



Health Outcomes

# Health Service Use

Stage 2

Epidemiological Series Report # 2007-25

April 2007

## Introduction

The following overview presents information on health service use among the participants of the North West Adelaide Health Study, and the demographic and risk factors associated with using at least one health service in the last 12 months. Stage 1 (baseline examination) of the study was conducted between 2000 and 2003, and Stage 2 (second examination) was conducted from 2004 to 2006.

## Measurement and definition of health service use

A question regarding use of health services in South Australia in the last twelve months was asked of participants at Stage 1 and Stage 2 of the study. Participants were able to select if they had used more than one health service, from a number of predetermined medical, allied health, mental health or alternative health services. Participants were also asked how many times they used each of these health services in the last twelve months. In Stage 2 an extra category "Social worker/ counsellor" was added.

## Prevalence of health service use – Stage 1 & Stage 2

The proportion of participants using each type of health service according to the self report CATI questionnaire for Stage 2 is shown in Table 1. Overall, in Stage 1, **94.0%** (95% CI 93.2-94.6) and in Stage 2, **94.7%** (95% CI 93.9-95.4) of study participants reported using a health service at least once in the last 12 months.

**Table 1: Prevalence of use of health service (Self Report)\***

	Stage 1		Stage 2	
	n	%	n	%
General practitioner	3584	88.5	3171	91.0
Community health centre	163	4.0	128	3.7
District nurse or other community nurses	77	1.9	82	2.4
Psychologist	119	2.9	72	2.0
Psychiatrist	128	3.2	106	3.0
Day surgery	459	11.3	412	11.8
Hospital - Accident and Emergency Department	501	12.4	366	10.5
Hospital - Clinic (outpatient /specialist/allied health)	579	14.3	432	12.4
Eye specialist/ ophthalmologist	941	23.3	438	12.5
Other specialist doctor (not in hospital)	683	16.9	774	22.1
Physiotherapist	546	13.5	595	17.0
Chiropractor	528	13.0	496	14.2
Alternative therapist (e.g. naturopath, osteopath)	179	4.4	256	7.3
Podiatrist	343	8.5	334	9.5
Dietician	95	2.4	71	2.0
Nurse educator	36	0.9	44	1.3
Social worker / Counsellor	-	-	79	2.3
Other (please specify)	206	5.1	1177	33.6

\* Multiple responses possible.

Note: (Stage 1) 12 participants and (Stage 2) up to 18 participant did not provide responses and were excluded.

Overall in Stage 2, 94.8% of respondents had used a health service at least once in the last 12 months.

## Demographic profile of people using health services

Respondents who used health services at least once in the last 12 months was statistically significantly higher among females, those 65 to 74 years, adults living with a partner, and those part time or casually employed or undertaking home duties, or retired. Use of a health service at least once in the last 12 months was statistically significantly lower among those aged 25 to 34 years, earning above \$40,000, or never married (Table 2).

**Table 2: Univariate Odds Ratios for demographic variables associated with using any health service at least once in the last twelve months.**

Variable	n	%	OR	(95% CI)	p value
<b>Sex</b>					
Male	1594/1718	92.8	1.00		
Female	1723/1784	96.6	2.20	(1.61-3.02)	<b>&lt;0.001</b>
<b>Age group</b>					
20 to 24 years	284/295	96.6	1.00		
25 to 34 years	633/701	90.2	0.33	(0.17-0.64)	<b>0.001</b>
35 to 44 years	664/711	93.4	0.50	(0.25-1.00)	0.05
45 to 54 years	586/620	94.6	0.62	(0.30-1.28)	0.20
55 to 64 years	460/477	96.4	0.96	(0.43-2.13)	0.92
65 to 74 years	351/355	99.0	3.57	(1.04-12.21)	<b>0.04</b>
75 years and over	339/343	98.7	2.61	(0.86-7.98)	0.09
<b>Highest education level obtained*</b>					
Secondary	1355/1415	95.8	1.00		
Trade/apprenticeship/cert/diploma	1124/1183	95.0	0.83	(0.58-1.21)	0.34
Bachelor degree or higher	530/559	94.9	0.81	(0.52-1.29)	0.38
<b>Gross annual household income*</b>					
Up to \$20,000	573/589	97.3	1.00		
\$20,001- 40,000	698/729	95.8	0.65	(0.35-1.19)	0.16
\$40,001- 60,000	643/693	92.8	0.36	(0.20-0.64)	<b>0.001</b>
More than \$60,000	1014/1066	95.2	0.55	(0.31-0.98)	<b>0.04</b>
<b>Family structure*</b>					
Family & children, 2 biological / adopted parents	1122/1201	93.4	1.00		
Adult living with partner, no children	851/874	97.4	2.59	(1.61-4.15)	<b>&lt;0.001</b>
Adult living alone	397/414	95.9	1.65	(0.96-2.83)	0.07
Adults – related / unrelated, living together	318/331	96.0	1.69	(0.93-3.08)	0.08
Step/sole/shared parenting & other	325/341	95.2	1.41	(0.81-2.43)	0.22
<b>Marital status*</b>					
Married or living with partner	2069/2161	95.7	1.00		
Separated/divorced	258/270	95.5	0.94	(0.51-1.74)	0.85
Widowed	195/198	98.2	2.48	(0.84-7.26)	0.10
Never married	527/567	92.9	0.59	(0.40-0.86)	<b>0.006</b>
<b>Work status*</b>					
Full time employed	1369/1468	93.3	1.00		
Part time/casual employed	524/540	97.1	2.45	(1.42-4.22)	<b>0.001</b>
Unemployed	71/75	93.8	1.09	(0.42-2.82)	0.87
Home duties/retired	942/959	98.2	4.01	(2.38-6.75)	<b>&lt;0.001</b>
Student/other	138/150	91.9	0.82	(0.44-1.53)	0.54

\*Not stated category not reported.

Those using any health service at least once in the last 12 months were more likely to be:

- female;
- adults living with a partner;
- part time or casually employed;
- undertaking home duties or retired.

Health service use was significantly more likely among those who had cardiovascular disease or arthritis.

People who used a health service have significantly lower quality of life scores on all dimensions of the SF-36.

### Chronic condition profile of health service use

In Stage 2, the prevalence of using any health service at least once in the last 12 months was statistically significantly higher among those who had cardiovascular disease or arthritis (Table 3).

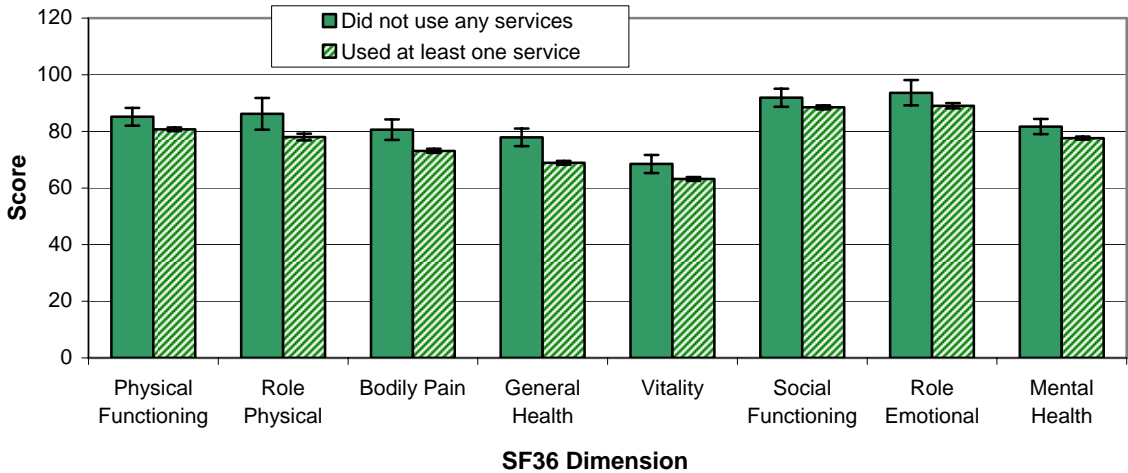
**Table 3: Univariate Odds Ratios for chronic conditions associated with health service use**

Variable	n	%	OR	(95% CI)	p value
<b>Diabetes*</b>					
No	2796/2919	95.8	1.00		
Yes	215/221	97.2	1.54	(0.68-3.50)	0.30
<b>Asthma*</b>					
No	2542/2656	95.7	1.00		
Yes	497/513	96.9	1.42	(0.83-2.43)	0.20
<b>COPD*</b>					
No	2843/2970	95.7	1.00		
Yes	145/145	100.0	-	-	-
<b>Cardiovascular Disease*</b>					
No	3079/3259	94.5	1.00		
Yes	232/235	98.9	5.33	(1.54-18.47)	<b>0.008</b>
<b>Arthritis*</b>					
No	2567/2734	93.9	1.00		
Yes	728/744	97.8	2.93	(1.74-4.91)	<b>&lt;0.001</b>

\* Don't know/ refused/ not stated category not reported.

### Quality of Life profile of respondents who used health services

Figure 1 shows the mean scores of the SF-36 subscales for respondents who used any health service at least once in the last 12 months compared with those who did not use a health service. Participants using a health service scored statistically significantly lower on all dimensions of the SF-36, when compared with those with who did not use a health service.



**Figure 1: SF-36 mean scores for participants who did or did not use a health service at least once in the last twelve months**

This document is one of a series of reports concerning Stage 2 of the North West Adelaide Health Study. Please see website for other reports in the series - [www.health.sa.gov.au/pros](http://www.health.sa.gov.au/pros)

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