

Access to general practitioners in South Australia: a population survey

Richard L Reed, Leigh S Roeger, Nova Reinfeld-Kirkman and Sara L Howard

Most Australians make at least one visit to a general practitioner each year¹ and, for many patients, GPs are their major point of access into the health care system. Not being able to access a GP in a timely fashion can be very stressful for patients who are ill, and GP appointment delays have been found to predict lower levels of satisfaction with access to care.² Internationally, delays in scheduling are routinely documented^{3,4} and improving access to GP services is a key component of many health care reform agendas.

In the United Kingdom, the National Health Service Plan stated that patients should be able to see a GP within 48 hours,⁵ and substantial investment has been directed to achieving this goal.⁶ In the United States, timely access to care is one of the six dimensions of health care quality identified by the Institute of Medicine's very influential report *Crossing the quality chasm*,⁷ and the US Agency for Healthcare Research and Quality argued that improving access to health care would result in reduced morbidity and mortality and also lead to cost savings.⁸

Patient access to general practice appointments is not routinely measured and, in Australia, very little evidence is available to inform discussions on this important dimension determining quality of care. A health population survey in New South Wales found that, of people who experienced difficulties in getting health care when they needed it, the most prevalent difficulty reported was the waiting time for a GP appointment (36%).⁹ This compares with 14% of people reporting difficulties with access to specialists and 7% with emergency department waiting times. However, the NSW survey did not measure actual appointment waiting times.

Australia is included in the Commonwealth Fund International Health Policy Survey and, in the most recent survey,¹⁰ respondents were asked how quickly they could get an appointment to see a doctor the last time they were sick or needed medical attention. In Australia, 62% reported that they were able to be seen the same or next day, 21% waited 2–3 days, and 15% waited 4 or more days. However, the survey did not

ABSTRACT

Objective: To determine the timeliness of access to general practitioner appointments in South Australia.

Design and setting: Face-to-face interviews with a random and representative sample of South Australians living in metropolitan Adelaide and country towns with a population of 1000 or more in 2007.

Participants: 2507 people aged 15 years and over who had seen a GP in the previous 12 months.

Main outcome measures: Waiting times for obtaining an appointment with a GP, patients' perceptions about appointment waiting times, and waiting times at the GP's surgery.

Results: Most respondents reported that for their last visit with a GP, they were able to be seen on the same day (39%) or within 1 or 2 working days (33%); 20% waited more than 2 working days for their appointment. Nine per cent of respondents (159/1764) reported waiting more than 2 working days because an earlier appointment was not available. Respondents reporting lower levels of household income were more likely to report longer waits for GP appointments. Most respondents (78%) felt that they were able to make a GP appointment as soon as they thought necessary. At the surgery, 46% of respondents were seen within 15 minutes, but 13% waited 45 minutes or longer.

Conclusions: In general, access to GPs is timely, and most South Australians reported that for their last GP visit they were able to make an appointment as soon as they thought was necessary.

MJA 2008; 189: 95–99

examine the reasons why people waited for an appointment (eg, if they waited to see the GP of their choice or if an earlier appointment was not convenient for them).

In 2007, Catholic Health Australia commissioned a telephone survey of 1200 Australians aged 18 years and over to elicit perceptions about ease of access to health care services.¹¹ Most respondents (87%) indicated that they believed it was easy to gain access to GPs, but only 50% agreed that it was easy to gain access to medical specialists. Those in capital cities and those in white-collar occupations were more likely to report easy access to GPs compared with those residing in rural areas or employed in blue-collar occupations.¹¹ The results from this survey (in contrast to those from the NSW survey) appear to indicate that most Australians experience good ease of access to GPs.

The purpose of our study was to measure the actual timeliness of access to GPs in South Australia. This was measured by including a number of questions about access to GPs in a state-level population

health survey. We also examined possible associations between demographic and other contextual factors (eg, area of residence) and access to GPs.

METHODS

The data for this study were collected in the 2007 South Australian Health Omnibus Survey,¹² a representative survey of people aged 15 years or older. The Health Omnibus Survey uses face-to-face interviews, with a non-replacement sample of households throughout the state. In rural areas, only residents in towns with a population of 1000 or more are sampled.

Respondents were asked a series of questions about access to GPs based on patient satisfaction surveys carried out in England by the Picker Institute on behalf of the UK Healthcare Commission.¹³ The questions about access to GPs that we used in our study are shown in Box 1.

A key indicator used by the Healthcare Commission to monitor access to GP appointments is the proportion of appoint-

1 Key questions on access to general practitioners in the 2007 South Australian Health Omnibus Survey¹²

1. On a scale of 1–5, where 1 is not at all important and 5 is very important, can you please rate how important it is for you to see the general practitioner of your choice for most of your health issues?

- 1 Not at all important
- 2
- 3
- 4
- 5 Very important

2. Thinking about the last visit you had with a doctor, how many days did you have to wait between when you made the appointment and when you saw the GP?

- 1 I was seen without a prior appointment (skip to question 4)
- 2 I was seen on the same working day (skip to question 4)
- 3 I waited 1 or 2 working days
- 4 I waited more than 2 working days
- 5 It was a pre-planned appointment or visit (skip to question 4)
- 6 Can't remember

3. What was the main reason you waited?

- 1 I wanted to see my own choice of doctor
- 2 I could not get an earlier appointment
- 3 It was not convenient for me to have an earlier appointment
- 4 Other reason (specify)

4. How do you feel about the length of time you waited for that appointment with the doctor?

- 1 I was seen as soon as I thought was necessary
- 2 I should have been seen a bit sooner
- 3 I should have been seen a lot sooner

5. For that appointment when you arrived at the GP surgery how long did you have to wait to see the doctor?

- 1 Seen on time or early
- 2 Less than 5 minutes
- 3 Between 5 and 14 minutes
- 4 Between 15 and 29 minutes
- 5 Between 30 and 44 minutes
- 6 Between 45 and 59 minutes
- 7 Between 1 and 2 hours
- 8 2 hours or longer



ments that involve a wait of greater than 2 working days because the person could not get an earlier appointment. This indicator was constructed to *exclude* routine appointments, such as those that are made to obtain prescriptions and referrals, and planned appointments required for periodic monitoring of health conditions. It also excludes patients who waited more than 2 days because: they wanted to see a GP of their choice, because it wasn't convenient for them to be seen earlier, or for other reasons (eg, waiting for test results).

In our study, we used a similar indicator labelled “undesirable waiting time”, which was defined as a waiting time for an appointment of more than 2 days because

an earlier appointment was not available. This was calculated from a combination of responses to Question 2 and Question 3 (Box 1). The denominator used was the number of respondents endorsing Question 2, options 2, 3 and 4. The numerator was the number of people waiting more than 2 working days (Question 2, option 4) and who also indicated that the main reason they waited was because they could not get an earlier appointment (Question 3, option 2).

Ethics approval for the survey questions was provided by the South Australian Department of Health – Human Research Ethics Committee (HREC).

Stata/MP, version 10.0 (StataCorp, College Station, Tex, USA) was used to perform the

analyses. The analyses take into account that the survey data were weighted to the 2006 Australian Bureau of Statistics census figures by sex, age and demographic variables (country of birth, marital status, educational attainment and household income) to be representative of the South Australian population. Small discrepancies in some table frequency and percentage totals occur due to the effect of rounding in the presence of weighted data.

RESULTS

The 2007 South Australian Health Omnibus Survey had 2507 respondents (participation rate, 62.7%).¹² Of the 2507 survey respondents, 2175 (87%) reported visiting a GP in the previous 12 months (Box 2).

Waiting times for an appointment

Most people who had made an unplanned appointment to see a GP in the previous 12 months were able to be seen either without a prior appointment (8%), on the same working day (39%), or within 1 or 2 working days (33%). Twenty per cent of respondents waited more than 2 working days for their appointment.

Satisfaction with waiting times

Excluding respondents who were seen on the same working day, 78% indicated that they were seen as soon as they thought was necessary. Eleven per cent indicated that they should have been seen a bit sooner, and 10% believed that they should have been seen a lot sooner.

Reasons for waiting 2 or more working days for an appointment

The two main reasons people waited 2 or more working days for an appointment were that they could not get an earlier appointment (42%) or that they wanted to see the doctor of their own choice (42%). Only a small proportion (12%) waited because it was not convenient or sufficiently urgent for them to have an earlier appointment.

Proportion of appointments for which there was an undesirable waiting time

A total of 1764 appointments were made either for the same working day (744), 1 or 2 working days (638), or for more than 2 working days (382). Of the 382 appointments made for more than 2 working days, 159 were because the person could not get an earlier appointment. Therefore, 9% of

2 Responses to questions about access to general practitioners

Questions and responses	Number of respondents (%)*
Seen general practitioner in previous 12 months	2507 (100%)
Yes	2175 (87%)
No	307 (12%)
Missing	25 (1%)
Appointment wait	2175
Preplanned appointment	231
Can't remember/missing	26
Total specific responses	1919 (100%)
Seen without a prior appointment	154 (8%)
Same working day	744 (39%)
1 or 2 working days	638 (33%)
More than 2 working days	382 (20%)
Satisfaction with waiting time	1431 (100%)
Seen as soon as necessary	1122 (78%)
Should have been seen a bit sooner	163 (11%)
Should have been seen a lot sooner	146 (10%)
Reason patient waited more than 2 days	382 (100%)
Choice of own doctor	162 (42%)
Could not get an earlier appointment	159 (42%)
Not convenient/not urgent	46 (12%)
Other	15 (4%)
Waiting time at surgery	1995 (100%)
Seen on time or early	116 (6%)
Less than 5 minutes	146 (7%)
Between 5 and 14 minutes	649 (33%)
Between 15 and 29 minutes	572 (29%)
Between 30 and 44 minutes	247 (12%)
Between 45 and 59 minutes	122 (6%)
Between 1 and 2 hours	113 (6%)
2 hours or longer	29 (1%)

* Small discrepancies in frequencies and percentage totals are due to rounding in the presence of weighted data.

DISCUSSION

The data obtained in this representative population study indicate that, generally, people have timely access to GP appointments in SA. Seventy-eight per cent of respondents reported that they were seen by the doctor as soon as they thought necessary. However, 11% indicated that they should have been seen “a bit sooner”, and 10% indicated that they should have been seen “a lot sooner”. By the UK National Health Service standard for timeliness of access — that consumers seeking care should be seen within 2 working days — we found that that this was not the case for 9% of South Australians, who waited longer because no earlier appointment had been available.

This level of undesirable waiting time, as we have defined it in our article, was lower than that reported by the UK Healthcare Commission. In 2006, 12% of English patients (of 10 000 questionnaire respondents) who waited for an appointment reported that they waited more than 2 working days because no earlier appointment had been available with any GP at their local practice.¹⁴ A similar proportion of English respondents (compared with the South Australian respondents in our study; 77% v 78%) reported that they were seen by the GP as soon as they thought necessary.

These results suggest that actual waiting times for GP appointments and patient perceptions of waiting times are slightly better in SA than in the UK. However, these modest differences should not be over-interpreted because small variations in methods between surveys can have large impacts on estimates. An example in this case is that the UK survey was mailed to patients of registered GPs' patients while our survey was conducted face-to-face. The results for actual waiting times for GP appointments are, however, consistent with those reported by an international health policy survey conducted by The Commonwealth Fund in 2007, which found that Australians were able to see a doctor more quickly than respondents in the US, UK and Canada, but not as quickly as those in the Netherlands and New Zealand.¹⁰

The univariate and multivariate logistic regression analyses of demographic and contextual factors associated with undesirable waiting times showed that respondents reporting lower household incomes were at increased risk of experiencing an undesirable appointment waiting time. Living in a regional (versus a metropolitan) area was significant in the univariate analyses, but not when household income was controlled for.

appointments (159/1764) met our definition of an undesirable waiting time, requiring waiting times of more than 2 working days because of a lack of available appointments.

Factors associated with undesirable waiting times

The results from a series of univariate logistic regressions (Box 3) showed that area (regional), household income, and the employment status, home duties were significantly associated with the odds of experiencing an “undesirable waiting time”. A multivariate analysis (Box 3) was performed with these three variables entered simultaneously in a model. Variables relating to area and employment status were no longer sig-

nificant. Only income, with respondents reporting lower incomes at more risk of an undesirable waiting time, remained significant. A final series of multivariate analyses was performed to test the remaining variables (sex, country of birth, being Aboriginal or Torres Strait Islander, marital status) in the presence of income. None showed statistical significance.

Waiting time at the surgery

For respondents who had made an appointment (that is, were not seen without a prior appointment), 46% were seen by their GP within 15 minutes of their appointment times. However, 13% waited 45 minutes or longer.

3 Factors associated with undesirable delays in general practitioner appointments

Factor	No. of respondents	Univariate analysis		Multivariate analysis	
		Odds ratio	95% CI	Odds ratio	95% CI
Sex					
Male (R)	806				
Female	959	1.39	0.94–2.05		
Area					
Metropolitan (R)	1293				
Regional	472	1.77 [†]	1.17–2.69	1.34	0.84–2.10
Age	1764	1.00	0.99–1.01		
Marital status					
Married (R)	935				
De facto	162	1.58	0.86–2.91		
Separated/divorced	158	1.33	0.77–2.30		
Widowed	97	0.76	0.34–1.68		
Never married	410	1.09	0.65–1.81		
Household income (increasing)*	1474	0.91 [†]	0.84–0.98	0.87 [†]	0.78–0.97
Employment					
Full time (R)	628				
Part time	335	1.64	0.97–2.75	1.34	0.72–2.47
Home duties	187	1.80 [‡]	1.03–3.13	1.24	0.63–2.42
Unemployed	46	0.95	0.28–3.31	0.89	0.20–4.11
Retired	363	0.97	0.59–1.62	0.62	0.32–1.23
Student	144	0.91	0.34–2.45	0.42	0.10–1.89
Aboriginal or Torres Strait Islander					
No (R)	1335				
Yes	37	0.40	0.05–2.95		
Country of birth					
Australia (R)	1375				
United Kingdom and Ireland	154	0.73	0.40–1.34		
Other Europe	117	0.57	0.25–1.29		
Asian country	46	0.46	0.09–2.18		
Other	73	1.07	0.45–2.59		

(R) indicates reference category. * Household income refers to the total annual household income of all members of the household before tax, and is coded from 1 (up to \$12 000) through 2 (\$12 001–\$20 000) and then in \$10 000 increments up to 9 (\$100 000 or more). † Significant at $P < 0.01$. ‡ Significant at $P < 0.05$. ◆

Given GP workforce shortages in country areas,¹⁴ the finding that South Australians living in regional areas do not appear to be at increased risk of experiencing an “undesirable waiting time” is surprising. However, only country towns with a population of more than 1000 were surveyed, and we are not confident that these results could be generalised to smaller rural communities. Thus, it is important to be clear

that our results indicate only that we failed to detect a difference in access to GPs between South Australians living in metropolitan Adelaide compared with respondents living in South Australian regional centres.

The finding that respondents reporting lower incomes were at increased risk of an undesirable waiting time in obtaining a GP appointment adds to growing Australian literature documenting socioeconomic

health inequalities. Because access to primary health care in Australia is relatively universal, it is argued that the health care system is not likely to be a major cause of socioeconomic health inequalities.¹⁵ Our results suggest that universal access is not necessarily the same as equal access.

The definition of an undesirable waiting time that we adopted is a conservative one because it does not classify waiting more than 2 working days to see the GP of patients’ choice as an undesirable waiting time. If we had classified such appointment waiting times as “undesirable” the rate of undesirable waiting times would have doubled to 18%. In 1999 the Consumers’ Health Forum of Australia released a document indicating that the timeframe for arranging a consultation with a GP for non-urgent cases should be less than 48 hours.¹⁶ If this means a consultation with the GP of the patient’s choice, then this is a very high standard and, as our results show, it was not reached nearly a fifth of the time.

Given the high value many patients place on being able to see the GP of their choice, for many health problems, this may take precedence over quicker access. As working hours vary for individual GPs, there will always be some degree of trade-off between choice and availability, and patients of some popular GPs with limited working hours will always have long periods of waiting for appointments, even in settings where timely access to GPs is very good.

No explicit standard has been created for time waiting to be seen in GPs’ surgeries, but in general, waiting times of more than 30–45 minutes are regarded as excessive. We found that waiting times within GPs’ surgeries were quite variable, with a significant minority of patients (13%) waiting 45 minutes or longer. Long surgery waiting times have been found to be associated with poorer patient satisfaction, but it appears that patients are prepared to give GPs considerable leeway in waiting times, provided that they receive adequate time with the GP to discuss their problems.¹⁷ Waiting times in GP surgeries are influenced by many factors, including patients presenting with complicated medical problems that had not been anticipated in advance, and the methods used for scheduling availability of GPs. Improved scheduling practices can have an important influence on surgery waiting times.^{18,19}

Several limitations to our study need to be acknowledged. The survey participation rate (62.7%) is reasonable for surveys of this

type, but it is possible that people with reduced levels of access may have been less likely to take part in the survey. There is considerable variation in the distribution of the GP workforce across the country, and our results may not generalise to other Australian states and territories. Our broad classification of area as either metropolitan or regional is less than ideal because it probably masks considerable variability; also, smaller rural communities were not included in the survey. Further geographic analysis of the survey data using a finer grain approach to “area” is planned.

The concept of “health access” is complex²⁰ and its measurement challenging.²¹ Internationally, and particularly in the UK, considerable progress has been made towards better understanding of the role that timeliness of GP appointments and other factors, such as the ability to make after-hours GP appointments, have in determining patient satisfaction with their primary health care system. If Australian policymakers seek to tackle perceived problems with access to GPs, they need to understand what the problems are, where they occur, and their magnitude. Surveys like ours can contribute to this understanding.

ACKNOWLEDGEMENTS

This study was supported by the Australian Government’s Primary Health Care Research, Evaluation and Development (PHCRED) Strategy.

COMPETING INTERESTS

None identified.

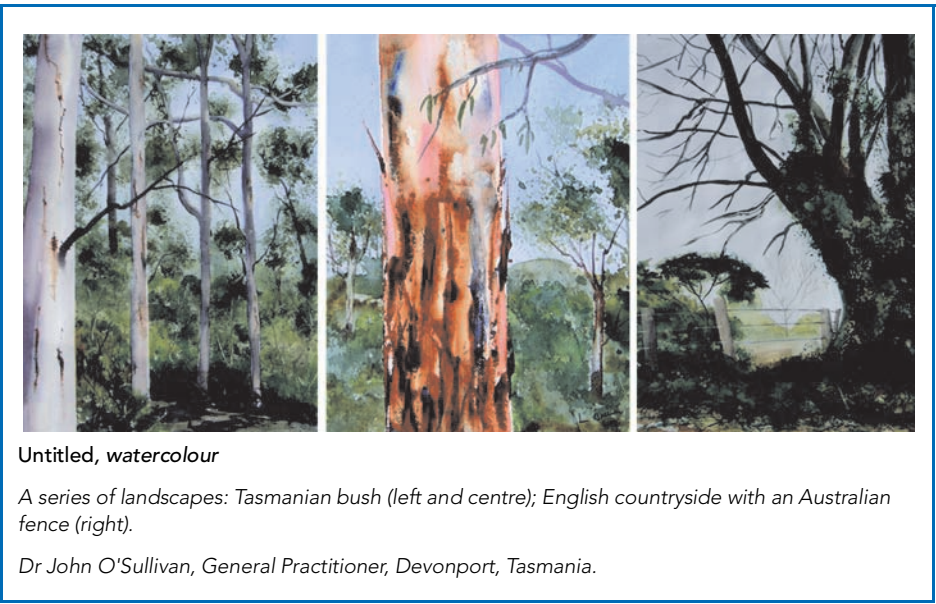
AUTHOR DETAILS

Richard L Reed, MD, MPH, Head
Leigh S Roeger, BA(Hons), PhD, Senior Research Fellow
Nova Reinfeld-Kirkman, BBSc(Hons), Research Associate
Sara L Howard, BHLthSc(Hons), PhD, Research Fellow
 Department of General Practice, Flinders University, Adelaide, SA.
Correspondence:
 Richard.Reed@flinders.edu.au

REFERENCES

1 Britt H, Miller GC, Charles J, et al. General practice activity in Australia 2005–06. Canberra: AIHW, 2007. (AIHW Cat. No. GEP 19. General Practice Series No. 19.) <http://www.aihw.gov.au/publications/index.cfm/title/10377> (accessed Jun 2008).
 2 Barry DW, Melhado BS, Chacko KM, et al. Patient and physician perceptions of timely

access to care. *J Gen Intern Med* 2006; 21: 130-133.
 3 Merritt, Hawkins and Associates. Summary report: 2004 survey of physician appointment wait times. Irving, Tex: MHA, 2004. <http://www.merritt-hawkins.com/pdf/mha2004waitsurv.pdf> (accessed Apr 2008).
 4 Strunk BC, Cunningham PJ. Treading water: Americans’ access to needed medical care, 1997–2001. Tracking report No. 1. Washington, DC: Center for Studying Health System Change, 2002. <http://hschange.com/CONTENT/421/?words> (accessed April 2008).
 5 Department of Health (UK). The NHS Plan: a plan for investment, a plan for reform. London: DH, 2000. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002960 (accessed Jun 2008).
 6 Rubin G, Bate A, George A, et al. Preference for access to the GP: a discrete choice experiment. *Br J Gen Pract* 2006; 56: 743-748.
 7 Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century. Washington, DC: National Academies Press, 2001.
 8 Agency for Healthcare Research and Quality. National health care quality report — 2004. Rockville, Md: AHRQ, 2004. <http://www.ahrq.gov/qual/nhr04/fullreport/index.htm> (accessed Apr 2008).
 9 New South Wales Government Department of Health. Types of difficulties getting health care when needing it, persons who had difficulties getting health care aged 16 years and over, NSW, 2006. Sydney: The Department, 2006. http://mhcs.health.nsw.gov.au/PublicHealth/surveys/hsa/06/m_h_diff2/m_h_diff2_bar_resp.asp (accessed Apr 2008).
 10 The Commonwealth Fund. 2007 International health policy survey in seven countries. New York: The Commonwealth Fund, 2007. <http://www.cha.org.au/site.php?id=1215> (accessed Apr 2008).
 11 Catholic Health Australia and Newspoll Market Research. 2007 Medical treatment study. Canberra: CHA, 2007. <http://www.cha.org.au/site.php?id=1215> (accessed May 2008).
 12 Wilson D, Wakefield M, Taylor A. The South Australian Health Omnibus Survey. *Health Promot J Austr* 1992; 2: 47-49.
 13 Department of Health (UK). National survey of local health services 2006. London: DH, 2006. http://www.dh.gov.uk/en/Publicationsandstatistics/Statistics/StatisticalWorkAreas/Statisticalhealthcare/DH_073494 (accessed Apr 2008).
 14 Australian Institute of Health and Welfare. Medical labour force 2004. Canberra: AIHW, 2006. (AIWH Cat. No. HWL 39. National Health Labour Force Series, No. 38.) <http://www.aihw.gov.au/publications/index.cfm/title/10379> (accessed Jun 2008).
 15 Turrell G, Mathers CD. Socioeconomic status and health in Australia. *Med J Aust* 2000; 172: 434-438.
 16 Consumers’ Health Forum of Australia. Consumers’ expectations of general practice in Australia. Canberra: CHF, 1999. http://www.chf.org.au/Docs/Downloads/195_conexpectationGP.pdf (accessed Apr 2008).
 17 Anderson RT, Camacho FT, Balkrishnan R. Willing to wait? The influence of patient wait time on satisfaction with primary care. *BMC Health Serv Res [Internet]* 2007; 7 (31).
 18 Knight AW, Padgett J, George B, Datoo MR. Reduced waiting times for the GP: two examples of “advanced access” in Australia. *Med J Aust* 2005; 183: 101-103.
 19 Murray M, Berwick DM. Advanced access: reducing waiting and delays in primary care. *JAMA* 2003; 289: 1035-1040.
 20 Gulliford M, Figueroa-Munoz J, Morgan M, et al. What does “access to health care” mean? *J Health Serv Res Policy* 2002; 7: 186-188.
 21 Jones W, Elwyn G, Edwards P, et al. Measuring access to primary care appointments: a review of methods. *BMC Fam Pract [Internet]* 2003, 4 (8).
 (Received 21 Apr 2008, accepted 6 Jun 2008) □



Untitled, watercolour

A series of landscapes: Tasmanian bush (left and centre); English countryside with an Australian fence (right).

Dr John O’Sullivan, General Practitioner, Devonport, Tasmania.