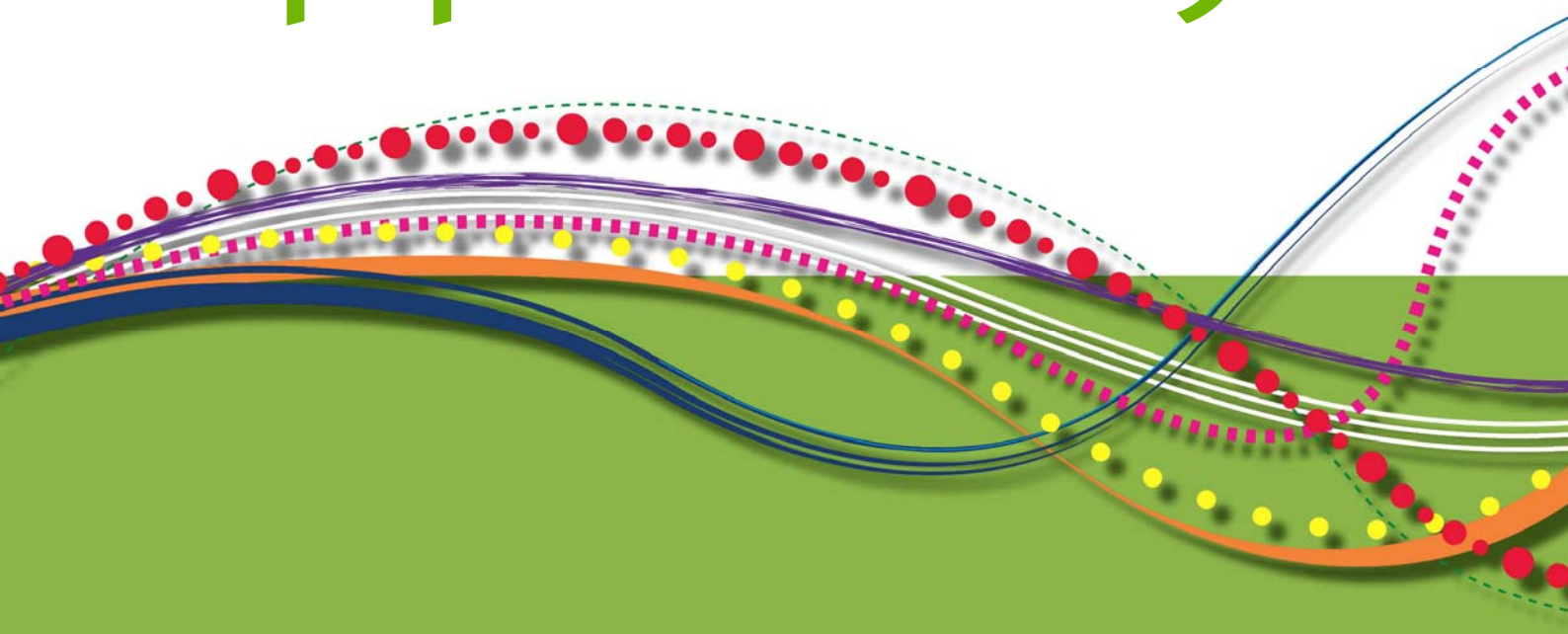
Queensland Health

The health of Queensland's Papua New Guinean population 2009



Queensland Government

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An electronic version of this document is available at www.health.qld.gov.au/multicultural

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Executive summary

This document profiles the health of Papua New Guinean Queenslanders. Data from a literature review, the Queensland Hospital Admitted Patient Data Collection, Australian Bureau of Statistics and focus groups with Papua New Guinean community members and leaders in Cairns and South-East Queensland and a consultation with a Cairns Pacific Islander community association are presented.

Quantitative data, particularly on the determinants of health and some health status indicators, are not available for the Papua New Guinea (PNG) population. Improved data collection and analysis is required to enable the development of a complete synopsis of the health of Papua New Guinean Queenslanders.

At the 2006 Census there were 12,566 Queenslanders born in PNG. The population is growing steadily at a growth rate of 30 per cent between 2001 and 2006. The PNG population speaks predominantly English, followed by Tok Pisin, Cantonese and Motu. Twenty per cent of people born in PNG identified Australian ancestry at the 2006 Census. The PNG born population is largely Christian. The majority of PNG-born people arrived in Australia during 1971-1980, indicating a population that is relatively established. The median age for the PNG-born population was similar to the Australia-born population and the sex ratio was 77.4 males per 100 females. The population is geographically distributed throughout Queensland but the largest populations are in Brisbane, Cairns and Gold Coast – with 51.62 per cent of the population living in these three Local Government Areas.

The PNG population has diverse health beliefs. However there are some commonalities and key features that are shared across this heterogeneous population. Beliefs are centred on an understanding that the physical and non-physical worlds are intertwined and that the health of people is directly related to the maintenance of proper social ties, adherence to the rules around taboos, and the propitiation of spirits. Serious illness and death result from oversights or disrespect of these beliefs. Living in harmony with the people in the village (rural) or in the house (urban) is fundamental to good health [1]. Spirits, sorcery, taboo violation, social transgression and witchcraft are attributed as the cause of illness in various locations throughout PNG. However, as the length of exposure to Australian medicine increases, knowledge of, and interest in, traditional practices and belief systems is beginning to wane. These traditional health beliefs and the process of acculturation all impact on the health of Papua New Guinean Queenslanders.

People born in PNG, who are one segment of the PNG community, display positive health outcomes for musculoskeletal disease and external causes. However, the higher hospitalisation separation ratio for diabetes and mental health snap-shot data suggest a chronic disease burden in the PNG-born population.

Focus groups identified the health priorities for the PNG communities in Cairns and South-East Queensland as diabetes, coronary heart disease, mental health and cancer. The PNG community experience many barriers accessing the health system including the lack of PNG health workers, Pacific Islander dedicated services, the lack of cultural competency in health services and the lack of culturally tailored health promotion.

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To improve PNG health in Queensland, all six focus groups recommended culturally tailored health promotion, dedicated Pacific Islander health workers and dedicated Pacific Islander programs and services.

Similar findings were made across other Pacific Islander communities in Queensland, highlighting what focus group participants themselves stated – Pacific Islander people have more similarities than differences regarding health and cultural belief systems. Therefore, the strategies to improve Pacific Islander health in Queensland have been compiled into a separate document, *Queensland Health response to the Pacific Islander and Māori needs assessment*.

About the document

Background

In 2008/09 the Queensland Government identified Pacific Islander[1] communities as a priority population. In response to this, Queensland Health undertook a health needs assessment with the largest communities – Papua New Guinean, Māori, Samoan and Fijian (Indigenous Fijian and Fiji Indian).

Document structure

Section one, *Data sources*, describes the main data sources used in this document.

Section two, *A profile of Queensland's Papua New Guinean population*, includes the population size and growth, languages spoken at home, ancestry, year of arrival, participation in voluntary activities, and age, sex and geographic distribution of the population.

Section three, P*apua New Guinean health beliefs* outlines the key cultural issues and factors that relate to the Papua New Guinea construction and experience of health and illness.

Section four, *Wellness and illness, the health status of Papua New Guinea-born Queenslanders,* includes information on deaths (all causes and avoidable) and hospitalisations (all causes and avoidable).

Section five, *Determinants of Papua New Guinean health and wellbeing*, includes Papua New Guinean health behaviours, psychosocial factors, socioeconomic characteristics, and knowledge, attitudes and beliefs.

Section six, *Health outcomes for Queenslanders born in Papua New Guinea,* principally documents the national health priority areas including: cancer, cardiovascular disease, diabetes, respiratory disease and musculoskeletal disease.

Section seven, *The way forward to improve Papua New Guinean health,* provides information on the approach taken to develop strategies and recommendations to improve Pacific Islander health in Queensland.

[1] Pacific Islander people come from three main regions in the Pacific – Melanesia (including Papua New Guinea, the Indonesian provinces of Papua and West Irian Jaya, New Caledonia, Vanuatu, Fiji, and the Solomon Islands); Micronesia (the Marianas, Guam, Wake Island, Palau, the Marshall Islands, Kiribati, Nauru, and the Federated States of Micronesia); and Polynesia (New Zealand, Niue, the Hawaiian Islands, Rotuma, the Midway Islands, Samoa, American Samoa, Tokelau, Tonga, Tuvalu, the Cook Islands, French Polynesia, and Easter Island). Polynesia is the largest of the three zones.

1 Data sources

This document draws on several quantitative and qualitative data sources. Data and methodology are further described in Attachment 1.

1.1 Literature review

A literature review was conducted for 1998 to 2010 using the following search terms:

- Health status Papua New Guineans
- Health priorities Papua New Guineans
- Morbidity Papua New Guineans
- Risk factors Papua New Guineans
- Pacific Islander health
- Papua New Guinea health
- Papua New Guinea epidemiology
- Papua New Guinea chronic disease
- Papua New Guinea mental health
- Social determinants of health
- Health inequity Papua New Guinea
- Health disparity Papua New Guinea
- Health inequality Papua New Guinea
- Papua New Guinea health beliefs

Databases searched:

- Medline
- Meditext
- Austhealth

References in articles obtained were followed up. Internet searches were also conducted using these search terms.

Articles were prioritised to include studies on immigrant Papua New Guinean populations including those in Australia. However, little has been published on the health of Papua New Guineans in Australia.

1.2 Quantitative data sources

1.2.1 Hospital separation data

Hospital separation data were derived from the Queensland Hospital Admitted Patient Data Collection, including private and public hospitals. All disease specific hospital separations were derived using the principal diagnosis of inpatient episodes of care. All separations were coded using the International Classification of Diseases version 10 Clinical Modification (ICD-10-CM) using standard code sets. Death and hospitalisation rates for all diseases and conditions are reported as age standardised rates. Standardisation minimises the distorting effects of age on the indicators and facilitates comparisons among populations.

With the method of direct standardisation, the proportional distribution of the standard population by age group is applied to the rates to obtain age standardised rates, which minimise or remove the distorting effects of age. Indirect standardisation uses the age distribution of the standard population to obtain expected counts, total number of expected counts and subsequently, standardised ratios (standardised mortality ratio or standardised separation ratio etc). The end product of direct standardisation is age

adjusted rates, while the end products of indirect standardisation are expected counts and standardised ratios.

It should be noted that hospital separation only includes those born in PNG – not members of the PNG community born in other countries, including Australia.

1.2.2 Australian Bureau of Statistics

Several data were obtained from the Australian Bureau of Statistics - National Health Survey 2007-08[2], Health Literacy[3], Australian Social Trends[4] and 2006 Census of Population and Housing.[5] All sources are cited and information about specific surveys including sample size can be obtained from the appropriate data custodian.

1.3 Focus groups with Papua New Guinean community members and leaders

As the Papua New Guinean community is predominantly located in Far North Queensland and South-East Queensland, - focus groups were held in these two locations.

Three focus groups took place in Cairns; one with community leaders and two with community members. All focus groups were held at the Cairns Library. The leaders' focus group involved ten participants; three men and seven women. The community focus groups involved 18 people; three men and 15 women[2]. A consultation with the Pacific Communities Council of Far North Queensland (PCCFNQ) also took place and is included here. There were eight Council representatives; four men and four women representing the Papua New Guinean, Cook Islander, Māori, Samoan and Tongan populations.

In South-East Queensland, three focus groups took place in Logan and Brisbane; one with community leaders and two with community members. Four PNG leaders attended the leaders' focus group in Brisbane which was held at the Multicultural Development Association. The first community focus group involved 11 people, nine women and two men and was held at Multilink at Logan. The second focus group involved 15 people; nine women and six men, and was held at a function room at the Corinda Golf Club.

The focus groups were co-facilitated by a Papua New Guinean facilitator and the Project Officer. Focus groups were conducted predominantly in English. A standard list of prompting points was used (Attachment 2 for community focus groups and Attachment 3 for leaders' focus groups). The focus group data was analysed by the Project Manager and Project Officer and then checked for cultural accuracy by the co-facilitators.

1.4 Health service provider survey

A potential sample of health services was developed. Health services in Cairns and South-East Queensland, where the PNG population reside, comprised the sample. Participants were randomly selected and contacted for a telephone interview. However, as most potential respondents were either not available or not able to participate due to time constraints, additional participants were selected from the sample or from referrals from the services contacted who could not participate. In total, fifteen participants completed the questionnaire (Attachment 5).

[2] The sex ratio of men to women in the PNG-born population is 80:100.

Profile of health service provider interview participants	
Type of health service provider	
Nurse	9
Social worker	2
Counsellor	1
Manager	1
GP	1
Trainer	1
Locations	
Cairns	8
South-East Qld	7

1.5 Data quality

Data are not available for several sections of this document. Quantitative data on the determinants of health relies on overseas studies and aggregated Australian data that place all Pacific Islander people into the category 'Oceania'. Queensland data on vaccination, mental health, alcohol, tobacco and other drugs, and communicable diseases are not available for PNG-born Queenslanders, or those with Papua New Guinean ethnicities.

2 A profile of Queensland's Papua New Guinean population

The people of Papua New Guinea (PNG) have travelled to Australia for thousands of years. The traditional ties between the people of Papua New Guinea and the Torres Strait were recognised in a treaty between the two countries. The treaty recognises a Protected Zone which is an area of the Torres Strait. The main reason for the Protected Zone is so that Torres Strait Islanders and the coastal people of Papua New Guinea can carry on their traditional way of life.[6]

Between 1863 and 1904 people from 80 Pacific Islands, primarily Vanuatu and the Solomon Islands were trafficked to Queensland to work in the sugarcane fields. This included approximately 5,000 New Guineans between 1883 and 1885. Many of these workers died soon after their arrival in Queensland.[7] The descendants of those who survived and stayed in Australia are known as Australian South Sea Islanders.

In the early part of the twentieth century many people were denied entry to Australia due to the Immigration Restriction Act 1901. However, Papuans were exempt for the purposes of pearl fishing. The 1954 Australian Census showed only 1723 Papua New Guinea-born people in Australia, including some engaged in the Torres Strait Islands pearling Industry [8].

Papua New Guinea gained its independence in 1975 and in 1978, the Torres Strait Border Treaty was signed. In 1976 there were 15,562 Papua New Guinea-born people recorded as living in Australia.

In 2006, Queensland had the largest PNG-born population in Australia (52.4 per cent), followed by New South Wales (21.8 per cent) and Victoria (9.8 per cent) .[8]

2.1 Population size and growth

The minimum core set of indicators defining cultural and linguistic diversity (CALD) are country of birth, main language other than English spoken at home, and proficiency in English. Refer to Attachment 6 for the full list of indicators.

The size of the Queensland PNG population can be estimated from 2006 Census data on country of birth and ancestry. According to this data, there were 12,566 Queenslanders who were born in PNG. PNG was ranked 12th of all overseas birthplace groups in Queensland. People born in PNG comprise 0.3 per cent of the total Queensland population.[9] In addition, there were 8,655 Queenslanders who identified their ancestry to Papua New Guinean ethnicities.

Between 2001 and 2006, the PNG-born population (based on country of birth) grew by 2.4 per cent and those people identifying PNG ancestry grew by 30 per cent. The total Queensland population grew by 2.4 per cent.

2.2 Languages spoken at home

PNG is the most linguistically diverse country in the world with more than 830 Indigenous languages.[10] The three official languages are English, Tok Pisin and Hiri Motu. At the 2006 Census, 886 people in Queensland spoke Tok Pisin and 296 people spoke Motu at home, indicating a high level of English and other language usage among the PNG population. The following additional languages were identified for those born in PNG:

Table 1 PNG born Queenslanders by language spoken at home, 2006

Language spoken by those born in PNG	Number
English	9837
Tok Pisin	886
Cantonese	747
Motu	296
Dutch	23
Japanese	13
Torres Strait	13

2.3 Ancestry

At the 2006 Census, 8655 Queenslanders identified their ancestry as Papua New Guinean, 216 as Melanesian Papuan (NFD) and 126 as Melanesian Papuan. Across Australia, 23 per cent of those who were born in PNG identified they had Australian ancestry.

2.4 Religious affiliation

At the 2006 Census, Queenslanders born in PNG identified predominantly with Christian religions:

Table 2 PNG born Queenslanders by religious affiliation, 2006

Religion	Number
Western Catholic	4595
Anglican Church of Australia	1560
Uniting Church	1479
Lutheran	569
Baptist	348
Seventh Day Adventist	238
Assemblies of God	218
Jehovah's Witness	142
Salvation Army	36
Christian Outreach Centres	29
Churches of Christ	28
Ba'hai	24
Wesleyan Methodist	21

2.5 Year of arrival

Table 3 shows that the majority PNG-born people in Queensland are well established, as most arrived between 1971 and 1990.

Table 3 PNG-born Queenslanders by year of arrival, 2006

Before 1971	1971-1980	1981-1990	1991-2000	2001-2005	2006	Not stated	Total
1952	4321	2341	1645	1225	335	788	12,607[3]

[3] For some demographic and health determinants indicators (such as ancestry or weekly individual income by birthplace) the total population number may differ by a few, depending on which source was used. This is due to the application of randomisation formulas by ABS.

2.6 Participation in voluntary activities

At the time of the 2006 Census, 19 per cent of the PNG-born population in Queensland had participated in voluntary activities in the preceding 12 months. PNG-born Queenslanders were ranked 10th among country of birth groups with 19 per cent of people participating in voluntary activities. Australia-born people were ranked fifth with 20.3 per cent of people participating in voluntary activities in the preceding 12 months. Participation in voluntary activities is considered an important indication of social inclusion.[11,12]

2.7 Age and sex distribution

Among the total population of PNG-born Queenslanders, there were 7082 females (56.37 per cent) and 5481 males (43.63 per cent) in 2006. The sex ratio was 77.4 males per 100 females for Queensland and 80.1 males per 100 females for Australia. The sex ratio for the whole Queensland population in 2006 was 99.7 males per 100 females.

In 2006, the median age of the PNG-born population in Queensland was 37.8 years, compared with 37.1 years for the total Australian population and 36.0 for the Queensland population. The age distribution showed 6.3 per cent were aged 0-14 years, 9.5 per cent were 15-24 years, 53.9 per cent were 25-44 years, 24.4 per cent were 45-64 years and 5.9 per cent were 65 and over.[8]

2.8 Geographic distribution

In 2006, the three Health Service Districts with the largest populations of PNG-born Queenslanders were Metro South (3696), Metro North (2983) and Cairns and Hinterland (1814). The top three Local Government Areas (LGA) were Brisbane, Cairns and Gold Coast.

Table 4 PNG-born Queenslanders by top 10 Queensland LGAs, 2006

Local government area	Responses (2006)	Percentage of pop
Brisbane (C)	4097	32.58%
Cairns (C)	1426	11.34%
Gold Coast (C)	969	7.70%
Logan (C)	897	7.13%
Townsville (c)	465	3.70%
Pine Rivers	450	3.58%
Redland	381	3.04%
Maroochy	316	2.52%
Toowoomba	266	2.12%
Thuringowa	261	2.07%
Other	3046	24.22%
Total	**12,574**	**100%**

2.9 Summary of the PNG population profile

The size of the PNG population in Queensland can be measured from 2006 Census country of birth data. The population of PNG-born people in Queensland in 2006 was 12,566. The population based on ancestry data grew 30 per cent between 2001 and 2006.

The PNG population speaks predominantly English. The other languages spoken are Tok Pisin, Cantonese and Motu. The PNG born population is largely Christian with the largest groups identifying with the Catholic, Anglican and Uniting churches.

The majority of PNG-born people arrived in Australia during 1971-1990, indicating a population that is relatively established. This has implications for the 'healthy migrant effect' which is a temporary phenomenon whereby healthy migrants start losing their relatively good health after the first five years.[13-16]

The median age for the PNG-born population was similar to the whole Queensland population. The sex ratio was 77.4 males per 100 females which was significantly different to the Queensland wide ratio of 99.7 males per 100 females. Geographically the population is widely distributed throughout Queensland with the largest populations in Brisbane, Cairns and Gold Coast – with 51.62 per cent of the population live in these three Local Government Areas.

Taking participation in voluntary activities as an indicator of social inclusion, the PNG population appears socially included with a similar participation rate to the Australia-born population.

3 Papua New Guinean health beliefs

Health and illness are constructs that differ across cultures. Culture significantly shapes perceptions of health and health-related behaviour. The failure to adequately take into account a population's cultural and social constructs can result in barriers to effective health care [17]. This section will briefly outline the fundamental concepts that are integral to the Papua New Guinean constructions of health and illness.

The concepts presented in this chapter are generalisations, and health beliefs will vary according to level of acculturation, level of education, religious beliefs and other particulars. Individuals may not fit in a predetermined cultural box and will be in different stages of acculturation.

Papua New Guinea at a glance

Papua New Guinea is the largest developing country in the Pacific region and has the lowest health status in the region [18]. It is classified as a low-income country, comparable to sub-Saharan African nations, and is ranked 149th out of 179 countries on the human development index.[19] Close to 87 per cent of the country's six million people live in rural areas and access to widely scattered rural communities is often difficult. Only three per cent of the country's roads are paved. Communicable diseases, including malaria and tuberculosis are the major cause of morbidity and mortality in all age groups and PNG now has a generalised HIV/AIDS epidemic.[18]

Health and other beliefs

PNG is renowned for its cultural diversity. With regard to health beliefs and traditional medical practices, there is diversity not only between provinces but also within provinces. Notwithstanding this diversity, there is some uniformity in the underlying beliefs from which traditional practices stem.[20]

People generally believe that the physical and nonphysical worlds are intertwined and that the health of people is directly related to the maintenance of proper social ties, adherence to the rules around taboos, and the propitiation of spirits. Serious illness and death result from oversights or disrespect of these beliefs. Living in harmony with the people in the village (rural) or in the house (urban) is fundamental to good health.[1]

Most cultural groups in PNG classify illness according to severity. Illnesses considered minor are generally due to natural causes, contagious illnesses, illnesses that have been introduced by Europeans, and illnesses that affect children. Serious illnesses usually involve supernatural forces. People from all provinces in PNG see spirits as disease-causing agents. Spirits may be ancestors, unrelated, or associated with geographic features.[20] Similarly, all provinces except Simbu believe that sorcery causes illness. In most cultural groups, sorcerers are believed to possess the power to cause and cure illness. Table 5 summarises the various supernatural forces that people in different PNG provinces believe cause illness:

Table 5 Commonly perceived supernatural causes of illness in PNG

Province	Spirits	Sorcery	Taboo violation	Social transgression	Witchcraft
Bougainville	✓	✓	✓	✓	x
Central	✓	✓	x	x	x
East New Britain	✓	✓	x	x	x
East Sepik	✓	✓	✓	✓	✓
Eastern Highlands	✓	✓	✓	✓	x
Enga	✓	✓	✓	✓	✓
Madang	✓	✓	✓	✓	x
Manus	✓	✓	✓	✓	x
Milne Bay	✓	✓	✓	✓	✓
Oro	✓	✓	✓	✓	x
Sandaun	✓	✓	✓	✓	x
Simbu	✓	x	✓	✓	x
Southern Highlands	✓	✓	✓	✓	x
West New Britain	✓	✓	✓	✓	x
Western	✓	✓	x	x	x
Western Highlands	✓	✓	✓	✓	x

Source: [20 p. 54]

Some of the less common health beliefs about the causes of illness are:

- loss of soul
- contamination from women or sexual intercourse
- natural causes such as wind or water
- earthquakes
- pollution
- contagious elements such as viruses or bacteria
- natural ageing process.

Traditional treatment modalities

Traditional treatment modalities may be unique to certain cultural groups, but there are also many practices that are common in many provinces.[20] A large part of traditional medicine is based on plant or tree medicines. In many communities there is widespread knowledge of plant remedies that are used for first aid. For more specialised treatment, a traditional practitioner or a sorcerer is usually required [20]. The various types of traditional treatments are presented in Table 6.

Table 6 Traditional treatment practice in PNG

Province	Home care	Plant remedies	Sorcery/ incantation	Spiritual healing	Blood letting	Massage
Bougainville	✓	✓	✓	✓	x	✓
Central	✓	✓	✓	x	✓	✓
East New Britain	x	✓	✓	✓	✓	✓
East Sepik	x	✓	✓	x	✓	x
Eastern Highlands	✓	✓	✓	✓	✓	x
Enga	x	x	✓	x	x	x
Madang	x	✓	✓	x	x	x
Manus	✓	✓	✓	✓	x	x
Milne Bay	x	✓	✓	✓	✓	x
Oro	x	✓	✓	✓	x	x
Sandaun	x	✓	✓	x	x	x
Southern Highlands	✓	✓	✓	✓	✓	✓
West New Britain	✓	✓	✓	x	✓	x
Western	✓	✓	✓	x	x	x
Western Highlands	x	✓	✓	x	x	x

Source: [20 p. 55]

The use of trance to access information about difficult situations or future events occurs in some communities and plant concoctions are used to achieve trance states.[21]

Western medicine is usually acquired through local aid posts and is more often used for minor illnesses. It is also used for symptom relief for serious illnesses or complementary to traditional medicine. However, as the length of exposure to Western medicine increase, knowledge of and interest in traditional practices is starting to wane. In some provinces the younger generations have little knowledge of traditional practices.

Wantok system

Wantok means 'one talk' and it refers to people of the same family, village or clan (who share the same language). The foundation of Papua New Guinean society is the sense of duty and obligation to fulfil responsibilities to the extended family. It is a reciprocal system; assistance is given but with the understanding that equal value is owed and should be returned. Contributions towards bride price, school fees, death feasts and construction (in money or in kind) are made to the clan based on this system. In the village setting, the *wantok* system provides a safety net with strong community obligations and a way to share wealth and responsibilities. However in the political and business world, the system has led to conflict of interest and nepotism because the obligations to clan have often had to supersede the larger community interests.

Health beliefs and acculturative stress

The preceding summary of health beliefs should be considered in the context of a population in the process of acculturation. As for any immigrant population, the PNG population is adjusting to a host culture and a range of experiences referred to as acculturative stressors. These include[22] :

- Physical stressors – changes in weather, housing, new settings, safety
- Social stressors – loneliness, homesickness, missing family and friends, difficulty relating to others, making new friends
- Cultural stressors – differences in cultural values and attitudes, racial discrimination

- Functional stressors – change in mode of transportation, languages used daily, work and study conditions, financial situations
- Biological stressors – different foods, illnesses or disease.

Both traditional health beliefs and the process of acculturation play an integral role in the health and wellbeing of PNG people in Queensland.

4 Wellness and illness, the health status of Papua New Guinean Queenslanders

4.1 Self-reported health and quality of life

The National Health Survey 2007-08 presented data relating to self-reported health status and quality of life at a national level. Data are not routinely available by country of birth as analysis is limited by small numbers of overseas born participants.

4.2 Life expectancy

The life expectancy of the Queensland population 2004-2006 (including Australian and overseas-born) is 78.5 years for males and 83.4 years for females.[4] The relatively small number of PNG-born Queenslanders prevents meaningful country of birth specific life expectancy calculations from being made.

4.3 Infant mortality and health

The most recent available Queensland data reporting infant health and infant mortality are for the period 2006-07. During this period, there were 695 infants born to women who recorded PNG as their country of birth. The number of perinatal deaths (stillbirths and deaths to infants in the first 28 days of life) was ten.[23] There was no difference in the perinatal mortality rate of infants born to PNG–born mothers (14.4 per 1000 total births) and all Queensland mothers (10.5 per 1000 total births).

For the same period, of the 695 births recorded to PNG-born mothers, 59 occurred before 37 weeks gestation and were therefore classified as pre-term births. There was no difference in the rate of pre-term births for PNG-born mothers (84.9 per 1000 births) and all Queensland mothers (88.7 per 1000 births).[23]

4.4 Deaths – avoidable and all causes

Under nationally agreed criteria, almost two-thirds of all deaths of Queenslanders aged less than 75 years in 2004 were considered to have been potentially avoidable[24]. Of the 9598 deaths of people aged less than 75 years in 2004, 6805 (64 per cent) were considered avoidable and 3092 or 36 per cent were considered non avoidable.

Avoidable deaths include those caused by preventable conditions (for example lung cancer, hepatitis or chronic obstructive pulmonary disease), treatable or health care amenable conditions (for example most cancers) and preventable and treatable conditions (for example diabetes).

There was no difference in the standardised mortality rate for all causes of death for PNG-born Queenslanders (134.9) and the total Queensland population (100).

There was also no difference in the standardised mortality rate for total avoidable conditions for PNG-born Queenslanders (137.3) and the total Queensland population (100).

4.5 Hospital separations – all causes and avoidable

Hospital separations are a measure of hospital activity, representing episodes of hospital care from admission to discharge, transfer or death. In this document, hospital separations are presented as comparative ratios between the total Queensland population and PNG-born Queenslanders. In each case, hospital separation ratios have been age standardised using the 2006 Queensland population as standard. 'All Queensland' is the reference group for this comparison and therefore in each instance has a standardised hospital separation ratio of 100. The source for these hospital separation data is the Queensland Hospital Admitted Patient Data Collection.

Hospital separation rates and ratios, adjusted for the age of the population, are often used to compare levels of illness in communities. However, they need to be interpreted with caution. Hospital separations also reflect access to hospitals, the need for repeated admission, and current medical practice of treating an illness or injury in hospital, all of which can vary over time and in some cases between geographic areas.[25]

Between July 2006 and June 2008 PNG-born Queenslanders had a higher standardised separation ratio (SSR) for all causes (109.2) compared to the total Queensland population (100).

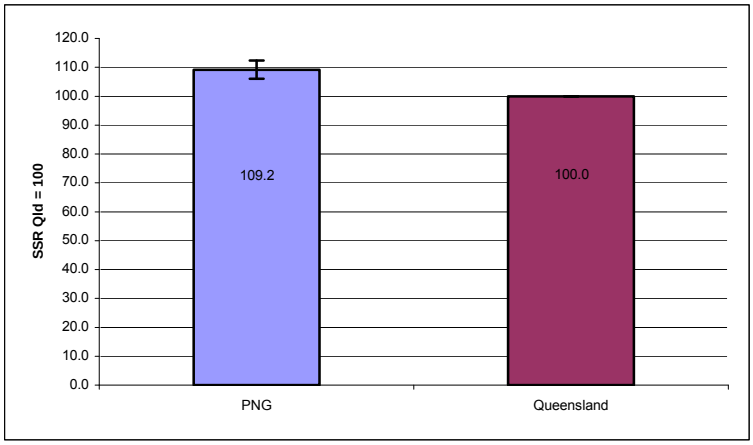


Figure 1 All causes standardised hospital separation ratio all Queensland & PNG born persons July 2006 to June 2008

There was no difference in the hospital separation ratio for total avoidable conditions for PNG-born Queenslanders (91.6) and the total Queensland population (100).

5 Determinants of Papua New Guinean health and wellbeing

5.1 About this chapter's data sources

This chapter presents the key determinants of PNG population health. The chapter presents findings of a literature review, focus groups with the PNG communities in Cairns and South-East Queensland, and a survey of health service providers.

Each section is documented in the following format:

1. Background information about the health factor summarised from *The Health of Queenslanders* report[26] (where available)
2. Literature review findings about each health factor in relation to the PNG population
3. National and Queensland data on the prevalence of each health factor among the PNG-born population
4. Focus group findings on each health factor
5. Health service provider survey findings on each health factor.

A summary of findings from focus groups with the PNG communities in Cairns and South-East Queensland is presented in Attachment 4. The major points of discussion will be documented in this chapter.

A summary of findings from the health service provider survey is presented in Attachment 5. Relevant findings will also be documented in full in this chapter.

5.2 Determinants of health

Determinants of health refers to the factors that influence the health status of populations and individuals.[27] These factors act in various combinations; that is, health is multi-causal.[28] These determinants or factors include societal factors such as culture, resources and systems; socioeconomic factors such as education, employment and income; health behaviours such as tobacco use, physical activity and alcohol consumption; and biomedical factors such as blood pressure, blood cholesterol and body weight. These factors are often categorised as either risk factors or protective factors.

The determinants of health are particularly important for explaining and predicting trends in health, and can provide explanations as to why some populations have better or worse health than others. They are at the heart of disease prevention and health promotion.[28]

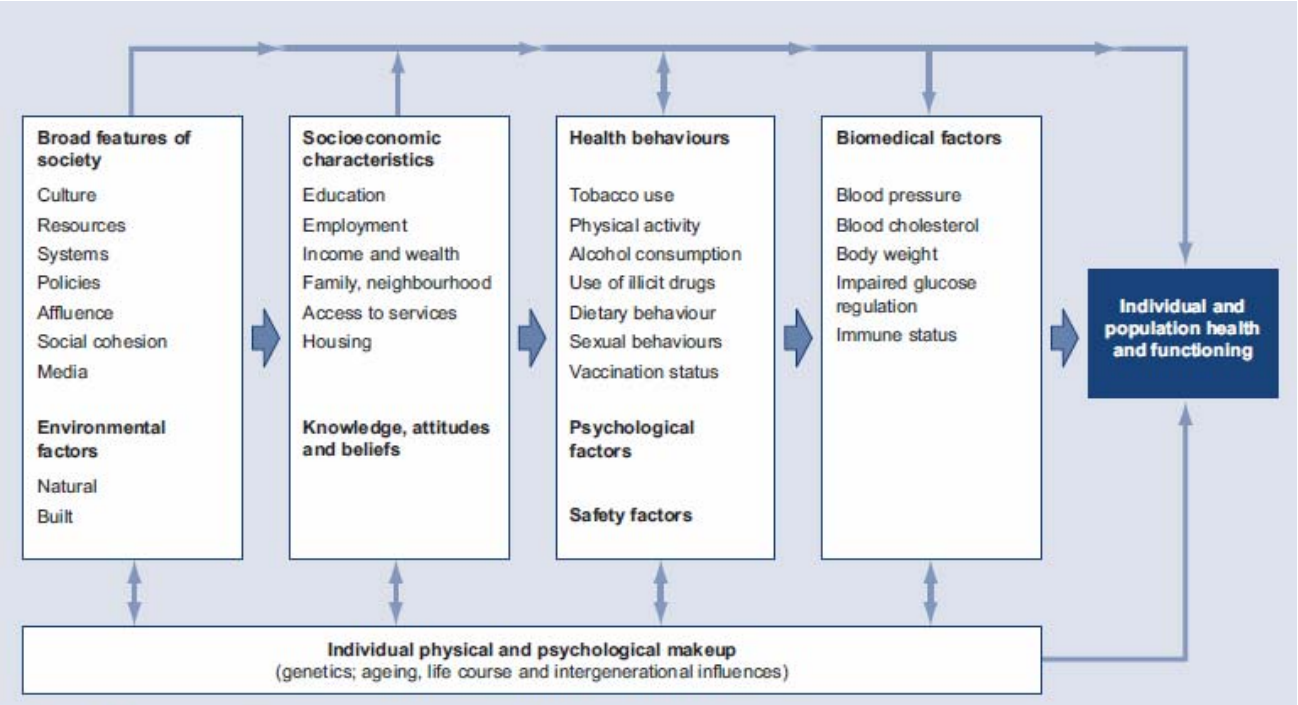


Figure 2 Conceptual framework for the determinants of health
(Source: Australian Institute of Health and Welfare[28])

This chapter documents the determinants of health and wellbeing.

5.3 Broad features of society

The PNG population in Queensland, like other Pacific Islander populations, is in cultural transition. People from PNG are immigrants from a country where, as the Indigenous peoples, they had cultural, social and spiritual ties to their land. Like many other Pacific Islander communities, Papua New Guineans do not identify themselves as 'ethnic migrants', and rather see themselves as indigenous people of the Pacific region.

Social cohesion was low within the communities in both Cairns and South-East Queensland, with people poorly networked within the community and with the wider community. There was strong evidence of low access to mainstream media messages with all focus groups reporting these messages either did not reach their community, or were not understood.

The weekly income of PNG-born people appears higher than Australia-born but is most likely skewed by Australians born in PNG as five out of six focus groups reported economic barriers. Therefore it is likely that the PNG community is not an affluent one.

5.4 Health behaviours

5.4.1 Tobacco use

Tobacco smoking is a leading risk factor in Queensland. It is known to contribute strongly to lung and related cancers, cardiovascular disease and diabetes regardless of country of birth.[25]

World Health Organisation data indicates that the tobacco smoking prevalence in PNG for males aged 17-59 is 53 per cent and for females is 34 per cent [29].

The National Health Survey 2007-08 asked participants about a number of risk factors including smoking. Of those people born in Australia, 19.9 per cent reported being a daily smoker. Of those people born in Oceania, 22.2 per cent reported being a daily smoker[2].

Smoking was not identified as a concern by PNG community members in Cairns nor in South-East Queensland and health service providers were not asked about smoking among Papua New Guineans.

5.4.2 Alcohol consumption

Alcohol is the most commonly used drug in Australian society. There is evidence that, from middle-age onwards, relatively low levels of alcohol have some health benefits.[30] However, drinking regularly and drinking at levels higher than the recommended National Health and Medical Research Council (NHMRC) guidelines increases the risk of acute and chronic health and social impacts, and premature death.

There is no recent data from PNG on the prevalence of hazardous alcohol consumption. However, PNG is renowned for its 'culture of intoxication'.[31] Local and provincial communities have often adopted a prohibitionist approach to alcohol consumption and media reports indicate that widespread hazardous drinking and violence have placed industrial projects at risk.[31] These may indicate that the prevalence of hazardous drinking is likely to be high in PNG.

In the National Health Survey 2007-08, participants were asked about a number of risk factors including high risk alcohol consumption. Of those people born in Australia, 14 per cent reported consuming alcohol considered high risk. Of those people born in Oceania, 16 per cent reported consuming alcohol considered high risk.[2]

In the South-East Queensland focus groups, alcohol and drug misuse was mentioned in both of the community focus groups but not discussed at any length. One community focus group identified that heavy drinking, particularly of spirits, was a common practice among young people in the PNG community.

In Cairns, both community focus groups identified alcohol and substance abuse as causing significant health and social problems within the PNG community. The leaders did not mention alcohol and drug misuse, which may reflect the older average age of the group. One theme in the community focus groups was that young people in particular drink heavily in their social circles, although some participants said alcohol is a problem for all ages. Greater accessibility of alcohol in Australia was identified as a factor contributing to the problem. Some participants also mentioned that excessive drinking had led to some violence, particularly outside nightclubs in Cairns. One woman said:

> *"Alcohol – people don't have enough food and water and too much alcohol. Young people consume a lot of alcohol. Alcohol is very accessible here and it has led to binge drinking. Drugs is also an issue as it is far more accessible here than at home. There is some peer pressure especially when there are get togethers, in the community atmosphere with friends – people gee each other up. Alcohol is a problem for all ages. Young people however can't get alcohol at home – here there's heaps of availability."*- PNG female

All of the focus groups discussed the close links between the Aboriginal and Torres Strait Islander communities and the PNG community and several participants worked in Aboriginal and Torres Strait Islander services. In one community focus group, some participants discussed PNG and Aboriginal and Torres Strait Islander communities socialising with each other. Children and young people who grow up together also use substances together. One man said:

> *"When there's drugs involved, it leads to mental health problems …depression. I work with Indigenous kids – they use spray paint, glue, or whatever they can find. It is a multicultural community in Cairns – they all mix together. So it affects other kids too. We mix around. The community gets together. They've been friends since little. What they see others do, they'll want to do as well."* – PNG male

Marijuana was the main drug identified as being used in the PNG community.

Health service providers were not asked about alcohol consumption in the PNG community.

5.4.3 Dietary behaviour

Nutrition is an important determinant of health and wellbeing. Good nutrition is essential for the normal growth and the physical and cognitive development of infants and children, healthy weight, enhanced resilience and quality of life, good physical and mental health throughout life, resistance to infection, and protection against chronic disease and premature death.[26]

Nutrition data are limited in Queensland and Australia and country of birth data is not available for Queensland. The National Health Survey 2007-08 reported 93.4 per cent of Australia-born people had inadequate fruit and vegetable consumption and 93.0 per cent of Oceania-born people had inadequate intakes.

National health data from PNG is of limited relevance to the PNG population living in Queensland, as the vast majority of the PNG population live in rural areas where malnutrition and underweight are prevalent. Of more relevance is the urban population in Port Moresby where the population is exposed to Western foods, supermarkets and sedentary lifestyles.[32] In a study comparing the body mass index (BMI) of urban and rural populations in PNG, Port Moresby residents had a mean BMI of 26.5, residents from Manus with some peri urban characteristics 25.5, while those from remote villages in Central Province 19.6. In Port Moresby obesity among males was 16 per cent and females was 26 per cent, and in Manus 13 per cent and 20 per cent respectively.[32]

All the South-East Queensland focus groups identified obesity as an emerging problem in the PNG community with poor diets and low levels of physical activity the underlying causes. Participants said their traditional diets were healthy and fresh and that the array of processed foods in Australia was confusing as the nutritional content is difficult to understand. They also discussed that meat is not consumed often in PNG but in Australia it is more readily available and consumed more often. The community focus groups identified that health promotion is needed on nutrition and physical activity. The following comment was typical:

> *"… we must educate our people that they don't forget where they've come from. Desserts are a foreign thing. At home we only eat two meals a day. Just because we come here, we shouldn't forget about our culture and do things in new ways… Awareness raising campaign is required. 'Remember the foods we grew up on.' If we eat our natural foods, cassava, taro…we would stay healthy."* – PNG male

In Cairns all three focus groups similarly discussed people's deteriorating lifestyle habits and in particular, their changing eating habits, as they settle into their life in Australia. It was acknowledged that when people first arrive in Australia they generally have good eating habits, but that these deteriorate over time. Two participants said:

> *"We naturally eat healthy stuff, but when we come here, we don't."* – PNG female

> *"Issues with food – there is plenty right food around – but we take short cuts! We have too much access to wrong foods, fast foods."* – PNG female

The focus groups in both locations prioritised healthy lifestyles messages, including nutrition, for culturally tailored health promotion. Some specific recommendations were:

- healthy lifestyle campaigns should be culturally relevant with a focus on nutrition
- nutritional information should include foods in the PNG diet such as taro and other root crops
- campaign idea: 'how much is too much?' guidelines for salt and sugar intake.

Health service providers were asked whether they had observed malnutrition or obesity among PNG consumers. Three health service providers had observed malnutrition often or sometimes, and eight had never observed it. Four health service providers did not answer the question as they had not worked closely enough with PNG consumers to comment. Five health service providers had observed obesity often or sometimes, while five had never observed it. Five did not answer the question as they felt they could not comment.

Breastfeeding

Infants and children depend on good nutrition for normal growth and development. Breastfeeding is associated with a reduction in the incidence and impact of childhood infections, allergic disease, diabetes, obesity, some childhood cancers and Sudden Infant Death Syndrome. Breastfeeding is also associated with reduced risk of cardiovascular disease in adulthood.[26]

In 2006, of the 337 PNG-born women who gave birth in Queensland Health facilities, at the time of discharge, 91 per cent (306) exclusively breastfed, 2 per cent (9) breastfed and formula fed and 7 per cent (22) exclusively formula fed. This is higher than exclusive breastfeeding rates by Australia-born mothers (83.3 per cent). No breastfeeding data is available at six months of age by mothers' country of birth. However, all Queensland rates at 2006 were known to be 57 per cent, which fell well below the national objective of 80 per cent.

5.4.4 Physical activity

Physical activity is essential for maintaining good physical and mental health and general wellbeing of adults and children. Regular physical activity reduces the risks of many chronic diseases, particularly cardiovascular disease and Type 2 diabetes. Half the adult population in Queensland is not sufficiently active and there is great potential to improve physical activity.[26]

Data relating to levels of physical activity for Queenslanders by country of birth is not available. The National Health Survey 2007-08 found that adults born in Oceania had slightly lower sedentary levels compared to adults born in Australia.[33]

In the Cairns focus groups, physical activity was not specifically discussed. However, a Pacific Islander community garden was recommended by two focus groups. The garden was felt to promote trust and cooperation in the community and would provide an avenue for growing traditional foods and promoting physical activity.

In South-East Queensland all of the focus groups discussed the change in lifestyle in Australia. This included the lack of incidental physical activity and a reliance on transport. Participants said that in PNG, people rely more on walking and tending to the garden, which increases their physical activity levels. Obesity was seen to be a problem in the community in Queensland. The following comments were typical:

> *"Obesity – some of us grow too fat here. At home we walk around and there's a lot to do. But here not. Obesity is a problem. We don't do exercise and we eat too much food. At home you don't have a car and you walk to the market. Here you don't need to walk much. You catch the bus or train."* – PNG female

> *"We are too embarrassed or lazy to exercise!"* – PNG leader

5.4.5 Sexual behaviours

Safe sexual behaviour is another factor affecting health and wellbeing [34]. Unsafe sex, unplanned pregnancies, sexually transmitted infections, HIV infection and unwanted sex are some of the issues related to sexual behaviour.

There are no Queensland or national data on the prevalence of these sexual health behaviours and health outcomes among the PNG-born community specifically.

In Queensland, of the 166 new Human Immunodeficiency Virus (HIV) notifications in 2008, 65.1 per cent (108) were Australia-born. Countries of birth reported for the remaining 34.9 per cent (58) of notifications included Pacific Islands (9.6 per cent), Africa (7.8 per cent), Europe (6.0 per cent), Asia (4.2 per cent), the Americas (1.8 per cent), and unknown (5.4 per cent).[35]

Unlike most other countries in the world where the HIV epidemic is steady or declining, in PNG it is expanding. Also, different to the generalised trend, in PNG the majority of infections occur in rural areas, not urban areas [36]. The prevalence of HIV infection in the adult population is two per cent, which is approximately 64,000 people.[37] Very high rates of sexually transmitted infections are also reported in PNG, with low-risk groups (mothers attending ante-natal clinics) having estimated rates in the range of 18 per cent to 80 per cent for gonorrhoea, 4 per cent to 30 per cent for syphilis, and 17 per cent to 44 per cent for Chlamydia.[38]

Sexually transmitted infections were raised in all of the Cairns focus groups. However, it was noted that the topic is a taboo topic and not discussed openly in the community. This could be related to the bilingual co-facilitator also working in a sexual health education program targeting the PNG community and some participants feeling comfortable to raise this taboo subject. One community focus group identified that sexually transmitted infections are common among the younger PNG community. The other focus group discussed that HIV is not a problem in Cairns among people from PNG, but that HIV is a major problem in PNG. In that focus group there was also a debate about the most effective strategies to deal with sexual health issues in the Cairns PNG community. Some people felt that open and confronting communication strategies should be used while others felt that given the taboo nature of this health topic, a more sensitive approach was required.

In the South-East Queensland focus groups, discussion of sexually transmitted infections was limited to providing comment on the literature review findings. Both focus groups said that sexually transmitted infections were a problem particularly among younger people. However, no further discussion ensued.

Health service providers were asked to rate how frequently they had observed sexually transmitted infections among their PNG consumers. This was a difficult question as those working in clinical areas not related to sexual health would not have an opportunity to know if their client had a sexually transmitted infection. Two sexual health clinic nurses were interviewed and both had observed sexually transmitted infections among PNG consumers 'often'. Of the remaining health service providers, two rated sexually transmitted infections as occurring among PNG consumers 'sometimes' and seven as 'never'.

Health service providers were asked to prioritise the most important health and wellbeing issues for the consumers with whom they work from a PNG background. One service provider, a sexual health nurse, prioritised HIV. The strategies suggested to address this issue was to increase the cultural competency of health professionals, including general practitioners, to respond more effectively to PNG consumers.

In summary it appears that sexually transmitted infections in the PNG community, particularly among young people, could be an issue of concern.

5.4.6 Vaccination status

Queensland data is not available to provide vaccination rates by specific country of birth.

In the Cairns focus groups, discussion of vaccination occurred in both the leaders' and community focus groups. Participants said there is a perception that in Australia too many vaccinations are given to children, as in PNG these are not routinely available. Therefore, mothers do not take their infants and children for the recommended vaccinations. One leader said that health education was required for young mothers:

"Health education – for example our young women do not know anything about vaccination and the need to vaccinate their children".- PNG leader

This finding is consistent with a Logan study[39] on immunisation for children from Samoan, Tongan, Cook Islands and Māori backgrounds. The study reported lower immunisation coverage (77 per cent) in four Logan suburbs and a higher representation of children from these backgrounds among those in prep/year one who were overdue for immunisation. Barriers to immunisation were identified as previous immunisation experiences, cultural norms, family structure, language barriers and low health literacy. Enablers were identified as having knowledge of immunisation and the health system, the ability to read and speak English, an understanding of incentive programs, having support family networks, and maintaining a record of past immunisations.

5.5 Psychosocial factors

5.5.1 Psychological and mental health

There are no data available on the prevalence of mental illness in the PNG-born population in Queensland. The 2007 National Survey of Mental Health and Wellbeing reported prevalence data at the regional level, for example, Oceania.

There are few mental health data reported in PNG. PNG has one psychiatrist per one million people and one registered psychiatric nurse per 70,000 people. The majority of mental health care is provided by general health workers in various community settings [40].

In Cairns, mental illness was identified as an issue of concern by all three groups. Suicide was identified as largely affecting young people in one focus group. In the other community focus group it was identified that the PNG population has poor understanding of mental health issues. Mental health is regarded as a taboo subject in the PNG community. One young woman said:

"Mental health – our community has a very narrow understanding. Mental health is a taboo subject – everyone is affected. In the old days it was more taboo – now as everything becomes more westernised in PNG things are changing a bit. People don't talk about how they are feeling. I was never asked when I was growing up, how I feel." – PNG young woman

A related topic discussed in one of the community focus groups was that of social isolation. There was concern that new arrivals and the elderly are socially isolated, and the elderly in particular, very lonely. A related topic, gambling addiction and its significant impact on the PNG community in Cairns, was discussed in all three focus groups. Participants said that people from PNG could be found at any gambling outlet, whether it be the casino, clubs with poker machines, keno, horse racing or bingo. People described family and financial stresses in relation to gambling. The leaders described the impact on children in particular:

"In PNG cards was common but here it's the poker machines. Children are left to fend for themselves while their mother goes out to gamble." – PNG male leader

It was explained that in PNG card games also involved gambling for money and after coming to Australia, many people progress on to other forms of gambling. Gambling addiction was also discussed in both of the South-East Queensland community focus groups. Anecdotes were provided of the impact of gambling addiction in the community:

"I know someone who has kids; he leaves them in the apartment and is gone for days. …He was a very big gambler and the children were going hungry, no clothing… Kids were wearing summer clothing because father was gambling the money away. We had to help the family." – PNG female

In all of the South-East Queensland focus groups mental health, social and personal wellbeing and gambling addiction were discussed as priority issues in the PNG community.

Depression was identified in all of the South-East Queensland focus groups. Participants spoke about the impact of migration, change in lifestyle, social isolation, lack of connections and family support, and stressors of living in Australia. Discussions about loneliness, social isolation and being disconnected from the new community in Australia dominated the discussions. Most of the participants could relate to the following comment:

> *"I think a lot of people don't have their family network. I was very depressed when I first got here. I didn't seek medical attention but I was depressed. Depression is caused by loneliness… Cultural shock… You come here and everything is so different. You haven't got your family here."*- PNG female

Similar experiences were shared in the other community focus group:

> *"We need togetherness. We are lonely. I am home by myself. I need others, talk about home and all that. That would really help my depression. I was all alone when I first came. I was so lonely. I was in town and saw someone who looked like they were from PNG. I just went up to her and asked… I asked for her phone number. That's how I first met someone else from PNG. In WA they have a generic email address for everyone from PNG. That's how they link up. After I met some others I didn't want to go home anymore. I needed to find my own people or else I would have left and gone home."*- PNG female

Health service providers were not specifically asked about mental health issues. However, mental health issues were discussed as a priority health and wellbeing issue for PNG consumers by one mental health service provider. This service provider felt that working with young people and maintaining family connections was very important and that bicultural worker assistance was vital to this work.

5.5.2 Interpersonal violence

Abuse and steep power hierarchy within a community are recognised as risk factors to health and wellbeing.[28,34] Queensland and Australian data on the prevalence of interpersonal and domestic violence in the PNG population are not available. National surveys such as the Personal Safety Survey (2005) are not reported by country of birth.

As many people in the PNG-born population are reluctant to use services or report incidents of violence to the police, service data is also not an accurate reflection of the extent of the problem.

Violence against women in PNG is widespread, severe and well documented.[41-44] One study reported 60 per cent of men admitted to having participated in *lainap* (gang rape).[42] Another study reported a strong link between violence (particularly physical, emotional and sexual) and women's HIV positive status.[43]

Both of the South-East Queensland community focus groups said that violence against women is a problem in the local PNG community. In Cairns, all of the focus groups discussed interpersonal violence in the community. Domestic violence and violence among youth were discussed in particular. It was agreed that interpersonal violence is particularly prevalent in PNG, but some participants said that the problem is also widespread in the local community. One participant said:

> *"Domestic violence is a major problem in PNG. But the attitude comes here when people migrate here. There's little understanding that the laws are different here. There is more information around, even advertisements on TV – but it still happens. It is not discussed much*."- PNG female

Health service providers were asked to rate how frequently they had observed domestic violence issues among their PNG consumers. Five had observed domestic violence 'sometimes' and five 'never'. Five felt they could not comment. One service provider, a counsellor in a domestic violence service, felt that family violence was a major issue for the PNG community and that counselling, court support and community education were needed for the PNG community.

5.6 Socioeconomic characteristics

5.6.1 Access to health services

The health system itself is a fundamental determinant of health.[45] The World Health Organisation has identified that in most countries the health care system is inequitably distributed. This is pronounced in low- and middle-income countries, but inequity is also prevalent in high income countries such as Australia. There is evidence that people from ethnic minorities and Indigenous peoples are less likely to receive recommended health services and treatments that the wider population can expect to receive[45]. Access to culturally appropriate health services is an important protective factor.[34]

The focus group with PNG leaders and community members identified many barriers to the health system in both locations. Barriers discussed in all focus groups (denoted with a 3) or two focus groups (2) are summarised in Table 7.

Table 7 Summary of major barriers to access identified in focus groups in Cairns and SE Qld

Barriers to access identified in focus groups	Number of focus groups that identified barrier	
	Cairns	SE Qld
Lack of Pacific Islander workers	3	3
Lack of culturally tailored health promotion	3	3
Low health literacy	3	3
Lack of cultural competency in health services	3	3
Communication barriers	3	2
Economic barriers	3	2
Cultural reluctance to seek help	3	1
Lack of Pacific dedicated programs and services	2	2

Lack of Pacific Islander workers

The South-East Queensland leaders identified the unavailability of PNG or Pacific Islander health workers as the major issue. The leaders said that health issues were not properly addressed due to communication and cultural barriers. The community focus groups also identified the lack of PNG workers in the system as a major problem. It was also felt that PNG health workers would facilitate access and reduce cultural and communication barriers:

> *"The [mainstream] workers don't know the taboos that we have. They can't come from a PNG aspect to treat the problem". – PNG female*

One community focus group also identified the unavailability of a Pacific Islander Health Centre, staffed by Pacific Islander health workers. The other community focus group identified the lack of PNG or Pacific Islander health workers in the health system and the need for these workers in a range of contexts.

The major recommendation made by the three South-East Queensland focus groups was to address the unavailability of a Pacific Islander health workforce. All of the focus groups suggested that if there were no locally available doctors from a PNG background, that doctor exchange programs should be set up between Australia and PNG. Dedicated Pacific Islander health workers in the health system were seen to provide an access place and a contact point. It was also suggested that self-management programs and health promotion programs would be best delivered by trained Pacific health workers who were culturally knowledgeable and skilled in health service delivery. The community leaders said that equal participation in health care by PNG people could best be achieved through the employment of Pacific Islander health workers:

"We need equal participation by our people in health care. We can only achieve this if we employ Pacific Island health workers. Once again, an exchange of medical officers would help this". – PNG male, leader

The Cairns focus groups identified the same issues. The leaders felt that the lack of Pacific Islander liaison officers was a problem for community members who found it difficult to find services, while the community focus groups identified that the lack of Pacific Islander health workers led to poor service access and poor follow-up. Many participants also made comparisons with Aboriginal and Torres Strait Islander health workers and noted that such positions were required for the Pacific Islander population in Far North Queensland, not just the PNG population. A similar comparison was made with Aboriginal and Torres Strait Islander and Pacific Islander dedicated resources and services. The following comment by one participant was typical:

"There are Indigenous liaison officers but there is nobody for us. We should have a Pacific liaison officer available to help our people use the hospital and health services." – PNG leader, female

"We need a Pacific Islander health worker to assist with follow ups. The visiting midwife is really good. So helpful when you don't have your mother here to help you. We need something like that." – PNG female

All of the Cairns groups also recommended the employment of dedicated Pacific Islander health workers in the health system. The notion of 'for Pacific by Pacific' was one that everyone shared. It is noteworthy that both leaders and community members did not specifically recommend PNG staff but Pacific Islander staff. There was a strong identification with other Pacific Islander communities and it was felt that an inclusive approach would be successful and also more feasible. The community focus groups had specific strategies and recommendations for dedicated staff:

- Pacific Islander Liaison Officer at the Cairns Base Hospital
- Pacific Islander health promotion officer
- Pacific Islander women's health officer
- Pacific Islander identified worker to undertake education, social work, follow ups and act as a liaison person.

Two focus groups advocated the need for a Pacific Islander Liaison Officer within the health system for referral, assistance and support. The following comment is representative of the discussions:

"Pacific Islander workers – we need more of our own workers. We can't do it ourselves. We need more liaison officers." – PNG female

Four health service providers interviewed recommended the employment of PNG or Pacific Islander staff to help address the priority health issues of the community. All of the mental health service providers mentioned using bicultural workers through the Queensland Transcultural Mental Health Centre when they worked with PNG clients.

Lack of culturally tailored health promotion

Another topic in all of the focus groups was the lack of culturally tailored health promotion, targeting the PNG community. All participants discussed the PNG community's lack of engagement with health issues and campaigns and the resulting low health literacy. Health campaigns were seen as irrelevant as they did not include images, food or lifestyles related to Pacific Islander communities.

All of the South-East Queensland and Cairns focus groups identified a lack of engagement between health promotion and community education programs, and the PNG community. All participants agreed that the lack of cultural tailoring was the major problem and that people from PNG backgrounds should be employed to develop culturally tailored programs. Some participants described how mainstream campaigns were perceived as irrelevant and there were no strategies to disseminate information specifically to PNG people. Some participants also related the lack of health information reaching the PNG

community to the lack of a PNG centre or association that could act as the conduit. The following comments were typical of the discussions:

> *"Health promotion is needed – correctly targeted. There is no one place where you go as there is no place apart from the consulate. How would it get out? Everything is word of mouth. Queensland Health has to work alongside Papua New Guineans to do this."* – PNG male

> *"Health promotion campaigns do not reach us. I don't know where they are – where they are hiding. I think it depends on how much TV you watch. But they should come out and make it known to us."* – PNG male

The community focus groups identified that health promotion was needed on mental health issues, nutrition and physical activity.

All of the focus group articulated dissemination strategies for the PNG community in South-East Queensland. These included:

- Information in plain English and Pidgin English
- Community radio or TV
- Guest speakers (information sessions/workshops)
- PNG student associations
- Free BBQ to bring people together
- School newsletters
- Local newspapers
- Set up a PNG community newsletter
- Churches
- Set up a PNG network with a website and a contact point.

The Cairns focus groups also provided many ideas and recommendations for improving the lack of culturally tailored health promotion. Two campaign ideas were guidelines for salt and sugar intake 'how much is too much' and responsible gambling. Many suggestions were made for more effective dissemination of health information to reach the PNG and Pacific Islander communities in Cairns and Far North Queensland. Most of these involved personal approaches such as talks, small group sessions and workshops and engagement with churches and pastors. The importance of including Pacific Islander images was also highlighted. Specific strategies were:

- community education done by Pacific Islander workers under the umbrella of the Pacific Communities Council of Far North Queensland
- healthy lifestyle campaigns should be culturally relevant with a focus on nutrition
- use the Tropical Wave festival as a vehicle to deliver health campaigns
- in-flight or on-arrival information kits for newcomers on the services and systems in place in Australia
- HIV education involving magazines for young people, workshops for parents on talking with their children, facilitated by young people, cartoon books accessible where young people congregate and a campaign slogan of 'save the children of PNG'
- use the PNG radio program
- health information dissemination and health promotion should be ongoing. For example, a monthly talk or health workshop would keep the momentum going
- articles and information in local newspapers as PNG people are big readers of the local free newspapers
- a dedicated website for young people who are high users of the internet
- information should be in plain English
- campaign materials should have PNG or Pacific Islander people so that community members will identify with the campaign and its relevance to them
- PNG program on television.

Lack of cultural competency in health services

All of the focus groups identified various issues that relate to cultural competency in health services. The South-East Queensland leaders identified a lack of cultural awareness in the health system as a major problem and the community focus groups identified a range of culturally appropriate services that are required. One community focus group identified that the health system required cultural awareness training specifically on Pacific Islander cultural issues if Pacific Islander health workers could not be made available. The other focus group identified the need for culturally appropriate mental health support, aged care support, counselling and a PNG patient visiting service in major hospitals.

> *"Have more Pacific Islander staff. If they don't, they should educate their staff on cultural Pacific issues."* – PNG female

> *"When people get sick they go to the hospital. Nobody knows about it…it would help if we could visit them. It helps with the healing process. We should set up something with Queensland Health so that if someone is sick from PNG they could contact us and we could visit. We would like to have a visiting service. In the past we had a visiting service where we would visit PNG people in hospital or in gaol."* – PNG male

In Cairns all of the focus groups and in particular, the consultation with the PCCFNQ discussed cases and scenarios which reflect a lack of cultural competency among some health services. Specific issues included:

- Hospital: lack of support to accommodate those travelling to Cairns for treatment; culturally inappropriate handling of deceased bodies
- Mental health services: lack of culturally appropriate counselling services
- Food services: no culturally appropriate food available during hospital stays
- Health campaigns: not targeted to Pacific Islander peoples and therefore seen to be irrelevant or simply a lack of culturally appropriate health education e.g. cancer screening
- Aged care and respite services: not culturally appropriate and therefore there is some fear about using such services.

The PCCFNQ consultation revealed a lack of access to transport and accommodation support for Pacific Islander people who travel to Cairns from the Cape York region for health services, and also a lack of communication between the hospital and the Council:

> *"When Pacific Islander people who live in outer regions such as the Cape come to Cairns for a hospital appointment, we find them sleeping rough as they have nowhere to stay and often can't afford a motel. We feel bad. There is nothing in place for Pacific people. We would love to provide a room but the hospital says it is a privacy matter. Hospital is not willing to link people to support people here in Cairns. Also, people sometimes can't get back as they have no money. There's no scheme to get people back."* – PCCFNQ representative, female

In Cairns, the leaders recommended that cultural competency should be improved at the hospital, particularly in relation to food. It was suggested that local contractors could be engaged to provide cultural foods if the hospital could not cater for Pacific Islander patients. It was also suggested by the PCCFNQ that guidelines are required on the handling of deceased bodies to ensure cultural needs are met.

Communication barriers

In both locations, communication barriers were related to:

- a fear of asking questions, shyness and lack of confidence
- language barriers
- poor communication between doctors and PNG patients.

A strong theme in the focus groups was that people from a PNG background appear to be reserved or shy when needing to deal with mainstream service providers, or generally with people in authority. There is a cultural reluctance to seek help or approach service providers, ask for assistance, or ask questions.

"Misdiagnosis – we have a lack of confidence to tell the truth about what is really going on. If we had a PNG doctor this would be reduced." – PNG female

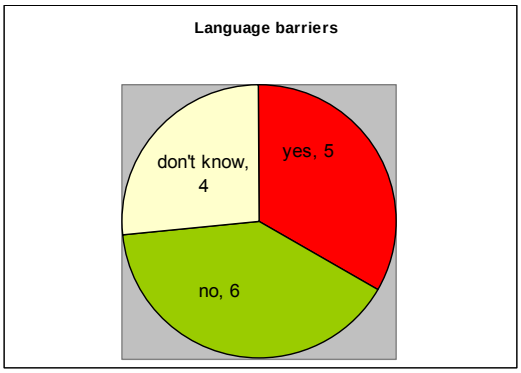
The second theme related to language barriers including the lack of interpreters available in Cairns and the lack of translations in Pidgin English in South-East Queensland. The following comment by one Cairns participant was typical:

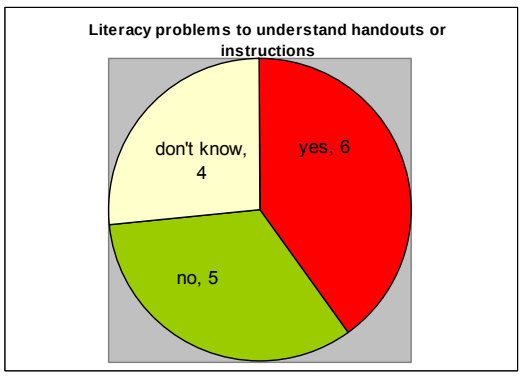
"...because PNG people can speak some English we assume they are fine. But they do not necessarily understand what's going on. Interpreters are generally not provided. Also the community doesn't know the interpreter services exist and don't know to ask for them. Information doesn't get out there. Doctors only book interpreters if the person speaks no English at all – if they speak a little – then they think all is okay." – PNG female

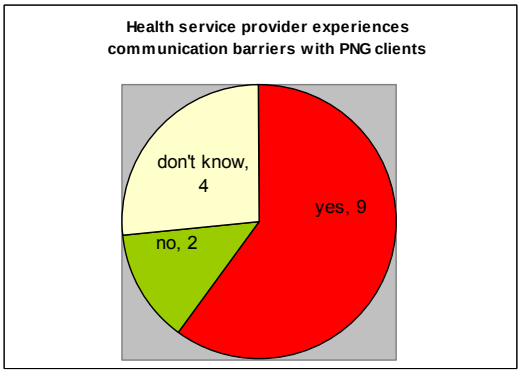
The South-East Queensland leaders also strongly advocated that only PNG or Pacific Islander health workers could reduce these communication and cultural barriers, while the community focus groups said that communication in English would suffice, but that culturally appropriate communication was required.

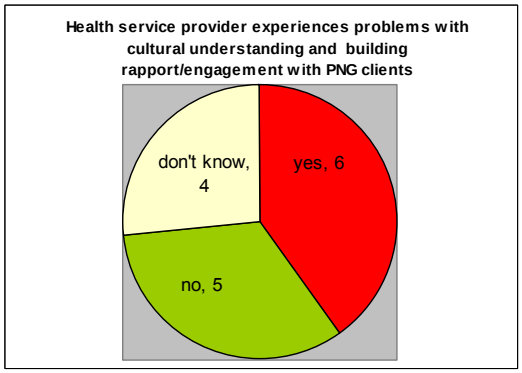
Poor communication between doctors and patients was perceived to be related to doctors not providing enough explanation and using unfamiliar terminology and patients feeling unable to ask questions. No specific recommendations were made to improve the communication barriers identified – all participants strongly recommended Pacific Islander health workers and dedicated Pacific Islander health services and programs to improve the safety and quality of health services received.

Health service providers were asked about language barriers, PNG patients' literacy level to understand hand-outs or instructions, communication barriers, cultural understanding and engagement. The results are summarised in the following graphs which show that overall, health service providers observe communication barriers for their PNG clients, and themselves experience communication barriers when working with PNG clients.









Health service providers discussed their strategies to improve communication which included use of interpreters, bicultural worker assistance, taking time to build trust, using visual pictures and flow charts,

using family members as interpreters, and working with partners and families to reduce communication barriers.

Economic barriers

In Cairns, all of the focus groups, and in South-East Queensland, both of the community focus groups, identified economic barriers to accessing health services. The increasing cost of accessing general practitioners and medicines were prohibitive for some families. One South-East Queensland focus group discussed people's inability to access bulk billing medical centres and their subsequent inability to see a doctor due to financial stress. They also discussed that many PNG students allow their health insurance to lapse, as they cannot afford to renew it. Health insurance is a requirement of entry to Australia for international students.

Participants in both locations also discussed the cost of relatives on visitors' visas requiring health care. (These visitors do not have access to Medicare and are required to pay full charges). The cost of dental treatment was also prohibitive for many in the PNG community. The leaders said that the cost of going to the doctor and medicines was too much for many in their community. One community participant said:

> *"It is expensive to go to the doctors. It is an issue. And also, Medicare doesn't cover dental."* – PNG female

Lack of Pacific Islander dedicated programs and services

In Cairns, two focus groups discussed people's lack of health service knowledge and how this was linked to the unavailability of Pacific Islander dedicated programs and services for referral and assistance. Examples were given which showed not only that new arrivals lack knowledge of how to access the health system, but also those who have lived in Australia for longer. A lack of understanding of the health system is widespread in the PNG community and there are no Pacific-dedicated people, places or services for Pacific Islanders who could facilitate this access. The following comment was typical:

> *"People don't know what's available and what sort of help they can get out there. They have the same mentality as from back home except now they are in a totally different environment where help is available."* - PNG leader, male

One focus group identified the lack of a Pacific Islander identifiable community space that would assist people to access information, referral and other community members and act as a place for community gatherings. Two focus groups called for dedicated Pacific Islander programs and services. A Pacific Islander community garden was recommended by two groups and a Pacific Islander nursing home and respite services by two groups. The garden was felt to promote trust and cooperation in the community and would provide an avenue for growing traditional foods and encourage physical activity. However it was also identified that a community garden would require a medium-term driver to ensure it was established properly with some ongoing support. It would also need to be located in a central place. Two groups also discussed the need for culturally appropriate counselling services and the need to include a spiritual dimension in counselling and support, as this is central to the Pacific Islander understanding of health and wellbeing. In relation to aged care, one leader from the PCCFNQ said:

> *"There's a major gap in aged care. There's a hostel here that can accommodate 35 people. Some Pacific people come through as they can't afford a proper nursing home. There's no or very little respite for carers that's culturally appropriate. It is all mainstream and so therefore the family member doesn't want that respite carer. Carers therefore don't get a break."* – PCCFNQ representative, male

The Cairns leaders recommended a Pacific Islander Health Centre and suggested that there are adequate numbers of medical officers and nursing staff in Far North Queensland with a Pacific Islander background who could be pooled together to provide the health services at a dedicated place. The need for a more general Pacific Islander community centre to act as a meeting place and central referral point was also

raised in two groups. It was also felt that such a centre could build networks and links in a fragmented community that currently is not cohesive or working together.

Similarly in South-East Queensland two focus groups also identified the lack of dedicated Pacific Islander or PNG health programs or services. In particular, the lack of Pacific Islander aged care services. One community focus group also identified the unavailability of a Pacific Islander Health Centre, staffed by Pacific Islander health workers. The other community focus group identified the lack of PNG or Pacific health workers in the system and the need to have these available in a range of contexts. One participant described such a centre in New Zealand that she was familiar with and there was consensus that such a service would address many health problems and issues in Queensland for PNG and Pacific Islander people:

> *"I would prefer to go to a Pacific health centre. I wouldn't have to explain, they will understand me. When I did my placement in New Zealand it was in Iwi[4] Services. ... They have Māori and Pacific Islander people working in that area. I found this very good."* – PNG female

Recommendations focussed on a Pacific Islander health centre and a more generic Pacific Islander community centre. The first option was seen as an essential service to provide greater access and more culturally appropriate health services to Pacific Islander people. The second was seen as integral to addressing the widespread social isolation, lack of trust, and social marginalisation in the PNG community and a way to disseminate information to the community. People talked about the need to have a focus point, a contact point or a referral point. The following comments were representative of the discussions:

> *"We need an office for the PNG community...a Pacific Islander centre"* – PNG male

> *"We need to set up a place for PNG people. There's no centre. Especially a place for the women."* – PNG female

> *"We need a Pacific Island community medical centre. We should have an exchange of doctors from the Pacific Islands and treat our own people."* – PNG male leader

One community focus group discussed the need for better Pacific Islander social support at great length. People discussed the extent of people's isolation and marginalisation and recommended that PNG support groups, a Pacific Islander community centre, and a central contact point via a website would be effective.

5.6.2 Income, employment and education

Poverty and low social status are risk factors to health and wellbeing while supportive economic and social conditions, income, wealth, employment and education are protective factors.[28,34]

The Queensland PNG-born population had a similar income, educational and employment profile to the Queensland Australia-born population in the 2006 Census.

At the time of the 2006 Census, the median individual weekly income for PNG-born people in Australia aged 15 years and over was $593, compared with $431 for all overseas-born and $488 for all Australia-born. The total Australian population had a median individual weekly income of $466.[46] This higher weekly income could be attributed to professional Australian expatriates born in PNG elevating these figures. Twenty per cent of those born in PNG had Australian ancestry in the 2006 Census.

Almost all of the focus groups discussed the economic barriers to health care. The increasing cost of health care, medicines and lack of bulk billing practices were seen as barriers for members of the PNG community. Participants said that people regularly do not attend health services due to the cost of health care and that the cost of dental care was particularly prohibitive.

[4] '*Iwi*' is a te reo Māori word for 'people', 'folk' or 'tribe' – it describes a social unit in the Māori population

5.6.3 Family and neighbourhood

Family and in particular, marital status is an important protective factor. Married people tend to be healthier and live longer than those who are unmarried. Research also shows that children and young people in lone-parent households have poor health status than those in two-parent households. This appears to be due to material disadvantage, rather than the family structure itself.[28]

Issues related to family did not feature in the focus groups. The Cairns focus groups did talk about the challenge of raising children in a different culture, but it was not a major issue. In the South-East Queensland focus groups, the lack of family connections post-migration was discussed in the context of isolation and depression. Participants spoke about the impact of migration, change in lifestyle, social isolation, and lack of connections and family support living in Australia. Discussions about loneliness, social isolation and being disconnected from the new community in Australia dominated the discussions.

The focus groups in both locations discussed the lack of cohesiveness and unity within the PNG community. People discussed the lack of community networks and support systems. In South-East Queensland both of the community focus groups discussed this issue. Divisions and community politics were identified as an obstacle to having a united and strong community to deal with its own health and social issues. The first community focus group identified that there are 12 community associations working in isolation and how good it was to come together for a common reason. These sentiments were strongly shared by the second focus group who noted that the diverse language and ethnic groups that comprise the PNG community are not united, and that a cohesive community umbrella group should be built.

In Cairns, the same issues were mentioned in one of the community focus groups. Participants said it was the first time they had ever come together with other members of their community and that they were interested in further meetings to solve community and common problems among PNG people.

There is increasing evidence that neighbourhoods affect health, particularly children's health.[27,47] In the community and leader focus groups, the neighbourhood environment was not specifically discussed.

5.6.4 Housing

Housing conditions are recognised as a factor affecting health and wellbeing[28]. Poor housing and ill health are linked[48]. In particular, there is an increasing body of evidence associating housing quality with infectious diseases, chronic illnesses, injuries, poor nutrition and mental disorders[49]. There is also a relationship between health and whether a family lives in owner-occupied housing, privately rented housing or public housing[50].

In Victoria, PNG-born people have lower rates of home ownership and higher rates of renting accommodation than the wider population. If the 'being purchased' and 'fully owned' categories are combined, then the rate for PNG-born is 58.3 per cent while the wider population's is 69.9 per cent.

Table 8 Housing tenure all Victoria and PNG-born persons (Vic), 2006

Tenure type	*Per cent of all PNG-born (Vic)*	*Per cent of all Victoria population*
Fully owned	17.6	30.1
Being purchased	40.7	39.8
Rented and rent free	35.7	21.1
Other	0.3	0.5
Not stated	2.0	5.8
Not applicable	3.7	2.7

Source: [51]

Housing issues did not arise in the community focus groups.

5.7 Knowledge, attitudes and beliefs

5.7.1 Health literacy

The National Preventative Health Taskforce recognises that knowledge, attitudes and beliefs are important factors in the health of individuals and populations.[27] Health literacy refers to the knowledge and skills required to understand and use information relating to health issues such as drugs and alcohol, disease prevention and treatment, safety and accident prevention, first aid, emergencies, and staying healthy [3]. Health literacy is particularly important to understanding the health of immigrant populations, as education and health literacy have an integral relationship with the overall health of a society's population, as well as inequalities within the population.[3]

The 2006 Adult Literacy and Life Skills Survey (ALLS) contained 191 health-related items across four domains (health promotion, health protection, disease prevention and systems navigation). For each of these domains, proficiency was measured on a scale. Scores were grouped into five skill levels with level one the lowest and level five the highest.

The ALLS found particular factors influenced people's health literacy. These included education, occupation, parental characteristics, and English as a second language. Only 26 per cent of those born in a mainly non-English speaking country achieved Level three or above.

All of the focus groups in Cairns and South-East Queensland identified PNG people's low health literacy. In Cairns, examples were given of erroneous community perceptions about health issues and services. For example, community members discussed women's perceptions that pap smears are used to diagnose sexually transmitted infections. Therefore, some young women are reluctant to have pap smears, or if they do, there is secrecy and shame about doing so. Another example related to vaccination. There is a perception that in Australia, too many vaccinations are given to children as, in PNG, these are not routinely available. Therefore, mothers do not take their infants and children for the recommended vaccinations. One young woman spoke of her personal experiences:

> *"Girls are embarrassed to go for a pap smear. Also the new vaccine – they are reluctant. Any of my sisters –would say 'you do what?' Because a pap smear is very invasive. The older women too are reluctant to go for pap smears. Community education is needed."* – young PNG female

In South-East Queensland the leaders identified a lack of 'orientation' to the health system for new arrivals as a problem in the community. Both community focus groups also discussed the difficulties experienced in trying to access and understand the health system. The lack of a central point of referral for Pacific Islander people was related to this problem. The following comments received unanimous agreement in one community focus group:

> *"There is no information. There should be information and it should say contact this phone number if you need help."- PNG male*
>
> *We need to network. We need a website and a contact point. That way we can contact each other. A central contact point. – PNG female*

Recommendations were made for a central point of contact and referral such as a Pacific Islander centre and a Pacific Islander contact website.

The health service provider survey also found that six providers had observed problems of literacy such as understanding hand-outs, pamphlets or instructions, while four had not observed this. Four health service providers could not comment.

5.7.2 Help seeking behaviour

Attitudes and belief systems affect health and health choices. Cultural values and world views also influence health and health choices.[52,53]

Internationally, it is observed that collectivist cultures such as Pacific Islander cultures, have a high reliance on their own social group for care and support and may delay their use of Western medicine, especially preventive health services.[53] Minor health issues are often expected to be cared for within the family or social unit and Western medicine is used only if emergency care is required. However, once in the health system, the health care provider is seen as wise and authoritative.

This may not be the case for the Queensland PNG community. The community was described as being isolated from each other and fragmented along ethnic lines.

All of the PNG focus groups discussed the cultural reluctance of PNG people to seek help. This was attributed to shyness, fear of asking questions and lack of confidence, particularly when dealing with people in authority. There is a cultural reluctance to seek help or approach service providers, ask for assistance or ask questions.

This experience is consistent with overseas experiences indicating that minority ethnic communities have poor access to the health system for a range of complex reasons including cultural and language barriers.[53-55]

6 Health outcomes

6.1 Cancer

Cancer is not just one disease, but a diverse group of diseases. Although there are many types of cancer, they all start because abnormal cells grow out of control. Cancers were the leading cause of the burden of disease and injury in Queensland in 2006, causing 18.9 per cent of the total burden of premature death and disability. Lung, colorectal, breast and prostate cancers caused half the cancer burden (49.2 per cent) .[26]

There was no difference in the standardised separation ratio for all cancers excluding non-melanocytic skin cancers (July 2006 to June 2008) for PNG-born Queenslanders (112.5) compared to all Queenslanders (100).

Prevalence and trends in all types of cancer by Australia and PNG-born Queenslanders are found in Table 9. Among the PNG-born population, the number of cancer sufferers increased from 28 in 2000 to 36 in 2006. It should be noted that cancer incidence are very small for PNG-born Queenslanders and therefore any change in the number of cases has the potential to cause large increases or decreases in 'percentage change' figures. Also, due to the very small number of cases, no conclusions can be made.

Table 9 Cancer incidence by Australia and PNG country of birth 2000-2006

Country of birth	Year				
	2000	2002	2004	2006	Percentage change 2000-06
Australia	11850	12799	13471	14507	22.4
PNG	28	52	37	36	28.6

(Source: Cancer Registry, Queensland)

6.2 Cardiovascular disease

Cardiovascular health refers to any disease of the heart and blood vessels and is the leading cause of death in Australia. Cardiovascular disease (CVD) is also a major source of burden of disease in Queensland, where, in 2006, it accounted for 16.3 per cent of the total burden of disease. It is important to note that coronary heart disease accounts for a substantial proportion of morbidity and mortality associated with CVD. CVD, diabetes and chronic kidney disease account for about a quarter of the burden of disease in Australia.

Coronary heart disease (heart attack and angina)

There was no difference in the standardised hospital separation ratio for coronary heart disease (July 2006 to June 2008) for PNG-born Queenslanders (93.1) compared to all Queenslanders (100).

Stroke

There was no difference in the standardised separation ratio for stroke for PNG-born Queenslanders (101.5) compared to all Queenslanders (100).

6.3 Diabetes

Diabetes mellitus (diabetes) is a chronic metabolic condition in which the body produces inadequate insulin or is unable to properly use the insulin it produces, resulting in improper control of blood glucose.

Diabetes was the sixth leading broad cause of premature death and disability in Queensland in 2006, and was responsible for 5.7 per cent of the total burden of disease and injury. Type 2 diabetes caused 92 per cent of the total diabetes burden. Type 2 diabetes was the third largest specific cause of burden of disease (5.2 per cent), after coronary heart disease, and anxiety and depression. Diabetes is one of the few conditions for which death rates and prevalence are increasing.

PNG-born Queenslanders had a higher standardised separation ratio of 149.2, well above the Queensland base (100). There was no difference for diabetes complications for PNG-born Queenslanders (97.7) compared to all Queenslanders.

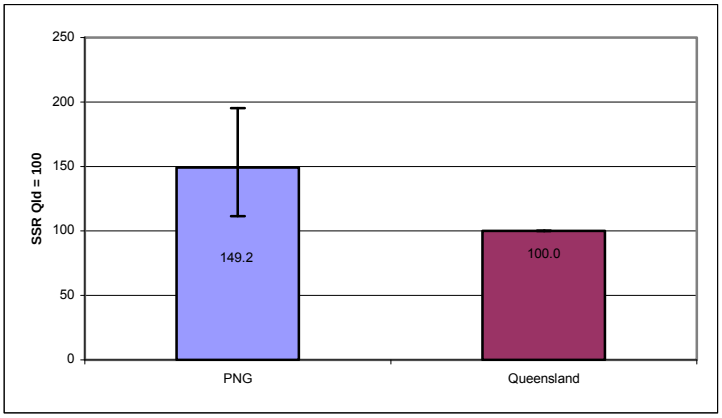


Figure 3 Diabetes standardised hospital separation ratio all Queensland and PNG born persons July 2006 to June 2008

6.4 Mental health

Mental health is the ability for people to interact with one another and the environment, in ways that promote subjective wellbeing, optimal development and the use of cognitive, affective and relational abilities. An individual's mental health is derived from their genetic makeup and general life circumstances, including their social, economic and environmental situation. Mental health problems and mental disorders refer to the spectrum of cognitive, emotional and behavioural disorders that interfere with the lives and productivity of people.[56]

Queensland Health mental health service data by country of birth were unavailable at the time of the needs assessment. However, by examining the country of birth of all consumers of Queensland mental health service on a given date, it is possible to gain a 'snap-shot' of the level of service usage by country of birth, although caution should be exercised with interpreting this data in isolation. In Queensland, mental health service snap-shot data (July 2008) shows PNG-born people as the fourth largest group of overseas-born consumers. This ranking is disproportionate with the size of the population, which is ranked 12th in population size among overseas born populations. This could indicate a higher use of mental health services than what would be expected, based on population size.

The Australian National Survey of Mental Health and Wellbeing does not report the prevalence of mental disorders by country of birth. Therefore Australian data is not available.

6.5 Respiratory disease

Asthma

Asthma is a chronic disease characterised by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person. While the cause of asthma is unknown, there are factors that may increase the risk of developing the condition, including environmental exposures such as tobacco smoke, specific allergens, lack of physical activity and stressful life events.[25]

There was no difference in the standardised separation ratio for asthma for PNG-born Queenslanders (101.2) compared to all Queenslanders (100).

Chronic obstructive pulmonary disease

Chronic obstructive pulmonary disease (COPD) is a specific health condition which affects the lungs. It is characterised by a persistent blockage of airflow from the lungs and can be life threatening. The condition cannot be reversed. The main form of COPD is emphysema. The main cause of COPD is tobacco smoking.

There was no difference in the standardised separation ratio for COPD for PNG-born Queenslanders (85.3) compared to all Queenslanders (100).

6.6 External causes

Injury resulting from an external cause

In 2003, in Queensland, intentional and unintentional injury was the cause of 7.9 per cent of the total burden of disease; 10.6 per cent for males and 4.7 per cent for females. One third of the burden due to injury is due to seven risk factors. Alcohol is by far the biggest contributor. Injury prevention was designated a national priority in 1986 in recognition of the national burden of injury, its high importance to the community, the potential for gain through preventing or lessening the impact and because the extent of injury can be measured through a number of relevant indicators.

While deaths from injury have declined, hospitalisation rates for many injuries have increased over the past decade, in particular, fire, burns and scald injury in young children, and fall related injuries in older people.

PNG-born Queenslanders recorded a lower separation ratio for external causes (84.6) compared all Queenslanders (100).

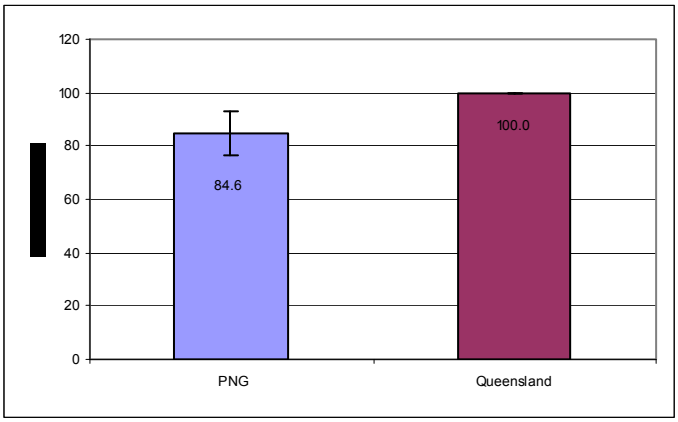


Figure 4 External causes standardised hospital separation ratio all Queensland and PNG-born persons July 2006 and June 2008

6.7 Musculoskeletal disease

Musculoskeletal conditions include arthritis and other joint problems, and disorders of the bones, muscles and their attachments to each other. Arthritis and musculoskeletal conditions are the world's most common cause of severe, long term pain and physical disability.

PNG-born Queenslanders had a lower separation ratio for musculoskeletal disease (84.4) compared to all Queenslanders (100).

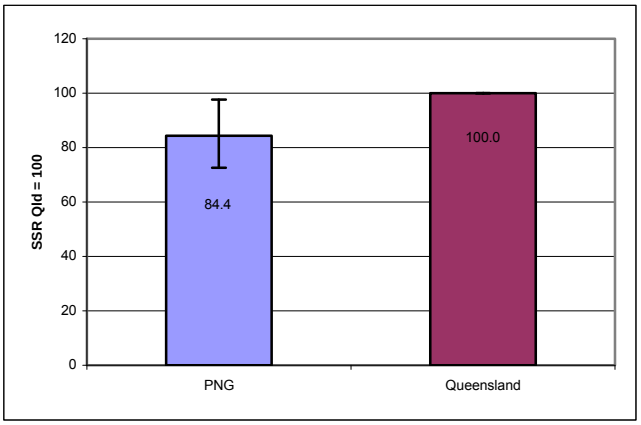


Figure 5 Musculoskeletal disease standardised hospital separation ratio all Queensland and PNG-born persons July 2006 and June 2008

6.8 Communicable disease

In Queensland, infectious and parasitic diseases account for a low level of the burden of disease. This is due to current levels of investment in communicable disease surveillance and control.

Prevention (including vaccination), screening, treatment, control and monitoring of a range of communicable diseases are undertaken in Queensland. Communicable diseases include: mumps, measles, rubella, hepatitis, pertussis, tetanus, influenza, sexually transmissible diseases, food borne illnesses, vector (such as mosquito) borne diseases, tuberculosis, and diseases transmitted by animals (zoonotic diseases).

Due to data collection methodology and the small numbers involved, it is not possible to report communicable diseases by country of birth.

7 The way forward to improve PNG health

The health experiences and needs of people in the PNG communities in South-East Queensland and Cairns are largely similar across the two communities.

A segment of these communities, the PNG-born, display a number of positive health outcomes including lower ratios for musculoskeletal disease and external causes. However, the higher hospitalisation separation ratio for diabetes and mental health snap-shot data suggest a chronic disease burden in the PNG-born population. This was supported by the focus groups in both locations which identified diabetes and mental health issues in the PNG community in Queensland. Focus group data also identified that the PNG community experiences many barriers accessing the health system, including the lack of PNG health workers, Pacific Islander dedicated services, the lack of cultural competency in health services and the lack of culturally tailored health promotion.

Similar findings were made across other Pacific Islander and Māori communities in Queensland, highlighting what focus group participants themselves stated – Pacific Islander people have more similarities than differences regarding health status and belief systems. Therefore, the strategies to improve Pacific Islander and Māori health in Queensland have been compiled into a separate document, *Queensland Health response to the Pacific Islander and Māori health needs assessment*. Separate documents have been prepared for other Pacific Islander communities in Queensland.

Attachment 1 - Data and methodology

All data sources are cited. For further information contact the program manager, Queensland Health Multicultural Services.

Unless otherwise indicated all data refer to the total population (0-85+ years).

Australian Bureau of Statistics (ABS) data are used with permission from the ABS. Copyright in ABS data vests with the Commonwealth of Australia.

Hospital separation data were derived from the Queensland Hospital Admitted Patient Data Collection, including private and public hospitals. All disease specific hospital separations were derived using the principal diagnosis of inpatient episodes of care. All separations were coded using the International Classification of Diseases version 10 Clinical Modification (ICD-10-CM) using standard code sets.[57]

Death, cancer incidence and hospitalisation rates for all diseases and conditions are reported as age standardised rates. Standardisation minimises the differences in age composition among populations and facilitates comparisons among populations. Queensland total population (person) data is directly standardised to the 2001 Queensland Census data. Country of birth population data is indirectly standardised to the 2006 Queensland Census data.

With the method of direct standardisation, the proportional age distribution of the standard population is applied to the rates to obtain age standardised rates, which minimise or remove the distorting effects of age. Indirect standardisation uses the age distribution of the standard population to obtain expected counts, total number of expected counts and subsequently standardised ratios (standardised mortality ratio or standardised separation ratio etc). The end product of direct standardisation is age-adjusted rates, while the end products of indirect standardisation are expected counts and standardised ratios.

Survey data are reported as percentage and 95 per cent confidence intervals. Unless otherwise noted, all survey data refer to self report and are not standardised. All sources are cited and information about specific surveys including sample size can be obtained from the custodian.

Attachment 2 – Focus group prompting points (community members)

1. Arrival and refreshments (30 mins)

2. Facilitators introduce themselves and explain the process (10 mins)

Traditional welcome and Aboriginal and Torres Strait Islander acknowledgement

Today we are going to talk about the health needs of our community. Queensland Health, who we both work for, is interested in finding out about the health needs of our community and most importantly, what you think are the best ways to address them. Firstly, I want to check whether you prefer to speak in [**]or in English, or both.

We want this to be like an informal chat, so there are no right or wrong answers. All details you provide will be completely confidential; we do not use names or any other personal details.

Does anyone have any questions before we start?

3. Introductions (15 mins)

Let's all introduce ourselves. Could you please introduce yourself and tell us what you think the number one health problem in our community is. Just be brief – no more than one minute per person.

4. Health priorities from community perspective (20 mins)

<u>What are the health conditions common in our community?</u>
- what about younger people?
- what about older people?
- what about mental or emotional health? (if only physical health is mentioned)

<u>What are the issues with the health system common in our community?</u>
- what about health promotion campaigns?
- what about community health services?
- what about hospital services?

5. Present literature review (15 mins)

Distribute the hand-out on the literature review findings and go through it

<u>What do you think about these research findings? Does it apply to the community here?</u>

6. Present leaders' responses (15 mins)

Distribute the hand-out on the health priorities identified by the community leaders

<u>What do you think about what your leaders said? Do you agree?</u>

7. Strategies to address health needs (30 mins)

Let's now talk about what needs to be done about these health needs in the community.

In your opinion/view, what do you think Queensland Health should do to address the health conditions common in our community?
- what could be done to prevent some of these health problems in the community?
- what could be done to help people manage their health problems better?

In your opinion/view, what do you think Queensland Health should do to address the common problems people have with the health system?

- what could be done to improve access to services by people from our community?
- what should Queensland Health do to improve the experiences people have when they go to a community health centre or a hospital?

What should Queensland Health do to ensure that health information reaches our community members? How do people receive information? What is the best way to reach them?

8. Summing up (15 mins)

We have discussed a lot of health needs today. To finish up, can we make a summary that we can all agree on?

If you had an opportunity to present a list of the most important health priorities that Queensland Health should work on with our community, what would be on the list? Please put the list in order of importance.

- have we missed anything?
- is there anything you want to add to the list?

9. Finish

Thank for your time today. If you are interested in knowing about the outcome of our project, please leave us your contact details. We plan to hold a forum in November to share our findings with the communities involved. If you leave your contact details, you will receive an invitation.

Attachment 3 – Focus group prompting points (community leaders)

1. Arrival and refreshments (30 mins)

2. Facilitators introduce themselves and explain the project and workshop process (15 mins)

Traditional opening and Aboriginal and Torres Strait Islander acknowledgement

Introductions (name and community)

Cover following topics:
- Purpose and scope of health needs assessment project
- Which communities involved and why
- Methodology
- Forum

Workshop process:
- Going to do small group work in our community groups
- Going to have big group discussions

Does anyone have any questions before we start?

3. Small group work: health priorities identification (15 mins)

Could you please move into small groups so that you are with people who are also from your community? Please answer the following question:

Q: What are the health conditions common in your community?
- what about younger people?
- what about older people?
- what about mental or emotional health? (if only physical health is mentioned)

Please choose one person to present back to the big group.

Q: What are the issues with the health system common in your community?
- what about access to services?
- what about experiences people have at health services?
- what about health promotion campaigns?
- what about community health services?
- what about hospital services?

4. Big group: presentation of health needs (25 mins)(5 mins per presentation)

5. Small group work: compare with research findings and develop summary list (15 mins)

Could you please move back into your small community groups? We will now present you with a list of health priorities for your community that has come from research. Please note, that some of this research has come from overseas and some from Australia. For some communities more information has come from overseas than for other communities.

Please answer the following questions:

What do you think about this research? Does it apply to your community here?

Please make a list of the most important health needs and priorities in your community in Queensland that you think Queensland Health should be working on. It should be a list that you can all agree on. Please put the list in order of importance.

6. Small group work: Strategies to address health needs (15 mins)

Stay in your small groups. Please now answer the following questions:

Please advise us what Queensland Health could do to:

- **Prevent** some of these health problems in your community.
- Ensure that **health information reaches** your community members? How do people receive information? **What is the best way to reach them**?
- **Improve access** to services by people from your community.
- Help people **manage** their health problems better.
- Improve the **experiences** people have when they use a health service.

7. Presentation (40 mins)(8 mins per presentation)

Please present your small group work. Please tell us:

- whether your list was different from the research findings and why you think this is the case
- what your agreed list of priorities is
- what the major strategies are to address these health needs

8. Finish

We have discussed a lot of health needs today. Please be assured that your contribution will be used in our work. Thank for your time today. If you are interested in knowing about the outcome of our project, please leave us your contact details. We plan to hold a forum in November this year to share our findings with the communities involved. If you leave your contact details, you will receive an invitation.

Traditional close

Attachment 4 – Summary of focus group results

As the PNG community is predominantly located in Far North Queensland and South-East Queensland, focus groups were held in these locations.

Three focus groups took place in Cairns, one with community leaders and two with community members. A consultation with the Pacific Communities Council of Far North Queensland (PCCFNQ) also took place and is included here. In South-East Queensland, three focus groups took place in Logan and Brisbane, one with community leaders and two with community members.

Across all focus groups, the following health conditions were identified as being prevalent in the PNG community in Queensland. The health conditions identified are similar across the communities in two locations with diabetes, coronary heart disease, mental health issues and cancer featuring in both locations:

Identified by three focus groups	Identified by two focus groups	Identified by one focus group
PNG COMMUNITY CAIRNS		
Diabetes Coronary heart disease Cancer Mental illness Gambling addiction Sexually transmitted infections Domestic violence	Alcohol and drug issues Aged care	Social and personal wellbeing (isolation) Malaria Hepatitis Arthritis Asthma Oral health
PNG COMMUNITY SE QLD		
Diabetes Mental illness (including depression, post natal depression) Social and personal wellbeing (isolation, loneliness, culture shock, homesickness) Obesity Cancer Coronary heart disease	Sexually transmitted infections Alcohol and drug issues Violence against women Gambling addiction Alzheimer's disease	Asthma Oral health Malaria Arthritis

The focus groups were also asked to comment on the health system in Queensland and the interaction between community members and the health system. Many barriers and problems were identified. Those common to both communities and discussed in all focus groups were the lack of culturally tailored health promotion, the lack of culturally specific workers, the lack of cultural competency in health services, low health literacy, and the lack of Pacific Islander dedicated programs/services:

Identified by three focus groups	Identified by two focus groups	Identified by one focus group
	PNG COMMUNITY CAIRNS	
Communication barriers Lack of culturally tailored health promotion Economic barriers Lack of cultural competency in health services Low health literacy Lack of Pacific Islander health workers	Cultural reluctance to seek help Lack of Pacific Islander dedicated programs/ services	Lack of cohesive community and formal networking Community reluctance to engage on culturally sensitive topics
	PNG COMMUNITY SE QLD	
Lack of Pacific Islander health workers Lack of culturally tailored health promotion Low health literacy Lack of cultural competency in health services Lack of Pacific Islander dedicated programs/services	Communication barriers Economic barriers Lack of cohesive community and formal networking Cultural reluctance to seek help	Satisfaction with health services

Finally, focus group participants were asked to make recommendations or suggest strategies for remedying the problems identified. Once again, there were overlapping issues across the two communities – with culturally tailored health promotion, dedicated culturally specific health workers and dedicated Pacific Islander programs and services recommended in all of the focus groups:

Identified by three focus groups	Identified by two focus groups	Identified by one focus group
	PNG COMMUNITY CAIRNS	
Culturally tailored health promotion Dedicated Pacific Islander health workers Dedicated Pacific Islander programs and services	Increase cultural competency in health services	Community engagement
	PNG COMMUNITY SE QLD	
Dedicated Pacific Islander health workers Culturally tailored health promotion Dedicated Pacific Islander programs and services	Community engagement Pacific Islander health centre	Pacific Islander health research and data Up-skilling, training and scholarships Increase cultural competency in health services Reduce economic barriers

The major points of discussion are documented in Chapter 5.

Attachment 5 – Survey of health service providers

A potential sample of health services was developed. Health services in locations where the PNG population reside in South-East Queensland and Cairns comprised the sample. Participants were randomly selected and contacted for a telephone interview. However, as most potential respondents were either not available or not able to participate due to time constraints, additional participants had to be selected from the sample or from referrals from the services contacted who could not participate. In total, 15 participants completed the questionnaire (eight in Cairns and seven in South-East Queensland).

Health service providers were asked to comment on: whether barriers are experienced by PNG clients in their service, whether they had experienced any difficulties or challenges working with PNG clients, to rate the frequency they had observed particular health conditions among their PNG clients (health conditions identified from the literature review), and to suggest the most important health priorities and strategies to improve PNG health.

The following summary table presents the results of the questionnaire:

Question	Response	
	Yes	No
Do you see PNG patients in your service?	11	3
In your observation, do PNG patients experience: - language barriers?	5	6
-problems of literacy	6	5
-non-attendance or drop out of using service?	8	3
Do you experience any difficulties or challenges in: -communication?	9	2
-cultural understanding?	6	5
-developing rapport or engagement?	6	5

Please rate the frequency you have observed the following issues:	often	some-times	never
Malnutrition	2	1	8
Malaria	0	2	9
Family violence	0	5	5
HIV/AIDS	2	2	7
Sexually transmitted infections	2	2	7
Poverty	2	6	3
Diabetes	2	5	4
Cardiovascular disease	1	6	4
Obesity	1	4	5
Cancer	0	5	5

Major health priorities and problems identified	Frequency
Don't come for preventive health	2
In mental health – maintaining family connection	1
Chronic disease	1
Fragmented services	1
Access barriers	1
No cultural specific centre	1
HIV/AIDS	1
Family violence	1

Strategies identified by health service providers to address health priorities	Frequency
Pacific Islander workers	3
Need to target youth	1
Engagement and access	1
Holistic approach such as hospitals and schools working together	1
Information sessions	1
Staff cultural competence	1
One to one support for domestic violence	1
Health workers attend community events to build trust	1

Attachment 6 – Standards for Statistics on Cultural and Language Diversity

The Australian Bureau of Statistics Statistical Concepts Library provides authoritative information about the concepts, sources, methods and classifications underlying Australian official statistics. The *Standards for Statistics on Cultural and Language Diversity*[58] identifies three 'minimum core set' items that measure cultural and linguistic diversity (CALD) and an additional eight standard indicators.

The **Minimum** Core Set of Cultural and Language Indicators consists of the following four indicators:

- Country of Birth of Person
- Main Language Other Than English Spoken at Home
- Proficiency in Spoken English
- Indigenous Status

The **Standard** Set of Cultural and Language Indicators is as follows:

- Country of Birth of Person
- Main Language Other Than English Spoken at Home
- Proficiency in Spoken English
- Indigenous Status
- Ancestry
- Country of Birth of Father
- Country of Birth of Mother
- First Language Spoken
- Languages Spoken at Home
- Main Language Spoken at Home
- Religious Affiliation
- Year of Arrival in Australia

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