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NAB Health Insights Special Report

**Part 3: e-Health - Usage,
Satisfaction & Preferences**

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Part 3 - e-Health - Usage, Satisfaction & Preferences

Healthcare has been transformed post the pandemic. Increasingly, consumers expect care to be available when and how it's most convenient for them. Face-to-face is still overwhelmingly preferred. But there are opportunities to expand telehealth & virtual care further. Health apps & wearable technologies are also on the rise, but age & income are key. Australians are increasingly comfortable sharing personal health data with GPS & specialists.

Many health professionals are reconsidering what share of their appointments really need to be taken in person. In some cases, virtual care might be better for them and the patient. In Part 3 of NAB's Health Special Insight Series, we ask 2,000 Australians about their attitudes, behaviours, and preferences for e-Health. Demand is rising (particularly for GP consultations), but more must be done to build virtual interpersonal relationships, particularly for chronic care patients.

How pervasive is telehealth in Australia? The growth of telehealth has been very rapid since the pandemic with around 4 in 10 (41%) Australians having experienced a telehealth appointment with a GP in the past year alone. Somewhat more women (45%) than men (38%) had used telehealth. Interestingly, by age, GP telehealth appointments were most common among those aged over 65 (49%), and least common in the 18-24 (37%) and 35-44 and 55-64 (38%) age groups. Telehealth was much less common with specialist doctors, with just under 1 in 10 (8%) Australians having interacted this way over the past year. Telehealth may also increase demand from those previously reluctant to visit face-to-face due to travel or time away from work or family. Telehealth is undoubtedly a boon to patients located in rural areas, who may be medically underserved. Somewhat more Australians in rural or remote areas (12%) had a telehealth appointment with a specialist doctor, compared to 7% in capital cities. The number was also slightly higher for women (9%) than men (7%). By age, it ranged from 13% in the 55-64 group to just 4% in the 18-24 and 35-44 age groups.

For other health providers, around 1 in 20 Australians had a telehealth appointment with a public hospital (5%) or a psychologist/psychiatrist (5%), and 1 in 25 (4%) with a pharmacy over the past 12 months. Far fewer had a telehealth appointment with a dentist (2%), private hospital (1%), optometrist (1%), vet (1%) or chiropractor, osteopath, or physiotherapist (less than 1%). There were however some groups where noticeably more people



had experienced a telehealth appointment - particularly in the 18-24 age group for appointments with a psychologist/psychiatrist (12%), in the 25-34 age group with a pharmacist, and in regional cities with a private hospital (4%).

How do Australians rate telehealth compared to a traditional face-to-face consultation overall? On the whole, consumers were happy with telehealth and appreciated that it was a good adjunct to the way they received their healthcare. Around 1 in 4 (27%) Australians who had a GP telehealth consultation and 1 in 5 with a specialist doctor (22%), rated their experience better than face-to-face. Noting the incidence of telehealth consultations is much lower for other health professionals, over 1 in 2 Australians also rated their experience as better for visits to dentists (55%) and pharmacies (54%), 1 in 3 for public hospitals (36%), and 1 in 4 for psychologists/psychiatrists (24%). Conversely, the number who said their overall experience was worse was highest for psychologists/psychiatrists (27%), GPs (21%)

and specialist doctors (21%). Importantly, almost 6 in 10 Australians said the experience with specialist doctors was about the same (57%), and around 1 in 2 GPs (51%), psychologist and psychiatrists (49%) and public hospitals (47%) the same.

How do Australians rate telehealth compared to a traditional face-to-face consultation in key areas? On

balance, Australians were most positive in regard to the ease of getting an appointment (+34%), appointment wait times (+30%) and personal comfort & level of convenience (+20%). Interestingly, with consumers much more cost-conscious due to the rising cost of living, Australians were much less positive in regard to cost (-4%). The ability to understand or voice & visual quality (-3%) and length of time with the health professional (-3%) was also on balance, rated negatively.

For specialist doctors, the main positives were ease of getting appointments (+23%), sense of privacy (+19%), personal comfort & convenience (+19%), appointment wait times (+18%) and level of truthfulness when answering medical questions (+17%). The biggest detriment was the length of time (-9%). As more health practitioners roll out virtual services, more needs to be done to build virtual interpersonal relationships, particularly for chronic care patients. For some, telemedicine remains an inferior “tele-urgent” substitute for face-to-face care rather than simply a different technology to use in delivering it. But certain kinds of health care can only be provided in person. Health professionals often have to rely on all their senses - not just hearing and vision - and often it is what patients do not notice or complain about that is essential. Telemedicine will improve face-to-face care, but not replace it.

How would Australians prefer to interact with their health professional? Despite the growing prevalence of telehealth appointments, the balance of preferences was heavily tilted toward face-to-face interactions.

Over 9 in 10 Australians would prefer to interact face-to-face when with an optometrist (94%), chiropractor, osteopath, or physiotherapist (91%), dentist (91%) or other health provider (91%). Most Australians also preferred face-to-face interactions with vets (87%), specialist doctors (85%), and for private (84%) and public (79%) hospitals. The lowest number of Australians indicated they preferred face-to-face interactions for psychologists/psychiatrists (73%), pharmacies (74%) and GPs (77%). While the traditional GP practice may experience more competition from low-cost, pure virtual competitors, most Australians will continue to support their GP, valuing a full range of face-to-face care services. Australians who preferred to interact online with these health professionals was highest for psychologists/psychiatrists (8%), other health providers (5%) and public hospitals (4%). Almost 1 in 4 Australians did not care or preferred an even mix when interacting with a pharmacy (23%), and around 1 in 5 with a GP (20%), psychologist/psychiatrist (19%) or public hospital (17%).

Do preferences differ by appointment type?

Overwhelmingly, the preference is for a face-to-face for all appointment types, except for renewing a prescription where broadly similar numbers preferred face-to-face (37%) or telehealth consultations (33%). Other areas where a higher number of Australians preferred a telehealth appointment include: results follow up (23%); minor or common ailment complaints (17%); and referral (15%) appointments. For all other appointment types,



significantly more Australians preferred a face-to-face - particularly for dental health appointments (81%), general medical check-ups (77%), acute ailment appointments (76%), and appointments for a child (75%) or elderly person (72%). But around 1 in 3 Australians had no preference or an even mix for appointments for minor or common ailments (32%), referrals (31%), and renewing prescriptions (30%).

How widespread is the usage of health apps & wearable technologies?

There has also been steady growth in consumer-focused technology that encourages a healthier lifestyle and helps users better understand health outcomes by tracking sleep, counting steps, glucose levels, hydration, etc. Australia was an early adopter of this wearable technology. Around 1 in 3 (32%) Australians have used a mobile phone or tablet app to help inform or manage their health in the past year. Usage was much more common among young people aged 18-24 (around 6 in 10, 57%), stepping down in each age group to just 12% for the over 65 group. There is also a direct correlation with income, with noticeably more Australians (4 in 10, 42%) in higher income groups (over \$100,000 p.a.) using this technology, with just half this number (2 in 10, 20%) in the lower income group (less than \$35,000 p.a.).

Around 1 in 4 (24%) Australians have used wearable technology to monitor and collect health information, such as heart rate, respiration, blood glucose monitoring, and fitness and lifestyle etc. Again however, the usage of wearable technology did vary widely across key groups.

Around 4 in 10 (40%) people in the 18-24 age group had used a wearable device, stepping down in each age group to 9% in the over 65 group. It was most widespread in the highest income group (35%) followed by the \$50-75,000 p.a. group (29%), and lowest in the lowest income group (14%).

How comfortable are we sharing our personal data from technology or e-health management tools?

When Australians were asked to rate their level of comfort on a scale from 0-10 (0 = extremely uncomfortable; 10 = extremely comfortable), comfort levels were highest for sharing data with GPs (7.1 pts) and specialist doctors (7.0 pts). Previous NAB research (see NAB Health Insights Report Part 1) has shown GPs are the most trusted profession by consumers in Australia. Trusting relationships between patients and clinicians is critical to giving and receiving care. All other practitioners scored 6+ pts, except vets (5.7 pts). They were far less comfortable sharing their data with technology companies (4.6 pts). Interestingly, men were more comfortable sharing data than women with all practitioners, particularly with technology companies and vets. By age, Australians over the age of 65 were much more comfortable sharing their data with most practitioners, and typically those in 45-54 and 55-64 the least comfortable, particularly sharing with technology companies, where Australians under the age of 35 were somewhat more comfortable doing so. Income did not appear to influence comfort levels for sharing data, with those in the \$35-50,000 p.a. income group typically most comfortable sharing their data, and those in the lowest income group least comfortable.



Around 4 in 10 (40%) people in the 18-24 age group had used a wearable device, stepping down in each age group to 9% in the over 65 group.

e-Health

The growth of telehealth in Australia since its introduction as a temporary initiative in response to the COVID-19 pandemic has been very rapid. Between 13 March 2020 and 31 July 2022, 118.2 million telehealth services were delivered to 18 million patients, and more than 95,000 practitioners have now used telehealth services. In Part 3 of our State of Health 2022 series, we asked how many Australians had a telemedicine/telehealth (i.e. over the phone, or by video call) appointment with health service professionals over the past 12 months.

The use of telehealth services was most prolific among Australians when using general practitioners (GP), with the 2022 survey finding 4 in 10 (41%) had a telehealth appointment with a GP in the past year. Interestingly, this number did not vary much across regions, ranging from 43% in capital cities to 38% in regional cities. Somewhat more women (45%) than men (38%) had a telehealth consultation with a GP in the last 12 months. We found no relationship by age, with GP telehealth appointments most common in the over 65 age group (49%), and least common in the 18-24 (37%) and 35-44 and 55-64 (38%) age groups - see table below.

Chart 1: Have you had a telemedicine/telehealth appointment in the past year?

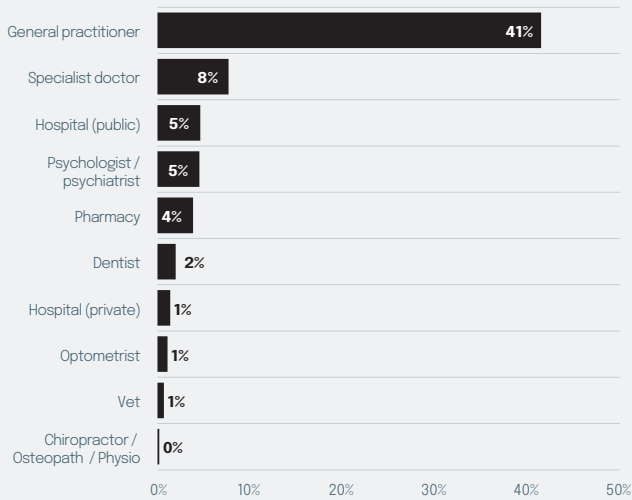


Table 1: Telehealth/telemedicine appoint in the past year: region, gender & age

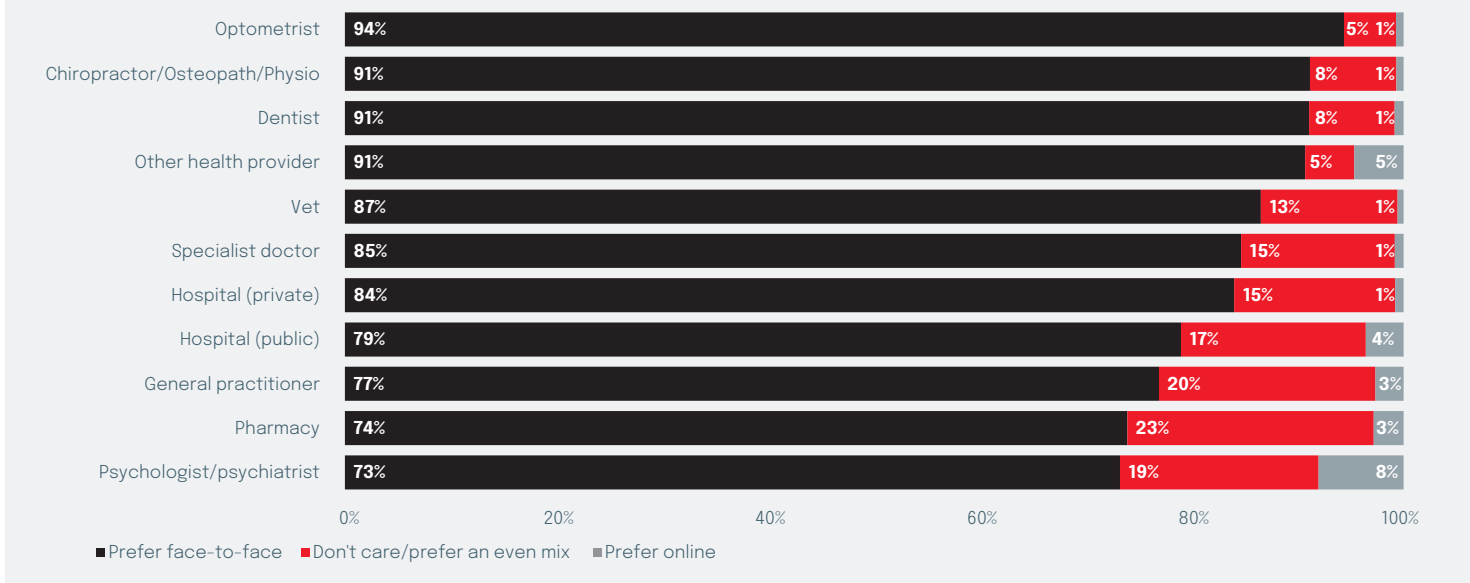
	General Practitioner (GP)	Specialist doctor	Hospital (public)	Psychologist / psychiatrist	Pharmacy	Dentist	Hospital (private)	Optometrist	Vet	Chiropractor / Osteopath / Physio
All Australians	41%	8%	5%	5%	4%	2%	1%	1%	1%	0%
Capital city	43%	7%	4%	5%	4%	2%	1%	1%	0%	0%
Regional city	38%	8%	6%	5%	5%	2%	4%	2%	1%	0%
Rural/remote	39%	12%	6%	2%	3%	2%	2%	0%	1%	0%
Men	38%	7%	4%	4%	4%	3%	2%	1%	0%	0%
Women	45%	9%	5%	5%	4%	1%	1%	1%	1%	0%
18-24	37%	4%	7%	12%	6%	5%	2%	1%	1%	0%
25-34	43%	9%	5%	4%	8%	3%	2%	3%	2%	0%
35-44	38%	4%	3%	5%	4%	3%	1%	1%	0%	1%
45-54	41%	6%	5%	4%	2%	1%	2%	1%	0%	0%
55-64	38%	13%	4%	4%	2%	1%	1%	1%	1%	1%
65+	49%	9%	5%	1%	2%	1%	1%	0%	0%	0%

The next most common telehealth appointment was with a specialist doctor, but for just under 1 in 10 (8%) Australians. However, somewhat more Australians in rural or remote areas (12%) had a telehealth appointment with a specialist doctor in the last 12 months, compared to just 7% in capital cities. The number was also slightly higher for women (9%) than men (7%). By age, it ranged from 13% in the 55-64 group to just 4% in the 18-24 and 35-44 age groups.

For other health providers, around 1 in 20 Australians had a telehealth appointment with a public hospital (5%) or a psychologist/psychiatrist (5%), and 1 in 25 (4%) with a

pharmacy over the past 12 months. Far fewer had a telehealth appointment with a dentist (2%), private hospital (1%), optometrist (1%), vet (1%) or chiropractor, osteopath or physiotherapist (less than 1%). Within these health providers, there were however some demographic groups where noticeably people had a telehealth appointment in the past 12 months - particularly the number of Australians in the 18-24 age group that had a telehealth appointment with a psychologist/psychiatrist (12%), in the 25-34 age group with a pharmacy, and in regional cities with a private hospital (4%).

Chart 2: How would you prefer to interact with/for these following health professionals/services



Australians who had visited or used a health professional in the past year were asked how they would prefer to interact with them. Despite the growing prevalence of telehealth appointments, the balance of preferences was heavily tilted toward face-to-face interactions.

Specifically, the survey found over 9 in 10 Australians would prefer to interact face-to-face when with an optometrist (94%), chiropractor, osteopath or physiotherapist (91%), dentist (91%) or other health provider (91%). Most Australians also preferred face-to-face interactions with vets (87%), specialist doctors (85%), and for private (84%) and public (79%) hospitals. The lowest number of Australians indicated they preferred face-to-face interactions for psychologists/psychiatrists (73%), pharmacies (74%) and GPs (77%).

Australians who preferred to interact online with these health professionals was highest for psychologists/psychiatrists (8%), other health providers (5%) and public hospitals (4%). Almost 1 in 4 Australians did not care or preferred an even mix when interacting with a pharmacy (23%), and around 1 in 5 with a GP (20%), psychologist/psychiatrist (19%) or public hospital (17%).

The table on the following page also shows face-to-face was the preferred method of interacting with all health practitioners by region, gender and age - though the number of people who indicated this preference did vary significantly in some areas.

Table 2: Interaction preferences for face-to-face: region, gender & age

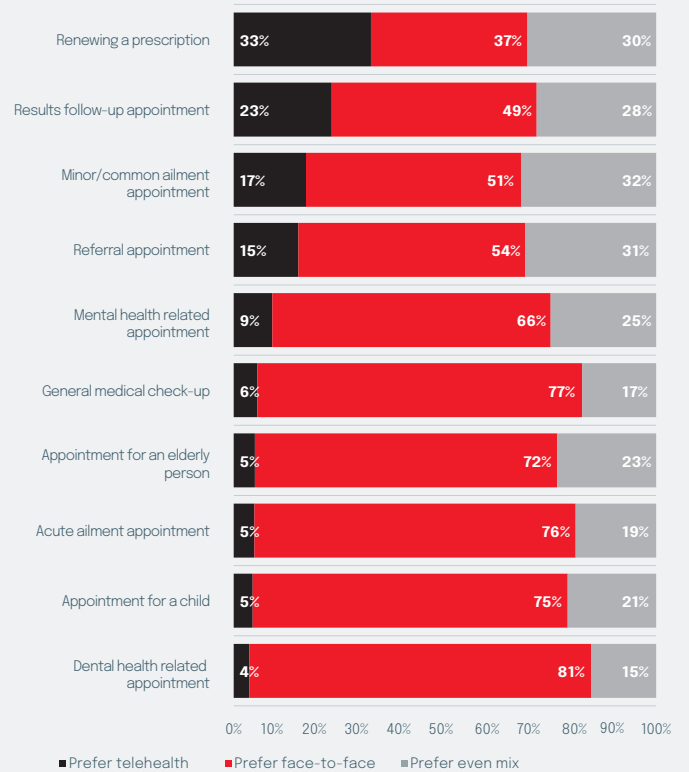
	General Practitioner (GP)	Specialist doctor	Dentist	Hospital (private)	Hospital (public)	Optometrist	Psychologist / psychiatrist	Pharmacy	Chiropractor / Osteopath / Physio	Vet	Other health provider*
All Australians	77%	85%	92%	85%	77%	94%	70%	75%	91%	80%	91%
Capital city	77%	85%	92%	85%	77%	94%	70%	75%	91%	80%	91%
Regional city	75%	81%	91%	80%	83%	94%	77%	71%	100%	90%	86%
Rural/remote	79%	88%	87%	83%	80%	97%	82%	74%	80%	89%	100%
Men	80%	90%	93%	88%	80%	92%	73%	76%	88%	87%	86%
Women	74%	81%	89%	83%	79%	96%	73%	72%	93%	86%	95%
18-24	73%	71%	88%	74%	68%	91%	71%	67%	86%	82%	100%
25-34	69%	77%	92%	83%	89%	93%	77%	61%	94%	88%	100%
35-44	70%	70%	85%	76%	70%	96%	72%	69%	92%	76%	75%
45-54	79%	86%	91%	88%	74%	89%	57%	72%	72%	86%	78%
55-64	80%	91%	94%	91%	79%	94%	75%	83%	96%	92%	100%
65+	86%	92%	94%	87%	86%	98%	90%	85%	97%	94%	92%

*limited sample

Areas where differences were more pronounced included: the higher number of men (80%) and in the over 65 age group (86%) who preferred to interact face-to-face with a GP; men (90%) and in the over 65 (92%) and 55-64 (91%) with a specialist doctor; in the 55-64 group (91%) with a private hospital; in the 25-34 (89%) and over 65 (86%) age groups with a public hospital, in rural and remote areas (82%) and over 65 age group (90%), with a psychologist/psychiatrist (90%), in regional cities (100%) with chiropractors, osteopaths or physiotherapist; and in the over 65 (94%) and 55-64 (92%) with vets.

A deeper look into the preferences of Australians for telehealth or face-to-face appointments shows they can also vary quite widely according to the type of health-related issue. Chart 3 shows the overwhelming preference is for a face-to-face for all appointment types, except renewing a prescription where a broadly similar number preferred face-to-face (37%) or telehealth consultations (33%). Other areas where a higher number of Australians preferred a telehealth appointment were for results follow up (23%), minor or common ailment complaints (17%) and referral (15%) appointments.

Chart 3: Prefer telemedicine/telehealth or face-to-face appointments



For all other appointment types, significantly more Australians preferred a face-to-face consultation - particularly for dental health appointments (81%), general medical check-ups (77%), acute ailment appointments (76%), and appointments for a child (75%) or elderly person (72%).

While the overwhelming preference remained heavily skewed toward face-to-face, around 1 in 3 Australians had no preference or an even mix for appointments for minor or common ailments (32%), referrals (31%), and renewing prescriptions (30%).

Table 3: Appointment preferences consultation type: region, gender & age

	General medical check-up	Dental health related appointment	Mental health related appointment	Appointment for a child	Appointment for an elderly person	Acute ailment appointment	Minor/common ailment appointment	Results follow-up appointment	Referral appointment	Renewing a prescription
PREFER FACE-TO-FACE										
All Australians	77%	81%	66%	75%	72%	76%	51%	49%	54%	37%
Capital city	76%	82%	65%	74%	71%	76%	50%	49%	53%	36%
Regional city	76%	79%	68%	77%	73%	77%	49%	48%	57%	39%
Rural/remote	82%	80%	66%	73%	72%	78%	57%	48%	52%	37%
Men	76%	81%	69%	73%	71%	79%	56%	54%	59%	42%
Women	78%	81%	63%	77%	72%	73%	46%	43%	48%	32%
18-24	67%	73%	61%	66%	62%	60%	41%	53%	47%	39%
25-34	70%	78%	60%	74%	70%	63%	46%	36%	52%	32%
35-44	67%	73%	57%	66%	58%	66%	50%	47%	55%	45%
45-54	75%	83%	67%	76%	76%	82%	52%	48%	50%	36%
55-64	90%	90%	78%	86%	81%	90%	58%	53%	58%	35%
65+	90%	89%	79%	85%	81%	93%	57%	57%	57%	37%
PREFER TELEHEALTH										
All Australians	6%	4%	9%	5%	5%	5%	17%	23%	15%	33%
Capital city	6%	4%	10%	5%	5%	5%	19%	24%	15%	34%
Regional city	7%	3%	7%	4%	4%	6%	17%	24%	15%	30%
Rural/remote	2%	3%	8%	4%	6%	5%	9%	17%	15%	28%
Men	5%	5%	9%	7%	6%	5%	16%	21%	16%	31%
Women	6%	2%	9%	2%	4%	5%	19%	26%	15%	35%
18-24	11%	4%	7%	5%	6%	10%	21%	19%	17%	28%
25-34	8%	4%	9%	4%	3%	6%	19%	32%	14%	38%
35-44	7%	5%	11%	7%	7%	7%	14%	22%	15%	30%
45-54	6%	5%	17%	5%	8%	5%	21%	28%	18%	40%
55-64	3%	1%	4%	3%	4%	1%	17%	20%	15%	33%
65+	2%	2%	4%	2%	2%	1%	13%	18%	14%	26%

The table above also shows significantly more Australians (with a few exceptions) preferred to have face-to-face consultations than by via telehealth for most appointment types - irrespective of the region they live, gender and age. The exceptions were for renewing prescriptions, where more women preferred telehealth than face-to-face (35% vs. 32%), as did Australians in the 25-34 (38% vs. 32%) and 45-54 (40% vs. 36%) age groups, with preferences also broadly similar in capital cities and in the 55-64 age group.

Among other observations, we noted a relatively higher number of Australians living in capital and regional cities that preferred a telehealth consultation for a minor or common ailment complaint and for a results follow-up appointment than in regional and remote areas. By gender, key differences related to the somewhat higher number of men who preferred telehealth appointments for a child, and women for a results follow-up appointment. By age, key discrepancies mainly related to the relatively higher number in the 45-54 group that preferred telehealth consultations for mental health-related issues, and along with the 25-34 age group for a results follow-up appointment.

Australians that had a telehealth appointment in the past year were asked to rate their virtual consultation compared to a traditional face-to-face consultation across a range of factors. The overall experience was mixed across health practitioners.

Over 1 in 2 Australians said their experience was better than a traditional visit for dentists (55%) and pharmacies (54%). Around 1 in 3 rated their experience with a public hospital better (36%), around 1 in 4 telehealth consultations with GPs (27%) and psychologists/psychiatrists (24%) better, and 1 in 5 a specialist doctor (22%) better. The number who said their overall experience was worse was highest for psychologists/psychiatrists (27%), GPs (21%) and specialist doctors (21%). Almost 6 in 10 said the experience with specialist doctors was about the same (57%), and around 1 in 2 GPs (51%), psychologists and psychiatrists (49%) and public hospitals (47%) the same - see chart 4.

We excluded optometrists, vets, private hospitals, and chiropractors, osteopaths and physiotherapists because of a limited sample size in these categories that had a telehealth consultation with any of these health providers in the past year.

Another way to look at preferences is by measuring the 'net balance' of responses. This is calculated by subtracting negative responses from positive responses. A positive result means the number of people who said it was better exceeded those who said it was worse. A negative net balance means the number who said it was worse out-weighted those who said it was better. People who thought it was the same are not counted. The results are shown in chart 5 below.

In net terms, significantly more Australians said their virtual consultation with a dentist was better than face-to-face (+55%), followed by pharmacy (+44%), public hospitals (+18%) and GPs (+6%). The number of Australians who said their consultation with a specialist doctor was better or worse was basically similar, but slightly more said the overall experience with psychologists and psychiatrists was worse (-2%).

In order to better understand the overall experience Australians' had with their telehealth consultation, we asked them how their virtual visit compared to a traditional face-to-face consultation in regards to several factors - value and cost, length of consultation, personal comfort & convenience, ability to understand the health professional (voice & visual quality of consultation), ease of getting an appointment, ease of getting advice, treatment or service required, level of friendliness, courtesy, respect received from health professional, their own level of truthfulness when answering medical questions, appointment wait times, explanation of condition or treatment offered, and sense of privacy.

Individual results are presented for telehealth consultations conducted with GPs, specialist doctors, dentists, public hospitals, psychologists and psychiatrists and pharmacies in charts 6 - 11.

Chart 4: Overall experience

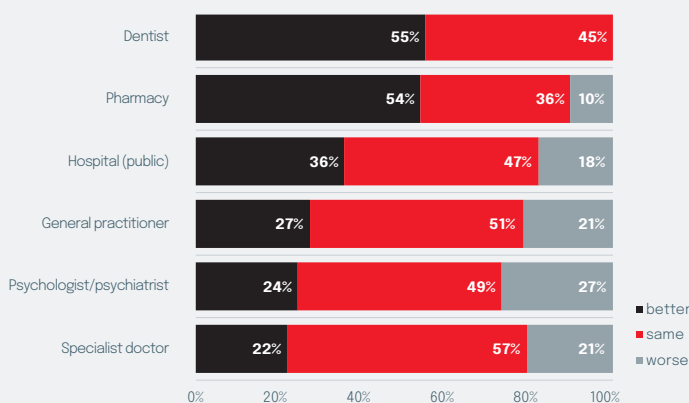


Chart 5: Overall experience (net balance)

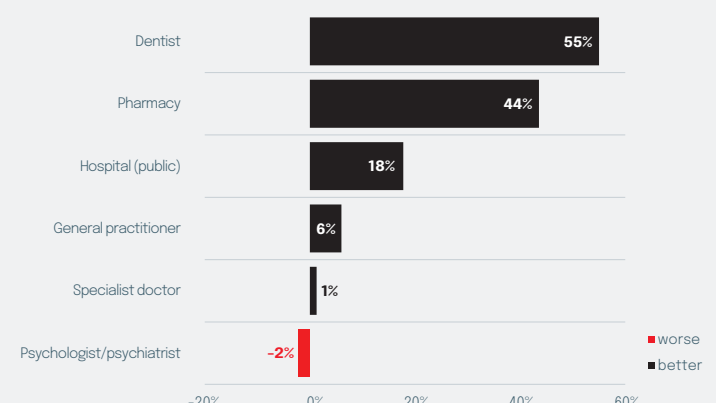


Chart 6: General practitioner (net balance)

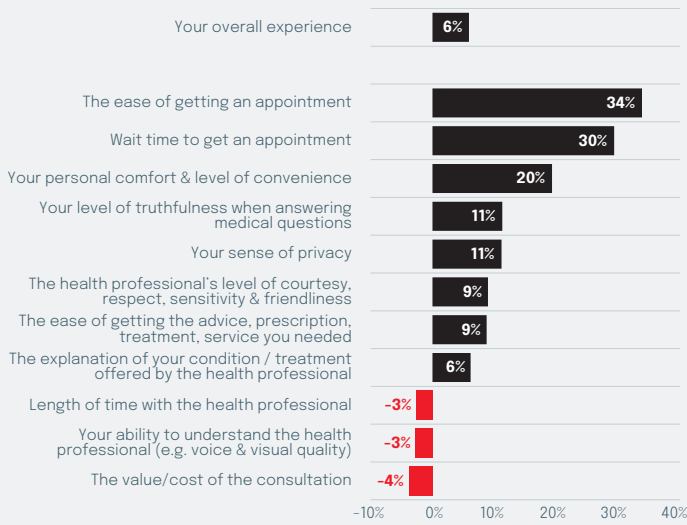


Chart 7: Specialist doctor (net balance)

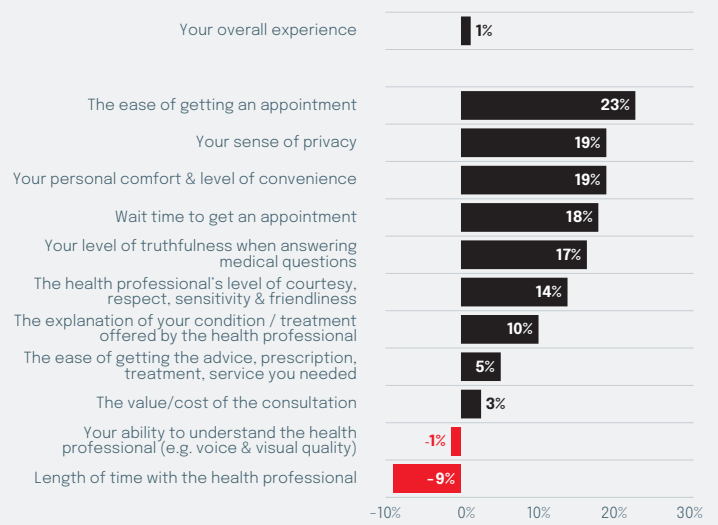


Chart 8: Dentist (net balance)

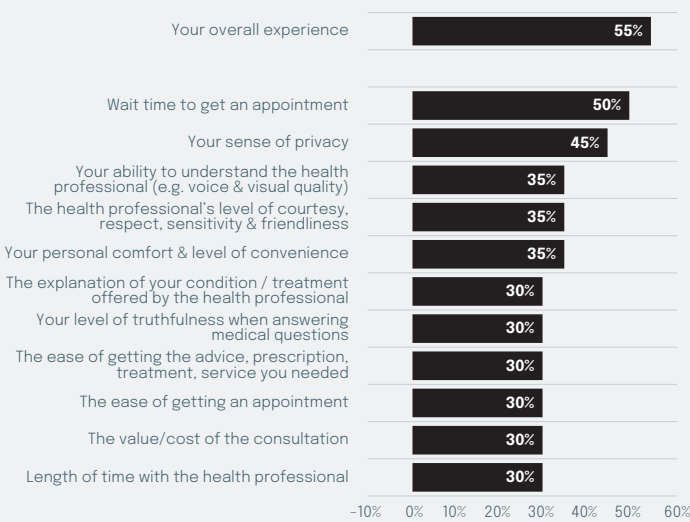


Chart 9: Public hospital (net balance)

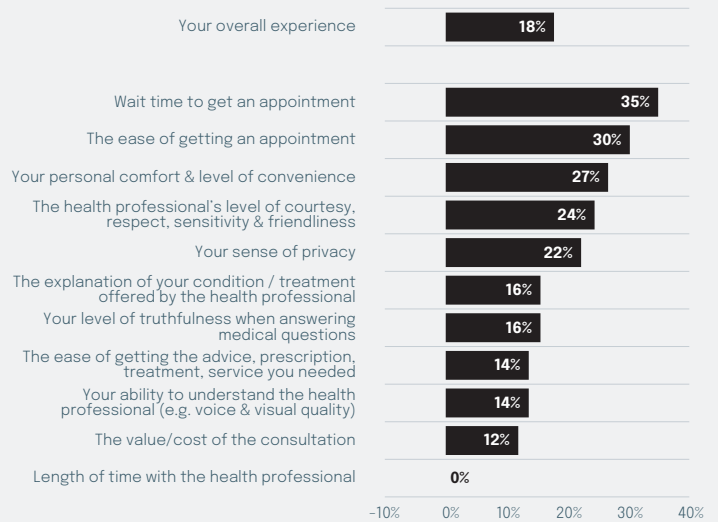


Chart 10: Pharmacy (net balance)

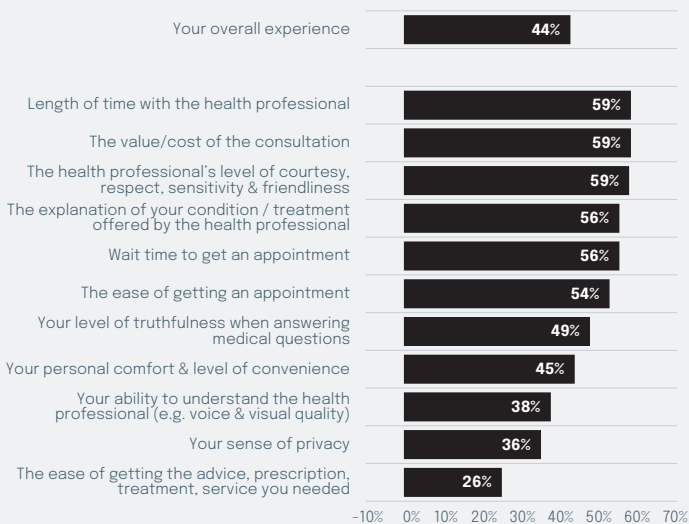
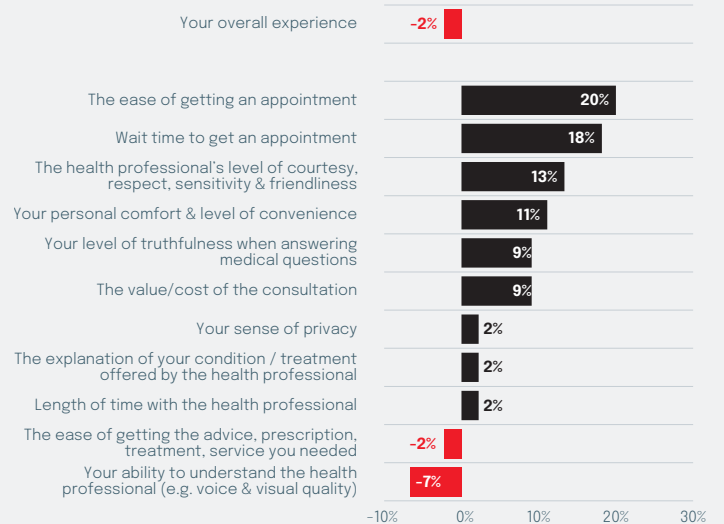


Chart 11: Psychologist/psychiatrist (net balance)





For GPs, most Australians said their virtual consultation was better than face-to-face because of the ease of getting an appointment (+34%), appointment wait times (+30%) and personal comfort & level of convenience (+20%). But the number of people who said it was worse outweighed those who said it was better for cost (-4%), ability to understand them or voice & visual quality (-3%) and length of time with the health professional (-3%).

For specialist doctors, the main positives were ease of getting appointments (+23%), sense of privacy (+19%), personal comfort & convenience (+19%), appointment wait times (+18%) and level of truthfulness when answering medical questions (+17%). The biggest detriment was the length of time with them (-9%).

More Australians rated their telehealth experience with dentists positive in all areas, led by wait times for an appointment (+50%), sense of privacy (+45%), ability to understand them (+35%), level of courtesy, respect, sensitivity & friendliness (+35%) and personal comfort & convenience (+35%).

Public hospitals were also rated more positive in all areas, with the most common factors that made a telehealth consultation better than a traditional visit appointment wait times (+35%), ease of getting appointments (+30%), personal comfort & convenience (+27%), level of courtesy, respect, sensitivity & friendliness from public hospital health professionals (+24%) and sense of privacy (+22%).

Telehealth interactions with pharmacies also provided a better experience for more Australians in all areas than did a traditional visit, particularly length of time of consultation (+59%), cost (+59%), courtesy, respect, sensitivity & friendliness (+59%), explanation of condition and treatment (+56%), appointment wait times (+56%) and ease of getting appointments (+54%).

The net experience with telehealth consultations with a psychologist/psychiatrist was overall negative (-2%), with more people indicating the ability to understand them (e.g. voice & visual quality) was worse (-7%), as was the ease of getting the advice, prescription, treatment or service they needed (-2%). The main factors where it was better than a traditional visit was ease of getting appointments (+20%) and appointment wait times (+18%).

e-Health: apps & wearable technology

Healthcare mobile apps are supported by smartphones and tablet devices. They enable medical and public health practices with new and innovative ways to deliver healthcare services outside traditional settings. Examples include telemedicine apps (which help provide virtual patient care by health practitioners), health management apps (which can help people assess their health conditions such as diabetes, cholesterol levels, heart rate etc.), and wellbeing & fitness apps (such as food nutrition apps that count calories, stress-management apps, sleep apps and other tracking apps that assist people to live healthier lives).

But how widespread is the usage of such apps in Australia? When Australians were asked if they had used mobile phone or tablet apps to help inform or manage their health in the past year, around 1 in 3 (32%) had. But the adoption of this technology varied across key groups.

More women (35%) than men (29%) used healthcare apps. The survey found a direct correlation with healthcare app usage and age. It was most widespread in the 18-24 age group at around 6 in 10 (57%) Australians, and stepped down progressively in each age group to 12% in the over 65 group. Also clear was the very large gap in usage rates for Australians under the age of 35 relative to other age groups. The survey also found a direct correlation with health care app usage and income. It was most widespread in the highest income group (over \$100,000

p.a.) at around 4 in 10 (42%) Australians, and stepped down in each income group to half this level in the lowest income group (less than \$35,000 p.a.) at 2 in 10 (20%) people - see chart 12.

Wearable technology is also playing a role in helping monitor and manage health outcomes for Australians. Wearables are typically incorporated into items that can be worn on a body, and used for tracking information on real time basis - e.g. consumer or medical devices that monitor and collect health information, such as heart rate, respiration, blood glucose monitoring, and fitness and lifestyle etc.

When Australians were also asked if they had used wearable technology in the past year to help inform them about and manage their health, around 1 in 4 (24%) had. Again however, the usage of wearable technology did vary widely across key groups.

Slightly more women (26%) than men (23%) had used wearables. The survey found a direct correlation with the use of wearables and age. Around 4 in 10 (40%) people in the 18-24 age group had used a wearable device, with this number stepping down in each age group to 9% in the over 65 group. The survey found a looser correlation with income. It was most widespread in the highest income group (35%) followed by the \$50-75,000 p.a. group (29%), and lowest in the lowest income group (14%) - see chart 13.



Chart 12: Number of people who have used e-health mobile phone or tablet apps in the past year

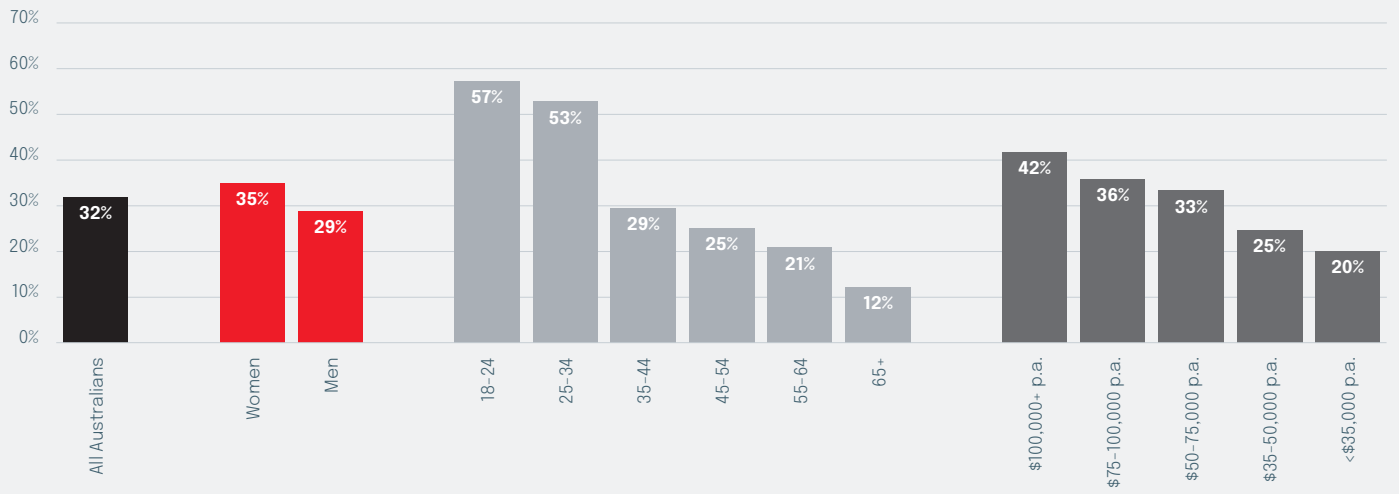
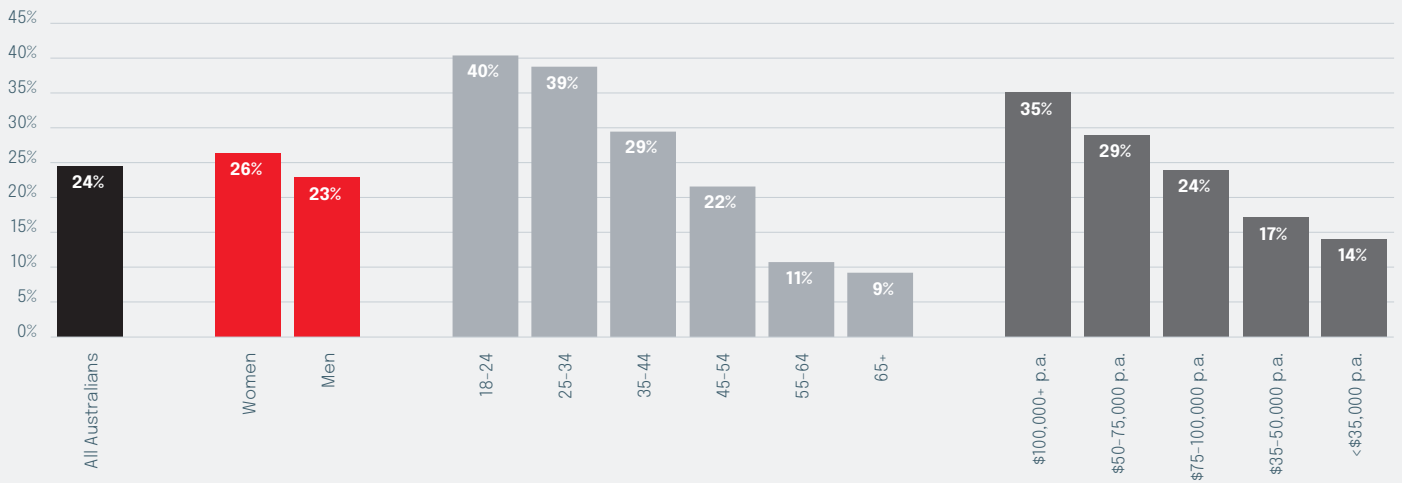


Chart 13: Number of people who have used e-health wearable technology in the past year



e-Health: sharing data

Sharing medical data can help save lives. Healthcare data is essential for longitudinal care, ensures that health professionals and care givers can access complete patient information and is vital for drug research and development. But with data privacy and protection key issues for many Australian consumers, are Australians comfortable with sharing their personal data from technology or e-health management tools with health practitioners and technology companies.

The survey results suggest they are “quite” comfortable doing so with most health practitioners, but “somewhat uncomfortable” sharing it with technology companies. When asked to rate their level of comfort on a scale from 0-10 (0 = extremely uncomfortable; 10 = extremely comfortable), comfort levels were highest for sharing data with GPs (7.1 pts) and specialist doctors (7.0 pts). All other practitioners scored 6+ pts, except vets (5.7 pts). They were far less comfortable sharing their data with technology companies (4.6 pts) - see chart 14.

Chart 14: How comfortable would you be sharing your personal data from technology or e-health mangement with these professionals?

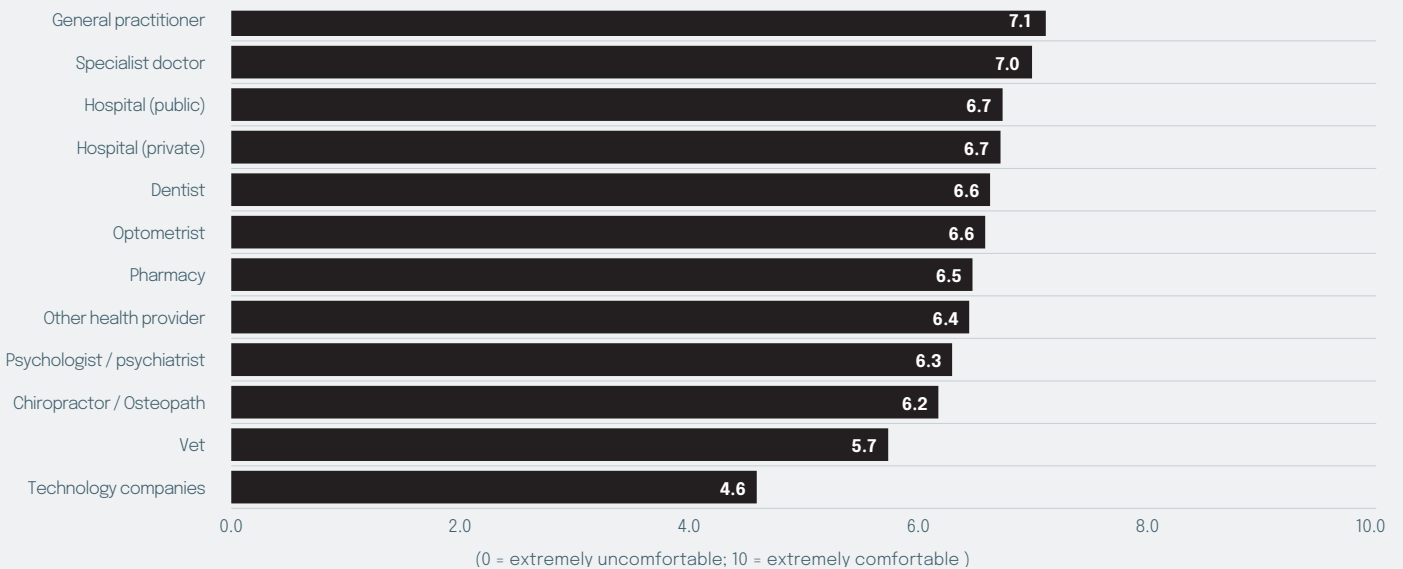


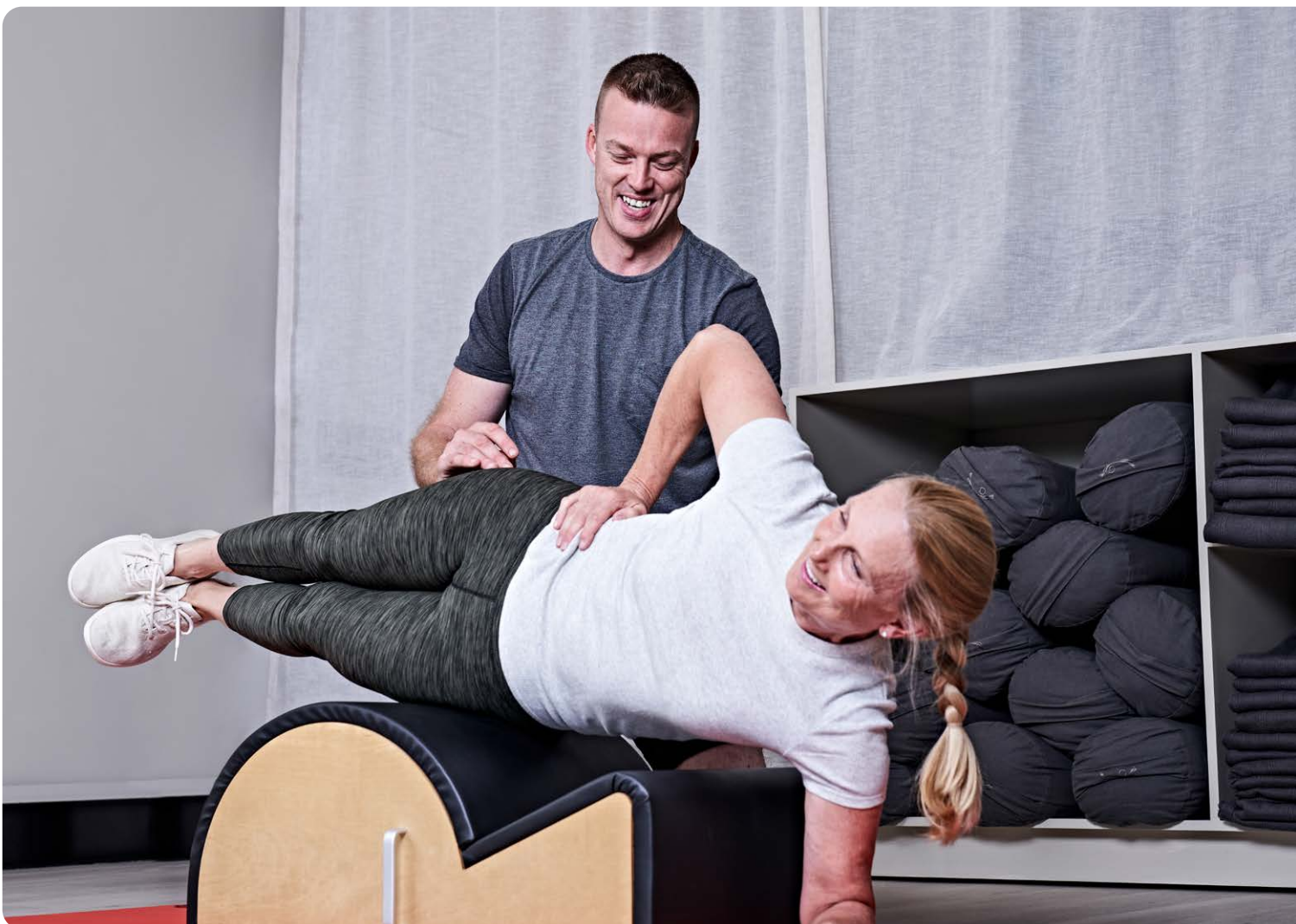
Table 4 shows that men were more comfortable sharing data than women with all practitioners, particularly with technology companies and vets. By age, Australians over the age of 65 were noticeably more comfortable sharing their data with most practitioners, and typically those in 45-54 and 55-64 the least comfortable, particularly for sharing with technology companies, where Australians under the age of 35 were somewhat more comfortable doing so. Income did not appear to influence comfort levels for sharing data, with those in the \$35-50,000 p.a. income group typically most comfortable sharing their data, and those in the lowest income group typically least comfortable.

The survey also showed that Australians in all regions, and by gender, age and income, were least comfortable sharing their health data with technology companies.



Table 4: Sharing data: gender, age & income

	All Australians	Men	Women	18-24	25-34	35-44	45-54	55-64	65+	<\$35,000 p.a.	\$35-50,000 p.a.	\$50-75,000 p.a.	\$75-100,000 p.a.	\$100,000+ p.a.
General practitioner	7.1	7.3	7.0	7.1	7.0	6.7	6.7	7.0	8.1	6.9	7.7	7.3	7.3	7.0
Specialist doctor	7.0	7.2	6.8	6.7	7.1	6.6	6.5	6.8	8.0	6.7	7.5	7.1	7.1	7.0
Dentist	6.6	6.8	6.4	6.6	6.9	6.2	6.2	6.4	7.4	6.4	7.1	6.7	6.9	6.6
Hospital (private)	6.7	6.8	6.6	7.0	6.8	6.5	6.1	6.3	7.5	6.3	7.4	6.6	7.0	6.8
Hospital (public)	6.7	6.9	6.5	6.5	7.0	6.3	6.4	6.4	7.5	6.5	7.5	6.7	7.0	6.7
Optometrist	6.6	6.7	6.4	6.7	6.7	6.2	6.2	6.3	7.3	6.3	7.3	6.7	7.0	6.5
Psychologist / psychiatrist	6.3	6.4	6.2	6.6	6.8	6.2	5.8	5.7	6.6	5.9	6.5	6.6	6.5	6.4
Pharmacy	6.5	6.6	6.3	6.5	6.5	6.0	6.1	6.2	7.5	6.3	7.2	6.7	6.7	6.3
Chiropractor / Osteopath	6.2	6.2	6.1	6.3	6.5	6.1	5.7	5.8	6.6	5.6	6.5	6.4	6.6	6.3
Vet	5.7	6.0	5.5	6.0	6.2	5.9	5.3	5.1	5.7	5.1	5.9	6.1	6.2	6.0
Other health provider	6.4	6.6	6.3	6.2	6.8	6.4	6.0	5.9	7.2	6.1	7.1	6.4	7.0	6.5
Technology companies	4.6	5.0	4.2	5.4	5.6	5.2	3.7	3.6	4.0	4.0	4.6	4.9	5.2	4.8



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