


## ORIGINAL ARTICLE

# Accessible and affordable healthcare? Views of Australians with and without chronic conditions

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## Key words

population health, health services, chronic disease, affordability, equity of access.

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## Abstract

**Background:** With 50% of Australians having chronic disease, health consumer views are an important barometer of the ‘health’ of the healthcare system for system improvement and sustainability.

**Aims:** To describe the views of Australian health consumers with and without chronic conditions when accessing healthcare.

**Methods:** A survey of a representative sample of 1024 Australians aged over 18 years, distributed electronically and incorporating standardised questions and questions co-designed with consumers.

**Results:** Respondents were aged 18–88 years (432 males, 592 females) representing all states and territories, and rural and urban locations. General practices (84.6%), pharmacies (62.1%) and public hospitals (32.9%) were the most frequently accessed services. Most care was received through face-to-face consultations; only 16.5% of respondents accessed care via telehealth. The 605 (59.0%) respondents with chronic conditions were less likely to have private health insurance (50.3% vs 57.9%), more likely to skip doses of prescribed medicines (53.6% vs 28.6%), and miss appointments with doctors (15.3% vs 10.1%) or dentists (52.8% vs 40.4%) because of cost. Among 480 respondents without private health insurance, unaffordability (73.5%) or poor value for money (35.3%) were the most common reasons. Most respondents (87.7%) were confident that they would receive high quality and safe care. However, only 57% of people with chronic conditions were confident that they could afford needed healthcare compared with 71.3% without.

**Conclusions:** Health consumers, especially those with chronic conditions, identified significant cost barriers to access of healthcare. Equitable access to healthcare must be at the centre of health reform.

## Introduction

The Australian healthcare system provides universal coverage for all residents and aims to provide equitable, accessible, safe, high-quality healthcare to the population.<sup>1</sup> The views of consumers are an important barometer of the ‘health’ of the healthcare system, especially

when gauging equity of access.<sup>2</sup> It is more important to know whether experiences and opinions differ for people with or without chronic conditions, and those who frequently access several different health services across health sectors. Such information is useful for policy-makers, decision-makers and clinicians when undertaking service planning and healthcare quality improvement activities.<sup>3</sup> Consumer involvement in shaping the Australian healthcare system occurs mainly through participation in boards, advisory councils or other governance structures in the

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health system.<sup>4</sup> Although there is a strong move towards capturing patient reported outcome measures, such data tend to record views about specific encounters, often related to care received in hospital.<sup>2</sup> The 2012 Menzies-Nous surveys provided comprehensive information on health consumer sentiment about the health system in the broadest sense, but there have not been comprehensive surveys on this level since.<sup>5</sup>

The Australian Institute of Health and Welfare (AIHW) reports that approximately 50% of Australians live with at least one chronic condition.<sup>6</sup> Chronic conditions account for 37% of all hospitalisations, 61% of total disease burden and 87% of deaths in Australia.<sup>6</sup> The rapidly ageing population and continuing rise in chronic conditions pose a significant threat to the sustainability of healthcare systems around the world.<sup>7</sup> The Australian healthcare system and Australian health consumers are also challenged by increasing healthcare costs,<sup>7</sup> overdiagnosis and overtreatment,<sup>8</sup> growing out-of-pocket health costs,<sup>9</sup> and ever increasing private health insurance (PHI) premiums, which has led to a fall in PHI coverage to less than 50%, especially among people aged under 65 years.<sup>10</sup> In Australia, there are well recognised inequalities in access to healthcare in rural/remote areas, among people living with socioeconomic disadvantage, and other vulnerable populations, including first nations people, recent immigrants and refugees.<sup>7</sup>

Suggested solutions for improving access to healthcare through modes other than the traditional face-to-face consultation, include telehealth, telemonitoring, telephone advice lines and smartphone apps. Although an opinion survey conducted by Ernst and Young of 2044 Australians in 2018 showed that 48% would be willing to consult a doctor via computer video or another device,<sup>11</sup> there is no holistic information on how these services are being accessed due to fragmented and incomplete data.

The aim of this study was to survey a representative sample of adult Australians to gauge their opinions about access to and affordability of healthcare. We also aimed to compare views of people with and without chronic conditions and to examine differences associated with demographics, financial situation and PHI cover.

## Methods

### Participant recruitment

We contracted a research company, Research Now (rebranded as Dynata; <https://www.dynata.com/>), to generate a sample of ~1000 Australians aged over 18 years with representation across age groups, genders and geographical locations. Research Now is a leading digital data collection company with over 200 000 panellists registered

in Australia. The sampling algorithm ensures random selection and demographic representation (<https://www.dynata.com/dynata-insights-platform/>). Participants were paid a small fee (AUD\$1.50) by Research Now for completing the survey. Data were collected in December 2018. The Macquarie University Human Research Ethics Committee provided approval (Ref no: 5201836705403).

### Survey design

The survey was co-designed with consumer researchers from the Consumers Health Forum of Australia. In addition to researcher-devised and consumer-devised questions, items about self-reported health status, health conditions and PHI were drawn from the National Health Survey.<sup>12</sup> Questions about financial stress were derived from the Household, Income and Labour Dynamics in Australia (HILDA) survey.<sup>13</sup> Questions about care affordability were drawn from the Commonwealth Fund survey<sup>14</sup> and questions about accessibility were sourced from the Menzies-Nous surveys.<sup>5</sup> We asked about diagnosed chronic conditions as defined by the AIHW<sup>15</sup> (see Supporting Information Appendix S1 for the final survey items).

### Analysis

Research Now sets soft quota apportionment by age, gender and state so that the sample approximated representation of the general adult population. We made minor post-weighting adjustments by age, sex and state to ensure the data accurately reflected population distribution according to the Australian Bureau of Statistics in June 2018.<sup>16</sup> Data were analysed using descriptive and inferential statistics (IBM SPSS Statistics V24). Weighting was undertaken through a survey raking technique using the *anesrake* package in R.<sup>17</sup>

## Results

### Demographics

One thousand and twenty-four Australians aged between 18 and 88 years ( $M = 46.6$ ,  $SD = 17.2$ ) completed the survey. It is not possible to estimate a survey response rate because of the sampling process applied to an established panel as described earlier. After the adjustments were applied, the sample was representative of the Australian population based on the Australian Bureau of Statistics data (Table 1).<sup>16</sup>

**Table 1** Characteristics of the 1024 respondents and representativeness of the Australian population

Characteristics	<i>n</i> † (%)‡	Australian population distribution (%)
Gender		
Male	432 (49.0%)	49.0
Female	592 (51.0%)	51.0
Age (years)		
18–24	68 (12.0%)	11.7
25–44	352 (37.0%)	37.0
45–64	383 (32.0%)	31.9
65+	221 (19.0%)	19.5
State		
ACT	9 (2.0%)	1.7
NSW	330 (32.0%)	32.0
NT	2 (1.0%)	0.01
Qld	218 (20.0%)	20.1
SA	83 (7.0%)	7.0
Tas	22 (2.0%)	2.1
Vic	262 (26.0%)	25.9
WA	98 (10.0%)	10.4
Location		
Metropolitan zones§	654 (65.6%)	71.0
Regional/Remote zones	370 (34.4%)	29.0

Population data sourced from the Australian Bureau of Statistics, 2018.<sup>16</sup> †Weighted number. ‡Weighted percentage for age, sex and state. §Based on the Rural, Remote and Metropolitan Area (RRAMA) classification as defined by the Australian Bureau of Statistics.

## Self-rated health status

Most respondents ( $n = 793$ ; 77.4%) rated their health status as excellent, very good or good. Almost two-thirds of respondents ( $n = 605$ ; 59.0%) had a chronic condition and over one-quarter ( $n = 285$ ; 27.8%) had more than one condition. Chronic conditions among the 605 respondents included: back pain or back problems ( $n = 260$ ; 25.4%), mental disorders ( $n = 244$ ; 23.8%), arthritis ( $n = 172$ ; 16.8%), asthma ( $n = 135$ ; 13.2%), cancer ( $n = 32$ ; 3.1%), cardiovascular disease ( $n = 62$ ; 6.0%), chronic obstructive pulmonary disease ( $n = 22$ ; 2.2%) and diabetes ( $n = 83$ ; 8.1%).

## Access to healthcare

### Healthcare services accessed in the past 12 months

General practitioners (GP) ( $n = 866$ ; 84.6%) and pharmacists ( $n = 636$ ; 62.1%) were the most frequently accessed health service providers in the last 12 months. Almost 33% ( $n = 337$ ) of participants accessed public hospitals; 11.5% ( $n = 118$ ) accessed private hospitals. Approximately 23% ( $n = 239$ ) accessed a specialist

doctor outside of the hospital system. Less than half of respondents accessed a dentist in the past 12 months ( $n = 440$ ; 43.0%). The majority (87.7%) were confident that they would receive high-quality and safe healthcare if they became seriously ill, with no significant difference when comparing respondents with and without chronic conditions ((86.3% vs 89.5%;  $N = 1024$ );  $X^2 = 4.08$ ,  $P = 0.253$ )).

Respondents with chronic conditions reported more frequent use of all healthcare services (Fig. 1). They were significantly more likely to access a GP ( $X^2 (1, N = 1024) = 15.33$ ,  $P < 0.05$ ), pharmacist ( $X^2 (1, N = 1024) = 48.65$ ,  $P < 0.05$ ), specialist doctor outside hospital ( $X^2 (1, N = 1024) = 58.25$ ,  $P < 0.05$ ), a public hospital ( $X^2 (1, N = 1024) = 41.75$ ,  $P < 0.05$ ), or an allied health provider ( $X^2 (1, N = 1024) = 39.05$ ,  $P < 0.05$ ), Table 2.

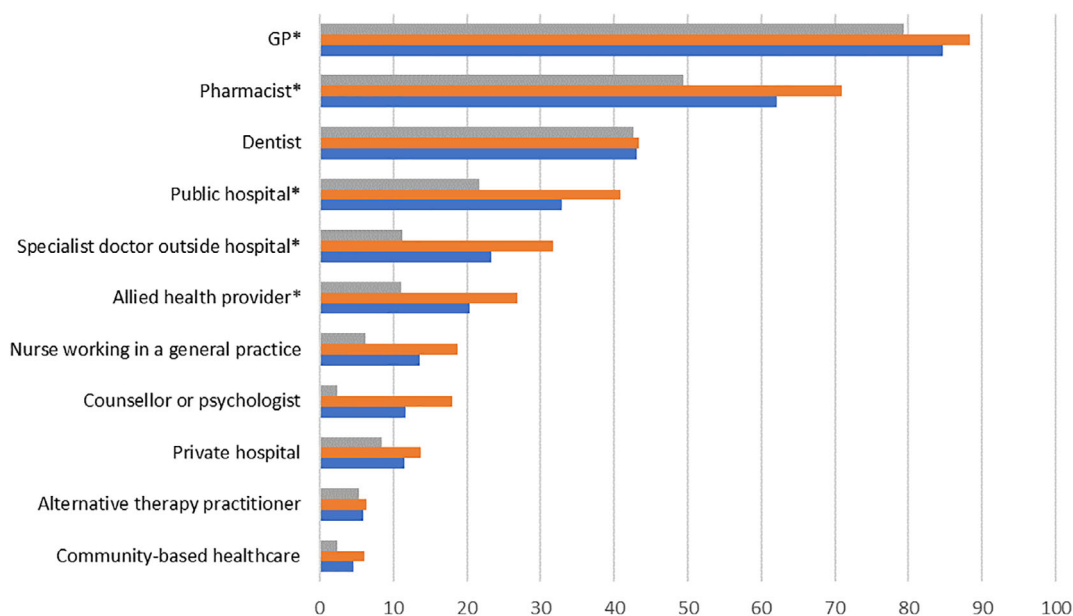
Respondents who lived outside of a metropolitan zone were significantly more likely to access a pharmacist ( $X^2 (1, N = 1024) = 5.71$ ,  $P = 0.02$ ) or public hospital ( $X^2 (1, N = 1024) = 6.94$ ,  $P = 0.01$ ). Respondents earning  $> \$1500$  per week were significantly more likely to access a dentist ( $X^2 (1, N = 1024) = 15.16$ ,  $P < 0.001$ ) and significantly less likely to access a public hospital ( $X^2 (1, N = 1024) = 10.83$ ,  $P = 0.001$ ) compared with those earning  $< \$1500$  a week. Respondents with PHI were significantly more likely to access a dentist ( $X^2 (1, N = 1024) = 90.13$ ,  $P < 0.001$ ), a specialist doctor outside of a hospital ( $X^2 (1, N = 1024) = 5.91$ ,  $P = 0.01$ ), an allied health professional ( $X^2 (1, N = 1024) = 18.32$ ,  $P < 0.001$ ) and significantly less likely to access a public hospital ( $X^2 (1, N = 1024) = 17.56$ ,  $P < 0.001$ ) compared with respondents without PHI.

### Alternative modes of accessing healthcare

One hundred and sixty-nine (16.5%) respondents accessed healthcare by means other than attending a face-to-face appointment with a health professional (Fig. 2). Of these 169 respondents, 65.7% ( $n = 111$ ) had a chronic condition and used alternative modes of access significantly more frequently than respondents without chronic conditions ( $X^2 (1, N = 1024) = 4.33$ ,  $P = 0.03$ ), especially telephone advice lines ( $X^2 (1, n = 169) = 5.06$ ,  $P = 0.03$ ) (Fig. 2).

### Affordability of healthcare

Almost all respondents ( $n = 994$ , 97.1%) had a Medicare card and were eligible to access publicly funded healthcare services and 53.0% ( $n = 543$ ) had PHI. Of those with PHI, 66.2% ( $n = 360$ ) had Hospital and Extras cover, 16.3% ( $n = 89$ ) had Extras treatment cover only, 14.5% ( $n = 79$ ) had Hospital cover only. The weekly household income was \$500–\$1499 for almost half of respondents ( $n = 491$ ; 47.9%), and less than \$500 for



**Figure 1** Use of healthcare services (%) in the past 12 months ( $N = 1024$ ). Note: GP, general practitioner; specialist doctor outside hospital, e.g. a cardiologist, surgeon, psychiatrist; allied health provider, e.g. physiotherapist, dietitian, optometrist, speech pathologist, occupational therapist, podiatrist; alternative therapy practitioner, e.g. acupuncture, naturopathy, herbalist; community-based healthcare, e.g. home support, nursing, rehabilitation services. \*Significant difference between respondents with a chronic condition and those without. (■), No chronic conditions reported; (■), at least one chronic condition reported; (■), all respondents.

20.6% ( $n = 211$ ). Twenty-six percent reported experiencing high ( $n = 125$ ; 12.2%) or some financial stress ( $n = 142$ , 14%).

Of the 351 (34.3%) respondents who needed to access a dentist, almost half ( $n = 166$ ; 47.4%) did not do so because they 'could not afford it'. Similarly, for people with chronic conditions, 'could not afford it' was cited as a reason for not filling prescriptions or skipping doses, not undertaking recommended tests or follow-up appointments (Table 3).

Three-quarters of respondents felt it was important that GP bulk bill through Medicare and not charge additional fees (Table 2). Overall, 62.7% ( $n = 641$ ) were very or somewhat confident that they could afford the needed healthcare if they became seriously ill. However, respondents with chronic conditions were significantly less likely to have such confidence (56.7% ( $n = 343$ ) vs 71.3% ( $n = 298$ );  $X^2(1, n = 1023) = 25.95, P < 0.001$ ).

### Private health insurance

Of the 543 respondents with PHI, the majority indicated that they would renew their PHI when it expires ( $n = 450$ ; 82.8%). The most common reason for having PHI was security, protection or peace of mind, while the most common reasons for not having PHI were

unaffordability and perceived low value for money (Table 4). Respondents without chronic diseases were significantly more likely to have PHI than those with a chronic condition (57.9% vs 50.3%;  $n = 1017$ );  $X^2 = 5.78, P = 0.02$ ). People who had PHI were more likely to live in a metropolitan zone (56.9% vs 46.7%;  $n = 1017$ );  $X^2 = 9.55, P = 0.002$ ), earned more than \$1500 per week (74.1% vs 43.9%;  $n = 1017$ );  $X^2 = 80.17, P < 0.001$ ) and were not financially stressed (57.1% vs 27.2%;  $n = 1018$ );  $X^2 = 39.43, P < 0.001$ ).

## Discussion

The present study is the first since 2012<sup>5</sup> to report on opinions about the healthcare system of a representative sample of Australians. In line with previous reports, GP and pharmacists were the most frequently accessed healthcare professionals.<sup>5</sup> Public hospitals were accessed by over a third of the respondents, comparable with AIHW reports.<sup>18</sup> However, the proportion of Australians who rated their health as excellent, very good or good decreased to 77% from ~85% in 2012.<sup>5</sup>

Consumers have previously raised concerns about affordability of healthcare,<sup>9</sup> and out of pocket expenses have been estimated at A\$4290 per annum per

**Table 2** Access to healthcare services by chronic condition, geographic location, weekly income and private health insurance

All respondents	Chronic condition, n (%)			Lives in metropolitan zone, n (%)			Weekly income bracket ≥\$1 500, n (%)			Private Health Insurance, n (%)			
	n (%)	Yes (n) = 605; 59.0%	No (n) = 419; 41.0%	P-value	Yes (n) = 371; 65.6%	No (n) = 353; 34.4%	P-value	Yes (n) = 322; 31.5%	No (n) = 702; 68.5%	P-value	Yes (n) = 543; 53.4%	No (n) = 474; 46.6%	P-value
GP	866 (84.6)	534 (88.3)	333 (79.3)	**P < 0.001	569 (84.8)	297 (84.1)	P = 0.78	277 (86.0)	590 (84.0)	P = 0.41	462 (85.1)	398 (83.8)	P = 0.57
Pharmacist	636 (62.1)	249 (70.9)	207 (49.4)	**P < 0.001	400 (59.5)	237 (67.1)	*P = 0.02	186 (57.8)	450 (64.1)	P = 0.05	337 (62.1)	294 (62.0)	P = 0.99
Dentist	440 (43.0)	262 (43.3)	179 (42.6)	P = 0.83	290 (43.2)	150 (42.5)	P = 0.82	167 (51.9)	273 (38.9)	**P < 0.001	309 (56.9)	130 (27.4)	**P < 0.001
Public hospital	337 (32.9)	247 (40.8)	91 (21.7)	**P < 0.001	202 (30.1)	135 (38.2)	*P = 0.01	83 (25.8)	254 (36.2)	*P = 0.001	146 (26.9)	186 (39.2)	**P < 0.001
Specialist†	239 (23.3)	192 (31.7)	47 (11.2)	**P < 0.001	145 (21.6)	94 (26.6)	P = 0.07	77 (23.9)	161 (22.9)	P = 0.73	143 (26.3)	94 (19.8)	*P = 0.01
Allied health‡	209 (20.4)	163 (26.9)	46 (11.0)	**P < 0.001	134 (19.9)	75 (21.2)	P = 0.62	66 (20.4)	143 (20.4)	P = 0.98	139 (25.6)	70 (14.7)	**P < 0.001

\*P < 0.05. \*\*P < 0.001. †Specialist doctors accessed outside of the hospital system. ‡Allied health professionals including physiotherapists, speech pathologists, psychologists and so on.

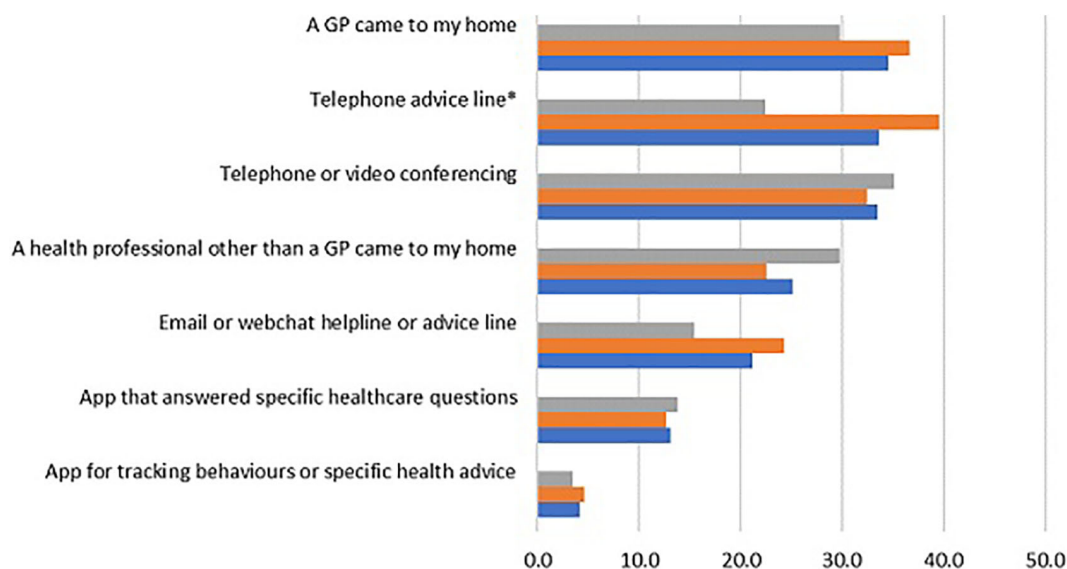
household.<sup>19</sup> The present study supports this, with only 62.7% of all respondents being confident that they could afford needed care and only 56.7% of those with chronic conditions. Almost 75% of consumers in our survey called for GP billing via Medicare to avoid out-of-pocket expenses, suggesting the need to review and strengthen primary care funding and care delivery models to ensure the sustainability of equitable access.

Affordability was a concern in other areas with approximately half of respondents reporting under-use of medicines because of cost. This has been highlighted by other studies from Australia, Europe and the United States.<sup>20</sup> For Australians with chronic conditions, cost was cited as a reason for not accessing a doctor (15.3%) or dentist (52.3%) and for skipping tests, treatments or recommended follow-up appointments (32.9%). This indicates potentially sub-optimal care, which may lead to increased risks of morbidity, preventable complications and emergency department presentations,<sup>21</sup> and a greater burden on our healthcare system and society.

Affordability concerns are compounded by high financial stress, which increased to 12.2% in our survey compared with ~8% in 2012.<sup>5</sup> We know that there is an inextricable relationship between health and income.<sup>22</sup> People with chronic conditions may be at a greater risk of missing out on needed care, not only because of increasing healthcare costs, but also because of limited capacity to earn due to their chronic condition.<sup>22</sup> Over the past 10 years, Australia has seen increasing erosion of job security and casualisation of the workforce with limited sick leave entitlements.<sup>23</sup> It will be important to continue measuring health consumer sentiment, especially in view of the recent job losses due to the COVID-19 crisis.

The proportion (53.0%) of respondents who had PHI aligns with the 54% reported by the ACCC for June 2018.<sup>24</sup> Counterintuitively, people with chronic conditions, who are likely to benefit most from PHI, were significantly less likely to have it. Affordability was the major factor in deciding whether or not to purchase PHI. In addition to cost, poor value for money was also given as a reason for not having PHI. Affordability of PHI has been previously raised as a concern; increasing PHI premiums and stagnating wage growth may be contributing factors.<sup>10,24</sup> A report from the Grattan Institute showed that young people are opting out of PHI;<sup>10</sup> however, our data did not reflect this, possibly because of our modest sample size in the 18–24 age group.

The present study suggests that face-to-face consultations were the norm for accessing healthcare in Australia at the time of our survey. This might limit timely access to healthcare, especially for Australians living in rural/remote zones, those living with



**Figure 2** Use of alternative modes of access to healthcare (%) of participants reporting the use of alternative modes of access ( $n = 169$ ). \*Significant difference between respondents with a chronic condition and those without. (■), No chronic conditions reported; (■), at least one chronic condition reported; (■), all respondents.

**Table 3** Differences in opinions and experience regarding affordability of healthcare

Survey responses selected	All respondents ( $N = 1024$ ), $n$ (%)	Respondent has at least one chronic health condition, $n$ (%)		Statistical comparison of respondents with and without chronic conditions
		Yes ( $n = 605$ )	No ( $n = 419$ )	
Could not pay for healthcare or medicine needed because of a shortage of money	97 (9.5)	84 (13.9)	13 (3.1)	$P < 0.001^{**}$
Important that GP bulk-bill so no additional fees need to be paid	777 (75.9)	472 (78.0)	302 (72.8)	$P = 0.002^{**}$
Did not fill a prescription for medicine, or skipped doses because of cost	114 (11.1)	96 (53.6)	18 (28.6)	$P = 0.001^*$
Had a medical problem but did not visit a doctor because of cost	75 (7.3)	54 (15.3)	21 (10.1)	$P = 0.08$
Skipped a medical test, treatment, or follow up that was recommended by a doctor because of cost	58 (5.7)	46 (32.9)	12 (22.2)	$P = 0.15$
Did not visit a dentist because of cost	166 (16.2)	103 (52.8)	63 (40.4)	$P = 0.02^*$

\*\* $P < 0.001$ ; \* $P < 0.05$ .

psychosocial disadvantage and people with chronic conditions including mental health problems, who need to access care frequently and may find travel to multiple face-to-face appointments cumbersome and expensive. Identified barriers to the uptake of telehealth in rural/remote zones and remote Australia include lack of reliable internet, deficits in awareness and 'know-how' among health consumers and healthcare providers, and

complex criteria for accessing Medicare item numbers for billing. The potential benefits of telehealth for patients, providers and the health system are yet to be realised in Australia. The lack of capacity for telehealth in primary care has been recently highlighted with the COVID-19 pandemic, triggering the addition of Medical Benefits Schedule items for telehealth and its recent widespread use. The extent to which this is sustained

**Table 4** Reasons provided for having and not having private health insurance† (N = 1024)

Reasons for having private health insurance (n = 543)	n (%)	Reasons for not having private health insurance (n = 481)	n (%)
Security/protection/peace of mind	320 (58.9)	Cannot afford it/too expensive	352 (73.2)
Provides benefits for extras	259 (47.6)	Lack of value for money/not worth it	170 (35.5)
Allows treatment as private patient	248 (45.7)	Medicare cover is sufficient	137 (28.6)
Shorter wait for treatment/concern over public hospital waiting lists	234 (43.1)	Disillusioned about having to pay out of pocket costs or gap fees	121 (25.2)
Choice of doctor	183 (33.7)	Pensioner/veteran's affairs/health concession card	109 (22.8)
Life-time cover/avoid age surcharge	150 (27.6)	Won't pay Medicare and private health insurance premium	54 (11.2)
Elderly/getting older/likely to need treatment	130 (24.0)	Pre-existing condition that limits or excludes me	52 (10.8)
To gain government benefits/avoid extra Medicare levy	123 (22.6)	Do not need medical care/in good health/have no dependants	40 (8.3)
Always had it/parents pay it/condition of job	89 (16.4)	Not high priority or previously included in parents' cover	28 (5.8)
Has illness/condition that requires treatment	76 (14.0)		
Other financial reasons	40 (7.4)		
Other	28 (5.1)		

†Respondents could provide more than one answer.

after the COVID-19 crisis has abated is currently uncertain.<sup>25</sup>

## Strengths and limitations

Strengths include a representative sample of the Australian population and co-design of the survey with consumer-researchers to ensure relevance of the selected questions to current health consumer issues. Furthermore, survey questions were sourced from other validated scales where possible. The relatively small sample is a limitation; however, the present study demonstrates the feasibility of undertaking the survey with larger samples in the future. A larger sample size will also allow us to make additional comparisons between participants from rural/remote zones with those from metropolitan zones. There was a slight over-representation of people with chronic conditions in our sample (59.0%) when compared with estimates from the AIHW (50%).<sup>15</sup> People with health concerns are more likely to respond to surveys such as ours. This may be a strength because it enabled

canvassing the opinions of people who have first-hand experience of the health system because of frequent use.

## Conclusions

Significant affordability problems when accessing needed healthcare were highlighted, especially among people with chronic disease and those experiencing financial stress. This manifested in respondents reporting skipping medication doses and pathology tests, and foregoing appointments with doctors because of cost. The main drivers for PHI were affordability rather than healthcare needs or age. Given that GP are accessed frequently and the proportion of people with chronic conditions is growing, providing accessible, affordable primary care services will be critical to meet ongoing demand and to reduce pressure on public hospitals. Repeating consumer sentiment surveys in larger representative samples in the future is important to gauge the health of the health system, especially in response to significant reforms or crises.

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## Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's web-site:

### Appendix S1. Consumer Sentiment Survey Instrument.