Population health profile of the Sutherland Division of General Practice: supplement

Population Profile Series: No. 13a

PHIDU

March 2007

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Australian Institute of Health and Welfare

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National Library of Australia Cataloguing in Publication entry

Population health profile of the Sutherland Division of General Practice: supplement.

ISBN 9 78073089 6128 (web).

1. Public health - New South Wales - Sutherland - Statistics. 2. Health status indicators - New South Wales - Sutherland - Statistics. 3. Health service areas - New South Wales - Sutherland. 4. Sutherland (N.S.W.) - Statistics, Medical. I. Public Health Information Development Unit (Australia). (Series : Population profile series ; no. 13a).

362.1099441

ISSN 1833-0452 Population Profile Series

Public Health Information Development Unit, The University of Adelaide
A Collaborating Unit of the Australian Institute of Health and Welfare

This profile was produced by PHIDU, the Public Health Information Development Unit at The University of Adelaide, South Australia. The work was funded under a grant from the Australian Government Department of Health and Ageing. The views expressed in this profile are solely those of the authors and should not be attributed to the Department of Health and Ageing or the Minister for Health and Ageing.

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.

Suggested citation:

PHIDU. (2007) *Population health profile of the Sutherland Division of General Practice: supplement.* Population Profile Series: No. 13a. Public Health Information Development Unit (PHIDU), Adelaide.

Enquiries about or comments on this publication should be addressed to:

PHIDU, The University of Adelaide, South Australia 5005
Phone: 08-8303 6236 or e-mail: PHIDU@publichealth.gov.au

This publication, the maps and supporting data, together with other publications on population health, are available from the PHIDU website (www.publichealth.gov.au).

Published by Public Health Information Development Unit, The University of Adelaide

Contributors: Anthea Page, Sarah Ambrose, Kristin Leahy and John Glover

Population health profile
of the Sutherland Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the Sutherland Division of General Practice*, dated November 2005, available from www.publichealth.gov.au. This supplement includes an update of the population of the Sutherland 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:

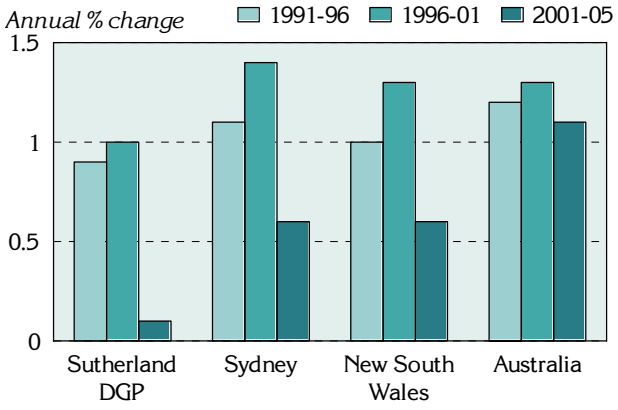
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive 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 Sutherland Division had an Estimated Resident Population of 214,492 at 30 June 2005.

Figure 1: Annual population change, Sutherland DGP, Sydney, New South Wales and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005



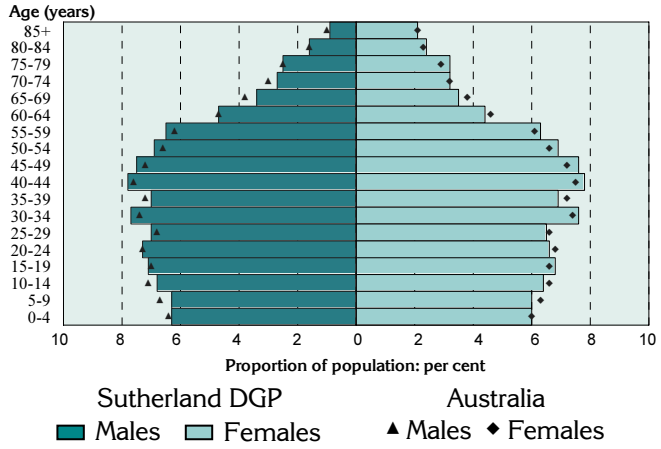
Over the five years from 1991 to 1996, the Division's population increased by 0.9% on average each year, below that in Sydney (1.1%) and New South Wales (1.0%). From 1996 to 2001, the annual percentage increase in the Division was 1.0%, further below that in Sydney (1.4%) and New South Wales (1.3%). The growth rate declined to 0.1% per year from 2001 to 2005, substantially below the annual increases for Sydney and New South Wales (0.6%), and Australia (1.1%).

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

Age group (years)	Sutherland DGP		Australia	
	No.	%	No.	%
0-14	40,612	18.9	3,978,221	19.6
15-24	29,904	13.9	2,819,834	13.9
25-44	62,374	29.1	5,878,107	28.9
45-64	54,286	25.3	4,984,446	24.5
65-74	13,700	6.4	1,398,831	6.9
75-84	10,421	4.9	954,143	4.7
85+	3,194	1.5	315,027	1.5
Total	**214,492**	**100.0**	**20,328,609**	**100.0**

As shown in the accompanying table and in the age-sex pyramid below, Sutherland DGP had similar proportions of children and young people, compared to Australia, and a slightly higher proportion of the population aged 45 to 64 years (25.3%, compared to Australia 24.5%). The proportions of the population in the age groups from 65 years were similar to those for Australia.

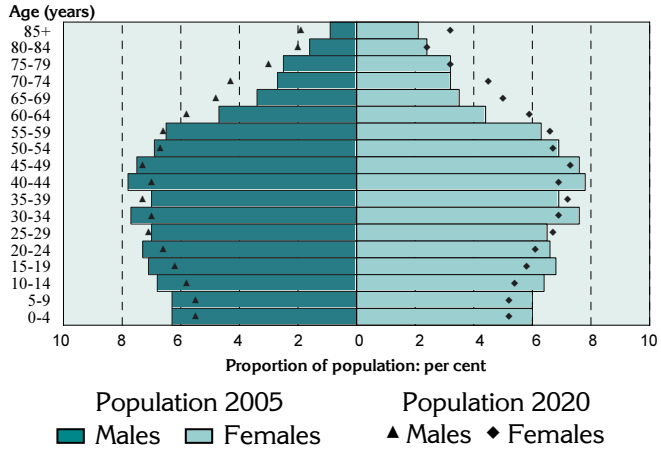
Figure 2: Population in Sutherland DGP and Australia, by age and sex, 2005



The age distribution of the Division's population is similar to that for Australia overall. The most notable differences are:

- at younger ages – slightly lower proportions of males aged 0 to 14 years and females aged 5 to 14 years;
- from 40 to 59 years – marginally higher proportions of both males and females; and
- at older ages – slightly higher proportions of females aged 75 to 79 years, but lower proportions of females aged 60 to 74, and males aged 65 to 74, and 85 years and over

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



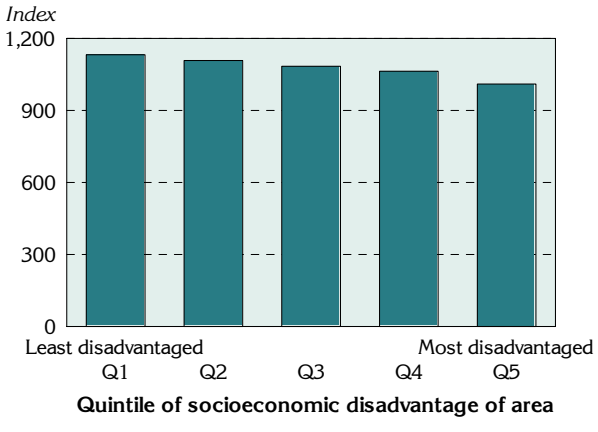
The population projections for the Division show a number of marked changes in age distribution, with the 2020 population projected to have:

- much lower proportions of males and females aged 0 to 24 years, 30 to 34 years and 40 to 44 years;
- higher proportions of males and females at ages 35 to 39 years; and
- at older ages – higher proportions of males and females from age 60 (with the exception of the 75 to 79 and 80 to 84 year age groups for females).

Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Sutherland Division of General Practice*, dated November 2005, available from www.publichealth.gov.au, for other socio-demographic indicators.

Figure 4: Index of Relative Socio-Economic Disadvantage, Sutherland DGP, 2001



One of four socioeconomic indexes for areas produced at the 2001 ABS Census is the Index of Relative Socio-Economic Disadvantage.

The Sutherland DGP has an index score of 1079, above the score for Australia of 1000: this score varies across the Division, from a (still high) score of 1010 in the most disadvantaged areas to 1132 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 substantially fewer jobless families in the Sutherland DGP (7.4%), compared to Sydney as a whole (15.6%) (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 markedly higher proportion of the population with private health insurance (66.2%), compared to Sydney (50.2%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Sutherland DGP, Sydney, New South Wales and Australia, 2001

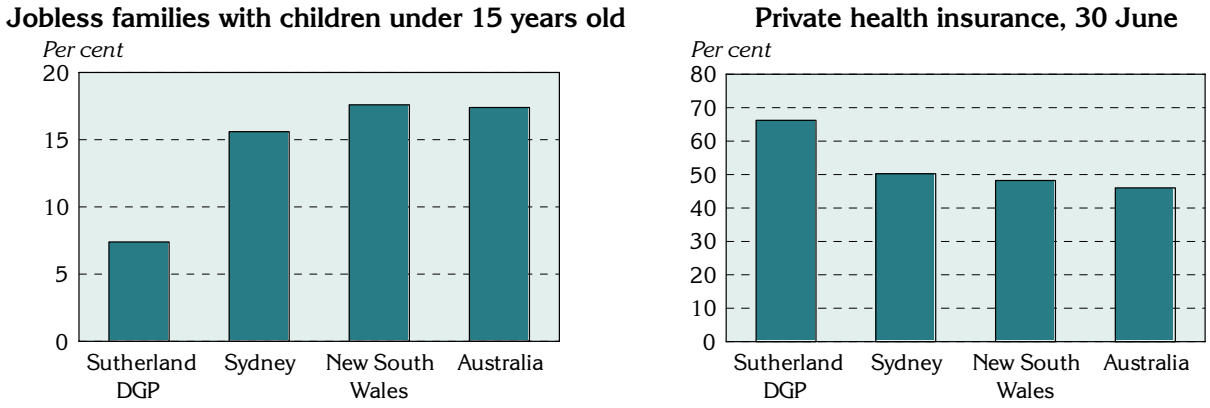
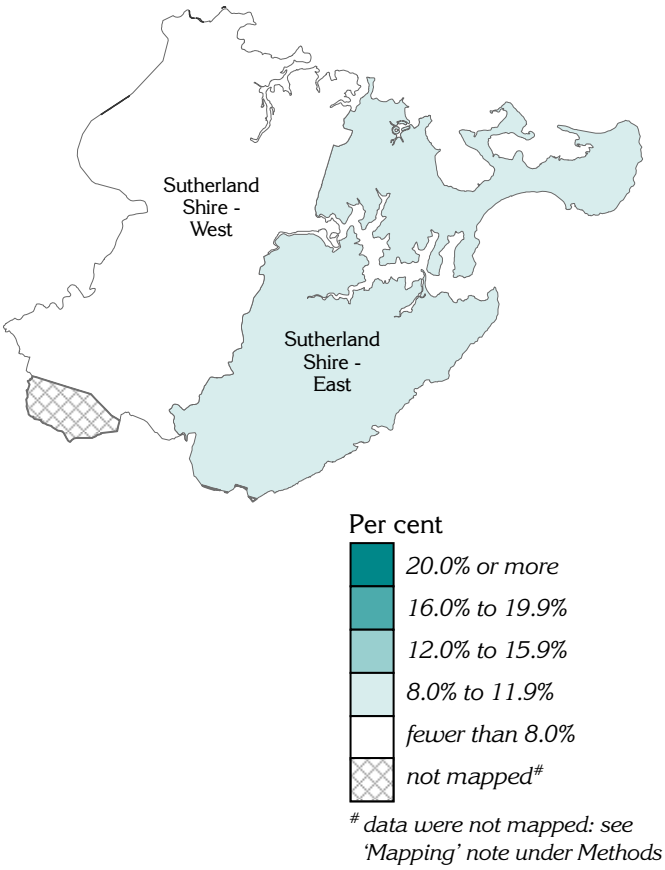


Table 2: Socio-demographic indicators, Sutherland DGP, Sydney, New South Wales and Australia, 2001

Indicator	Sutherland DGP		Sydney		New South Wales		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	1,651	7.4	66,526	15.6	121,409	17.6	357,563	17.4
Private health insurance (30 June)	134,022	66.2	2,000,802	50.2	3,062,382	48.2	8,671,106	46.0

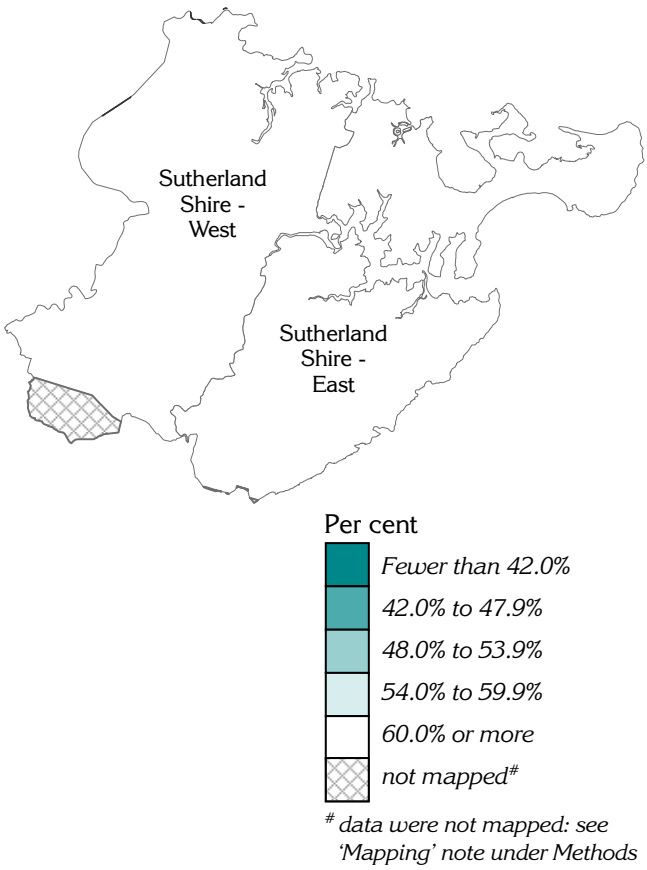
Details of the distribution of jobless families and of the population covered by private health insurance are shown by Statistical Local Area (SLA) in Maps 1 and 2, respectively.

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



data were not mapped: see 'Mapping' note under Methods

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



data were not mapped: see 'Mapping' note under Methods

GP services to residents of the Sutherland 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.

More than four fifths (83.3%) of all unreferred attendances for residents of Sutherland DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 927,344 GP unreferred attendances (Table 3). A further 6.6% of unreferred attendances to residents were provided by GPs with a provider number in St George DGP.

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

Division		Unreferred attendances	
Number	Name	No.	%[3]
214	Sutherland DGP	927,344	83.3
209	St George DGP	73,608	6.6
202	Eastern Sydney DGP	16,922	1.5
205	Bankstown DGP	16,844	1.5
201	Central Sydney DGP	14,403	1.3
203	South Eastern Sydney DGP	13,024	1.2
204	Canterbury DGP	8,781	0.8
216	Illawarra DGP	4,658	0.4
206	Western Sydney DGP (now WentWest & part Hawkesbury-Hills)	4,281	0.4
Other	..	33,631	3.0
Total	..	**1,113,496**	**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 214 by Division in which attendance occurred**

The majority (90.5%) of unreferred attendances provided by GPs with a provider number in Sutherland DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 2.8% of unreferred attendances by GPs in the Division were to people living in St George DGP.

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

Division		Unreferred attendances	
Number	Name	No.	%[3]
214	Sutherland DGP	927,344	90.5
209	St George DGP	28,234	2.8
216	Illawarra DGP	11,654	1.1
205	Bankstown DGP	7,306	0.7
201	Central Sydney DGP	4,155	0.4
210	Liverpool DGP	4,097	0.4
215	Macarthur DGP	3,718	0.4
203	South Eastern Sydney DGP	3,691	0.4
204	Canterbury DGP	3,184	0.3
202	Eastern Sydney DGP	2,731	0.3
Other	..	28,251	2.8
Total	..	**1,024,137**	**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 214 by Division of patient address**

Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the Sutherland Division of General Practice*, 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 there were relatively fewer people in Sutherland DGP who had asthma and were smokers, compared to Sydney and Australia as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were lower. Similarly, there were lower rates in Sutherland DGP of people who had type 2 diabetes and were overweight or obese, compared to Sydney and Australia.

Figure 6: Estimates of selected chronic diseases and risk factors, Sutherland DGP, Sydney and Australia, 2001

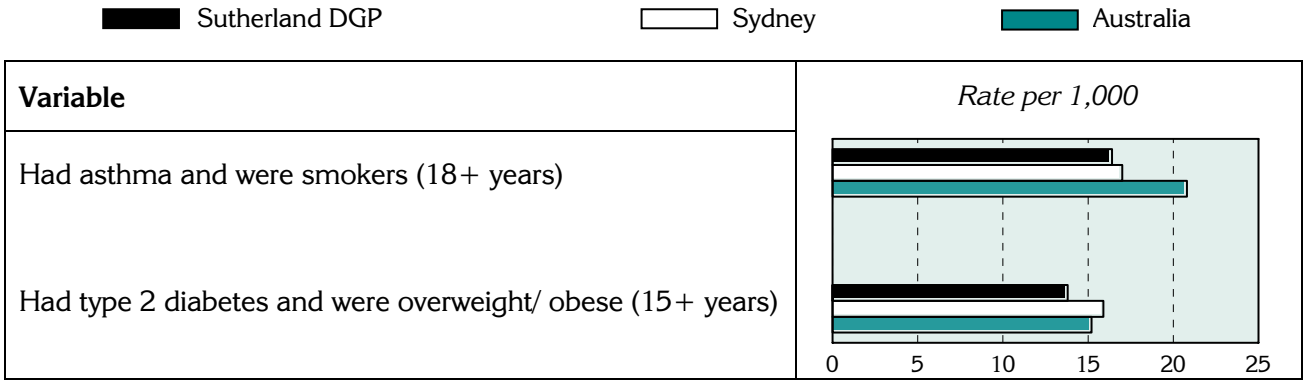


Table 5: Estimates of selected chronic diseases and risk factors, Sutherland DGP, Sydney, New South Wales and Australia, 2001

Variable	Sutherland DGP		Sydney		New South Wales		Australia	
	No.[1]	Rate[2]	No.[1]	Rate[2]	No.[1]	Rate[2]	No.[1]	Rate[1]
Had asthma and smoked[3]	3,442	16.4	72,198	17.0	126,542	19.7	397,734	20.8
Had type 2 diabetes & were overweight/ obese[4]	2,731	13.8	59,451	15.9	100,235	15.7	283,176	15.2

[1] No. is a weighted estimate of the number of people in Sutherland 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.

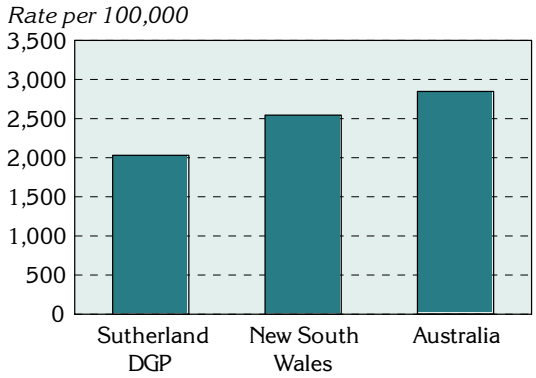
In 2001 to 2002, the 4,253 admissions from ambulatory care sensitive (ACS) conditions accounted for 6.8% of all admissions in the Sutherland DGP (Table 6, Figure 7), markedly below the levels for both New South Wales (8.6%) and Australia (8.7%).

Table 6: Avoidable[1] and unavoidable hospitalisations, Sutherland DGP, New South Wales, and Australia, 2001/02

Category	Sutherland DGP			New South Wales			Australia		
	No.	Rate[2]	%	No.	Rate[2]	%	No.	Rate[2]	%
Avoidable[1]	4,253	2,030.8	6.8	170,066	2,543.8	8.6	552,786	2,847.5	8.7
Unavoidable	58,334	27,525.7	93.2	1,810,901	27,255.3	91.4	5,818,199	29,970.7	91.3
Total	**62,587**	**29,562.8**	**100.0**	**1,980,967**	**29,798.8**	**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], Sutherland DGP, New South Wales and Australia, 2001/02



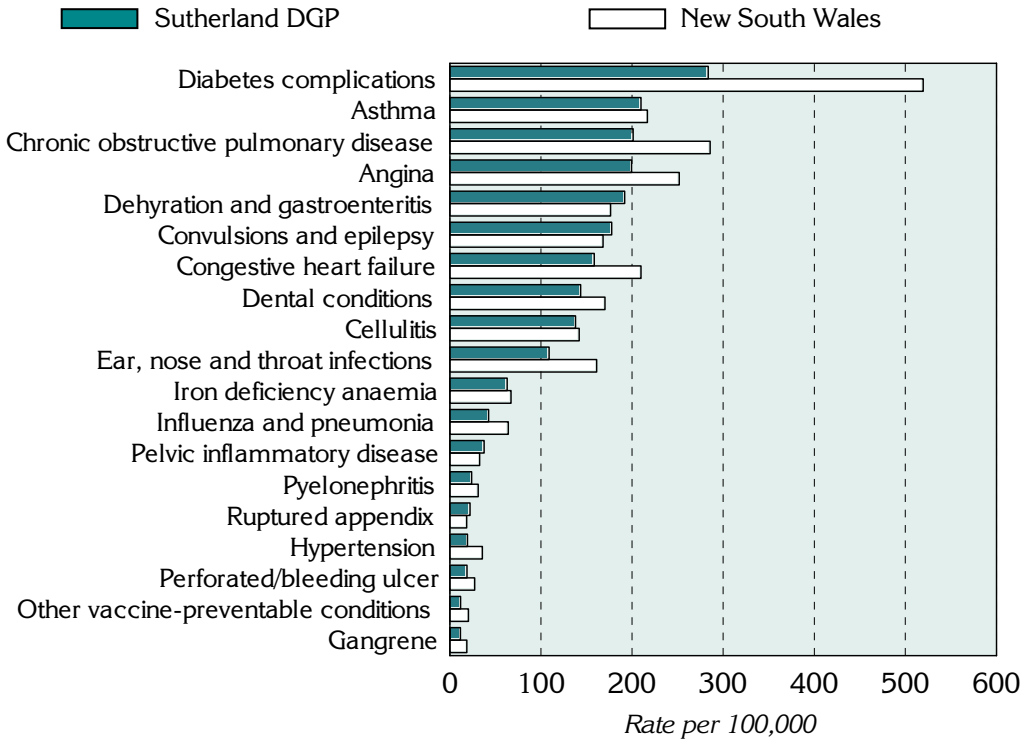
[1] **Admissions resulting from ACS conditions**

The rate of avoidable hospitalisations in Sutherland DGP is markedly lower, a rate of 2,030.8 admissions per 100,000 population, compared to both New South Wales (a rate of 2,543.8), and Australia (2,847.5).

Diabetes complications, asthma, chronic obstructive pulmonary disease and angina were the four conditions with the highest rates of avoidable hospitalisations in the Sutherland DGP (Figure 8, Table 7): however, rates all lower (and sometimes markedly so) than the rates for New South Wales.

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 convulsions and epilepsy have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 8: Avoidable hospitalisations[1] by condition, Sutherland DGP and New South Wales, 2001/02



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

Table 7: Avoidable hospitalisations[1] by condition, Sutherland DGP, New South Wales and Australia, 2001/02

Sub-category/ condition	Sutherland DGP		New South Wales		Australia	
	No.	Rate[2]	No.	Rate[2]	No.	Rate[2]
Vaccine-preventable	**114**	**54.2**	**5,630**	**84.5**	**16,573**	**85.4**
Influenza and pneumonia	89	42.5	4,280	64.1	13,021	67.1
Other vaccine preventable	25	11.7	1,350	20.4	3,552	18.3
Chronic[3]	**2,365**	**1,134.6**	**106,803**	**1,587.0**	**352,545**	**1,816**
Diabetes complications	594	283.6	34,975	519.5	141,345	728.1
Iron deficiency anaemia	133	62.8	4,494	67.0	16,451	84.7
Hypertension	41	19.3	2,398	35.7	6,354	32.7
Congestive heart failure	323	158.5	14,270	209.7	42,447	218.6
Angina	417	199.5	16,987	251.8	49,963	257.4
Chronic obstructive pulmonary disease	417	201.1	19,359	285.6	54,853	282.6
Asthma	440	209.8	14,289	216.8	41,009	211.3
Acute	**1,843**	**873.5**	**62,543**	**946.0**	**200,913**	**1,035**
Dehydration and gastroenteritis	407	191.8	11,725	176.4	37,766	194.5
Convulsions and epilepsy	375	177.7	11,093	168.1	31,137	160.4
Ear, nose and throat infections	226	108.8	10,615	161.1	32,075	165.2
Dental conditions	302	143.5	11,196	170.3	43,667	224.9
Perforated/bleeding ulcer	39	18.7	1,830	27.1	5,795	29.9
Ruptured appendix	47	22.0	1,212	18.5	3,866	19.9
Pyelonephritis	51	23.9	2,038	31.0	7,386	38.0
Pelvic inflammatory disease	81	37.6	2,134	32.7	6,547	33.7
Cellulitis	291	138.0	9,451	142.0	28,204	145.3
Gangrene	24	11.5	1,249	18.6	4,470	23.0
Total avoidable hospitalisations[4]	**4,253**	**2,030.8**	**170,066**	**2,543.8**	**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.

Just over two thirds (67.0%) of all deaths in Sutherland DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, lower than the proportion for Sydney (71.3%) (Table 8). The rate in the Division is markedly (22.0%) lower than that in Sydney, a differential of 0.78.

Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 28.4% of all deaths at ages 0 to 74 years in Sutherland DGP, consistent with the 28.6% in Sydney.

Table 8: Avoidable and unavoidable mortality (0 to 74 years) by area, Sutherland DGP, Sydney, New South Wales and Australia, 1997 to 2001

Mortality category	Sutherland DGP		Sydney		New South Wales		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable	1,555	155.3	36,709	199.5	66,151	213.6	189,845	211.8
% of total	**67.0**	**..**	**71.3**	**..**	**71.4**	**..**	**71.5**	**..**
(Amenable)	(660)	(65.8)	(14,736)	(80.6)	(26,374)	(85.0)	(76,249)	(85.1)
(% of total)	**(28.4)**	**(..)**	**(28.6)**	**(..)**	**(28.5)**	**(..)**	**(28.7)**	**(..)**
Unavoidable	766	76.5	14,768	80.6	26,468	85.3	75,582	84.3
% of total	**33.0**	**..**	**28.7**	**..**	**28.6**	**..**	**28.5**	**..**
Total mortality	**2,321**	**231.8**	**51,477**	**280.1**	**92,619**	**299.0**	**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. Sutherland DGP's rate of avoidable mortality for males was 196.4 deaths per 100,000 males, notably higher than the rate of 113.5 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 72.3, compared to 59.3 for females, a rate ratio of 1.22 (Figure 9, Table 9).

Figure 9: Avoidable and amenable mortality by sex (0 to 74 years), Sutherland DGP, Sydney, New South Wales and Australia, 1997 to 2001

Note: the different scales

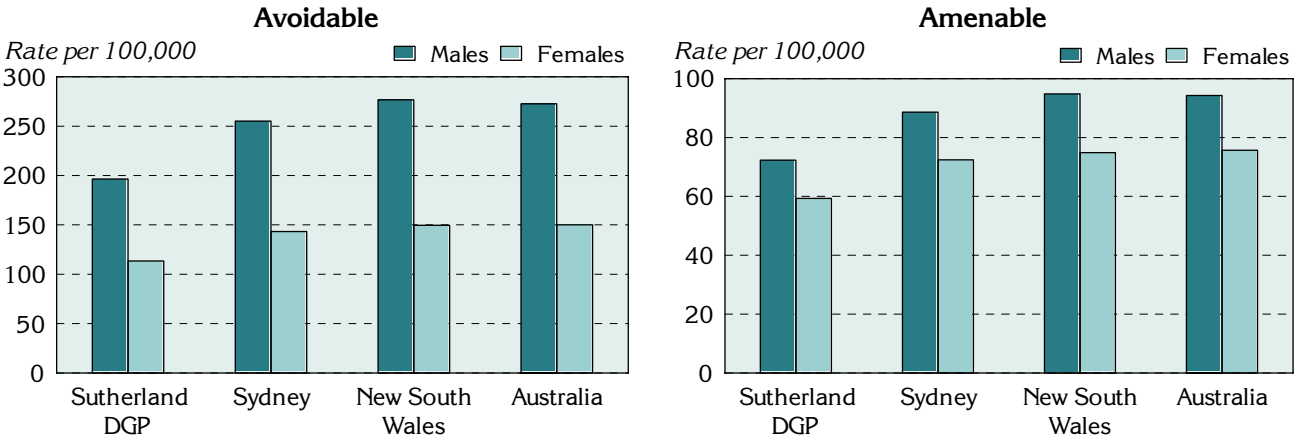


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, Sutherland DGP, Sydney, New South Wales and Australia, 1997 to 2001

Mortality category and sex	Sutherland DGP		Sydney		New South Wales		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable								
Males	978	196.4	23,505	255.1	43,074	276.8	123,026	272.6
Females	578	113.5	13,204	143.2	23,077	149.6	66,819	150.1
Total	**1,555**	155.3	**36,709**	**199.5**	**66,151**	**213.6**	**189,845**	**211.8**
Rate ratio–M:F[2]	**..**	**1.73****	**..**	**1.78****	**..**	**1.85****	**..**	**1.82****
Amenable								
Males	359	72.3	8,068	88.6	14,811	94.8	42,568	94.3
Females	302	59.3	6,667	72.4	11,562	74.9	33,681	75.7
Total	**660**	65.8	**14,736**	**80.6**	**26,374**	**85.0**	**76,249**	**85.1**
Rate ratio–M:F[2]	**..**	**1.22***	**..**	**1.22****	**..**	**1.27****	**..**	**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 Sutherland DGP, Sydney, New South Wales 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 67.5% of total YLL (0 to 74 years) for Sutherland DGP, lower than the 71.7% for Sydney. The proportion of YLL from amenable mortality for Sutherland DGP (27.9%) was consistent with that for Sydney (28.0%).

Table 10: Years of life lost from avoidable mortality (0 to 74 years), Sutherland DGP, Sydney, New South Wales and Australia, 1997 to 2001

Mortality category	Sutherland DGP		Sydney		New South Wales		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	26,934	67.5	644,323	71.7	1,147,183	71.8	3,327,375	71.9
(Amenable)	(11,108)	(27.9)	(251,183)	(28.0)	(444,143)	(27.8)	(1,298,430)	(28.0)
Unavoidable	12,947	32.5	254,314	28.3	451,496	28.2	1,303,289	28.1
Total	**39,881**	**100.0**	**898,637**	**100.0**	**1,598,679**	**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 1,021.7 deaths per 100,000 population in Sutherland 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 221.1 in Sutherland Division.

Table 11: Avoidable and amenable mortality by age, Sutherland DGP, Sydney, New South Wales and Australia, 1997 to 2001

Mortality category and age (years)	Sutherland DGP		Sydney		New South Wales		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable								
0-14	40	19.3	1,098	26.6	1,836	27.5	5,669	28.8
15-24	58	39.3	1,303	44.9	2,241	50.9	7,045	52.8
25-44	189	58.6	4,802	74.3	8,119	82.9	24,356	83.9
45-64	532	221.1	12,603	289.9	22,358	311.1	64,282	304.9
65-74	737	1,021.7	16,903	1,307.3	31,597	1,375.8	88,493	1,358.1
Total	**1,555**	**155.3**	**36,709**	**199.5**	**66,151**	**213.6**	**189,845**	**211.8**
Amenable								
0-24	36	10.3	1,013	14.5	1,658	14.8	5,083	15.4
25-44	52	16.3	1,093	17.2	1,878	19.2	5,946	20.5
45-64	244	101.4	5,384	123.9	9,444	131.4	27,464	130.3
65-74	328	452.8	7,245	559.0	13,394	582.9	37,756	579.4
Total	660	**65.8**	**14,736**	**80.6**	**26,374**	**85.0**	**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 Sutherland DGP were for cancer, with a rate of 56.3 deaths per 100,000 population, and cardiovascular diseases, 47.3 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 34.6 per 100,000 population and 16.2 per 100,000, respectively.

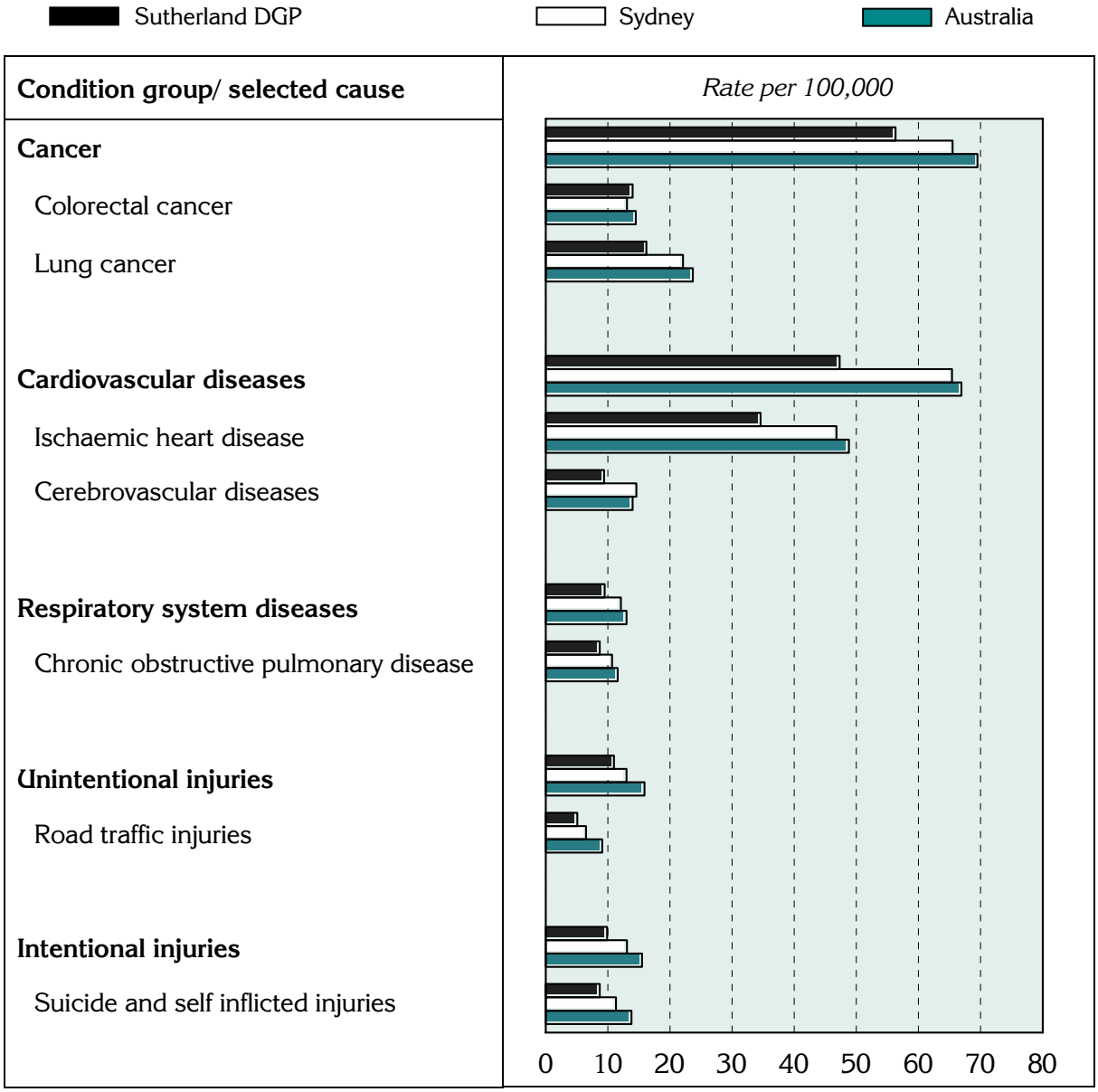
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Sutherland DGP, Sydney, New South Wales and Australia, 1997 to 2001

Condition group/ selected cause	Sutherland DGP		Sydney		New South Wales		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Cancer	**566**	**56.3**	**11,919**	**65.5**	**21,158**	**68.1**	**62,338**	**69.5**
Colorectal cancer	141	14.0	2,382	13.1	4,318	13.9	13,008	14.5
Lung cancer	162	16.2	3,983	22.1	7,297	23.4	21,208	23.7
Cardiovascular diseases	**474**	**47.3**	**11,824**	**65.4**	**21,925**	**70.3**	**59,945**	**66.9**
Ischaemic heart disease	346	34.6	8,461	46.8	15,935	51.1	43,712	48.8
Cerebrovascular diseases	95	9.4	2,641	14.6	4,656	14.9	12,558	14.0
Respiratory system diseases	**95**	**9.5**	**2,177**	**12.1**	**4,313**	**13.8**	**11,612**	**13.0**
Chronic obstructive pulmonary disease	87	8.7	1,916	10.7	3,882	12.4	10,395	11.6
Unintentional injuries	**110**	**11.0**	**2,513**	**13.0**	**4,540**	**15.0**	**14,224**	**15.9**
Road traffic injuries	51	5.1	1,249	6.5	2,528	8.4	8,138	9.1
Intentional injuries	**100**	**9.9**	**2,558**	**13.1**	**4,497**	**14.9**	**13,891**	**15.5**
Suicide and self inflicted injuries	88	8.7	2,211	11.3	3,941	13.0	12,393	13.8

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

Rates in the Division were lower than those for Sydney and Australia for all of the condition groups and selected causes (Figure 10).

Figure 10: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Sutherland DGP, Sydney and Australia, 1997 to 2001



Notes on the data

Data sources and limitations

General

References to 'Sydney' relate to the Sydney 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 (i.e. jobless families, people with health insurance): these areas are mapped with a pattern.

Statistical geography of the Sutherland 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. Statistical Local Areas (SLAs) in the Division are listed below in Table 14.

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

SLA code	SLA name	Per cent of the SLA's population in the Division*	Estimate of the SLA's 2005 population in the Division
17151	Sutherland Shire - East	100.0	101,745
17152	Sutherland Shire - West	99.5	112,747

* **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

Funding for these profiles was provided by the Population Health Division of the Department of Health and Ageing (DoHA).

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

For general comments, data issues or enquiries re information on the web site, please contact PHIDU:

Phone: 08-8303 6236 or e-mail: PHIDU@publichealth.gov.au