Improving healthcare experiences with digital technologies

2021 Accenture Health and Life Sciences Experience Survey – **Singapore** findings 🇸🇬

The 2021 Accenture
Health and Life Sciences
Experience survey of
653 people in Singapore
reveals how the healthcare
experience is changing

Key findings at a glance: Singapore

Residents of Singapore want their healthcare experiences to be more affordable, efficient, and, perhaps most importantly, to lead to better health outcomes. Integrating digital technologies across the healthcare ecosystem and into people´s health routines is an important step to meeting these needs.

Healthcare players—from doctors and pharmacists to technology and pharmaceutical companies—must combine the power of technology and human ingenuity and work together to boost the adoption of these technologies, without sacrificing people´s expectations for emotional support and empathy.

The benefits of this close collaboration between various healthcare providers and the use of digital technologies can be substantial, ranging from more accurate diagnoses and personalized treatments to more efficient appointments and deeper patient-provider relationships.

Our 2021 Health and Life Sciences Experience survey[1] seeks to understand patients' and people´s attitudes toward healthcare systems in Singapore and around the world, in terms of access, technology adoption, service experience, and trust.

We found that while digital technologies have become more widely available since the onset of the COVID-19 pandemic, adoption among consumers in Singapore remains low.

But the interest is there: many would use these technologies for increased convenience and to improve their health, especially if they could be confident about their data privacy and security.

Bolstering trust in providers across the healthcare ecosystem, breaking down financial barriers to healthcare services and treatments, and helping people navigate their patient journey can increase the uptake of digital health technologies in Singapore, creating more efficient and accessible healthcare experiences for all.

[1] To understand how healthcare experiences are changing and establish the patient view on what makes a great healthcare experience, Accenture surveyed 11,823 people aged 18+ between May and July 2021. We gauged their opinions on healthcare experiences across 14 countries in terms of access, equity, service experience, digital technology adoption, and trust. This report focuses on responses from 653 respondents in Singapore, surveyed between June 1 and June 10, 2021.

Did interest in digital technology come, then go?

Virtual appointments and other digital technologies to manage health needs became widely available to accommodate COVID-19 lockdowns and social distancing guidelines in Singapore—but adoption rates are low among Singaporeans compared to respondents from other countries.

Few are using digital technologies today compared to pre-pandemic

More than four in 10 (43%) Singaporeans say they have not used digital technologies to manage their health in the past year, compared with 36% of respondents globally.

Wearables, electronic health records, and mobile applications were most popular among Singaporeans, but few turned to virtual consultations and digital therapeutics—despite their potential benefits in terms of convenience and cost efficiency (Fig. 1).

However, use of these technologies has declined in Singapore: in our pre-pandemic 2020 survey of digital healthcare adoption, just 19% of respondents said they did not use any digital technologies to manage their health. Mobile applications and wearables were the most popular technologies, used by 49% and 38% of respondents respectively.

Fig. 1: Not many have adopted digital technologies to manage their health

Q. Which, if any, of the following digital technologies have you used to manage your health in the past year? Select all that apply.

Category	Singapore	Global
Not applicable - I haven't used any digital technologies to manage my health in the past year	43%	36%
Wearable technology	28%	19%
Electronic health records	17%	21%
Mobile phone/tablet applications	15%	20%
Social media and online support communities/resources	13%	12%
Virtual consultation with a medical provider	9%	23%
Digital therapeutics	6%	8%
Chatbots/Voice-enabled technology	5%	7%
Remote patient monitoring to track symptoms or a condition that is shared with a medical professional	4%	8%
Medical wearables	3%	5%
Don't know	2%	4%
Others	0%	1%

(Singapore N=653; Global N=11,823)

■ Singapore ■ Global

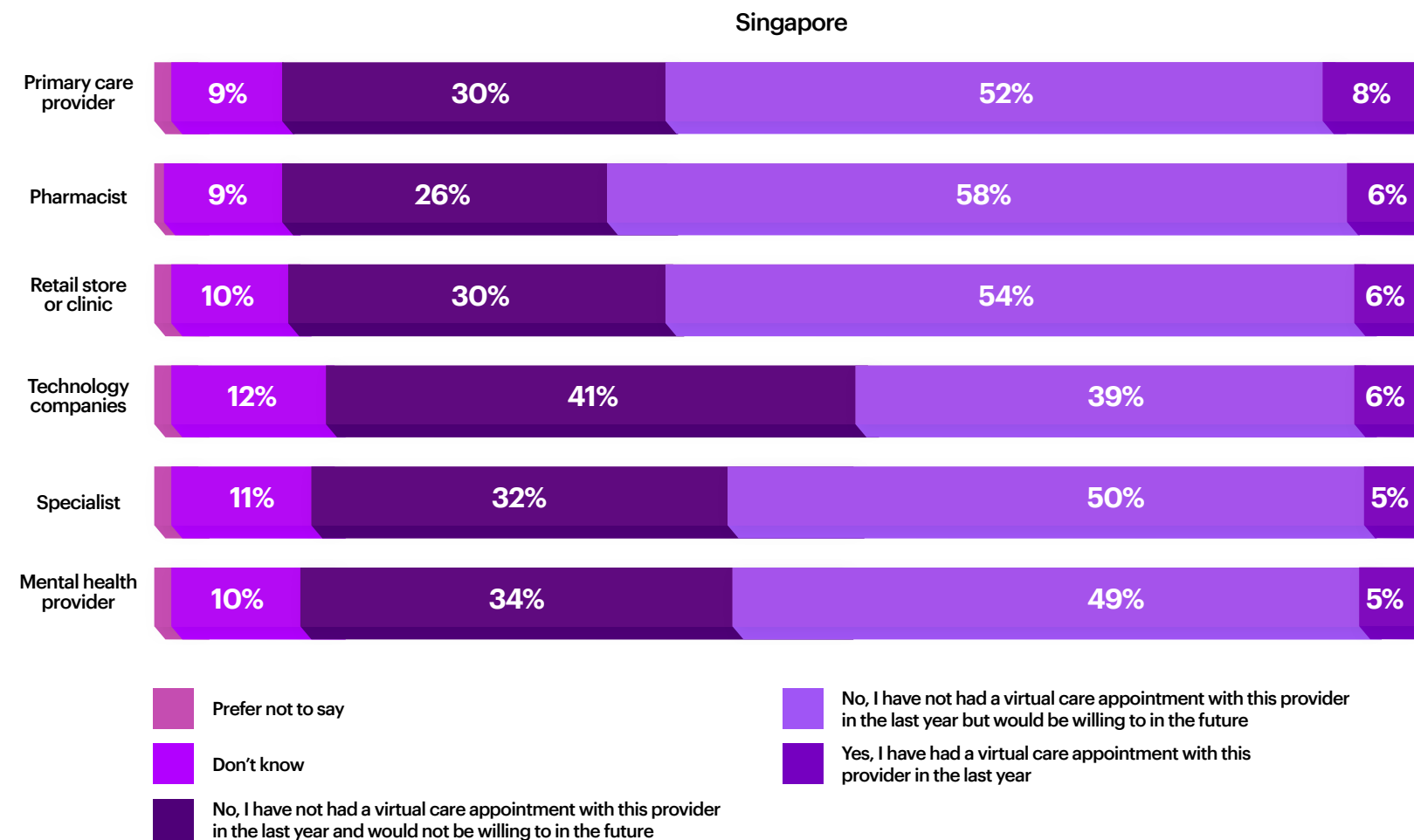Similarly, just 8% have had a virtual care appointment with their primary care provider in the past year, and even fewer have done so with pharmacists, retail stores or clinics, technology companies, specialists, or mental health providers. And while most respondents are willing to one day try virtual care with these providers, especially pharmacists, at least one-quarter say they are not willing to do so—with technology companies experiencing the most resistance (Fig. 2).

Fig. 2: Experience with virtual healthcare appointments is low

Q. Have you had a virtual care appointment with the following medical providers in the last year? If not, would you be willing to receive virtual care from that provider in the future?

Singapore

Provider	Prefer not to say / Don't know	No, not willing	No, but willing	Yes
Primary care provider	9%	30%	52%	8%
Pharmacist	9%	26%	58%	6%
Retail store or clinic	10%	30%	54%	6%
Technology companies	12%	41%	39%	6%
Specialist	11%	32%	50%	5%
Mental health provider	10%	34%	49%	5%

Legend:
- Prefer not to say
- Don't know
- No, I have not had a virtual care appointment with this provider in the last year and would not be willing to in the future
- No, I have not had a virtual care appointment with this provider in the last year but would be willing to in the future
- Yes, I have had a virtual care appointment with this provider in the last year

(Singapore N=653)

What could be inhibiting respondents from using virtual services and digital technologies to manage their health? Low trust in technology companies, financial struggles, and difficulty finding and using quality digital tools are some potential barriers to adoption.

Few Singaporeans trust technology companies with their data.
Just 41% say they trust technology companies to keep their digital healthcare information secure, ranking behind pharmaceutical companies (48%) and health insurance companies (54%). People are more likely to trust their healthcare providers (79%), government (74%, vs. 51% globally), and pharmacies (64%) to keep their information secure. Increasing consumer trust in these companies can help integrate them into the wider healthcare ecosystem and improve the digital tools available to both patients and providers.
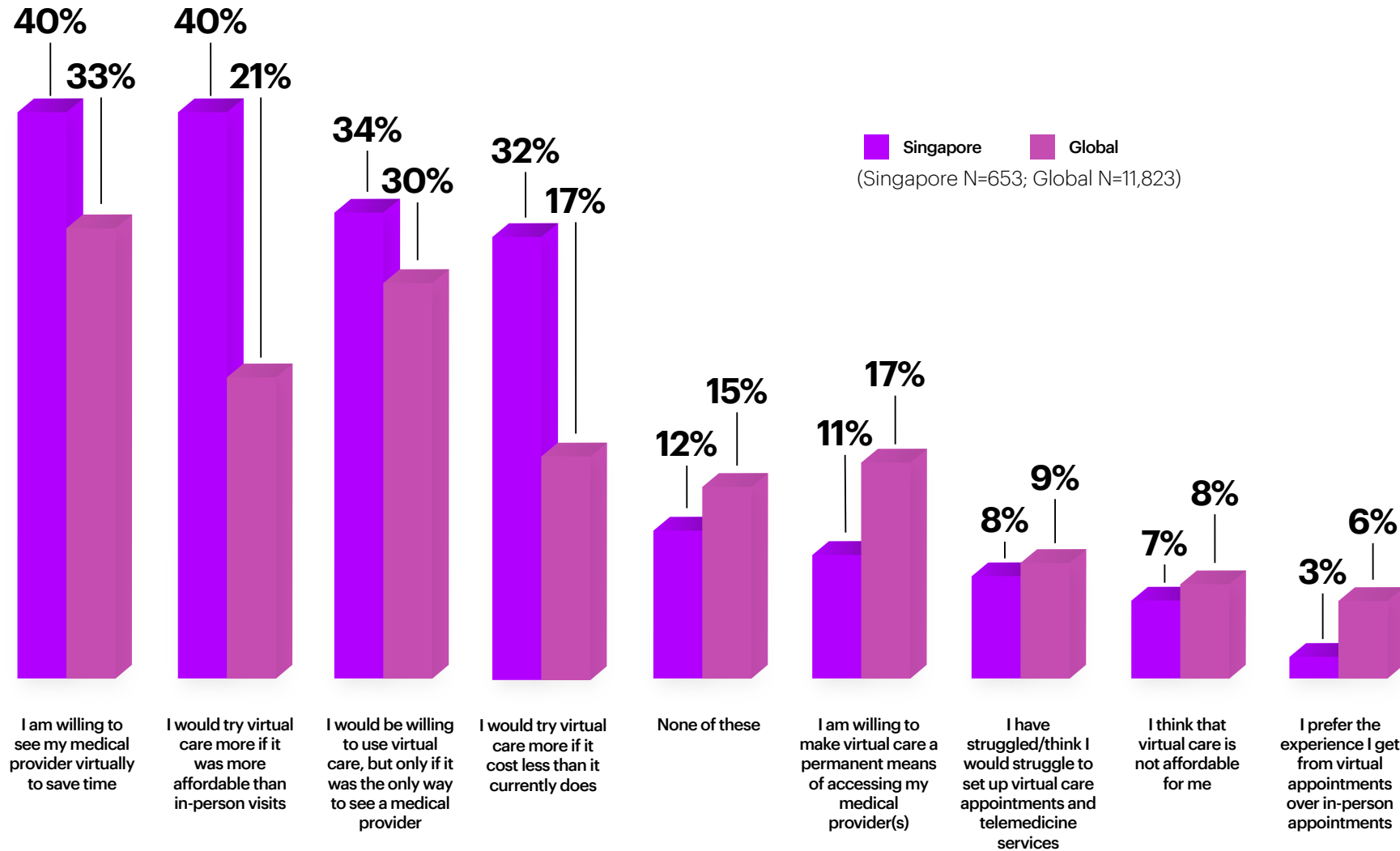
Regardless of their age, many have faced financial barriers when seeking healthcare services. Only 47% of Singaporeans say they have never been unable to afford their medical care or treatments. Almost one-third (30%) believe the healthcare services they receive are overpriced, compared with 22% globally—and not many (14%) know where to go for financial assistance to help pay for treatments or medications. Surprise at the cost of treatments, appointments, or medications was a common reason behind negative experiences, cited by 34% of respondents in Singapore.

Fig. 3: Virtual services could be more affordable

Q. Which, if any, of the following statements about virtual care apply to you? Select all that apply.

These financial barriers might explain the low adoption of virtual appointments—people in Singapore are more likely than others surveyed to say they would try virtual care if the cost was right (Fig. 3).

■ Singapore ■ Global

(Singapore N=653; Global N=11,823)

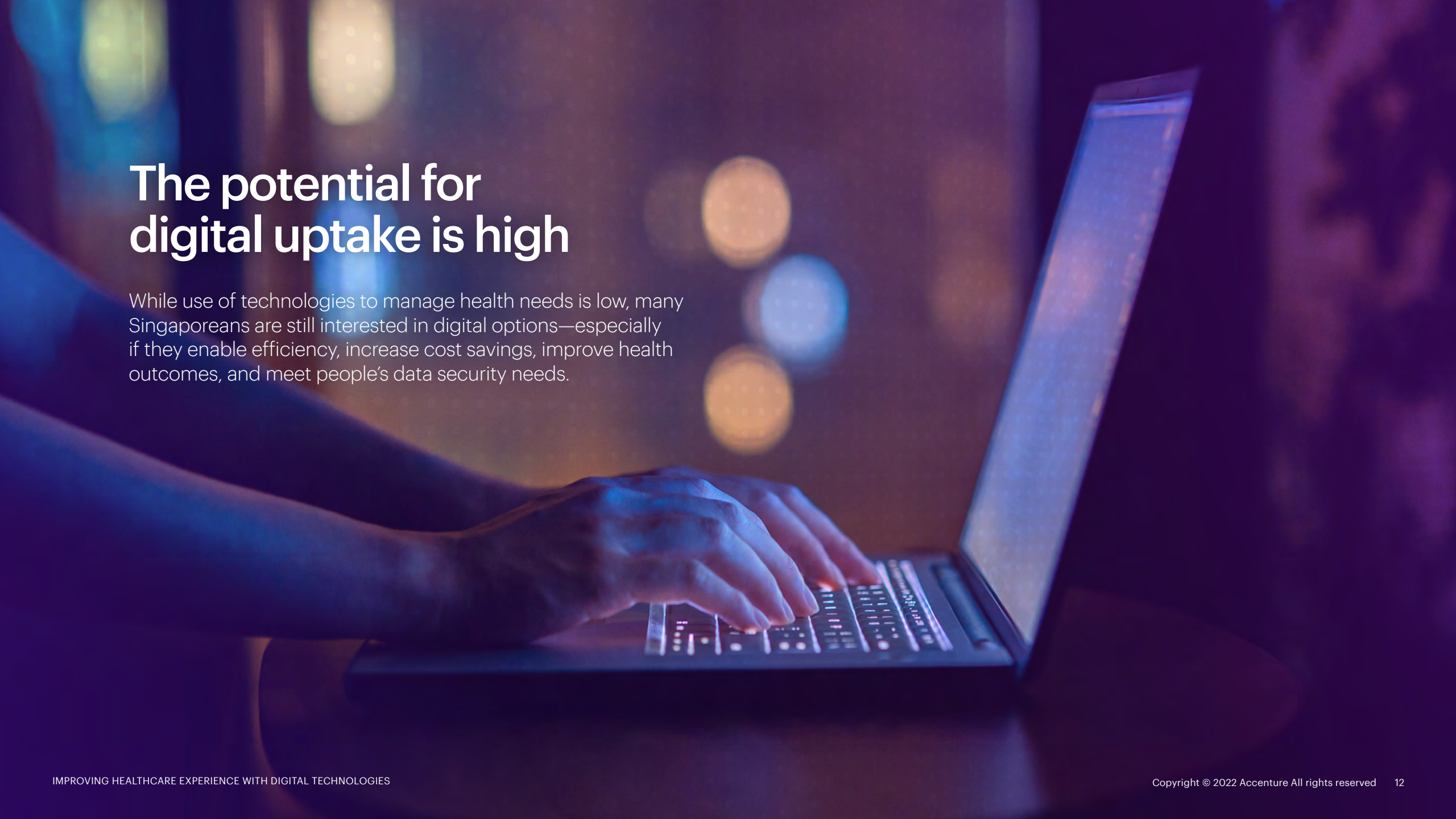| Statement	Singapore	Global
I am willing to see my medical provider virtually to save time	40%	33%
I would try virtual care more if it was more affordable than in-person visits	40%	21%
I would be willing to use virtual care, but only if it was the only way to see a medical provider	34%	30%
I would try virtual care more if it cost less than it currently does	32%	17%
None of these	12%	15%
I am willing to make virtual care a permanent means of accessing my medical provider(s)	11%	17%
I have struggled/think I would struggle to set up virtual care appointments and telemedicine services	8%	9%
I think that virtual care is not affordable for me	7%	8%
I prefer the experience I get from virtual appointments over in-person appointments	3%	6%

Many are open to using advanced digital technologies for their health needs—but they expect better quality tools and increased awareness around the options available to them. Nearly one-quarter (24%) of respondents say better-quality devices, software, and apps would make them more likely to use digital technology to manage their health, but quality can only go so far without the guidance needed to find and use these technologies.

A little over one-fifth (21%) say they would be more likely to use digital technologies if they knew more about what digital options were available to them, and 15% say they would if they received training on how to use these options.

Health providers can help their patients navigate the digital healthcare space with ease by introducing them to relevant technologies and making sure they understand how to use these tools. Other healthcare players, such as pharmaceutical and technology companies, can prioritize building digital technologies and therapeutics that are high-quality and easy to use.

The potential for digital uptake is high

While use of technologies to manage health needs is low, many Singaporeans are still interested in digital options—especially if they enable efficiency, increase cost savings, improve health outcomes, and meet people's data security needs.

Convenience and efficiency are top motivators for digital adoption

Over half (51%) of those who have had a negative healthcare experience say it was caused by inefficiencies such as long wait times.

Singaporeans are more likely than their peers around the world to be willing to see their medical provider virtually to save time (Fig. 3)—a benefit that is especially valuable to Gen Z (52%) and Millennial (51%) Singaporeans.

Respondents in Singapore are also willing to use digital technologies (e.g., a mobile phone, tablet, or wearable device) to interact with their medical providers for a number of cases that would increase convenience. For example, 44% would use these technologies to receive their prescriptions, and 29% would do so to expand access to their preferred medical doctors and treatments, for instance by being able to choose from more appointment times.

Similarly, 38% of respondents say they would be more likely to participate in a program to manage their health condition digitally (i.e., through their computer, smartphone, or other digital device) if it reduced the number of in-person visits they have to make.

Affordability challenges remain a barrier to digital adoption

Concerns over cost remain a barrier to the adoption of digital technologies for many, but this could also be turned into an opportunity: Singaporeans are more likely than others to say they would use digital technology to interact with their medical providers if it was a cheaper alternative to their current way of interacting with providers (41% say so, compared with 23% globally).

More than half (53%) say cost savings would make them more likely to participate in a program to manage their health digitally (vs. 27% globally), and 40% say lower costs of devices, software, and apps would make them more likely to use digital technology to manage their health (vs. 20% globally).

Respondents are open to using services or digital technologies for disease prevention, but only 32% say they would be willing to pay for these services or technologies if they were at a low or discounted cost. However, more respondents (43%, vs. 34% globally) would use them if they were free.

People are looking for better health outcomes

People are willing to use digital forms of care to improve their health. For example, Singaporeans would consider using digital therapeutics for disease monitoring or management of an ongoing illness (Fig. 4). People are also willing to use digital technology to interact with their medical providers for disease prevention (29%) or to treat and manage chronic conditions (27%).
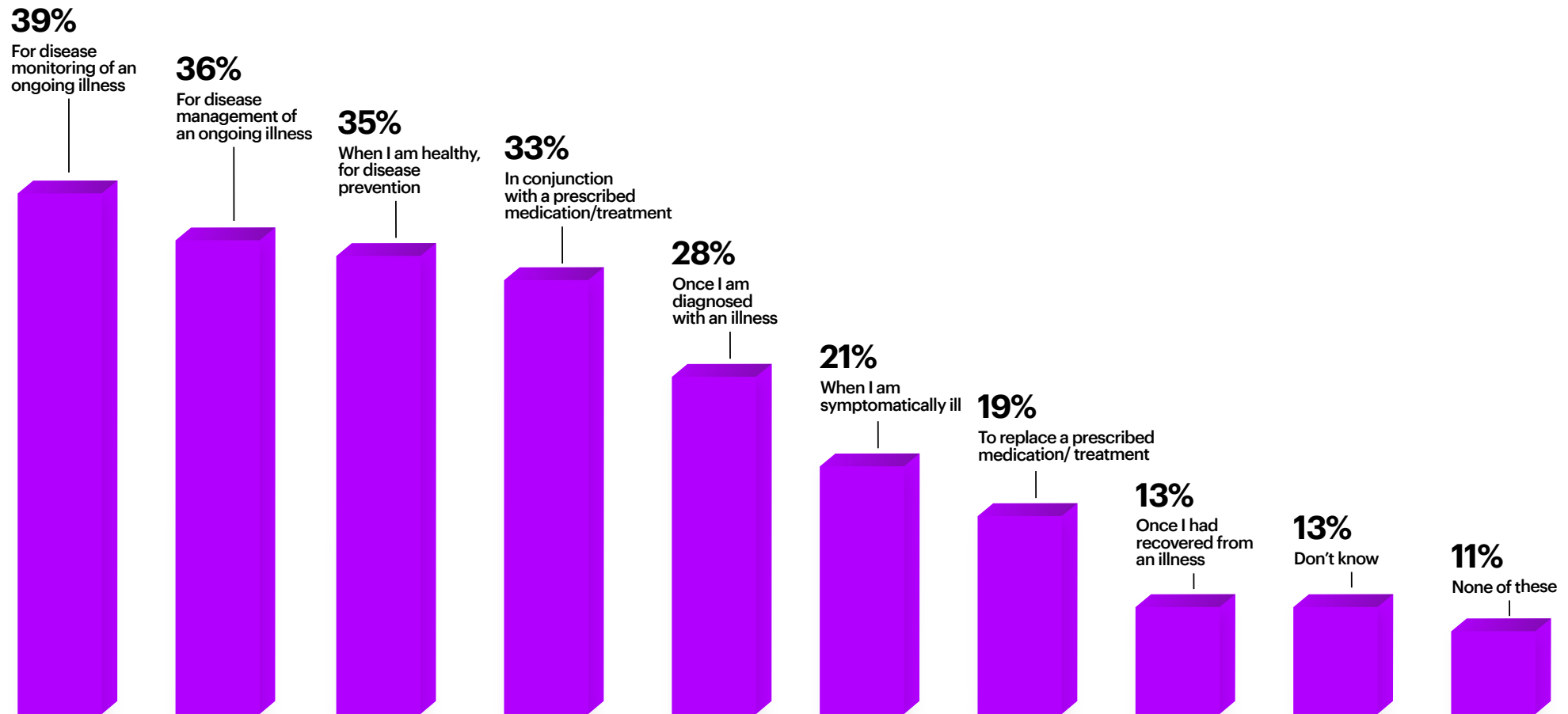
Over a third (37%) of respondents say receiving useful information about their health would make them more likely to participate in a program that helps them manage their health digitally, while 36% say this information would make them more likely to use digital technology to manage their health. The insights provided by these technologies can help people—and the providers with which they share their data—tailor treatments and healthcare experiences to meet their unique needs.

Singaporeans are also open to smart technologies, which can improve the accuracy of their diagnoses and increase the quality time spent with their providers. Most respondents are comfortable having a doctor who uses artificial intelligence or machine learning to aid in diagnosis or treatment decisions (57%) or for administrative purposes (69%)—and nearly half are comfortable with more advanced use cases of these technologies, such as using an app powered by artificial intelligence to determine if they need a diagnosis (47%) or using digital technology and artificial intelligence to get a diagnosis, treatment, or to participate in a clinical trial (47%). These comfort levels suggest that Singaporeans are not completely unwilling to incorporate technologies into their healthcare experiences—especially if their medical providers are involved. Instead, other factors such as cost could be getting in the way.

Fig. 4: Many would consider using digital therapeutics to manage their health

Q. For the following question, by "digital therapeutics," we mean applications that are tailored to a person's unique condition or disease and can customize interactions to provide reminders to take medications, schedule follow-up visits, or modify diet. In which, if any, of the following stages would you consider using digital therapeutics? Select all that apply.

39%
For disease monitoring of an ongoing illness

36%
For disease management of an ongoing illness

35%
When I am healthy, for disease prevention

33%
In conjunction with a prescribed medication/treatment

28%
Once I am diagnosed with an illness

21%
When I am symptomatically ill

19%
To replace a prescribed medication/ treatment

13%
Once I had recovered from an illness

13%
Don't know

11%
None of these

(Singapore N=653)

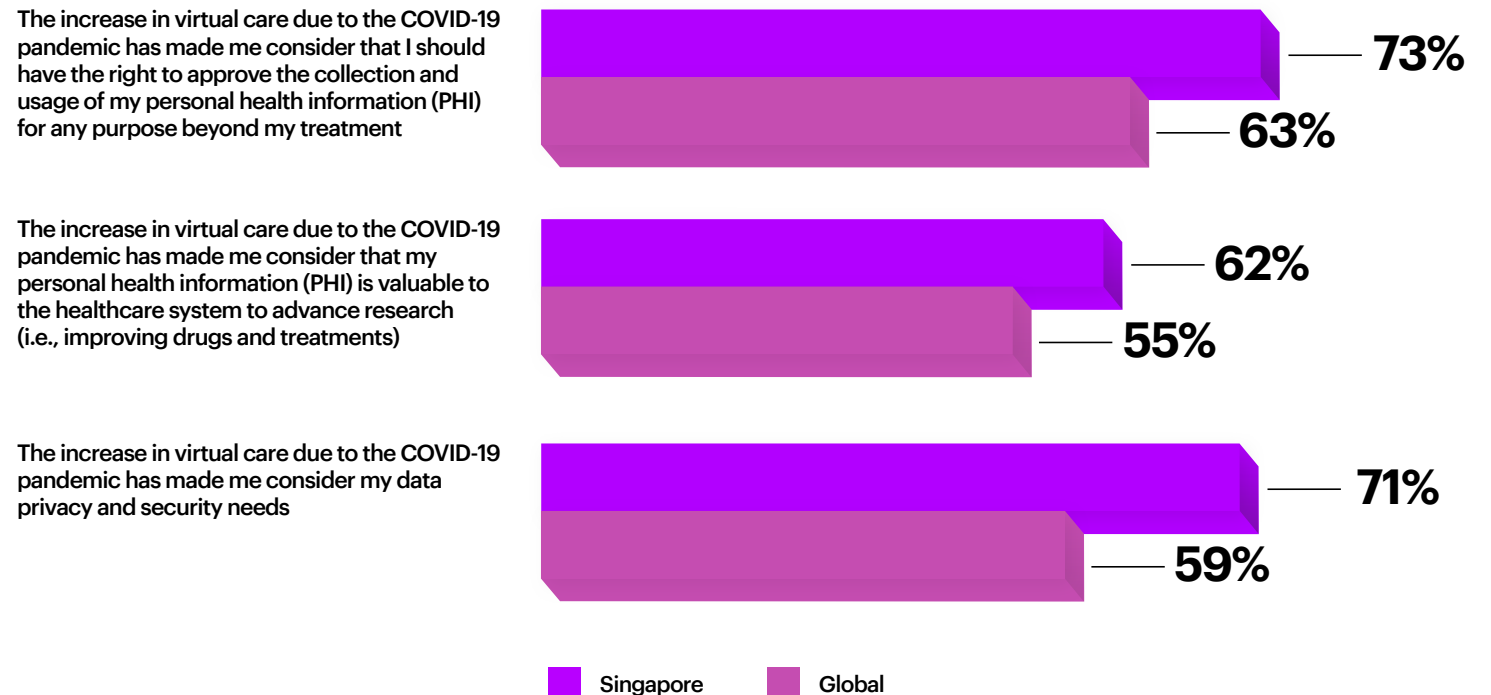# Data privacy and security must be prioritized

Data privacy and security are priorities for Singaporeans—and ensuring these needs are met could increase confidence in, and consequently adoption of, digital technologies.

Respondents in Singapore are more likely than others to say the increase in virtual care due to the COVID-19 pandemic has made them consider their data privacy and security needs (Fig. 5).

To encourage people to manage their health with digital technologies, providers must take into consideration this increased awareness around data privacy needs. Over one-third (34%) of respondents say more confidence in data security would make them more likely to use digital technology to manage their health, and 39% say they would be more likely to participate in a program that helps them manage their health digitally if their data privacy and security was ensured.

Fig. 5: Singaporeans are more aware of their data privacy and security

Q. To what extent do you agree or disagree with the following statements? "Strongly agree" and "Agree" responses.

The increase in virtual care due to the COVID-19 pandemic has made me consider that I should have the right to approve the collection and usage of my personal health information (PHI) for any purpose beyond my treatment
73%
63%

The increase in virtual care due to the COVID-19 pandemic has made me consider that my personal health information (PHI) is valuable to the healthcare system to advance research (i.e., improving drugs and treatments)
62%
55%

The increase in virtual care due to the COVID-19 pandemic has made me consider my data privacy and security needs
71%
**59%**

■ **Singapore** ■ **Global**

(Singapore N=653; Global N=11,823)

Trust across the health ecosystem varies, hindering effective care

Traditional healthcare providers are the most trusted sources of information (Fig. 6), placing them in a unique position to guide patients throughout their healthcare journeys—including encouraging them to use digital technologies to manage their health.
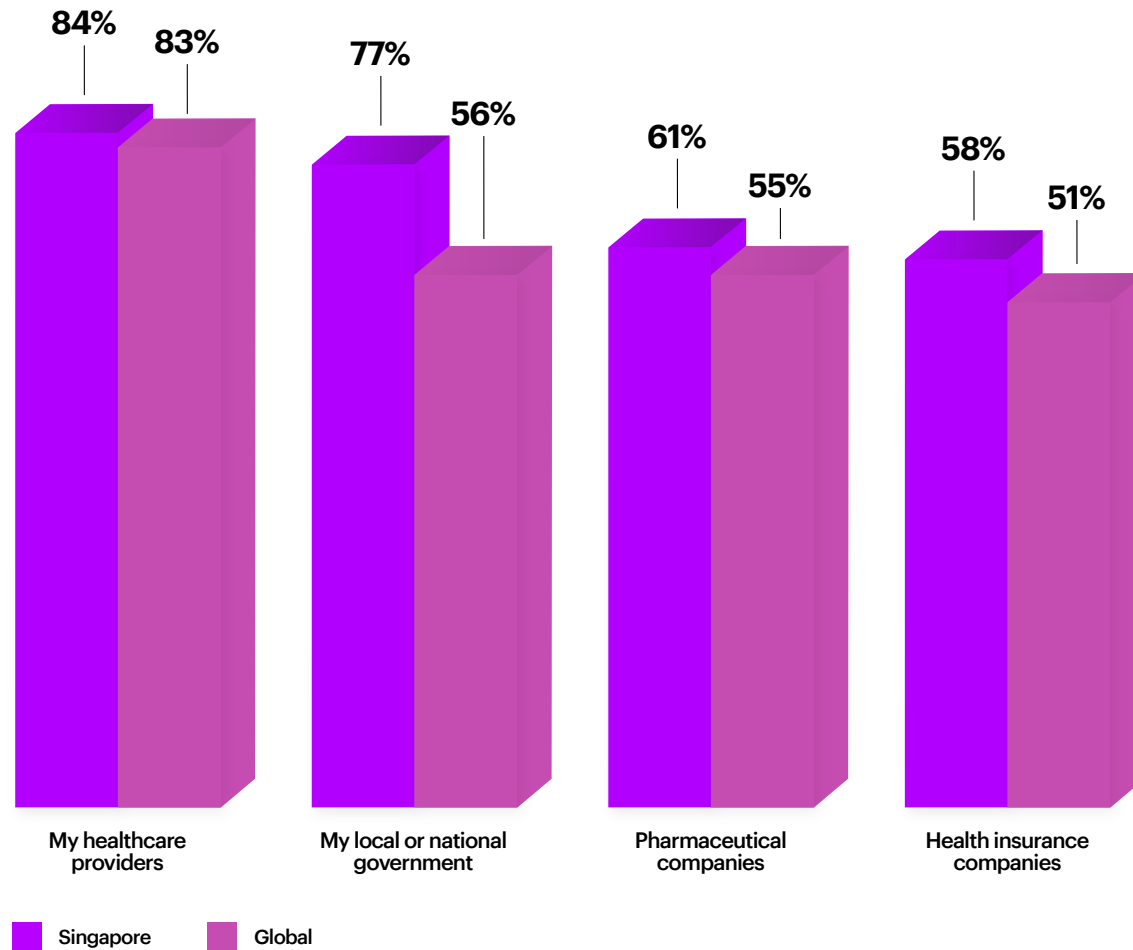
When asked what would make them more likely to use digital technology to manage their health, 21% of Singaporean respondents said increased awareness of the digital options available to them. Medical providers can boost the adoption of digital technologies and improve their patients' health outcomes by filling this awareness gap.

This patient-provider trust can go a long way in encouraging digital adoption: over a quarter of Singaporeans say recommendations from medical providers would make them more likely to participate in a program that helps them manage their health digitally (27%) or use digital technology to manage their health (29%).
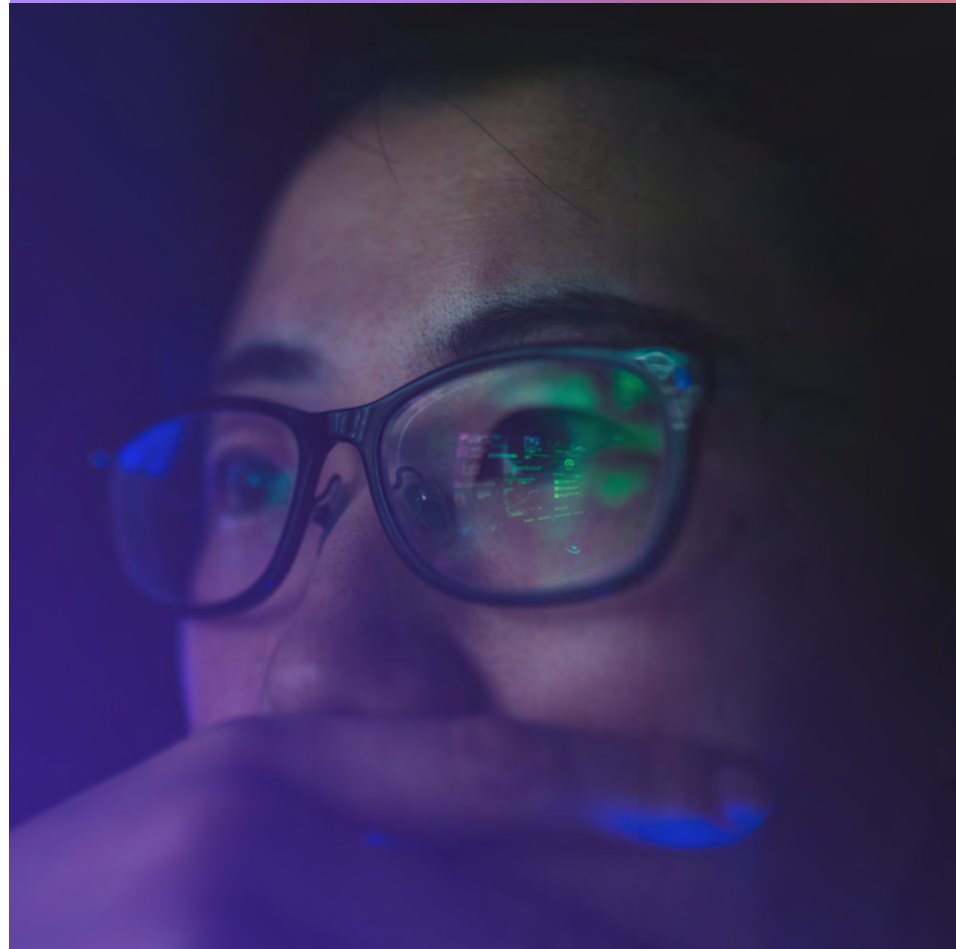
Fig. 6: People trust information from their medical providers and government

Q. Overall, how much do you trust information provided by the following sources?
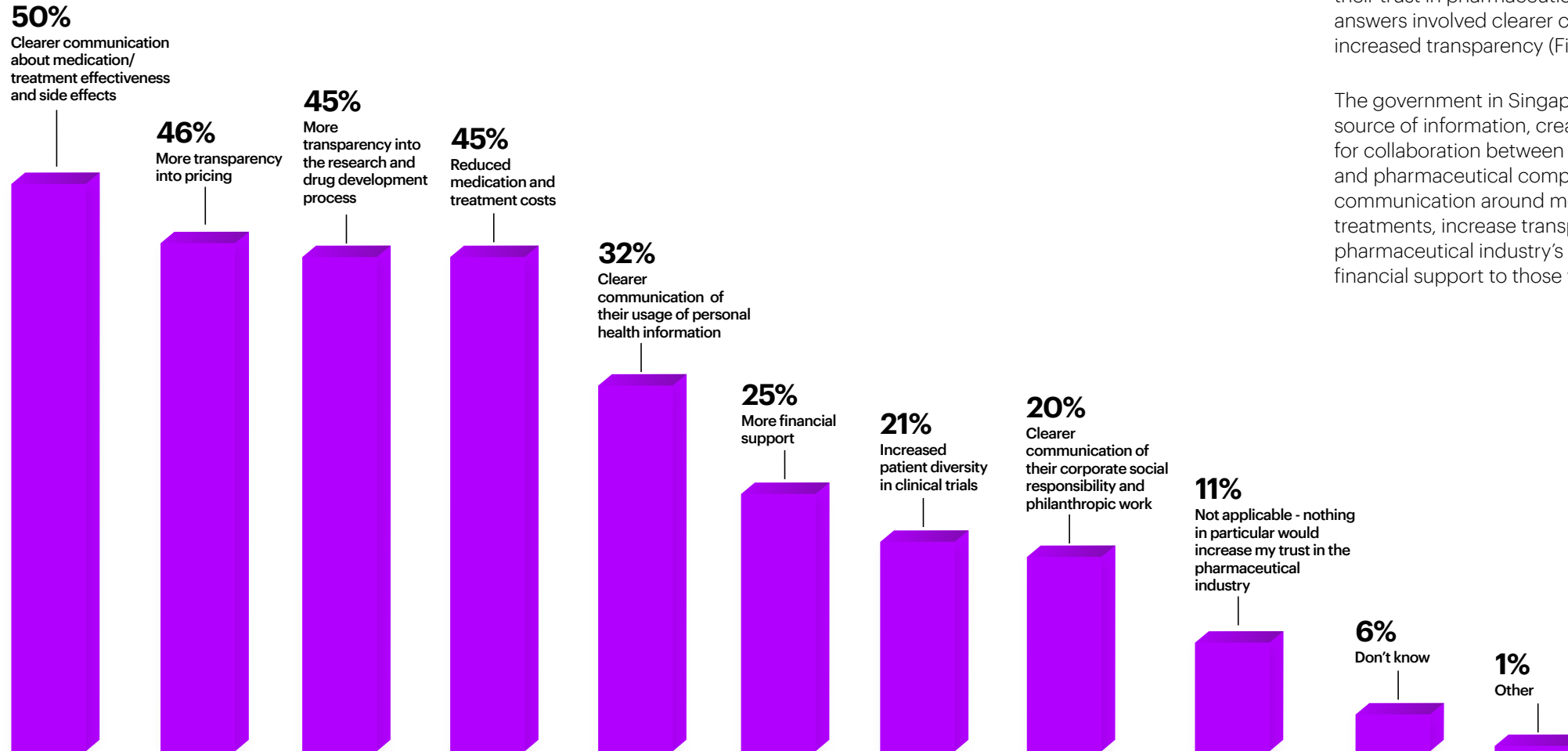"Very much" and "A little" responses.

	Singapore	Global
My healthcare providers	84%	83%
My local or national government	77%	56%
Pharmaceutical companies	61%	55%
Health insurance companies	58%	51%

(Singapore N=653; Global N=11,823)

But digital technologies cannot be the only component of a healthcare system that delivers seamless experiences—other providers such as pharmaceutical companies must be integrated into the wider healthcare ecosystem to improve health outcomes. Doing this requires trust in the pharmaceutical industry, but respondents have mixed feelings about these healthcare players (Fig. 6).

Not many Singaporeans trust pharmaceutical companies. For instance, less than one-fifth (16%) of respondents believe that pharmaceutical companies are doing a good job providing them with the best medications and services, compared with 21% globally.

A lack of clarity around medication protocols and treatment purposes could be contributing to the mixed feelings toward pharmaceutical companies. Currently, just 39% of respondents believe their medical providers and pharmacists do a good job explaining how to take medication; 44% say they understand the purpose of the medications they take (vs. 52% globally); and 9% say they know which companies make the medications they take (vs. 19% globally).

Fig. 7: Communication and transparency can increase trust in the pharmaceutical industry

Q. Which, if any, of the following would increase your trust in the pharmaceutical industry? Select all that apply.

50%
Clearer communication about medication/ treatment effectiveness and side effects

46%
More transparency into pricing

45%
More transparency into the research and drug development process

45%
Reduced medication and treatment costs

32%
Clearer communication of their usage of personal health information

25%
More financial support

21%
Increased patient diversity in clinical trials

20%
Clearer communication of their corporate social responsibility and philanthropic work

11%
Not applicable - nothing in particular would increase my trust in the pharmaceutical industry

6%
Don't know

1%
Other

(Singapore N=653)

What can pharmaceutical companies do to build trust among Singaporeans, and how can medical providers help? When asked what would increase their trust in pharmaceutical companies, the top answers involved clearer communication and increased transparency (Fig. 7).
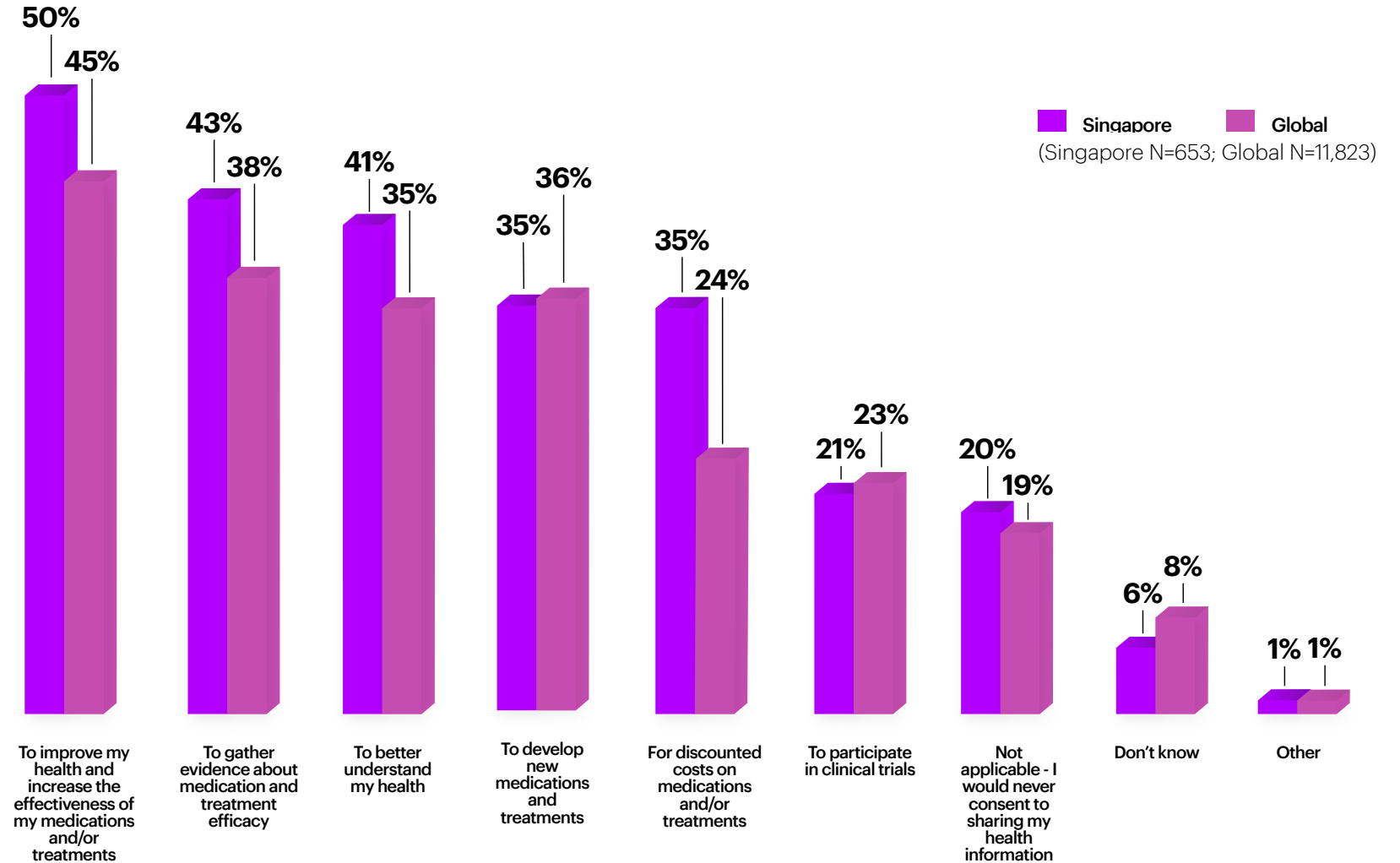
The government in Singapore is a highly trusted source of information, creating an opportunity for collaboration between policymakers and pharmaceutical companies to improve communication around medications and treatments, increase transparency into the pharmaceutical industry's processes, and offer financial support to those who need it.

But medical providers also can leverage the trust they have with their patients to boost trust in the pharmaceutical industry, ultimately improving health outcomes and building a more efficient and well-integrated healthcare system.

For example, while just 19% of Singaporeans would let pharmaceutical companies manage their illness in collaboration with a medical provider, many more would allow their medical providers to share their personal health information with pharmaceutical companies if it improved their health in some way (Fig. 8).

Fig. 8: People would let their medical provider share their health information with pharmaceutical companies for personal benefits

Q. For which, if any, of the following reasons would you allow your medical provider to share your personal health information with pharmaceutical companies? Select all that apply.

Singapore Global
(Singapore N=653; Global N=11,823)

	Singapore	Global
To improve my health and increase the effectiveness of my medications and/or treatments	50%	45%
To gather evidence about medication and treatment efficacy	43%	38%
To better understand my health	41%	35%
To develop new medications and treatments	35%	36%
For discounted costs on medications and/or treatments	35%	24%
To participate in clinical trials	21%	23%
Not applicable - I would never consent to sharing my health information	20%	19%
Don't know	6%	8%
Other	1%	1%

People want to receive emotional support

The use of digital technologies can lead to improvements for both people and providers alike by increasing efficiency, improving diagnosis accuracy, and personalizing treatments. But providers must maintain a balance between technology and human interactions to keep people satisfied throughout their health journey.
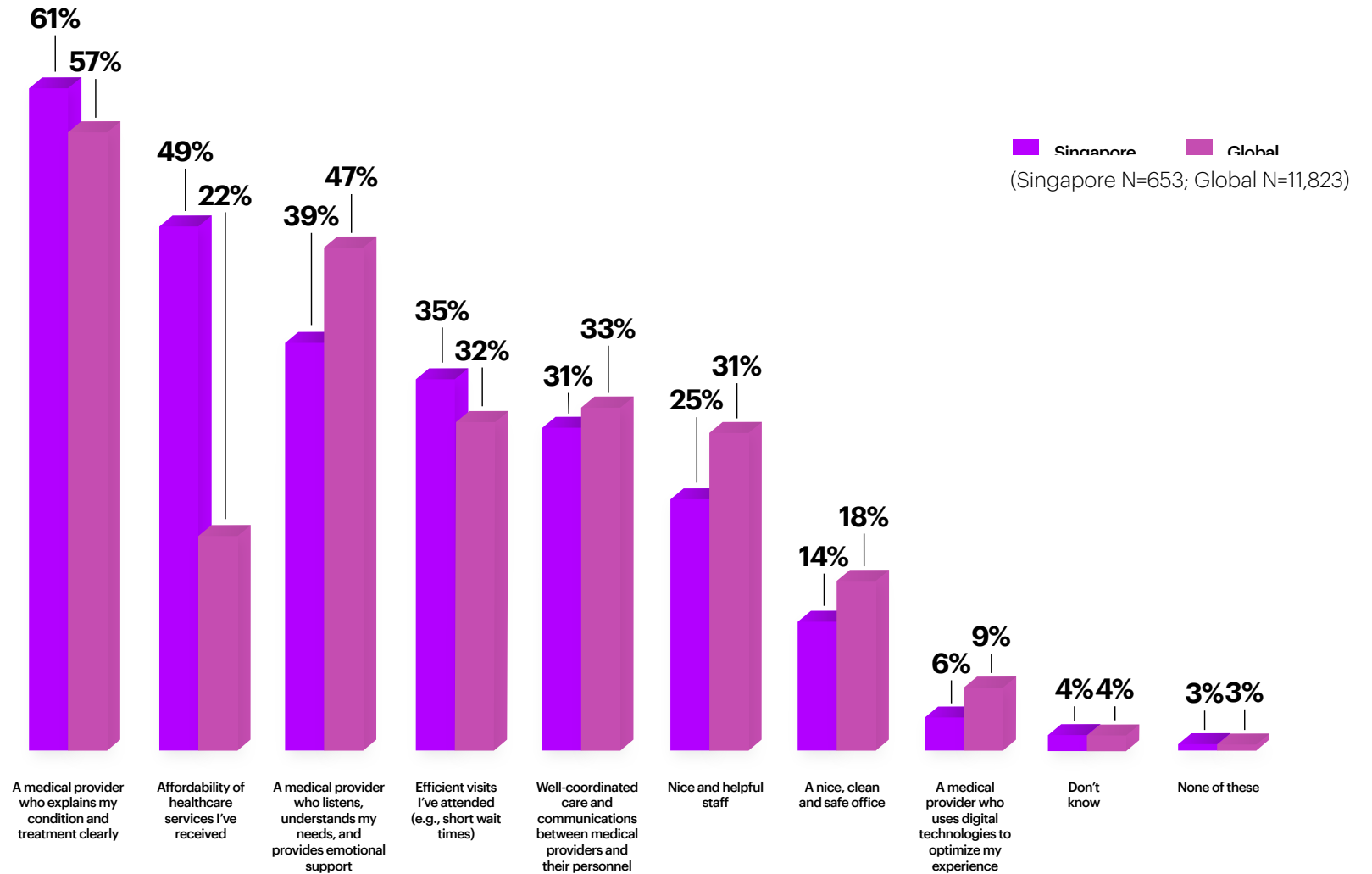
In general, Singapore respondents report high satisfaction with their experiences seeking medical care, including finding a medical provider for their needs (71%); scheduling an appointment (57%); the actual appointment (58%); post-appointment logistics (59%); and managing their health (67%).

How can providers maintain, or even improve on, these satisfaction levels? For a positive experience with a medical provider, people are looking for clear explanations, affordability, and empathy—all of which emphasize the need for an involved, supportive provider (Fig. 9).

These factors are also important for medications and treatments, with many citing affordability (69%, vs. 42% globally), convenience of getting the medication (53%), and how well they understand the medication (44%) as priorities.

Fig. 9: The human touch is critical for a positive healthcare experience

Q. Which three, if any, of the following factors are most important for your positive experience with a medical provider? Select top three.

■ Singapore ■ Global
(Singapore N=653; Global N=11,823)

Factor	Singapore	Global
A medical provider who explains my condition and treatment clearly	61%	57%
Affordability of healthcare services I've received	49%	22%
A medical provider who listens, understands my needs, and provides emotional support	39%	47%
Efficient visits I've attended (e.g., short wait times)	35%	32%
Well-coordinated care and communications between medical providers and their personnel	31%	33%
Nice and helpful staff	25%	31%
A nice, clean and safe office	14%	18%
A medical provider who uses digital technologies to optimize my experience	6%	9%
Don't know	4%	4%
None of these	3%	3%

Conclusion

The signals we saw in our research revealed the path to better healthcare experiences in Singapore involves close collaboration between healthcare players across the ecosystem to meet people's expectations, high quality and affordable digital technologies that increase service efficiency and treatment effectiveness, and medical providers who offer emotional support and empathy.

Build close collaboration between providers to improve healthcare experiences

The task of humanizing healthcare does not solely fall on the shoulders of providers. All players—from pharmaceutical companies to technology companies to insurance providers—should work in unison to improve care experiences.

Singaporeans trust their government and primary care providers as sources of accurate information and to protect their healthcare data—but this trust drops substantially for technology and pharmaceutical companies, both of which play a crucial role in building a digitally enabled, efficient healthcare system. By working closely with traditional providers and policymakers, these companies can create products and services that meet people's needs and preferences and establish themselves as trusted healthcare players.

Medical providers must be at the core of all efforts to boost engagement with and trust in other providers. They can facilitate secure data-sharing across the healthcare ecosystem, train people on how to use digital technologies, and guide patients throughout their healthcare journeys. These collaborative efforts can result in more coordinated, effective, and better healthcare experiences for patients and providers alike.

Embrace digital technologies that support health management and healthcare access

The use of digital health technologies is low in Singapore, but people are open to incorporating these tools into their health routines if doing so is affordable, efficient, and keeps their data protected.

Trusted medical providers are in a unique position to encourage the uptake of technologies ranging from electronic health records and wearables to AI-enabled apps and tools. These providers can help their patients navigate the digital options available and understand the benefits these technologies deliver in terms of personalized care and treatments, more accurate diagnoses, and deeper patient-provider relationships. At the same time, technology and pharmaceutical companies can work with healthcare providers to create products and services that are high in quality, affordable, and easy to use—transforming the effectiveness of treatments and healthcare experiences.

Maintain the human touch in healthcare experiences

The effective use of digital technologies and data-sharing can power seamless communication between providers and their patients, improve the accuracy of diagnoses, and increase the effectiveness of treatments.

But this is not enough for a positive healthcare experience: Singaporeans want a medical provider who offers emotional support, empathy, and communicates with them throughout their healthcare experience.Healthcare providers will need to balance the advantages that digitization offers with the traditional aspects of healthcare

that comfort people. Singapore residents are more ready than most to embrace digital technologies to manage their health. To boost adoption, the healthcare ecosystem, as a whole, must present information about the values of digital technologies more clearly and make these technologies affordable and accessible.

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About the 2021 Accenture Health and Life Sciences Experience Survey

Accenture commissioned a survey of 11,823 people aged 18+ to assess their attitudes toward the healthcare system in terms of access, equity, service experience, digital technology adoption and trust. The online survey included people across 14 countries: Australia (649), China, (806), Finland (662), France (822), Germany (872), India (873), Ireland (657), Italy (718), Japan (833), Norway (648), Singapore (653), Spain (675), United Kingdom (1,200) and the United States (1,755). Forty percent of the sample represent patients with current conditions in the following therapeutic areas: Oncology, Cardiovascular, Respiratory, Immunology, Gastroenterology and Neurology. The survey was fielded and analyzed during May and July 2021.

Thanks to **Oxford Economics** for its assistance in developing the survey, analyzing the data and establishing key narratives.

Thanks to **YouGov** for carrying out the fieldwork.

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