The health of Queensland's Italy–born population 2010

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Summary

The health of the Queensland population has been extensively described in recent Queensland Chief Health Officer reports, *The Health of Queenslanders 2006 (1)*, *The Health of Queenslanders 2008: Prevention of Chronic Disease (2)* and *The Health of Queenslanders 2010 (3)*.

According to the 2006 Census, there were 14 002 Italy–born Queensland residents. In the period 2001–2006, the Italy–born population of Queensland decreased by 7.9 per cent, compared with a 7.2 per cent increase in Australia–born Queensland residents.

In 2006, there was no difference in all cause and total avoidable standardised mortality ratios for Italy–born Queenslanders compared to the total Queensland population. For the period July 2006 to June 2008, Italy–born Queenslanders recorded higher standardised hospital separation ratios for all causes and total avoidable conditions, and diabetes complications compared to the total Queensland population. For the same period, lower standardised hospital separation ratios were recorded for Italy–born Queenslanders for chronic obstructive pulmonary disease (COPD), external causes (injury) and all cancers (excluding non–melanocytic skin cancers), compared to the total Queensland population.

International evidence indicates that cardiovascular disease is a significant contributor to mortality in Italy. National data indicates that diabetes is a significant issue for the Italy–born population, with higher mortality rates and hospitalisations compared to the Australian born population. National data also indicates that Italy–born people have significantly lower mortality ratio from lung cancer, coronary heart disease, cerebrovascular disease, all causes, influenza and pneumonia. The findings of higher hospitalisations from diabetes complications among the Queensland Italy–born population supports national findings of higher diabetes hospitalisations and mortality and suggests that diabetes is a significant health issue in the Italy–born population.

Taking these findings in to consideration, Italy–born Queenslanders appear to be relatively healthy when compared to the total Queensland population, except in the area of diabetes. The focus in Queensland, therefore, needs to be on prevention and management of diabetes. In addition, the Italy–born population represents an older age profile with the largest of its population aged 65 years or older. Service improvements dedicated to culturally appropriate services for older Italy–born people and in aged care will be a priority for this group now and into the immediate future. Improved data collection, analysis, dissemination, and use of data on specific culturally and linguistically diverse populations in Queensland is required to enable the same level of analysis that can be applied to Australia–born Queenslanders' health.

About the document

Queensland has a culturally diverse population and this trend is increasing. Thirty–three per cent of Queenslanders were born overseas, or have a parent who was born overseas. More than 270 languages are spoken in Queensland and almost eight per cent of Queenslanders speak a language other than English at home. Almost 50 000 people, or 1.2 per cent of the population, are either unable to speak English well, or not at all. This equates to, on average, one in three people being born overseas, or having a parent born overseas; one in five people being from a culturally and linguistically diverse background; and one in 10 being from a non–English speaking background.

This document profiles the health of Italy–born Queenslanders, comparing health status to that of all Queenslanders (the total Queensland population, including both Australian and overseas–born residents). It is one in a series of documents profiling the health status of Queensland's culturally and linguistically diverse communities.

Document structure

This document has seven sections:

Section one— *Literature review* presents a review of findings in national and international literature relating to the health of Italian populations.

Section two— *A profile of Queensland's Italy–born population* includes the age, sex and geographic distribution of the population.

Section three— *Health and Italian culture* focuses on the culturally– and spiritually–based health beliefs and systems that are widely practised by many Italian Queenslanders.

Section four— *Wellness and illness — the health status of Queenslanders born in Italy* includes deaths (all causes and avoidable) and hospitalisations (all causes and avoidable).

Section five— *Determinants of Italian health and wellbeing* includes both risky and protective behaviours, as well as some of the cultural and social determinants of health.

Section six— *Hospitalisations* principally reports on the national health priority areas including: cancer, cardiovascular disease, diabetes, respiratory disease and musculoskeletal disease.

Section seven— *Key implications for Queensland Health* outlines future directions for health service planning in Queensland in response to the findings.

1. Literature review

This literature review provides a synthesis of research on the health of Italy– born people living in Italy, Australia and internationally. The literature dates from 1998 to 2011. A manual internet search was conducted using Google Scholar to identify peer reviewed sources. A manual search of health websites was conducted including the World Health Organisation (WHO), the World Bank and the Australian Institute of Health and Welfare (AIHW). Search terms used included:

- Italy health status
- Italy migrant health
- Italy health indicators
- Italy–born migrant health
- Italy chronic disease
- Italy diabetes
- Italy cancer.

1.1 International literature

Wellness and illness, the health status of Italian today
WHO reports that people in Italy are living longer, with women in Italy continuing to have a higher life–expectancy than men. In 2006, Italy had one of the highest estimates of healthy life expectancy in a reference group of 27 European countries (all with very low child and adult mortality) (4). The report also states that both infant and neonatal mortality rates reduced by about two thirds between 1980 and 2001. Non–communicable diseases accounted for 81 per cent of all deaths in Italy, with cancer accounting for 31 per cent of deaths, and injuries causing about six per cent (4). In 2001, 38 per cent of total deaths in Italy were due to cardiovascular disease. It was the second highest cause of death for people under 64 (4, 5).

Excess weight and tobacco use were identified as risk factors, with almost half the men and one third of women in Italy overweight, and about 10 per cent of the total population obese (4). WHO reported that people in Italy consumed almost eight per cent more cigarettes per person than the average for a reference group of 27 European countries (4).

Health outcomes in Italy

Chronic disease
Chronic disease accounts for a high number of deaths in Italy (4, 5). Thirty–eight per cent of total deaths in Italy in 2001 were due to cardiovascular diseases, with coronary heart disease being the biggest killer, causing 12 per cent of all deaths (4). In 2001 the mortality rate due to diseases of pulmonary circulation and other heart disease among people 15–29 years of age was the highest in a reference group of 27 European countries (4).

Whilst coronary heart disease death rates in Italy have shown a slight decline in recent years, the disease still represents one of the main causes of death in Italy (6). Mortality rates for coronary heart disease fell by over 40 per cent between 1980 and 2000 (6). More than half the of the decrease (approximately 55 per cent) was attributable to reductions in major risk factors including systolic blood pressure and cholesterol among men and women, and smoking among men (6).

Cancers
Standardised death rates for all types of cancer among people aged 0–64 years and for lung cancer are high in Italy (5). Mortality from breast cancer in Italy is at the European average and mortality caused by cervical cancer is very low (5). In 2008 it was reported that the most common forms of cancer in the European Union were lung, colorectal and female breast cancer (7). Cancer incidence cases are expected to increase due to the ageing of the population in Europe, thus constituting a major public health issue for the region (7).

Communicable diseases
Communicable diseases account for less than one per cent of all deaths in Italy. Increased trade and population movement within the European region have facilitated the spread of infectious diseases (4). Literature on communicable diseases in Italy is limited.

Mental health

The prevalence of mental health disorders is very high in Europe, with mental health problems affecting at least one in four people at some time in their lives (8). Neuropsychiatric conditions have the highest burden of disease in the Italian population due to the associated disability in daily living (4). The burden is greater among females than males (4). The European Study of the Epidemiology of Mental Disorders (ESEMeD) project highlighted the magnitude of mental disorders in six European countries including Italy. The study found that 14 per cent of respondents reported a lifetime history of any mood disorder, 13.6 per cent any anxiety disorder and 5.2 per cent a lifetime history of any alcohol disorder (9). More than six per cent reported any anxiety disorder and 4.2 per cent any mood disorder. Furthermore, major depression and specific phobia were the most common single mental disorders (9).

Italian migrant populations

Most international studies on Italian migrant populations come from the United States (US), Canada and Europe. Studies from Canada and Europe report on more broad migrant groups, discussing the health of European–born migrants. The key themes in international studies are:

- Lower self–reported health status—Findings from a Swiss study on the reported health of immigrant groups in Switzerland (of which Italy–born migrants comprised 22 per cent) found that self–reported health of immigrants was inferior to that of the Swiss (10). Italian men and women were more likely to report suffering from chronic symptoms than the Swiss reference group. They were also more likely to report feeling mentally unwell, to feel a lack of mastery, and to take little exercise. The Italy–born migrant group showed the highest number of significant differences compared to the Swiss reference group (10).

  There was also a significant difference between immigrants and native–born Canadians in self–rated health status and unmet need for care (11). Immigrants from Europe reported fair or poor health more frequently than expected, and reported excellent health less frequently than expected (11). Immigrants from Europe reported chronic conditions, hospitalisations, and unmet needs for care more frequently than Canadians born in other parts of the world. However this may have been attributable to the fact that European immigrants are older on average than non–European immigrants (11).

- A study on the prevalence of overweight and obesity among migrants in Switzerland found that migrants tended to present higher overweight and obesity levels (12). Italy–born migrants presented a higher prevalence of overweight and obesity compared with Swiss, German and French–born people. The reasons for this difference could not be attributed solely to differences in age, socioeconomic status or physical activity, as the increased prevalence remained after multivariate adjustment (12).

- A study into the characterisation of type 2 diabetes mellitus in first generation Italian migrants to Belgium found that Italy–born patients were characterised by (13):
  - earlier age of diagnosis of diabetes
  - stronger family record of diabetes
  - stronger prevalence of current smoking
  - trend towards lower levels of physical activity.

1.2 National literature

AIHW reports a higher standardised mortality ratio from diabetes (1.67) among Australians born in Italy, and a lower mortality ratio from (14):
- lung cancer (0.91)
- coronary heart disease (0.84)
- cerebrovascular disease (0.76)
- influenza and pneumonia (0.82)
- all causes of death (0.87).

Chronic lower respiratory diseases are ranked as the fourth leading cause of death amongst Australia–born and eighth for the Southern and Western–Europe– born population (15).

The New South Wales (NSW) Population Health Survey reported differences in the health status of Italy–born people, compared with NSW residents born in NSW and other selected countries. Compared with the Australia–born, males and females born in Italy have high rates of self–reported overweight and obesity, and females born in Italy have high rates of self–reported psychological distress (16). People born in Italy also have high rates of self–reported diabetes when compared to their NSW–born counterparts. A significantly lower proportion of people born in Italy rated their health positively (61.8 per cent), compared with the total proportion for the NSW population (80.4 per cent) (16). This lower self–reported health status is consistent with international literature.

The prevalence and risk of diabetes in culturally and linguistically diverse (CALD) groups living in Australia compared with the Australia–born population was reported on in 2005 (17). Southern Europe was identified as one of the regions of birth with the highest rate ratios for diabetes prevalence, incidence, hospitalisations, and mortality relevant to diabetes (17). The report stated that Australian data shows females born in Southern Europe reported significantly more cases than expected based on Australia–born female rates (17). NSW data shows that the reported prevalence rates of doctor–diagnosed diabetes among Italy–born males and females aged 16 years and over were also statistically significantly higher (17).

A study of men and women aged 40–69 years born in Greece, Italy, Australia, and New Zealand (who were free from diabetes at baseline) concluded that Greek and Italian migrants to Australia have more than a three times greater incidence of type 2 diabetes than their Australia–born counterparts (18).

AIHW reports that irrespective of age, residents from 'other' Europe (including Italy) had significantly lower mortality rates for all causes of death combined, and for most specific causes (19). Despite the lower mortality rates, AIHW states that the prevalence of diabetes is high for Europe–born persons compared with Australia–born persons (20). It is also reported that Europe–born females have higher standardised hospitalisation ratios for tuberculosis (excluding the United Kingdom and Ireland) compared with Australia–born people (20). The standardised hospitalisation ratio for most other principal diagnoses were significantly lower for Europe–born people compared with the Australia–born (20).

1.3 Summary

The following summarises the findings from international and national literature:
- Internationally, health indicators for Italy show improvement, with reductions in infant mortality rates and increasing life expectancy, however non–communicable diseases such as cardiovascular disease continue to be a significant health burden.
- Whilst coronary heart disease death rates in Italy have shown a slight decline in recent years, the disease still represents the main cause of death in Italy.
- The prevalence of mental health disorders is very high in Europe, with mental health problems affecting at least one in four people at some time their lives.
- Nationally, Italy–born people have a higher standardised mortality ratio from diabetes and a lower mortality ratio from lung cancer, coronary heart disease, cerebrovascular disease, influenza and pneumonia, and all causes of death.
- Hospitalisations from diabetes among migrants from Southern Europe (which includes Italy) are higher than the Australian born population, as is the prevalence of diabetes. There is some evidence at the national level showing a higher level of diabetes incidence among Italy–born people and New South Wales data showing higher self–reported diabetes rates.
- It is concluded that Italy–born people generally enjoy better health than Australia–born persons do, except for diabetes where national and New South Wales data suggest higher mortality rates, prevalence and incidence, compared to the Australian–born population. In addition, self–reported health status among Italy–born Australians is significantly lower than the Australia–born, a finding consistent with international literature on Italy–born immigrants.

2 A profile of Queensland's Italy–born population

2.1 History of Italian migration to Queensland

Migrants from Italy are the fourth largest group of overseas born in Australia, after migrants from England, New Zealand and China (21).

Migration to Australia commenced in the mid 1800s in Victoria and New South Wales. In Queensland, a small settlement of migrants from Italy was formed in the Wide Bay district in 1890, and the following year the Queensland government brought over 300 agricultural labourers to work as cane cutters (22). The pattern of settlement was 'chain migration', whereby a male relative would arrive first and then sponsor the passage of a wife, children, siblings and other people from the same region (22).

The majority of Italian migrants arrived from the most economically depressed regions, namely Sicily, Calabria, Veneto and Campania (23). They were mostly from rural and farming areas, had limited education and spoke their regional dialect as their first language and standard Italian as their second. They had little or no English skills. Upon their arrival in Australia they were generally employed in farming or traditionally blue–collar jobs where they willingly worked long hours to build better lives for their families (24).

During the Second World War, many Italian migrants in northern Queensland were interned or were placed under severe restrictions, due to Italy's alliance with Nazi Germany. Internment ended in 1943 when, following an armistice with the Allies, Italy joined the war against Germany.

After the war, Australia provided fare assistance for workers willing to work in selected jobs, usually in the cane fields (22). This initiative and the social, political and economic uncertainty in Italy contributed to the largest wave of Italian migration, which lasted until the 1970s. Most of the new arrivals settled in Melbourne, Sydney and Adelaide and worked in industries, in labouring work, and building and constructions (24).

Since the 1970s Italian migration to Australia has almost ceased and at present the Italy–born community is numerically declining, due to the deaths of its ageing population and the low migration levels. The Australian Census of 1971 indicated more than 289 000 people born in Italy, gradually decreasing to about 199 123 in 2006 (21). However, 852 417 persons in Australia still identity themselves as having Italian ancestry, either alone or in combination with another ancestry (25).

2.2 Languages spoken at home and religions practised

At the time of the 2006 Census, the most common non–English language spoken at home was Italian, with its 311 600 speakers accounting for 1.8 per cent of the Australian population (25). However, this figure is comparatively fewer than twenty years ago when Italian was spoken by nearly 3 per cent of the Australian population (26). According to the Australian Bureau of Statistics (ABS) 2006 Census 95 per cent of Italy–born Australians recorded their religion as Christian, and the large majority identified as Roman Catholic.

By 2026, Italian is projected to remain the most commonly used foreign language among older people from CALD backgrounds in Australia, being spoken by 82 200 older people (27). A large number of older Italians living in Australia have low English proficiency. In the 2006 Census, proficiency in English was self–described by respondents as very well by 28 per cent, well by 32 per cent and not well by 21 per cent (28). As this group continues to age, their skills in English are likely to deteriorate as there is a tendency for older CALD people to revert back to their native language (23).

2.3 Age and sex distribution

At the Census in 2006, there were 14 002[*] Italy–born people living in Queensland compared to almost three million Australia–born people. The Italy–born population was comparatively older than the Australia–born population, with the largest population recorded in the 65–74 years age group, compared to the 25–44 years age group for Australia–born Queenslanders (Table 1).

Table 1: Australia–born and Italy–born Queensland population by age, 2006

	Australia	Italy
Age (5 yr group)	Persons	Persons
0–4	234 761 (8.0%)	22 (0.2%)
5–14	479 870 (16.4%)	70 (0.5%)
15–24	433 952 (14.8%)	160 (1.1%)
25–44	799 555 (27.2%)	1140 (8.1%)
45–54	376 474 (12.8%)	1651 (11.8%)
55–64	293 391 (10.0%)	3310 (23.6%)
65–74	170 627 (5.8%)	3880 (27.7%)
75–84	109 872 (3.7%)	3063 (21.9%)
85 and Over	36 754 (1.3%)	706 (5.0%)
Total	2 935 256	14 002

Source: ABS, 2006 Census

2.4 Population size and growth

Queensland's Australia–born population grew by seven per cent in the six year period from 2001 to 2006. In comparison, the Italy–born population decreased by more than seven per cent during the same period. This reflects the ageing of Queensland's Italy–born population and the small number of new Italian migrants arriving in Queensland (Table 2). The 2006 Census indicates a total Italy–born population of 13 993.

Table 2: Population growth by country of birth, Queensland 2001–2006

Country of birth	2001	2006	Percentage change 1996–2006
Australia	2 738 370	2 935 266	7.2
Italy	15 197	13 993[*]	−7.9

Source: ABS, 2006 Census(29)

2.5 Geographic distribution

In 2006, the largest populations of Italy–born residents were located in the following health service districts:
- Metro North (3755)
- Metro South (2865)
- Cairns and Hinterland (2086)
- Gold Coast (1540)
- Townsville (1553)
- Sunshine Coast – Wide Bay (1042).

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[*] For some demographic indicators the total population number may differ by a few. This is due to the application of randomisation formulas by ABS.

2.6 Ancestry

At the 2006 Census, there were 103 706 Queenslanders who identified their ancestry as Italian, which represents 2.7 per cent of the total Queensland population. There was a 15 per cent increase in Queenslanders identifying Italian ancestry during the period 2001–2006. Of those with Italian ancestry, 79.8 per cent were born in Australia and 12.8 per cent were born in Italy. Other countries of birth for those with Italian ancestry include (29):

- New Zealand
- England
- US
- Argentina
- South Africa
- Brazil
- France
- Egypt.

This report focuses only on those born in Italy, not those with Italian ancestry, which would be a much larger and diverse group.

2.7 Year of arrival

The largest increase of Italian migrants arriving in Australia was before 1971. Italy is one of the countries of birth with the highest proportion of longer standing migrants, with around 99 per cent of its population having arrived in Australia before 2002(25). The figures for Queensland also reflect the decline in migration from Italy. Before 1971 there were 11 122 arrivals, compared to 777 between 1971 and 1980. In more recent times, between 2001 and 2005, only 277 persons born in Italy arrived in Queensland (21).

Table 3: Italy–born Queenslanders by year of arrival

Birthplace	Before 1971	1971– 1980	1981– 1990	1991– 2000	2001– 2005	2006	Total
Italy	79.5	5.6	2.6	2.6	2.0	0.5	13 995

Source: ABS, 2006 Census, Birthplace by Year of Arrival: Selected Birthplace Groups

3 Health and Italian culture

The purpose of this section is to outline some key features of the dominant spiritual and cultural health beliefs, traditions, and practices that originally existed in Italy, and which may be upheld and practised by persons of Italian ancestry in Queensland. It should be noted that these characteristics may be limited to elderly Italians who migrated to Australia in the 1950s. They are not usually prevalent in younger Italians.

There are resources available to help health care professionals accommodate cultural and spiritual beliefs in the health care setting. These may include considerations of:
• specific dietary needs
• grooming and dress
• palliative care
• end–of–life practices and decision–making
• the role of family and gender in doctor–patient communication
• observance of important religious traditions, rituals, and celebrations.

For more information on specific religious and cultural considerations, refer to Religion Practices and Health Care in the Queensland Health Multicultural Clinical Resource (www.health.qld.gov.au/multicultural).

3.1 Italian health beliefs

Many elderly Italians openly discuss their ailments with family, friends and acquaintances. This is not usually done with life threatening illnesses. In Italian, the expression "how are you?" is also regarded as a question about health in addition to being simply a greeting. When discussing health issues, some older Italians do not understand the complexities and dangers of sharing and offering each other advice on medication or natural remedies they have found or heard to be effective. It is not unusual for elderly Italians to exchange medication with friends.

There is no cultural objection to taking western medicines, although some older Italy–born people may supplement this with their own home remedies, including herbal products. There is a perception that these remedies were traditionally used during their youth, are safer than modern medicine and are more natural, hence may not need to be discussed with the doctor (30).

Various studies have shown that Italians have a heightened response to pain, willingly discuss their pain, expect attention and sympathy from their family and friends and pain relief from their physician (23). There are however mixed attitudes towards the taking of strong pain relieving medication, such as morphine. While some will readily accept it, others may be wary of its side effects and will exhibit a certain level of stoicism in the belief that one is expected to endure some discomfort during sickness (31). Because of this stoicism, at times certain symptoms may be tolerated and permitted to run their course without consulting a physician. This is based on the belief that while the doctor can prescribe medication that may bring some relief, any drug will have other adverse effects on other organs of the body and cause further problems in the long term.

Many older Italians hold doctors in high regard, as knowledgeable and authoritative figures, and display an attitude of deference and compliance in their presence (23). However, with family and friends they may express the belief that they know their body better than their doctor and are in a better position to determine what is in their best interest.

In Italy lay people were often called upon to give tonic injections intramuscularly. Intramuscular medicine is still seen as superior to oral medication in many cases (22).

The belief in the power of the evil eye, *il malocchio*, to cause illness is no longer widespread, but may still be held by elderly Italians from the southern part of Italy and from rural areas. It was an entrenched practice in old village life and was based on the belief that "admiration or jealousy can provoke harm and be harnessed by some individuals"(23). Those who believe in the *malocchio* tend to protect themselves by using amulets or charms that are thought to ward off evil.

Many Italians believe that an individual's appetite or lack thereof is indicative of their health. Thin people are perceived as being weak and sickly. Good food is seen as preventative medicine and a key factor to staying healthy. Fruits, vegetables, pasta and bread are the staple foods of Italian diet. Chicken soup is believed to be the "magic broth" for restoring health. Herbal teas made from home grown Italian herbs such as bay leaves are often believed to settle an upset stomach and camomile is believed to relax and induce sleep.

A 2010 study exploring the health care beliefs of Italians in Melbourne found that 85 per cent of the respondents believe that family members play an active role in their disease management and 93.3 per cent believe that family support is very important to their ability to cope with their disease (32).

Italian families tend to filter and mediate most medical information (23). In the case of an elderly Italian person suffering from a terminal illness, family members may withhold disclosure to protect them from further suffering. At times even the elderly spouse may not be given all information by the adult children. Clinicians need to be aware of this tradition of non disclosure and discern on an individual basis, whether the diagnosis should be told to the patient or family (23). If the patient is told of the diagnosis, it may be beneficial to ask the patient how much information they wish to have (23).

Traditionally older Italians believe and expect that their children will look after them in their old age and regard aged care services and residential aged care facilities as a last resort'(22, 23). This is reflected in low nursing home admissions and other statistics that indicate that many Italians only start using services at crises points (23). When this happens, the elderly may feel that they have been sent to the nursing home to die.

Italians with a disability or mental illness have generally been cared for by the family, based on the belief that no institution can provide the same level and quality of care. Moreover, there is a certain stigma or feeling of shame attached to having a child with a mental or physical impairment and the family may try and hide it to keep a positive appearance within the community (22, 23).

3.2 Italian spiritual beliefs and health

The majority of Italians identify as being Roman Catholic. However, only a minority attend church regularly or profess allegiance to all the teachings of the Catholic Church. Most Italians attend religious services on special occasions including weddings, funerals, christenings, Christmas and Easter. Notwithstanding this, many Italian traditions are related to religious celebrations, including various festivals in honour of different saints.

A commonly held belief by Italians, which has been influenced by Catholicism, is the idea of pre–destination. Many older Italians believe that an individual's life course including their health and when they will die has been predetermined by God at conception and is largely outside of individual control. For example, a study of Italians in Melbourne found that 62.7 per cent believe that God or a higher being determines their health (32).

Predestination, or *il destino*, as it is commonly referred to, is often used by Italians to explain why some people suffer adverse health effects. For example, predestination may be seen as having a greater influence on an individual's likelihood of developing lung cancer rather than their smoking habits, since not all smokers develop this disease. This belief often leads to the adoption of an external locus of control rather than an acknowledgement that personal actions can affect health outcomes.

4 Wellness and illness, the health status of Queenslanders born in Italy

4.1 Self–reported health and quality of life

The 2007 National Health Survey reports 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. However, a 2008 report by the Chief Health Officer of New South Wales (incorporating survey data of approximately 44 000 New South Wales residents), notes that overall 80.4 per cent of New South Wales adults rated their health positively compared to 61.8 per cent of New South Wales adults born in Italy (16). This difference was statistically significant.

4.2 Life expectancy

The life expectancy of the Queensland population in 2008 (including Australia and overseas–born) was 78.9 years for males and 83.7 years for females (3). The relatively small number of Italy–born Queenslanders prevents meaningful life expectancy calculations from being made.

4.3 Infant mortality and health

During the period 2006–07, there were 43 infants born to women who recorded Italy as their country of birth(33). There were no perinatal deaths (stillbirths or deaths to infants in the first 28 days of life) recorded in these infants (33). For the same period (2006 and 2007), of the 43 births recorded to Italy–born mothers, six occurred before 37 weeks gestation and were therefore classified as pre–term births. Although the rate of pre–term birth was higher for Italy–born mothers when compared to all Queensland mothers, the increased rate was not statistically significant (33).

4.4 Deaths – all causes and avoidable

Almost two–thirds of all deaths of Queenslanders aged less than 75 years in 2006–07 were considered to have been potentially avoidable under nationally agreed criteria (3). Of the 9598 deaths of people aged less than 75 years in 2004, 6805 (64 per cent) were considered avoidable and 3092 or 36per cent were considered non avoidable.

In 2006, there was no difference in the all causes standardised mortality ratio of the Italy–born population of Queensland compared to all Queensland (Figure 1). Similarly there was no difference in the standardised mortality ratio for 'total avoidable conditions' up to 74 years of age.
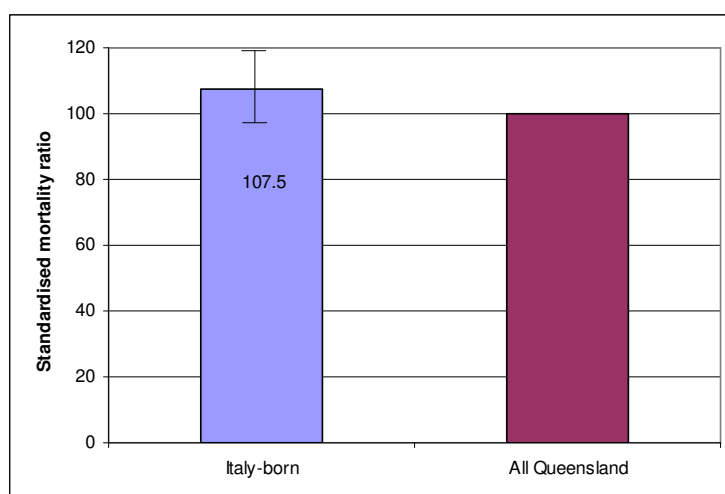

Figure 1: All causes standardised mortality ratio Italy–born and all Queensland persons, 2006 (Source: Causes of Death, ABS)

4.5 Hospital separations–all causes and avoidable

Hospitals are a vital and highly visible parts of the health system. A hospital separation is an episode of care which can be a total hospital stay or a portion of a hospital stay ending in a change of status (for example from acute care to rehabilitation). Hospital separations are often used to compare levels of illness in populations but should be interpreted with caution: as they also reflect access to hospitals, the need for repeated admissions and current medical practice of treating an illness or injury. All these factors can vary over time and between geographic areas(3). Hospital separation data were sourced from the Queensland Hospital Admitted Patient Data Collection.

Figure 2 presents the standardised hospital separation ratio for all causes (July 2006 to June 2008), for Italy–born Queenslanders and all Queenslanders. This ratio was 3.4 per cent higher for Italy–born Queenslanders, a difference which was statistically significant.

Figure 2: All cause standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

The standardised hospital separation ratio for the same period, for 'total avoidable' separations, is presented in Figure 3. Italy–born Queenslanders had a higher ratio than all Queenslanders.
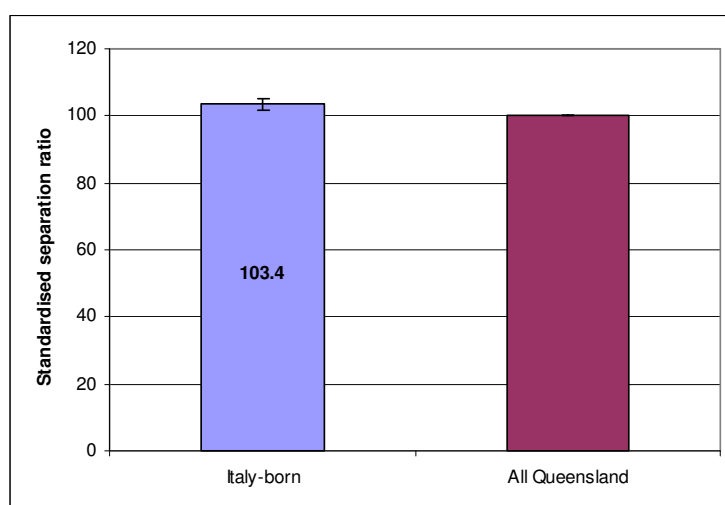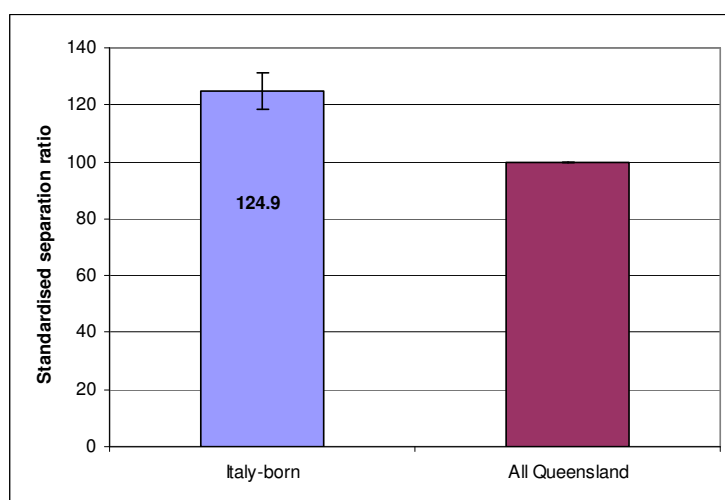

Figure 3: Total avoidable standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

5 Determinants of Italian health and wellbeing

Determinants of health and wellbeing refer to the factors that influence the health status of populations and individuals. There are many determinants that can impact on an individual's health status and health behaviours. AIHW has developed a conceptual framework for understanding the determinants of health (Figure 4) (34). As depicted in the framework, upstream factors include broad features of society such as culture and social cohesion, environmental factors, socioeconomic characteristics and knowledge, attitudes and beliefs can impact on health behaviours which include physical activity. The results of these influences are also bi–directional, so some of the factors that are further downstream such as biomedical factors can also have an impact on physical activity.

These determinants are complex, and can help to explain some of the disparities in health status and health behaviours relating to individuals form the Italian community in Queensland relative to the non–Italian Queensland population.
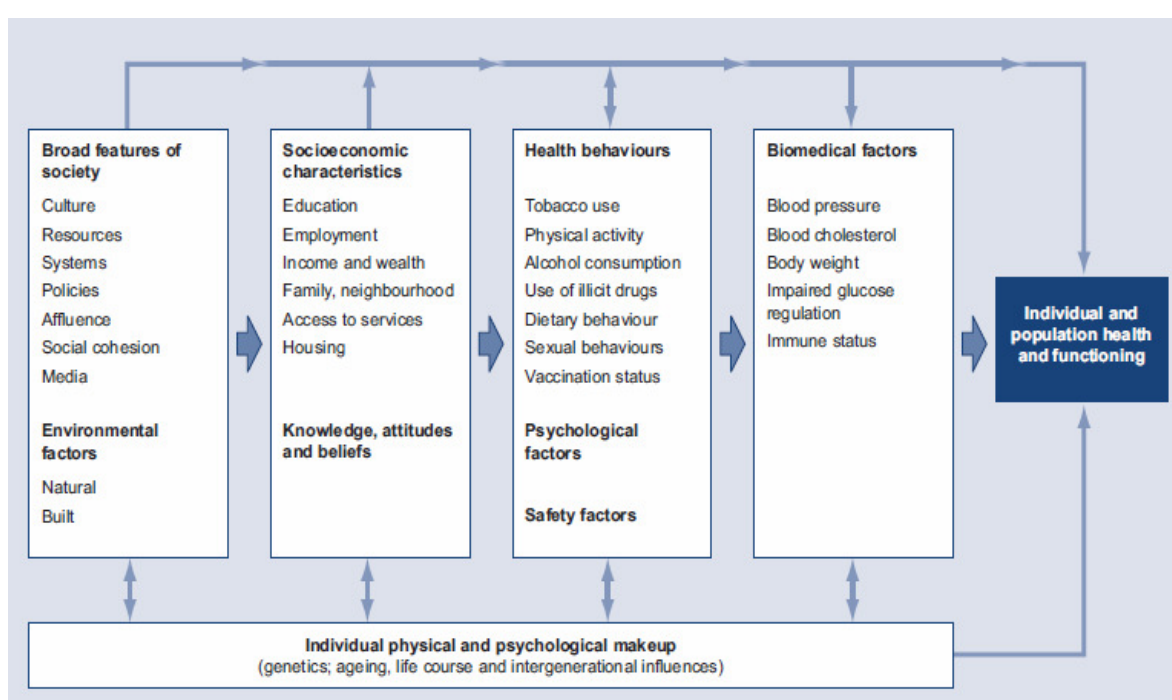

Figure 4: Conceptual framework for the determinants of health
(Source: Figure 4.1 AIHW, 2008a)

WHO recognises marginalisation and experiences of racism as linked to the social determinants of health (35). Migration itself is understood to be a significant stressor and the mode in which migrants enter the country is also a predictor of their capacity to manage their health, access and navigate the health system. The Australian Government Compendium of Social Inclusion Indicators recognises that a refugee background, in particular, is an indicator of poorer health outcomes. The Compendium found that low–English proficiency speaking households were more vulnerable to persistent poverty as well as social exclusion which are also strongly linked to poor health literacy and health outcomes (36). The experiences of racism, and both the real or perceived threat of verbal and physical racist abuse, have been shown to be a potential determinant of poor health and wellbeing (37).

In addition to the experience of emerging and growing migrant communities, the literature clearly indicates that young Australians with mixed ancestry and parents from culturally and linguistically diverse backgrounds are vulnerable to experiencing stressors and difficulties negotiating intercultural and intergenerational demands and expectations. The desire to "fit in" to mainstream Australian culture may override parents' expectations of maintaining cultural practices and traditions; this in turn may cause conflict and distress for migrant families (38).

5.1 Risk factors and health behaviours

Overview
Public health literature has extensively documented the key lifestyle risk factors that contribute to the incidence and prevalence of disease and death. Factors such as tobacco smoking, excessive alcohol consumption, poor diet and nutrition, physical inactivity as well as biological predispositions including low birth weight, high blood pressure, overweight and obesity, and poor blood glucose control are all attributable to chronic disease. Multiple risk factors increase likelihood of poor health outcomes. Data is presented on three leading risk factors[†].

Smoking
Tobacco smoking is a leading risk factor for chronic disease in Queensland and remains a leading cause of preventable death and health inequality (3).

Information on smoking by Italy–born Queenslanders is not available with only limited data on a national level available. The National Drug Strategy Household Survey (NDSHS) collects information relating to tobacco, alcohol and illicit drug use across Australia. In 2007, 23 356 participants completed the survey. Overall, 16.6 per cent of participants reported being daily smokers (39). The sample size of Italy–born participants was too small for meaningful statistical analysis.

Alcohol
Alcohol is the most commonly used drug in Australia with high levels of drinking known to increase the risk of acute and chronic health, negative social impacts and premature death (40). There are no data on alcohol consumption among the Italy–born population of Queensland, and there is no reliable data at a national level. In the NDSHS, 10.3 per cent of all participants reported alcohol consumption considered risky or high risk to their long–term health (39). Of Australia–born participants answering this question, 11 per cent (17 178) reported alcohol consumption which put them at risk or high risk of harm to their long–term health. The sample size of Italy–born participants was too small for meaningful statistical analysis.

Physical inactivity
In 2010, about half of Queensland adults were participating in sufficient physical activity for health benefit (3). It is estimated that physical inactivity is the fourth highest contributor to the burden of disease and injury in Australia, contributing to 6.7 per cent of the total burden (41). Physical inactivity contributes to increasing cardiovascular risk, overweight, high blood pressure, type 2 diabetes and some types of cancer (42). Regular physical activity reduces the risks of many chronic diseases, particularly cardiovascular disease and type 2 diabetes.

Rates of physical activity participation are lower in individuals from non–English speaking backgrounds compared to the Australia–born population. The 2006 General Social Survey indicated that individuals who were born in a non–English speaking country had a participation rate in sport and physical activity of 37.9 per cent[‡]. Those born in main English speaking countries had a participation rate of 65.4 per cent, born in proficient English speaking countries 56.6 per cent and born in Australia 63.9 per cent (43).

In Queensland the participation rate was 31.6 per cent for individuals born in a country not proficient in English, 71.3 per cent for individuals born in a main English speaking country, 63.9 per cent for individuals born in a country proficient in spoken English, and 64.5 per cent for individuals born in Australia (43).

5.2 Protective factors

Breastfeeding
Infants and children depend on good nutrition for normal growth and development. The benefits of such nutrition last throughout life and directly influence a range of childhood conditions including

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[†] Data are not available by specific country of birth for some risk factors
[‡] Defined as participation in sport or recreation in the last 12 months

overweight and obesity and dental disease. Good nutrition in infancy and childhood can also prevent diet–related diseases in later life (44).

During 2006, 16 infants were born to Italy–born mothers in Queensland hospitals and of these, 13 infants (81.3 per cent) were being exclusively breastfed at discharge following birth(45). This is comparable to exclusive breastfeeding rates by Australia–born mothers (83.3 per cent). No breastfeeding data are 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.

Cancer screening

Cancer screening uses tests to identify the early stages of cancer before symptoms are present. Currently, national screening programs are in place for breast cancer, cervical cancer and bowel cancer (3).

Participation rates in these screening services by individual country of birth are not available. However, the Department of Health and Aging reports that a number of barriers may affect participation, particularly in CALD populations (46). These barriers include:
• language
• cultural and religious beliefs
• lack of awareness of screening programs
• lack of understanding and knowledge of preventive health
• culturally inappropriate services
• embarrassment and fear; and access issues, including
• family obligations,
• transport
• finance.

Immunisation

Childhood immunisation
A number of communicable diseases are vaccine preventable through immunisation. Childhood immunisation prevents a range of diseases including measles, polio, pertussis, chickenpox, hepatitis B, meningococcal, pneumococcal and rotavirus diseases (3). Free vaccines are provided to Queensland children under the National Immunisation Program.

In June 2010 the target vaccination coverage rate of 90 per cent fully immunised was achieved in Queensland for all cohorts (3).

Data are not available to provide vaccination rates by country of birth.

6 Hospitalisations

6.1 Cancer

Overview

Cancer is the name used for a cluster of diseases for which the main characteristic is the development of abnormal cells which spread rapidly within the human body and is the leading cause of the burden of disease and injury in Queensland (2). Prostate, lung, colorectal and melanoma cancers accounted for 63 per cent of new cases for males in 2007. Breast, lung, colorectal, melanoma and cervical cancer accounted for 61 per cent of new female cancers (3).

The standardised hospital separation ratio for all cancers excluding non–melanocytic skin cancers (July 2006 to June 2008) for Italy–born Queenslanders and all Queenslanders is presented in Figure 5. The Italy–born population had a lower ratio than that of all Queenslanders.
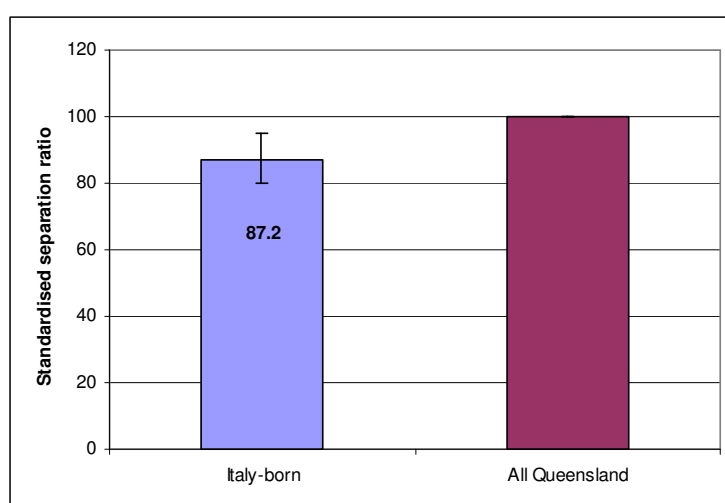

Figure 5: All cancers (excluding non–melanocytic skin cancers C44) standardised hospital separation ratio Italy–born and all Queensland persons, July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

6.2 Cardiovascular disease

Cardiovascular disease refers to any disease of the heart and blood vessels and is the leading cause of death in Queensland (3).

Coronary heart disease (heart attack and angina)

The standardised hospital separation ratio for coronary heart disease (July 2006 to June 2008), for Italy–born Queenslanders compared to all Queenslanders, is shown in Figure 6. There was no difference in the ratio of Italy–born Queenslanders compared to all Queenslanders.
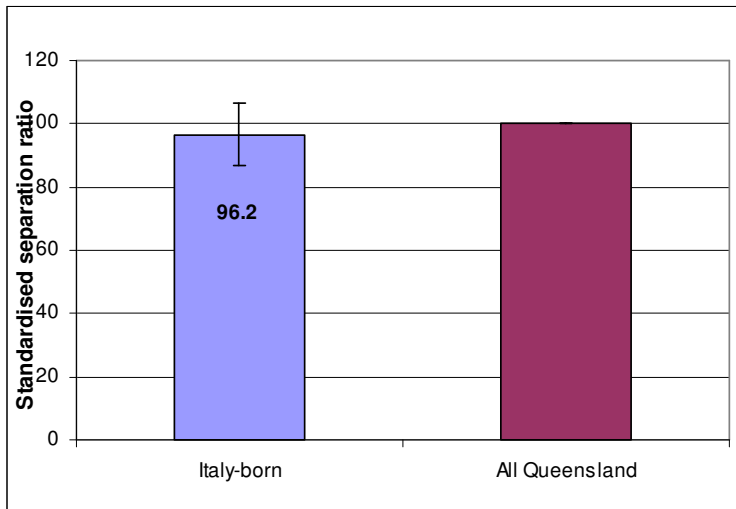
Figure 6: Coronary heart disease standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

Stroke

Stroke, or cerebrovascular disease, occurs when the blood vessels supplying part of the brain become blocked or burst.

Figure 7 presents the standardised hospital separation ratio for stroke, for Italy–born and all Queenslanders, July 2006 to June 2008. There was no difference in the ratio of Italy–born Queenslanders compared to all Queenslanders.

Figure 7: Stroke standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

6.3 Diabetes

Diabetes mellitus (diabetes) is a chronic metabolic condition in which the body produces inadequate insulin or is unable to use properly the insulin it produces, resulting in improper control of blood glucose (3).

The standardised hospital separation ratio for diabetes, Italy–born compared to all Queenslanders (July 2006 to June 2008), is presented in Figure 8. There was no difference in the ratio of Italy–born Queenslanders compared to all Queenslanders.
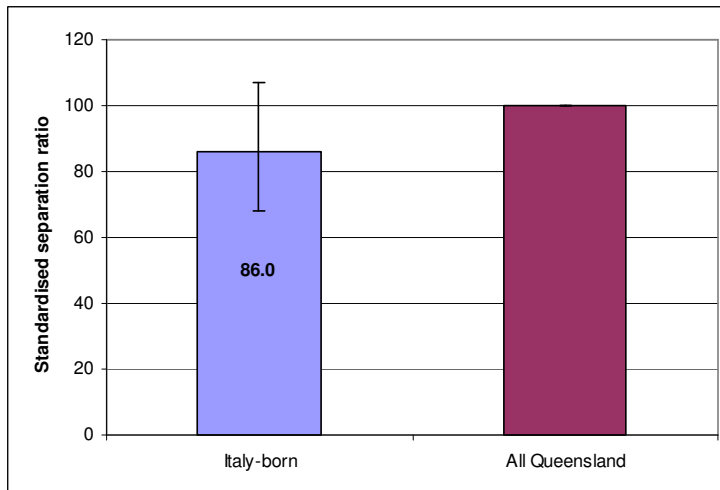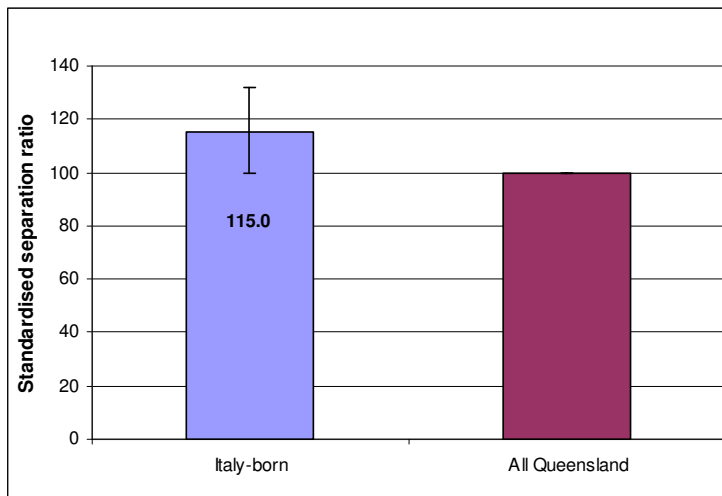

Figure 8: Diabetes standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

The standardised hospital separation ratio for diabetes complications for the same period is presented in Figure 9. Italy–born Queenslanders had a ratio more than 50 per cent higher than all Queenslanders.
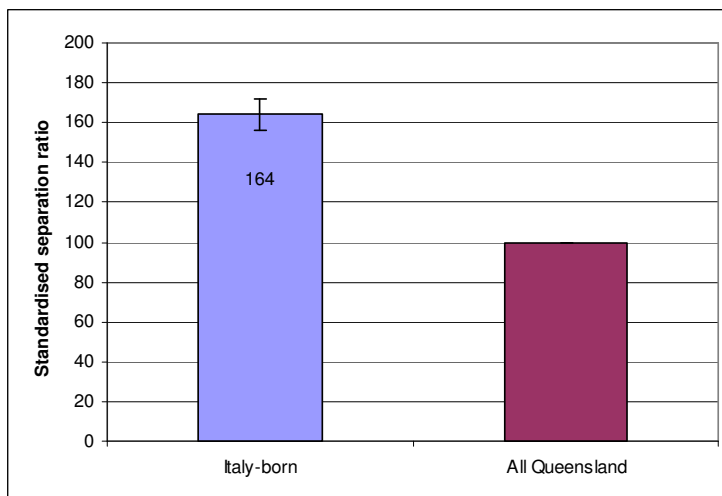

Figure 9: Diabetes complications standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

The standardised hospital separation ratio for diabetes complications excluding renal dialysis was also higher for Italy–born Queenslanders compared to all Queenslanders (Figure 10).
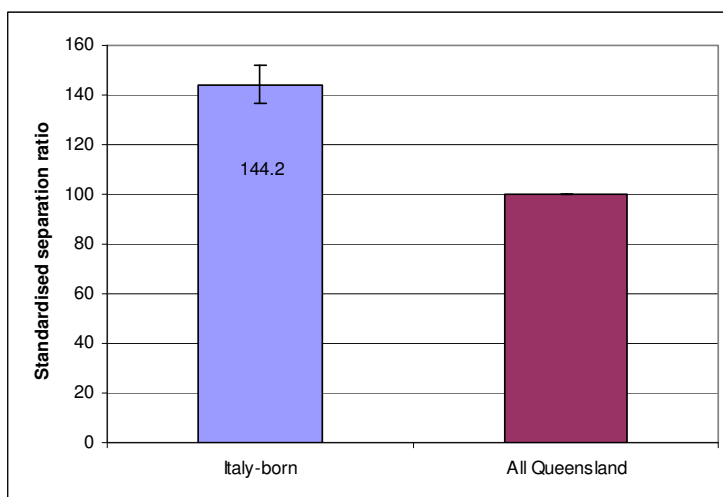
Figure 10: Diabetes complications (excluding renal dialysis) standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

Coding for diabetes, particularly diabetes complications, has varied from year to year over the past decade and this limits the reliability of data for this disease. Data for diabetes complications should be interpreted with caution (3).

6.4 Mental health

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 (47). An individual's mental health is derived from their genetic makeup and general life circumstances including their social, economic and environmental situation.

A mental disorder is a diagnosable illness and differs from mental health problems in duration and severity. Mental disorders of concern to public health include depression, anxiety and substance use disorders. Mental disorders represent an immense psychological, social and economic burden to society, and also increase the risk of physical illness (48).

Data relating to mental health by specific country of birth is not available for Queensland. However, in a 2008 New South Wales Chief Health Officer Report (16), limited country of birth specific data was published. This data suggests that in the measurement of psychological distress, Italy–born women scored significantly higher levels of distress than Italy–born men, and significantly higher levels of distress than both Australia–born men and women. This higher score was statistically significant. Very high levels of psychological distress may indicate a need for professional help; however, this does not mean that all individuals scoring highly have diagnostic levels of anxiety and depressive disorders (16).

6.5 Respiratory disease

Respiratory diseases are numerous and varied, are the third largest cause of death in Queensland and the seventh largest cause of hospitalisation (3). The two major chronic respiratory diseases that contribute the greatest burden are asthma and chronic obstructive pulmonary disease (3).

Asthma
The most notable respiratory disease is asthma which is a chronic respiratory disease characterised by recurrent attacks of episodes of wheezing, chest tightness and shortness of breath due to widespread narrowing of the airways and obstruction to airflow. There is no cure for asthma partly due to the lack of complete understanding of the causes of the disease (49). Asthma is a leading cause of disease burden in children and young people.

For the period July 2006 to June 2008, there was no difference in the standardised hospital separation ratio for asthma for Italy–born Queenslanders, compared to all Queenslanders (Figure 11).
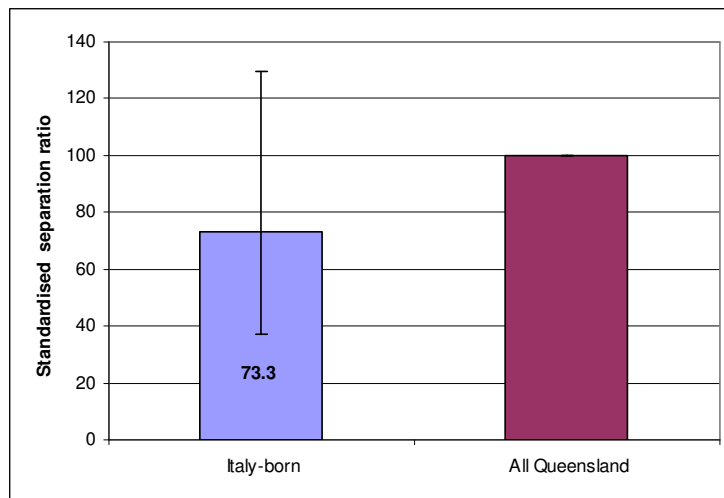

Figure 11: Asthma standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

Chronic obstructive pulmonary disease

Chronic obstructive pulmonary disease (COPD) is a serious and progressive disease which involves destruction of lung tissue and narrowing of the air passages, causing chronic shortness of breath. The main form of COPD is emphysema (2).

Figure 12 presents the standardised hospital separation ratio for COPD, Italy–born Queenslanders compared to all Queenslanders, for the period July 2006 to June 2008. Italy–born Queenslanders had a ratio of significantly lower than all Queenslanders.

Figure 12: COPD standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

6.6 External causes

Injuries accounted for 7.1 per cent of the total burden of premature death and disability in Queensland in 2007. Road traffic injuries and falls were responsible for the largest proportion of unintentional injuries and suicide and self inflicted injuries were the leading cause of intentional injury (3).

Over the past 10 years in Queensland, there have been major reductions in the rate of death for a number of injury types. However, data are not available by specific country of birth. These reductions occurred for important causes of death for (50):

- young children (drowning, burns and scalds)
- young people (transport)
- working age adults (homicide)
- older people (falls)
- as well as injuries affecting people of all ages (transport).

Injuries in this category are preventable, and the strategies to prevent them are as wide ranging and diverse as their causes.

For the period July 2006 to June 2008, the standardised hospital separation ratio for external causes, Italy–born Queenslanders compared to all Queenslanders, was more than 10 per cent lower (Figure 13).

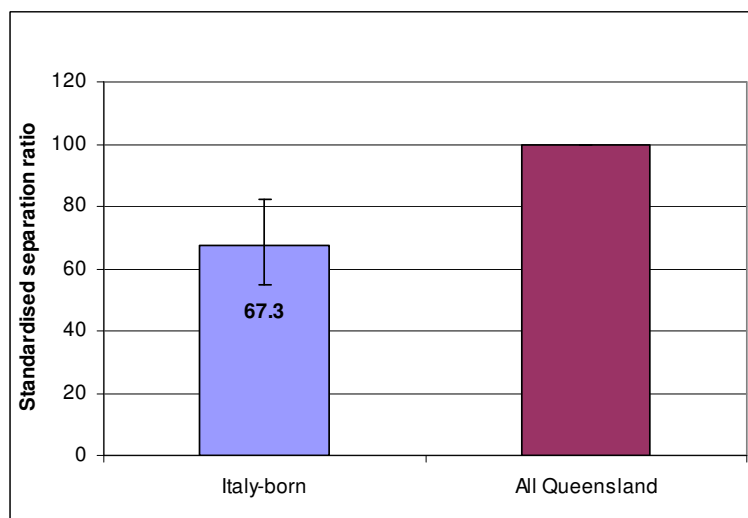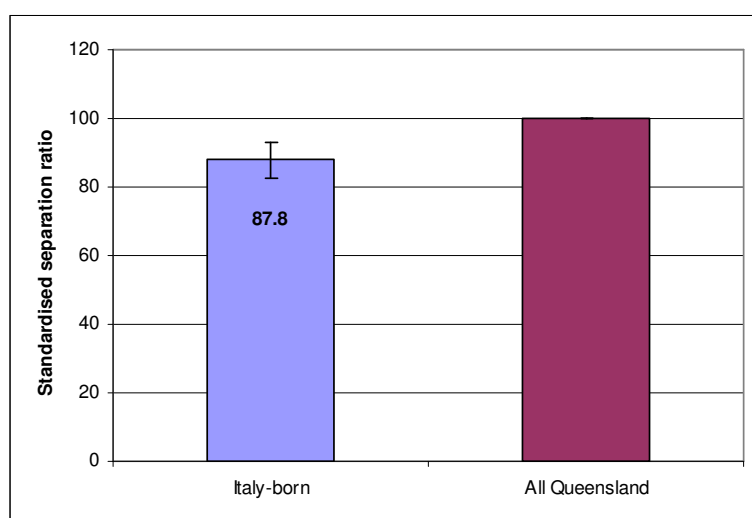Figure 13: External causes standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

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(51).

In 2004–05, one in three Queenslanders reported having a musculoskeletal condition of at least six months duration, with 16 per cent of Queenslanders reporting arthritis (52). The prevalence of arthritis was higher in females (18 per cent) than males (14 per cent)(52). The prevalence of arthritis increases with age.

Approximately 633 000 Queenslanders (17 per cent of the population) reported a long term back problem in 2004–05. Back pain prevalence begins to increase in the teenage years and peaks in the middle years. In 2005, 17 per cent of Australians presenting to a GP did so for arthritis with osteoarthritis the most common complaint (53). Back complaints were also a common cause of GP encounter, accounting for about eight per cent of GP presentations in 2005. Arthritis and back pain were often identified as co–morbid conditions when people presented to a GP for other chronic conditions (54).

There was no difference in the standardised hospital separation ratio for musculoskeletal disease for Italy–born Queenslanders, compared to all Queenslanders (Figure 14).
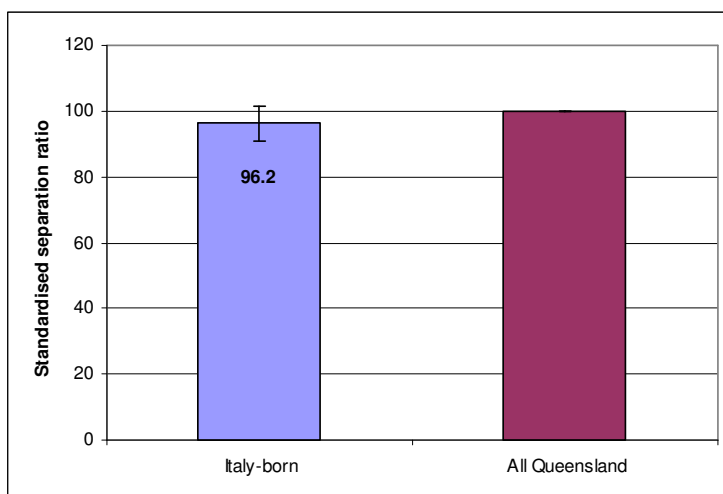
Figure 14: Musculoskeletal disease standardised hospital separation ratio Italy–born and all Queensland persons July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

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 is undertaken in Queensland. Communicable diseases include (3):
• mumps
• measles
• rubella
• hepatitis
• pertussis
• tetanus
• influenza
• sexually transmissible diseases
• food borne illnesses
• vector (such as mosquito) borne diseases
• tuberculosis
• diseases transmitted by animals (zoonotic diseases).

Current data collection standards do not include country of birth as a mandatory field. Therefore it is not possible to report communicable diseases by country of birth.

7 Key implications for Queensland Health

The health picture of the Italy–born population of Queensland is incomplete because prevalence and incidence data are largely unavailable for most health conditions as are CALD population surveys on risk and protective factors This population has lower hospitalisations for:
- chronic obstructive pulmonary disease (COPD)
- external causes (injury)
- all cancers (excluding non–melanocytic skin cancers).

Higher separation ratios were found for:
- all causes
- total avoidable conditions
- diabetes complications.

This could suggest an overall healthier population, except for diabetes, but could also suggest low hospital service access.

Risk factor information is unavailable due to small sample sizes in national surveys, or the lack of specific country of birth or ethnicity data making robust conclusions about risk difficult to reach.

International evidence indicates that cardiovascular disease is a significant contributor to mortality in Italy. National data indicates that diabetes is a significant issue for the Italy–born population, with higher mortality rates and hospitalisations compared to the Australian born population. National data also indicates that Italy–born people have significantly lower mortality ratios from:
- lung cancer
- coronary heart disease
- cerebrovascular disease
- all causes
- influenza
- pneumonia.

The findings of higher hospitalisations from diabetes complications among the Queensland Italy–born population supports national findings of higher diabetes hospitalisations and mortality and suggests that diabetes is a significant health issue in the Italy–born population.

Taking these findings in to consideration, Italy–born Queenslanders appear to be relatively healthy when compared to the total Queensland population, except in the area of diabetes. The focus in Queensland, therefore, needs to be on prevention and management of diabetes. In addition, the Italy–born population represents an older age profile with the largest of its population aged 65 years or older. Service improvements dedicated to culturally appropriate services for older Italy–born people and in aged care will be a priority for this group now and into the immediate future. Improved data collection, analysis, dissemination, and use of data on specific culturally and linguistically diverse populations in Queensland is required to enable the same level of analysis that can be applied to Australia–born Queenslanders' health.

Appendix 1 Data and Methodology

All data sources are cited. For further information contact the Director, 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 (55).

Death, cancer incidence and hospitalisation ratios for all diseases and conditions are reported as age standardised ratios. Standardisation minimises the differences in age composition among populations and facilitates comparisons among populations. In direct standardisation, the proportional age distribution of the standard population is applied to the ratio to obtain age standardised ratios which minimise or remove the distorting effects of age. In indirect standardisation, the age distribution of the standard population is used to obtain expected counts, total number of expected counts and subsequently standardised ratios (standardised mortality ratio or standardised separation ratio etc).

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