Population health profile of the GPpartners Division of General Practice (formerly Brisbane North DGP): supplement

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Interpretation of differences between data in this profile and similar data from other sources needs to be undertaken with care, as such differences may be due to the use of different methodology to produce the data.

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Population health profile
of the GPpartners Division of General Practice
(formerly Brisbane North DGP): supplement

This profile is a supplement to the *Population health profile of the Brisbane North Division of General Practice* (now known as GPpartners DGP), dated November 2005, available from www.publichealth.gov.au. This supplement includes an update of the population of the GPpartners Division of General Practice, as well as additional indicators and aspects of the Division's socioeconomic status, use of GP services and health. The contents are:

- Population [updated to June 2005]

- Additional socio-demographic indicators

- Unreferred attendances – patient flow/ GP catchment

- Additional prevalence estimates: chronic diseases and risk factors combined

- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

- Avoidable mortality

For further information on the way Division totals in this report have been estimated, please refer to the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

Population

The GPpartners Division had an Estimated Resident Population of 590,688 at 30 June 2005.

Figure 1: Annual population change, GPpartners DGP, Brisbane, Queensland and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005
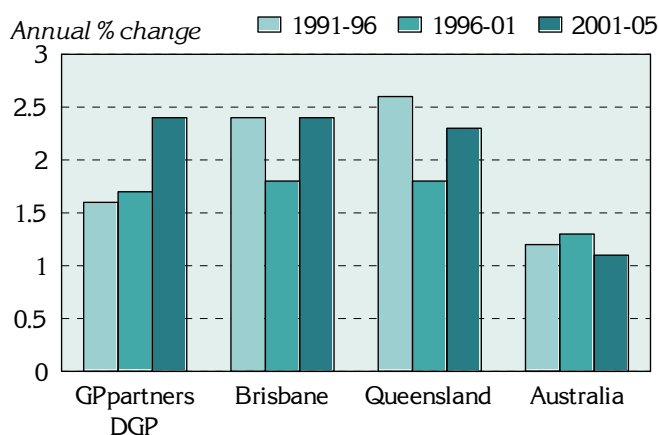
Over the five years from 1991 to 1996, the Division's population increased by 1.6% on average each year, lower than in Brisbane (2.4%) and Queensland (2.6%), but higher than for Australia (1.2%). From 1996 to 2001, the annual percentage increase in the Division was 1.7%, again lower than for Brisbane and Queensland (both 1.8%), and higher than for Australia (1.2%). The growth rate of 2.4% per year from 2001 to 2005 was equal to the annual increase for Brisbane, and higher than for Queensland (2.3%) and for Australia (1.1%).

Table 1: Population by age, GPpartners DGP and Australia, 2005

Age group (years)	GPpartners DGP No.	%	Australia No.	%
0-14	107,629	18.2	3,978,221	19.6
15-24	95,314	16.1	2,819,834	13.9
25-44	182,630	30.9	5,878,107	28.9
45-64	139,198	23.6	4,984,446	24.5
65-74	32,978	5.6	1,398,831	6.9
75-84	23,984	4.1	954,143	4.7
85+	8,955	1.5	315,027	1.5
Total	**590,688**	**100.0**	**20,328,609**	**100.0**

As shown in the accompanying table and the age-sex pyramid below, GPpartners DGP had a lower proportion of children than Australia as a whole, with 18.2% at ages 0 to 14 years (compared to 19.6%). Conversely, there were more people in the 15 to 24 and 25 to 44 year age groups (16.1% and 30.9%) compared to Australia (13.9% and 28.9%). The proportions of the Division's population in the age groups from 45 to 84 years were marginally lower than those for Australia.

## Figure 2: Population in GPpartners DGP and Australia, by age and sex, 2005

Age (years)

GPpartners DGP   Australia
■ Males □ Females   ▲ Males ◆ Females
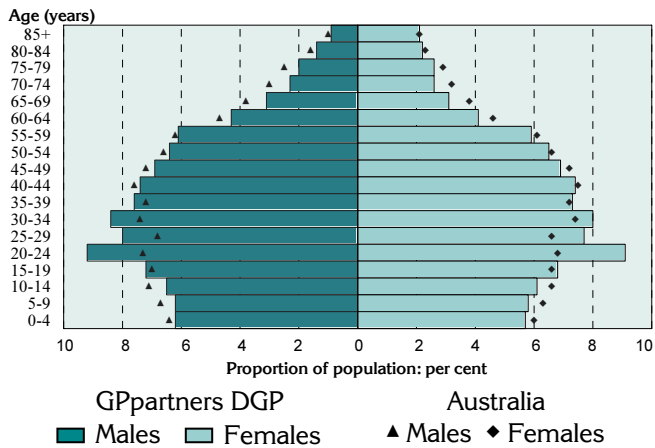
The age distribution of the Division's population is similar to that for Australia overall. The most notable differences are:

- at younger ages – relatively fewer children aged 0 to 14 years;
- from 20 to 34 years – relatively more males and females (most notably at ages 20 to 24 years); and
- at older ages – relatively fewer males and females aged 60 to 79 years.

Figure 3: Population projections for GPpartners DGP, by age and sex, 2005 and 2020

Age (years)

Population 2005   Population 2020
■ Males □ Females   ▲ Males ◆ Females
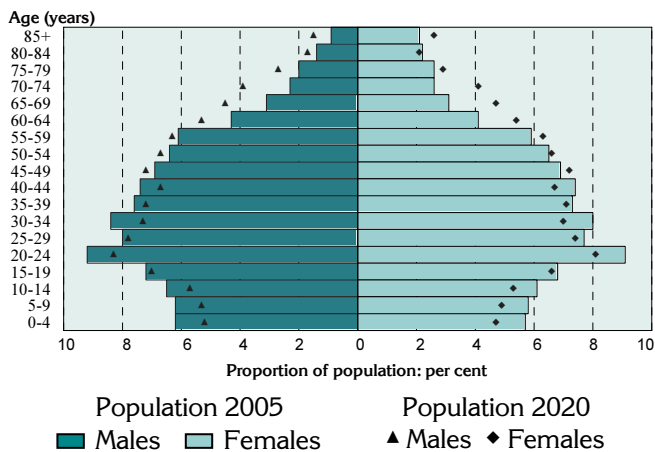
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- relatively fewer males and females aged 0 to 44 years (only marginally lower at ages 15 to 19 and 25 to 29 years);
- at ages 55 to 79 years – higher proportions of males and females (most pronounced at ages 60 to 74 years); and
- at ages 75 and over – relatively more males, and females other than at ages 80 to 84 years.

Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Brisbane North Division of General Practice* (now known as GPpartners DGP), dated November 2005, available from www.publichealth.gov.au, for other socio-demographic indicators.

Figure 4: Index of Relative Socio-Economic Disadvantage, GPpartners DGP, 2001
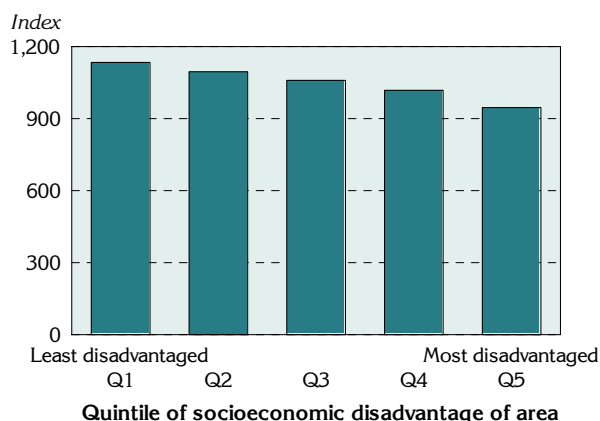
One of four socioeconomic indexes for areas produced at the 2001 ABS Census is the Index of Relative Socio-Economic Disadvantage.

The GPpartners DGP has an index score of 1051, above the score for Australia of 1000: this score varies widely across the Division, from a low of 946 in the most disadvantaged areas to 1134 in the least disadvantaged areas.

Note: each 'quintile' comprises approximately 20% of the population of the Division.

A new indicator, produced for the first time at the 2001 ABS Census, shows the number of jobless families with children under 15 years of age. There were markedly fewer jobless families in the GPpartners DGP (12.5%), compared to Brisbane as a whole (17.7%) (Figure 5, Table 2).

With the introduction of the 30% rebate for private health insurance premiums, there was a once-off registration process, providing information of the postcode and residence of those who had such insurance (these data are not available at this area level for later dates). In 2001, the Division had a notably higher proportion of the population with private health insurance (50.8%), compared to Brisbane (43.5%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, GPpartners DGP, Brisbane, Queensland and Australia, 2001

Jobless families with children under 15 years old

Per cent

Private health insurance, 30 June

Per cent
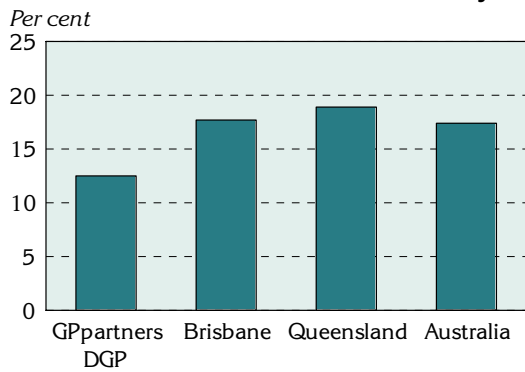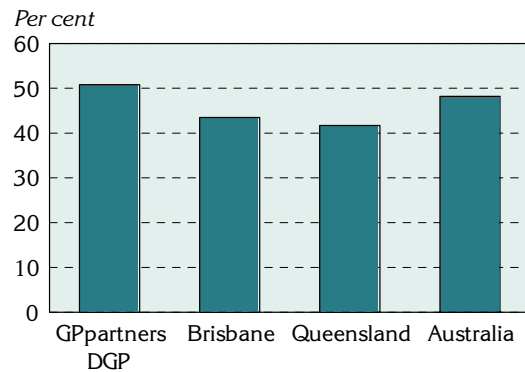
Table 2: Socio-demographic indicators, GPpartners DGP, Brisbane, Queensland and Australia, 2001

Indicator	GPpartners DGP		Brisbane		Queensland		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	6,631	12.5	31,941	17.7	74,942	18.9	357,563	17.4
Private health insurance (30 June)	266,719	50.8	698,753	43.5	1,511,613	41.7	8,671,106	46.0

Details of the distribution of jobless families (Map 1) and of the population covered by private health insurance (Map 2) are shown by Statistical Local Area (SLA) in Maps 1 and 2, respectively.

Map 1: Jobless families with children under 15 years of age by SLA, GPpartners DGP, 2001

Per cent

- 20.0% or more
- 16.0% to 19.9%
- 12.0% to 15.9%
- 8.0% to 11.9%
- fewer than 8.0%
- not mapped#
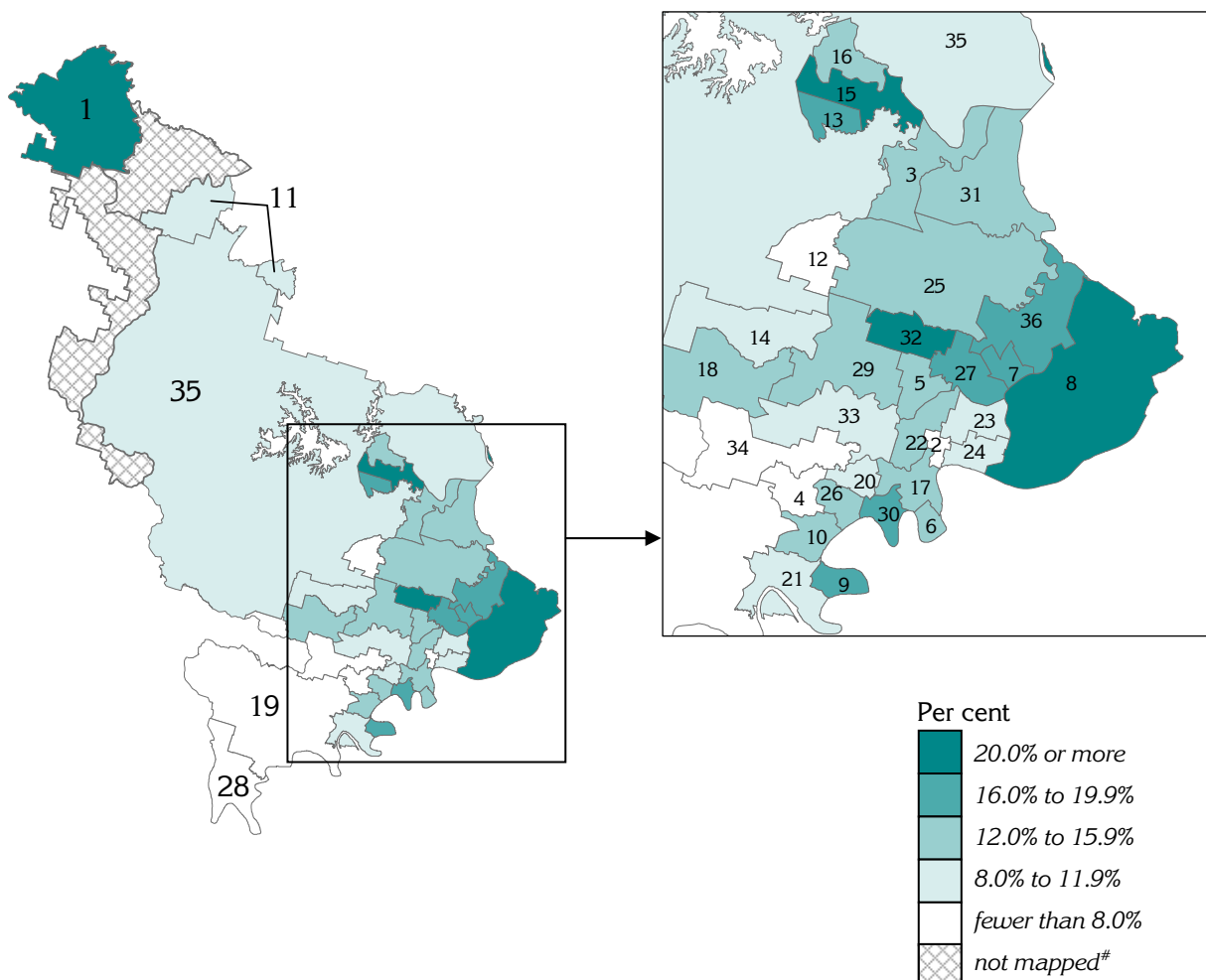
 # data were not mapped: see 'Mapping' note under Methods

For map labels: see next page

Map 2: People covered by private health insurance by SLA, GPpartners DGP, 30 June 2001

Per cent

- Fewer than 30.0%
- 30.0% to 39.9%
- 40.0% to 49.9%
- 50.0% to 59.9%
- 60.0% or more
- not mapped#
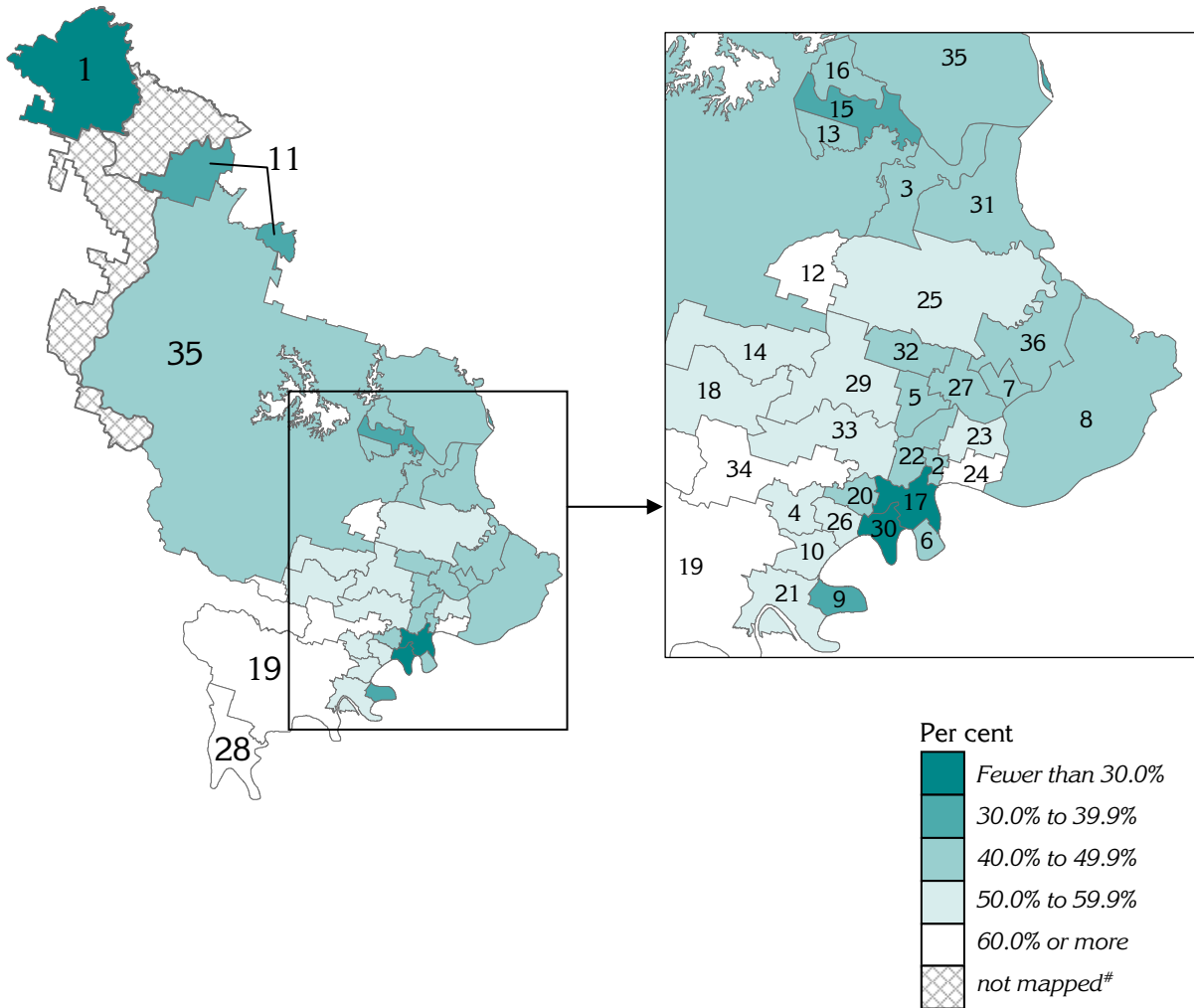
data were not mapped: see 'Mapping' note under Methods

Alphabetical key to SLA/SLA group, Brisbane North DGP, 2001

Albany Creek	12	Keperra/Upper Kedron	18
Albion	2	Kilcoy (S)	1
Anstead/Moggill	28	Lawnton	15
Ascot/Hamilton	24	Milton/Paddington	26
Ashgrove/The Gap	34	New Farm	6
Bald Hills	3	Northgate	7
Bardon	4	Nudgee Beach/Virginia	36
Bracken Ridge/Sandgate	31	Nundah/Wavell Heights	27
Bray Park	13	Petrie	16
Bridgeman Downs/Boondall	25	Pine Rivers Balance	35
Caboolture (S) Bal in BSD	11	Pinkenba-Eagle Farm	8
Chelmer/Taringa	21	Red Hill/Kelvin Grove	20
Chermside West/Chermside	32	St Lucia	9
City /Spring Hill	30	Stafford Heights/Mitchelton	29
Clayfield/Hendra	23	Toowong	10
Herston/Newstead	17	Upper Brookfield/Fig Tree Pocket	19
Hills District	14	Wilston/Enoggera	33
Kedron	5	Windsor/Wooloowin	22

GP services to residents of the GPpartners DGP

The following tables include information, purchased from Medicare Australia, of the movement of patients and GPs between Divisions. Note that the data only include unreferred attendances recorded under Medicare: unreferred attendances not included are those for which the cost is met by the Department of Veterans' Affairs or a compensation scheme; or are provided by salaried medical officers in hospitals, community health services or Aboriginal Medical Services, and which are not billed to Medicare. At any attendance, one or more services may have been provided.

The majority (89.6%) of all unreferred attendances to residents of GPpartners DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 2,258,617 GP unreferred attendances (Table 3). A further 2.4% of unreferred attendance to residents were provided by GPs with a provider number in South East Alliance (Brisbane) DGP, with 2.1% provided by GPs in Brisbane South DGP.

Table 3: Patient flow – People living[1] in GPpartners DGP by Division where attendance occurred[2], 2003/04

Division		Unreferred attendances	
Number	Name	No.	%[3]
405	GPpartners DGP	2,258,617	89.6
401	South East Alliance (Brisbane) DGP	62,022	2.4
402	Brisbane South DGP	52,488	2.1
407	Redcliffe Bribie Caboolture DGP	45,614	1.8
418	Sunshine Coast DGP	16,104	0.6
404	Logan Area DGP	11,029	0.4
406	Gold Coast DGP	10,237	0.4
Other	..	73,688	2.9
Total	..	**2,521,771**	**100.0**

[1] Based on address in Medicare records
[2] Division of GP based on provider number
[3] Proportion of all unreferred attendances of patients with an address in Division 405 by Division in which attendance occurred

Just over four fifths (81.3%) of unreferred attendances provided by GPs with a provider number in GPpartners DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 4.7% of unreferred attendance by GPs in the Division were to people living in Brisbane South DGP, with 3.7% of unreferred attendances going to South East Alliance (Brisbane) DGP.

Table 4: GP catchment – Unreferred attendances provided by GPs[1] in GPpartners DGP by Division of patient address[2], 2003/04

Division		Unreferred attendances	
Number	Name	No.	%[3]
405	GPpartners DGP	2,258,617	81.3
402	Brisbane South DGP	130,723	4.7
401	South East Alliance (Brisbane) DGP	102,635	3.7
407	Redcliffe Bribie Caboolture DGP	93,983	3.4
404	Logan Area DGP	40,099	1.4
408	Ipswich and West Moreton DGP	31,114	1.1
418	Sunshine Coast DGP	21,536	0.8
Other	..	101,088	3.6
Total	..	**2,779,795**	**100.0**

[1] Division of GP based on provider number
[2] Based on address in Medicare records
[3] Proportion of all unreferred attendances to GPs with a provider number in Division 405 by Division of patient address

Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the Brisbane North Division of General Practice* (now known as GPpartners DGP), dated November 2005, available from www.publichealth.gov.au, for the separate prevalence estimates of chronic disease; measures of self-reported health and risk factors. The process by which the estimates have been made, and details of their limitations, are also described in the 'Notes on the data' section of this earlier profile.

In this section two estimates, which combine the prevalence of selected chronic diseases with a risk factor, are shown for the Division. The measures are of people who *had asthma and were smokers*, and people who *had type 2 diabetes and were overweight or obese*: note that the estimates have been predicted from self-reported data, and are not based on clinical records or physical measures.

It is estimated that fewer people in GPpartners DGP had asthma and were smokers, compared to Brisbane and Australia as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were lower. The estimated rate for people in GPpartners DGP who had type 2 diabetes and were overweight/ obese was consistent with that in Brisbane and Australia.

Figure 6: Estimates of selected chronic diseases and risk factors, GPpartners DGP, Brisbane and Australia, 2001
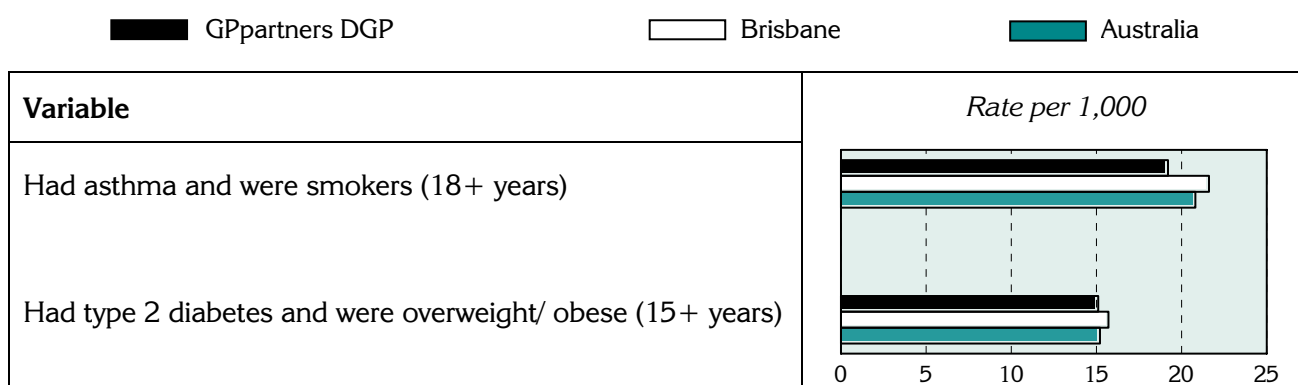
Table 5: Estimates of selected chronic diseases and risk factors, GPpartners DGP, Brisbane, Queensland and Australia, 2001

Variable	GPpartners DGP		Brisbane		Queensland		Australia	
	No.[1]	Rate[2]	No.[1]	Rate[2]	No.[1]	Rate[2]	No.[1]	Rate[1]
Had asthma & smoked[3]	11,376	19.2	37,177	21.6	83,759	23.2	397,734	20.8
Had type 2 diabetes & were overweight/obese[4]	7,367	15.1	23,133	15.7	52,952	15.0	283,176	15.2

[1] No. is a weighted estimate of the number of people in GPpartners DGP reporting these chronic conditions/ with these risk factors and is derived from synthetic predictions from the 2001 NHS
[2] Rate is the indirectly age-standardised rate per 1,000 population
[3] Population aged 18 years and over
[4] Population aged 15 years and over

Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

The rationale underlying the concept of avoidable hospitalisations is that timely and effective care of certain conditions, delivered in a primary care setting, can reduce the risk of hospitalisation. Admissions to hospital for these ambulatory care sensitive (ACS) conditions can be avoided in three ways. Firstly, for conditions that are usually preventable through immunisation or nutritional intervention, disease can be prevented almost entirely. Secondly, diseases or conditions that can lead to rapid onset problems, such as dehydration and gastroenteritis, can be treated. Thirdly, chronic conditions, such as congestive heart failure, can be managed to prevent or reduce the severity of acute flare-ups to avoid hospitalisation.

This measure does not include other aspects of avoidable morbidity, namely potentially preventable hospitalisations (hospitalisations resulting from diseases preventable through population based health promotion strategies, e.g. alcohol-related conditions; and most cases of lung cancer) and hospitalisations avoidable through injury prevention (e.g. road traffic accidents).

For information on the ambulatory care sensitive conditions and ICD codes included in the analysis in this section, please refer to the *Atlas of Avoidable Hospitalisations in Australia: ambulatory care-sensitive conditions*, available from www.publichealth.gov.au.

In 2001 to 2002, the 12,702 admissions from ambulatory care sensitive (ACS) conditions accounted for 6.8% of all admissions in the GPpartners DGP (Table 6, Figure 7), markedly lower than the levels in Queensland (8.5%) and Australia (8.7%).

Table 6: Avoidable[1] and unavoidable hospitalisations, GPpartners DGP, Queensland, and Australia, 2001/02

Category	GPpartners DGP			Queensland			Australia		
	No.	Rate[2]	%	No.	Rate[2]	%	No.	Rate[2]	%
Avoidable[1]	12,702	2,487.1	6.8	106,884	3,025.0	8.5	552,786	2,847.5	8.7
Unavoidable	174,416	33,239.1	93.2	1,153,519	32,410.1	91.5	5,818,199	29,970.7	91.3
Total	**187,118**	**35,742.5**	**100.0**	**1,260,403**	**35,435.5**	**100.0**	**6,370,985**	**32,818.2**	**100.0**

[1] Admissions resulting from ACS conditions
[2] Rate is the indirectly age-standardised rate per 100,000 population

Figure 7: Avoidable hospitalisations[1], GPpartners DGP, Queensland and Australia, 2001/02
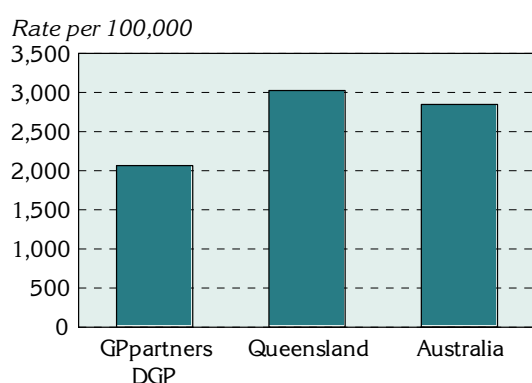
Rate per 100,000

The rate of avoidable hospitalisations in GPpartners DGP is markedly lower, a rate of 2,487.1 admissions per 100,000 population, compared to that in Queensland (a rate of 3,025.0), and notably lower than that in Australia (2,847.5).

[1] Admissions resulting from ACS conditions

Diabetes complications, chronic obstructive pulmonary disease, dehydration and gastroenteritis and angina were the four conditions with the highest rates of avoidable hospitalisations in the GPpartners DGP (Figure 8, Table 7).

Table 7 shows the number, rate and proportion of avoidable hospitalisations, for the individual ACS conditions, as well as the vaccine-preventable; acute; and chronic sub-categories. Almost two-thirds of avoidable hospitalisations are attributable to chronic health conditions. The predominance of hospitalisations for chronic conditions in this period can be primarily attributed to the large number of admissions for diabetes complications. Dehydration and gastroenteritis; and dental conditions have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 8: Avoidable hospitalisations[1] by condition, GPpartners DGP and Queensland, 2001/02

Legend: ■ GPpartners DGP □ Queensland

Conditions (top to bottom):
- Diabetes complications
- Chronic obstructive pulmonary disease
- Dehyration and gastroenteritis
- Angina
- Asthma
- Dental conditions
- Congestive heart failure
- Ear, nose and throat infections
- Convulsions and epilepsy
- Cellulitis
- Iron deficiency anaemia
- Influenza and pneumonia
- Pelvic inflammatory disease
- Pyelonephritis
- Gangrene
- Perforated/bleeding ulcer
- Ruptured appendix
- Hypertension
- Other vaccine-preventable conditions

X-axis: 0 100 200 300 400 500 600 700 800

Rate per 100,000

[1] Admissions resulting from ACS conditions: excludes nutritional deficiencies as less than ten admissions

Table 7: Avoidable hospitalisations[1] by condition, GPpartners DGP, Queensland and Australia, 2001/02

Sub-category/ condition	GPpartners DGP		Queensland		Australia	
	No.	Rate[2]	No.	Rate[2]	No.	Rate[2]
Vaccine-preventable	**436**	**84.6**	**3,188**	**89.6**	**16,573**	**85.4**
Influenza and pneumonia	358	69.9	2,646	74.6	13,021	67.1
Other vaccine preventable	78	14.7	542	15.0	3,552	18.3
Chronic[3]	**7,942**	**1,589.3**	**65,455**	**1,882.0**	**352,545**	**1,816**
Diabetes complications	3,082	620.7	25,175	722.9	141,345	728.1
Iron deficiency anaemia	481	93.7	2,772	79.7	16,451	84.7
Hypertension	91	17.8	1,324	38.3	6,354	32.7
Congestive heart failure	918	182.3	7,617	225.5	42,447	218.6
Angina	990	198.6	11,134	321.5	49,963	257.4
Chronic obstructive pulmonary disease	1,394	286.6	10,619	308.5	54,853	282.6
Asthma	986	189.6	6,814	185.6	41,009	211.3
Acute	**4,698**	**888.8**	**41,300**	**1,143.3**	**200,913**	**1,035**
Dehydration and gastroenteritis	1,079	201.5	8,278	234.1	37,766	194.5
Convulsions and epilepsy	629	119.1	5,902	162.3	31,137	160.4
Ear, nose and throat infections	738	142.0	6,829	184.4	32,075	165.2
Dental conditions	959	183.6	9,101	247.8	43,667	224.9
Perforated/bleeding ulcer	106	21.0	892	25.8	5,795	29.9
Ruptured appendix	103	19.1	754	20.7	3,866	19.9
Pyelonephritis	170	30.7	1,437	39.8	7,386	38.0
Pelvic inflammatory disease	228	40.1	1,315	36.2	6,547	33.7
Cellulitis	573	109.4	5,930	167.4	28,204	145.3
Gangrene	113	22.3	862	24.8	4,470	23.0
Total avoidable hospitalisations[4]	**12,702**	**2,487.1**	**106,884**	**3,025.0**	**552,786**	**2,847.5**

[1] Admissions resulting from ACS conditions
[2] Rate is the indirectly age-standardised rate per 100,000 population
[3] Excludes nutritional deficiencies as less than ten admissions
[4] Sub-category and condition numbers and rates do not add to the reported total avoidable admissions: five conditions (influenza & pneumonia, other vaccine preventable, diabetes complications, ruptured appendix and gangrene) are counted in 'any diagnosis', so may be included in more than one condition group

Avoidable mortality

Avoidable and amenable mortality comprises those causes of death that are potentially avoidable at the present time, given available knowledge about social and economic policy impacts, health behaviours, and health care (the latter relating to the subset of amenable causes).

For information on the avoidable and amenable mortality conditions and ICD codes included in the analysis in this section, please refer to the *Australian and New Zealand Atlas of Avoidable Mortality*, available from www.publichealth.gov.au.

Almost three quarters (72.3%) of all deaths in GPpartners DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, consistent with the proportion for Brisbane (72.7%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 30.3% of all deaths at ages 0 to 74 years in GPpartners DGP, compared to 28.6% in Brisbane.

Table 8: Avoidable and unavoidable mortality (0 to 74 years) by area, GPpartners DGP, Brisbane, Queensland and Australia, 1997 to 2001

Mortality category	GPpartners DGP		Brisbane		Queensland		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable	4,503	200.0	14,656	211.2	35,515	220.6	189,845	211.8
% of total	**72.3**	**..**	**72.7**	**..**	**72.8**	**..**	**71.5**	**..**
(Amenable)	(1,884)	(85.0)	(5,940)	(86.4)	(14,323)	(89.3)	(76,249)	(85.1)
(% of total)	**(30.3)**	**(..)**	**(29.5)**	**(..)**	**(29.3)**	**(..)**	**(28.7)**	**(..)**
Unavoidable	1,722	77.4	5,498	79.7	13,291	82.7	75,582	84.3
% of total	**27.7**	**..**	**27.3**	**..**	**27.2**	**..**	**28.5**	**..**
Total mortality	**6,225**	**277.4**	**20,154**	**291.0**	**48,806**	**303.4**	**265,427**	**296.1**
%	**100.0**	**..**	**100.0**	**..**	**100.0**	**..**	**100.0**	**..**

[1] Rate is the indirectly age-standardised rate per 100,000 population

Rates of avoidable mortality were higher for males than for females in each of the comparator areas. GPpartners DGP's rate of avoidable mortality for males was 251.1 deaths per 100,000 males, notably higher than the rate of 148.0 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 91.3, compared to 78.5 for females, a rate ratio of 1.16 (Figure 9, Table 9).

Figure 9: Avoidable and amenable mortality by sex (0 to 74 years), GPpartners DGP, Brisbane, Queensland and Australia, 1997 to 2001
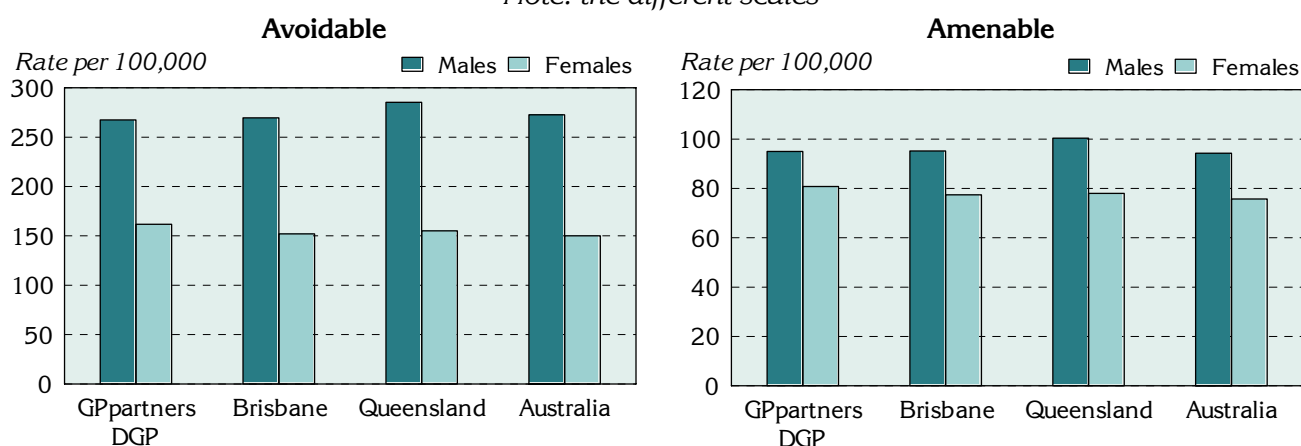
Note: the different scales

Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, GPpartners DGP, Brisbane, Queensland and Australia, 1997 to 2001

Mortality category and sex	GPpartners DGP		Brisbane		Queensland		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable								
Males	2,810	251.1	9,362	269.5	23,316	285.3	123,026	272.6
Females	1,693	148.0	5,294	152.0	12,199	155.1	66,819	150.1
Total	**4,503**	**200.0**	**14,656**	**211.2**	**35,515**	**220.6**	**189,845**	**211.8**
Rate ratio–M:F[2]	..	1.70**	..	1.77**	..	1.84**	..	1.82**
Amenable								
Males	993	91.3	3,249	95.2	8,181	100.4	42,568	94.3
Females	891	78.5	2,691	77.4	6,142	78.0	33,681	75.7
Total	**1,884**	**85.0**	**5,940**	**86.4**	**14,323**	**89.3**	**76,249**	**85.1**
Rate ratio–M:F[2]	..	1.16**	..	1.23**	..	1.29**	..	1.25**

[1] Rate is the indirectly age-standardised rate per 100,000 population

[2] Rate ratio (M:F) is the ratio of male to female rates; rate ratios differing significantly from 1.0 are shown with
 * p <0.05; ** p <0.01

Another way of measuring premature mortality is to calculate the number of years of life lost (YLL)[1], which takes into account the years a person could have expected to live at each age of death based on the average life expectancy at that age.

The numbers of YLL for GPpartners DGP, Brisbane, Queensland and Australia over the period of analysis are shown in Table 10 by mortality category. However, given the substantial variation in the populations of these areas, a comparison of the proportion of YLL for each area is also shown.

YLL from avoidable mortality accounted for 72.8% of total YLL (0 to 74 years) for GPpartners DGP, was consistent with the 72.8% for Brisbane. The proportion of YLL from amenable mortality of 30.0% for GPpartners DGP was higher than 28.9% for Brisbane.

Table 10: Years of life lost from avoidable mortality (0 to 74 years), GPpartners DGP, Brisbane, Queensland and Australia, 1997 to 2001

Mortality category	GPpartners DGP		Brisbane		Queensland		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	79,007	72.8	260,170	72.8	629,779	72.9	3,327,375	71.9
(Amenable)	(32,537)	(30.0)	(103,340)	(28.9)	(247,893)	(28.7)	(1,298,430)	(28.0)
Unavoidable	29,576	27.2	97,013	27.2	234,699	27.1	1,303,289	28.1
Total	**108,583**	**100.0**	**357,183**	**100.0**	**864,478**	**100.0**	**4,630,664**	**100.0**

[1] Years of life lost were calculated using the remaining life expectancy method (this provides an estimate of the average time a person would have lived had he or she not died prematurely). The reference life table was the Coale and Demeny Model Life Table West level 26 female (for both males and females), with the YLL discounted to net present value at a rate of 3 per cent per year.

In each of the areas in Table 11, the majority of avoidable mortality at ages 0 to 74 years occurred in the 65 to 74 year age group (Table 11), with 1,399.5 deaths per 100,000 population in GPpartners Division. The 45 to 64 year age group accounted for the next highest rate of avoidable death in all of the comparators, with a rate 274.9 in GPpartners Division.

Table 11: Avoidable and amenable mortality by age, GPpartners DGP, Brisbane, Queensland and Australia, 1997 to 2001

Mortality category and age (years)	GPpartners DGP		Brisbane		Queensland		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable								
0-14	146	30.4	500	30.1	1,208	32.2	5,669	28.8
15-24	159	36.5	562	44.8	1,386	54.3	7,045	52.8
25-44	578	71.5	1,916	77.8	4,527	84.9	24,356	83.9
45-64	1,499	274.9	5,107	301.7	12,543	322.5	64,282	304.9
65-74	2,121	1,399.5	6,571	1410.9	15,851	1404.6	88,493	1,358.1
Total	**4,503**	**200.0**	**14,656**	**211.2**	**35,515**	**220.6**	**189,845**	**211.8**
Amenable								
0-24	142	16.8	451	15.9	1,059	16.8	5,083	15.4
25-44	151	19.1	491	20.1	1,165	21.8	5,946	20.5
45-64	685	125.6	2,236	132.2	5,352	137.9	27,464	130.3
65-74	906	594.6	2,762	591.5	6,748	599.1	37,756	579.4
Total	**1,884**	**85.0**	**5,940**	**86.4**	**14,323**	**89.3**	**76,249**	**85.1**

[1] Rate is the indirectly age-standardised rate per 100,000 population

Table 12 shows the number and age-standardised death rate by selected major condition group and selected causes included in the avoidable mortality classification.

The highest rates of avoidable mortality for the selected major condition groups in the GPpartners DGP were for cancer, 71.7 deaths per 100,000 population, and cardiovascular diseases, with a rate of 65.0 deaths per 100,000 population (Table 12, Figure 10). For the selected causes within the condition groups, the two major causes of avoidable mortality were ischaemic heart disease and lung cancer, with rates of 46.7 per 100,000 population and 25.0 per 100,000, respectively.

Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, GPpartners DGP, Brisbane, Queensland and Australia, 1997 to 2001

Condition group/ selected cause	GPpartners DGP		Brisbane		Queensland		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Cancer	**1,583**	**71.7**	**4,928**	**72.2**	**11,618**	**72.6**	**62,338**	**69.5**
Colorectal cancer	314	14.3	967	14.3	2,392	15.0	13,008	14.5
Lung cancer	541	25.0	1,733	25.8	4,062	25.4	21,208	23.7
Cardiovascular diseases	**1,412**	**65.0**	**4,648**	**69.3**	**11,294**	**71.0**	**59,945**	**66.9**
Ischaemic heart disease	1,014	46.7	3,429	51.1	8,434	52.9	43,712	48.8
Cerebrovascular diseases	316	14.5	947	14.1	2,210	14.0	12,558	14.0
Respiratory system diseases	**252**	**11.7**	**906**	**13.7**	**2,168**	**13.7**	**11,612**	**13.0**
Chronic obstructive pulmonary disease	228	10.7	811	12.4	1,970	12.5	10,395	11.6
Unintentional injuries	**268**	**10.6**	**968**	**12.6**	**2,630**	**15.8**	**14,224**	**15.9**
Road traffic injuries	120	4.7	511	6.6	1,565	9.4	8,138	9.1
Intentional injuries	**395**	**15.6**	**1,305**	**17.1**	**3,017**	**18.2**	**13,891**	**15.5**
Suicide and self inflicted injuries	372	14.7	1,198	15.7	2,719	16.4	12,393	13.8

[1] Rate is the indirectly age-standardised rate per 100,000 population

Apart from cancer, rates in the Division for the condition groups and selected causes were generally below or consistent with those in Australia (Figure 10).

Figure 10: Avoidable mortality (0 to 74 years) by major condition group and selected cause, GPpartners DGP, Brisbane and Australia, 1997 to 2001
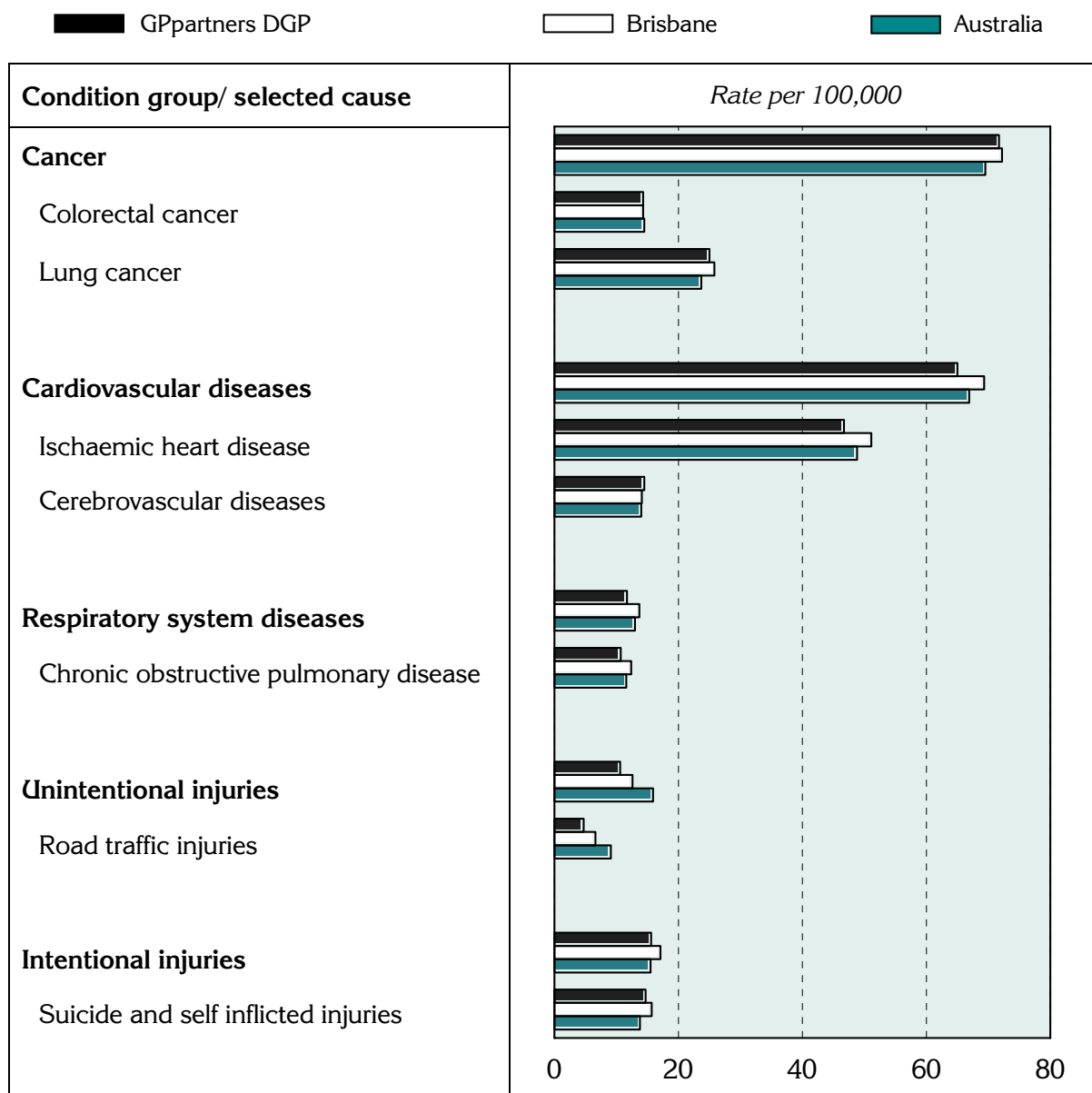
Notes on the data

Data sources and limitations

General

References to 'Brisbane' relate to the Brisbane Statistical Division.

Data sources

Table 13 details the data sources for the material presented in this profile.

Table 13: Data sources

Section	Source
Population	
Figures 1 and 2; Table 1	Estimated Resident Population, ABS, 30 June for the periods shown
Figure 3	Estimated Resident Population, ABS, 30 June 2005; Population Projections, ABS, 30 June 2020 (unpublished)[1]
Additional socio-demographic indicators	
Figure 4	ABS SEIFA package, Census 2001
Table 2; Figure 5; Map 1	Jobless families, ABS, 2001 (unpublished)
Table 2; Figure 5; Map 2	Private health insurance, from Hansard
GP services – patient flow/ GP catchment	
Tables 3 and 4	Medicare Australia, 2003/04
Additional prevalence estimates: chronic diseases and risk factors combined	
Figure 6; Table 5	Estimated from 2001 National Health Survey (NHS), ABS (unpublished)
Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions	
Tables 6 and 7; Figures 7 and 8	National Hospital Morbidity Database at Australian Institute of Health & Welfare, 2001/02; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)
Avoidable mortality	
Tables 8, 9, 10, 11 and 12; Figures 9 and 10	ABS Deaths 1997-2001; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)

[1] **The projected population at June 2020 is based on the 2002 ERP. As such, it is somewhat dated, and does not take into account more recent demographic trends: it is however the only projection series available at the SLA level for the whole of Australia.**

Methods

For background information on the additional prevalence estimates presented in this profile, please refer to the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

Please also refer to the November 2005 profile for information on the data converters.

Mapping

In some Divisions the maps may include a very small part of an SLA which has not been allocated any population; or has a population of less than 100 or has less than 1% of the SLAs total population; or there were less than five cases (ie. jobless families, people with health insurance): these areas are mapped with a pattern.

Statistical geography of the GPpartners DGP

For information on the postcodes in the Division, please refer the Department of Health and Ageing website http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm; also included in table format in the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

Statistical Local Areas (SLAs) are defined by the Australian Bureau of Statistics to produce areas for the presentation and analysis of data. In Brisbane, SLAs are based on suburbs: as many of these have very small populations, they have in some cases been grouped to form areas of larger population: the groupings are those used in HealthWIZ. The individual suburbs and groups of suburbs that comprise the Division are listed in Table 14. The SLA group name does not in all cases include the names of all suburbs (SLAs) in the group: all relevant SLA codes are shown in the table.

Table 14: SLAs and population in GPpartners DGP, 2005 on 2001 boundaries

SLA code[1]	SLA/SLA group name	Per cent of SLA/SLA group's population in the Division[*]	Estimate of the SLA/SLA group's 2005 population in the Division
35951	Albany Creek	100.0	16,505
31004	Albion	100.0	2,229
31018, 31053, 31386	Anstead/Moggill	100.0	8,628
31026, 31255	Ascot/Hamilton	100.0	9,348
31031, 31566	Ashgrove/The Gap	99.8	28,057
31037	Bald Hills	100.0	6,942
31048	Bardon	100.0	9,367
31072, 31078, 31173, 31514	Bracken Ridge/Sandgate	100.0	33,980
35957	Bray Park	100.0	9,153
31034, 31064, 31075, 31121, 31236, 31556, 31653	Bridgeman Downs/Boondall	100.0	54,891
32023	Caboolture Balance	2.3	316
31132, 31293, 31558	Chelmer/Taringa	100.0	21,001
31135, 31138	Chermside/Chermside West	100.0	12,815
31143, 31146, 31528	City/Spring Hill	100.0	11,307
31151, 31271	Clayfield/Hendra	100.0	13,744
31067, 31228, 31233, 31274, 31427	Herston/Newstead	100.0	12,548
35971	Hills District	100.0	21,623
31312	Kedron	100.0	11,746
31217, 31326, 31585	Keperra/Upper Kedron	100.0	16,071
34250	Kilcoy	11.4	407
35973	Lawnton	100.0	5,669
31378, 31454	Milton/Paddington	100.0	9,355
31421	New Farm	100.0	11,006
31435	Northgate	100.0	3,908
31045, 31438, 31443, 31593	Nudgee Beach/Virginia	100.0	9,130
31446, 31604	Nundah/Wavell Heights	100.0	17,685
35974	Petrie	100.0	8,937
35958, 35961, 35963, 35978, 35988	Pine Rivers Balance	100.0	82,366
31467	Pinkenba-Eagle Farm	100.0	361
31315, 31481	Red Hill/Kelvin Grove	100.0	9,324
31506	St Lucia	100.0	10,516
31211, 31353, 31383, 31533, 31536	Stafford Heights/Mitchelton	100.0	35,238
31574	Toowong	100.0	14,767
31083, 31127, 31222, 31318, 31323, 31465, 31473, 31582	Upper Brookfield/Fig Tree Pocket	100.0	33,318
31007, 31206, 31244, 31424, 31618	Wilston/Enoggera	100.0	23,937
31345, 31623, 31634	Windsor/Wooloowin	100.0	14,492

[*] **Proportions are approximate and are known to be incorrect in some cases, due to errors in the concordance used to allocate CDs to form postal areas**

Acknowledgements

Further developments and updates

When the re-aligned boundaries are released and DoHA have made known their geographic composition, PHIDU will examine the need to revise and re-publish these profiles (*Population health profile*, dated November 2005, and the *Population health profile: supplement*, dated March 2007).

PHIDU contact details

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