) *Racism and Ethnicity: Critical issues in New Zealand society*. Auckland: Oxford University Press.

Statistics New Zealand and Ministry of Pacific Islands Affairs. (2002) *Pacific Progress: A report on the economic status of Pacific peoples in New Zealand*. Wellington: Statistics New Zealand and Ministry of Pacific Islands Affairs.

Statistics New Zealand and Ministry of Pacific Islands Affairs (2010) *Demographics of New Zealand's Pacific population*. Wellington: New Zealand. At [Http://www.stats.govt.nz/browse_for_stats/people_and_communities/pacific_peoples](http://www.stats.govt.nz/browse_for_stats/people_and_communities/pacific_peoples). Accessed 18 July, 2011.

Statistics New Zealand and Ministry of Pacific Islands Affairs. (2011) *Health and Pacific peoples in New Zealand. Pacific Progress 2010*. Wellington: Statistics New Zealand and Ministry of Pacific Islands Affairs.

Tiatia, J. (1998) *Caught Between Two Cultures*. Auckland: Christian Research Centre.

Tobias, M., Yeh, L.C. (2009) How Much does Health Care contribute to Health Gain and to Health Inequality? Trends in Amenable Mortality in New Zealand 1981 – 2004. *Australian and New Zealand Journal of Public Health* 33(1): 70-78.

Tuimaleali'ifano, M. (1990) *Samoans in Fiji: Migration, Identity and Communications*. Fiji: Institute of Pacific Studies, University of the South Pacific.

Wilson, P. (2001) A Policy Analysis of the Expert Patient in the United Kingdom: Self-care as an Expression of Pastoral Power? *Health and Social Care in the Community* 9(3): 134-142.

Young, N. (2001) The Pre-hospital Experience of Samoan Families Who Had a Child Admitted to Hospital With Pneumonia: a qualitative investigation. *Pacific Health Dialog* 8(1): 20-28.