BUILDING TELEHEALTH EQUITY:
Insights from the Sault Sainte Marie Tribe of Chippewa Indians

CONNECTED NATION®

July 2024

INTRODUCTION

In the ever-changing landscape of health care, the intersection of technology and health has emerged in telehealth to reach underserved populations in ways traditional health care practices cannot.

Telehealth is the use of communications technology to seamlessly connect health care providers, practitioners, and patients without the need for in-person appointments. As technology has advanced, so have the means to access telehealth services. Beginning as a way for doctors to reach patients via telephone, this form of health care has evolved into an array of services that include virtual appointments, remote monitoring, text messaging between patients and their health care providers, and numerous other services. Telehealth usage across Michigan spiked during the peak of the COVID-19 pandemic. Although usage has declined since, telehealth communication levels have remained higher than before the pandemic because the public is more comfortable accessing virtual services.

Telehealth plays a vital role in rural Michigan, where medical care is limited and many clinics are at risk of closing. Travel to rural health care providers can be difficult, particularly during Michigan's winter months. Ensuring that Michigan residents have access to fast, reliable internet is paramount among government officials and public health professionals.

In 2022, Connected Nation Michigan partnered with the Sault Sainte Marie Tribe of Chippewa Indians to further understand how tribe members use telehealth, what barriers exist, and attitudes toward telehealth. This effort aims to identify ways tribal health clinics can expand their telehealth offerings, identify unmet demand, and address concerns that may prevent some tribe members from adopting telehealth services. As telehealth continues to evolve, it is essential to understand the unique challenges and opportunities that the Sault Tribe faces in its effort to improve health equity among tribe members.

TELEHEALTH BACKGROUND

Health care has undergone significant transformations in the wake of the COVID-19 pandemic. This public health emergency allowed health care to become more accessible to the public through online communication methods commonly known as telehealth. The World Health Organization (WHO) defines telehealth as "the delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities" (1). In other words, telehealth facilitates connections between patients and health care providers without in-person office visits. It primarily relies on internet access via computers, tablets, or smartphones to connect.

Telehealth has grown in popularity in recent years due to its many benefits. Through virtual appointments, patients can consult with their doctors from anywhere, save valuable time by avoiding in-office waiting and travel, and mitigate their exposure to illness by limiting visits to health care facilities (2). Telehealth encompasses diverse modes of interaction, such as speaking directly with a health care provider over the phone or video (synchronous), sending and receiving messages to and from a health care provider via email or other secure file exchanges (asynchronous), and through remote monitoring of vital signs. Telehealth encompasses both clinical services and nonclinical applications, such as scheduling, patient reminders, and providing access to patient records. Altogether, telehealth applications have been shown to reduce patient no-shows and increase patient retention while simultaneously allowing health care providers to reach more people and provide quality care to remote patients (3).

TELEHEALTH EXPANSION DURING THE COVID-19 PANDEMIC

Telehealth and telemedicine were not novel concepts before the emergence of the COVID-19 pandemic. However, this public health crisis changed the way health care providers interacted with patients, as it dismantled many previously existing barriers to telehealth access.

Temporary waivers issued by the U.S. Department of Health and Human Services (HHS) Secretary expanded the types of services that Medicare could provide through telehealth and reimbursed such services at parity with in-person care (4). All health care professionals who were eligible to bill Medicare could now deliver their services via telehealth. The Secretary also waived Medicare's licensure requirements and allowed providers to use popular technology platforms for telehealth. The HHS expanded Medicare coverage for audio-only services and waived the requirement that patients have an established relationship with a provider before receiving telehealth services (5).

Naturally, the relaxation of telehealth requirements allowed more people to access these resources. Patients have become more open to telehealth since many had no choice but to utilize it during the pandemic. They have dispelled previously held beliefs that telehealth services lack the quality of in-person care and have eased privacy concerns. As more people use telehealth, the stigma that telehealth is inferior to in-person care dissolves.

The effects of this expansion of the health care system have been transformative for many who previously found health care difficult to access. It has become a lifeline for those in rural communities where the distance to access medical treatment is many miles away. The aging population, which may face challenges related to mobility, has found convenience in telehealth. Immunocompromised individuals, who must exercise extreme caution in health care settings, greatly benefit from remote care as well. Additionally, anyone with limited availability to schedule time out of their workdays for in-person medical appointments now has an alternative mode of health care that is more flexible. Ultimately, telehealth has paved the way for improving the health and well-being of individuals across diverse backgrounds and circumstances, creating a healthier society.

LIMITS TO TELEHEALTH ACCESS

Despite the potential advantages that telehealth services can offer, rural communities may not have access to remote services due to a lack of broadband infrastructure. Even if high-speed internet does exist in a community, some households may still be left behind if they are unable to afford the cost of internet or do not own a computing device that can connect to the internet. Furthermore, insurance that does not cover the cost of telehealth may be another deterrent to those who could benefit from telehealth but choose not to do so. Eliminating barriers to telehealth will increase the overall impact this vital service will have.
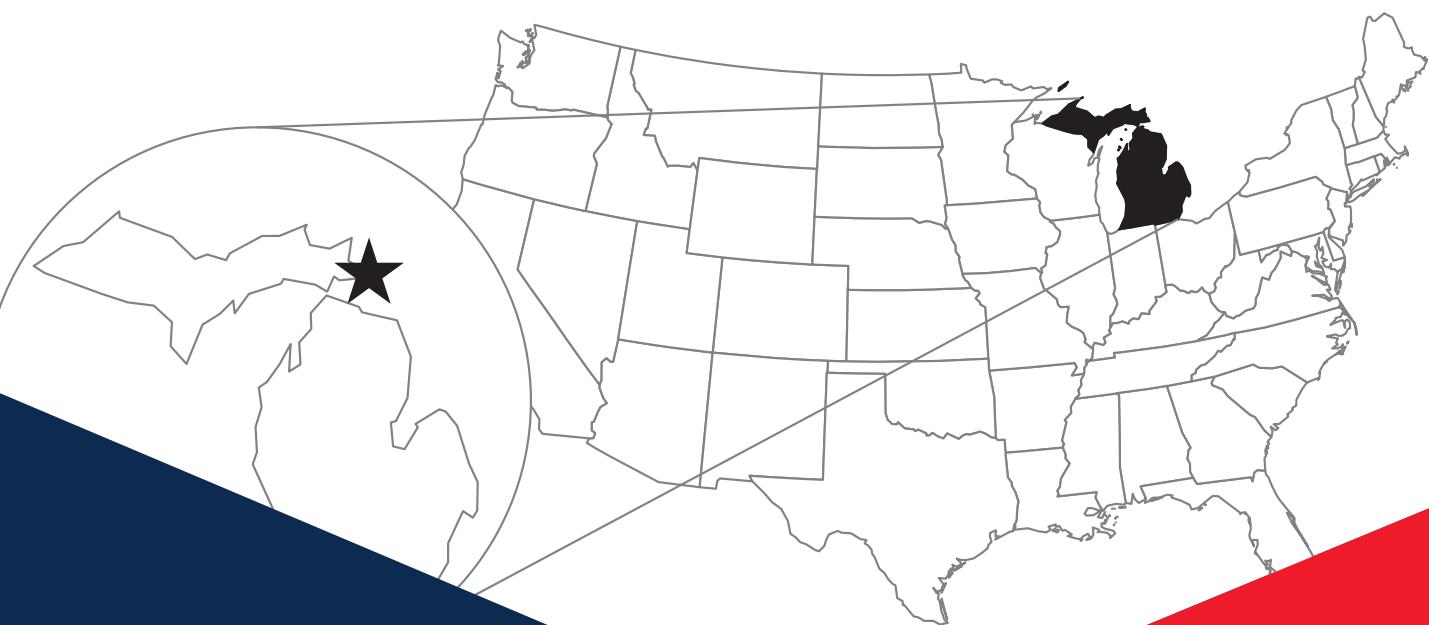
TELEHEALTH IN MICHIGAN

The Upper Peninsula of Michigan, commonly known as the U.P., comprises 15 counties with a total population of 301,608 according to the 2020 census, down from 311,631 in 2010. This population decline has been most significant in the cities of Sault Sainte Marie, Marquette, and Munising (6).

The impact of this shrinkage has been seen across the health care landscape in the U.P. as hospitals and health clinics in rural communities have closed. Existing health clinics often grapple with staffing shortages, as well as the rising costs that keep hospitals running, limiting their reach as resources become sparse (7).

Rural Michigan communities experience the most difficulties in obtaining health care, especially for specialty services beyond primary care. Economic hardships and decreasing rural populations in Michigan have initiated the closure of many hospitals. According to the UNC Center for Health Services Research, 149 hospitals have closed nationally since 2010, leaving residents vulnerable to inadequate health treatment (8). For residents in rural communities, the distance between home and the hospital could mean life or death. Some individuals are forced to travel 45 minutes to the nearest hospital. While telehealth cannot replace emergency care, it can play a pivotal role in mitigating the likelihood of life-threatening health issues — for example, via remote heart monitoring or remote stroke management care. Telehealth can also offer preventative education and early in-home treatment, helping rural residents with limited access to clinics avoid the onset of critical health problems in the first place.

However, to access telehealth, reliable high-speed internet access is a prerequisite — a need that still persists in many rural Michigan communities and tribal lands. According to the Telehealth in Michigan Report, 86% of Michigan households have access to broadband, meaning 14% of households are without a reliable internet connection (9). The state has been working to streamline efforts across government agencies related to broadband access. Internet expansion is necessary for telehealth and telemedicine to be accessible for all, including both residents and clinics that rely on the internet to provide their services (10).

Use of telehealth in Michigan among insured individuals currently stands at 11% of Medicare recipients, 13% of Medicaid recipients, and 17% of commercially insured patients (11). That's up from the less than 1% of the Michigan population who used telehealth before the COVID-19 pandemic, which suddenly spurred temporary flexibility in health insurance rules for telehealth (12). During the height of the pandemic, telehealth replaced in-person care as a preventative measure to stop the spread of the COVID-19 virus. At that time, 60% of privately insured individuals and 65% of Medicare beneficiaries used telehealth services in Michigan (13).

Rural communities in the state benefited the most from a wider prevalence of telehealth options, given their geographical isolation and limited health care resources. Telehealth was especially helpful for the 1 in 5 Michiganders who have mental health care needs and live in one of the 38 counties that have few or no behavioral health care providers (14). Prior to the COVID-19 pandemic, telehealth services were restricted by the "originating site" rule, meaning patients could only receive telehealth care from specific health care facilities located in counties outside Metropolitan Statistical Areas (MSAs) or rural Health Professional Shortage Areas (HPSAs) (15). During the pandemic, many programs like Medicare and Medicaid expanded the list of sites that patients could access from the comfort of their home, which increased the use of telehealth services. In 2021, patients who lived in areas where there was a shortage of behavioral health care providers were able to receive behavioral health care from another county in Michigan via telehealth, increasing the number of people in Michigan who received mental health treatment (16). Although there has been a decrease in telehealth usage post-pandemic, it is still much higher than activity levels in 2019.

Research has also shown that there is a direct correlation between access to broadband and the use of telehealth service (17). Expanding broadband internet access in the rural U.P. could enhance telehealth utilization in these areas.

TELEHEALTH AND THE AGING POPULATION

This new availability of telehealth has been particularly beneficial for older Americans. Telehealth resources provide more accessible, convenient care for the elderly, especially for those with limited mobility, no reliable transportation, or health issues that make leaving the home difficult. Geriatric-specific care, such as dementia or stroke management, can be conveniently accessed through telehealth. Telehealth can also reduce the level of caregiver burnout by supplementing in-home care with remote vital sign monitoring or daily electronic medication reminders.

Despite the benefits, telehealth still comes with some challenges for the elderly. The aging population in particular, a population that can benefit the most due to limited mobility and critical health conditions, often have more difficulties than others accessing and using telehealth services (18). Many older adults are not comfortable using technology and lack the digital skills to successfully execute a video call with a doctor. Family members or practitioners may be have to take on the added role of "tech support" during virtual appointments, and help the patient navigate the online portal being used to connect. Other older patients may have physical or cognitive barriers such as poor memory, hearing or vision impairments, or a physical disability that reduces their ability to use telehealth. Even commonly used platforms, such as Zoom, may not be easy to use for an elderly individual. For these reasons, the U.S. Department of Health and Human Services recommends that medical staff schedule a call with older patients before their appointment to walk them through the virtual platform and troubleshoot the issues the patient might have with technology (19).

As telehealth continues to expand, health care professionals should prioritize making telehealth more accessible and easier to use for individuals with disabilities or for those who lack digital literacy. This commitment to accessibility ensures that the aging population can seamlessly benefit from telehealth as a resource.

Insights from the
Sault Sainte Marie Tribe
of Chippewa Indians

Tribal Health Overview

Native Americans have reportedly long experienced poorer health than other populations living in the United States. Native populations served by the Indian Health Service (IHS) have the highest reported prevalence of type 2 diabetes in the world, fight cardiovascular disease as the leading cause of mortality, demonstrate the highest rate of substance abuse in the nation, and possess the greatest mortality rates from alcoholism, tuberculosis, homicide, and suicide than all other American populations (20).

These disparities result from a lack of resources within tribal communities, insufficient federal funding, and geographic isolation. Social determinants of health that contribute to negative health outcomes among tribal communities include a history of trauma, discrimination, and social exclusion coupled with poverty, fewer employment opportunities, poor quality of housing, limited access to healthy food, and poor quality health care (21).

Telehealth is seen as a method to bridge the gap in health care access in tribal communities and result in more positive health outcomes for community members by providing much-needed specialized care.

Survey Results

Households, and the residents within, are the lifeblood of a community. Understanding how residents are using high-speed internet to access health care services is critical to ensuring all residents on tribal lands have access to quality medical services.

For that reason, the Sault Sainte Marie Tribe of Chippewa Indians partnered with Connected Nation Michigan to ask tribal members about how they are using broadband technology to enhance their health care options, their attitudes toward telehealth applications, and what challenges they face when attempting to use available telehealth services. This information can help guide decisions about how best to design telehealth offerings and which telehealth options are in the greatest demand.

The following charts represent survey responses collected during the summer of 2023. During this time, 940 households with at least one enrolled Sault Tribe member responded to the survey, representing a response rate of 12.3%. Respondents could complete the survey by mail or online. This represents a margin of error of plus or minus 3% at a 95% confidence interval.

INTERNET CONNECTIVITY AND COMPUTER ACCESS

Without internet access or a personal computer, utilizing telehealth applications can present significant challenges. More than 9 out of 10 respondents (93.8%) own a cellphone, while 83.4% own a computer. This means that roughly 1 in 6 households do not possess a computer inside their home (Figure 1).

More than 4 out of 5 responding households (84.5%) stated that they subscribe to home internet service.

To further understand these data, internet subscriptions were broken down demographically among households by respondent age, annual household income, and by the number of children under 18 years old living in the home. Respondents with higher income are more likely to subscribe to a home internet service. Only 72% of respondents age 70 or older subscribe to the internet, which leaves just under one-third of that population disconnected from the internet and telehealth services (Figure 2).

Figure 1. Percent of Households Where Residents Own and Use Various Technologies

Use the internet outside of the home	66.3%
Own a computer	83.4%
Subscribe to home internet service	84.5%
Own a cell phone	93.8%
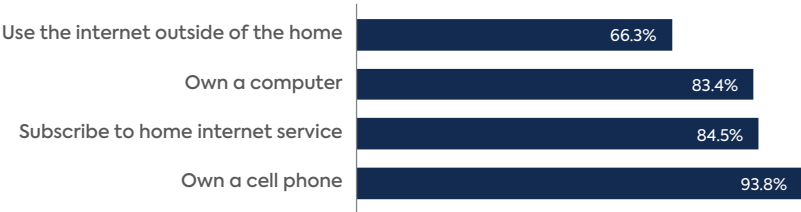
Figure 2. Respondents Who Subscribe to Home Internet Service

Age						Income						Children			
18 to 34	35 to 44	45 to 54	55 to 64	65 to 69	70 or older	Less than $15,000	$15,000 - $24,999	$25,000 - $34,999	$35,000 - $49,999	$50,000 - $74,999	$75,000 or more	No Children	1 Child	2 Children	3+ Children
95%	86%	90%	86%	90%	72%	58%	77%	86%	83%	89%	95%	84%	91%	92%	91%
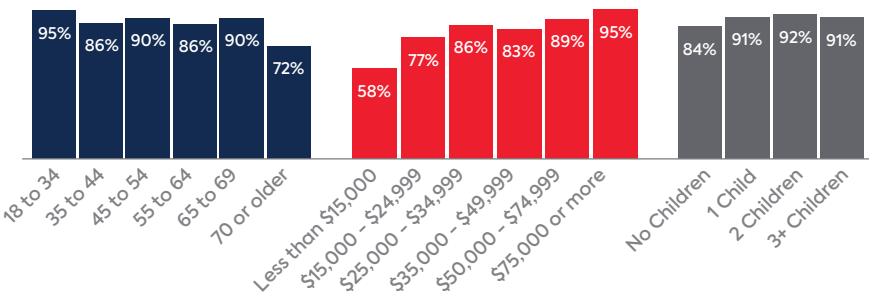
Survey Results

Home internet connections are not the only place where tribe members go online. Two out of 3 respondents (66.3%) said they use the internet outside of the home. Among this group, there is a strong correlation between internet usage and income. Age appears to be a key factor as well — a majority of respondents who use the internet outside of their homes are below the age of 70. Households without children are less likely to use internet outside the home than households with children (Figure 3).

Although a majority of households have internet connectivity, a significant portion are still excluded, limiting the number of valuable resources available for them to use at the click of a button, like telehealth.

TELEHEALTH AWARENESS AND USAGE AMONG TRIBAL MEMBERS

Nearly 2 out of 5 surveyed households (38.1%) reported having used telehealth services, while 41.0% expressed interest in using telehealth despite not having used it in the past (Figure 4).

An additional 20.9% have not used telehealth services and would not consider doing so. There are no significant differences in telehealth usage between home internet (41.2%), cell only (38.7%), and outside only (39.7%).

More than one-half of respondents (55%) said they know someone who has had a telehealth appointment. Respondents below the age of 64 are more likely to know at least one person who has used a telehealth application. Knowledge of other telehealth patients increases with income, where 72% of those with an annual income of $75,000 or more know at least one person who has used telehealth. (Figure 5).

.

Figure 3. Respondents Who Use Internet Outside of the Home
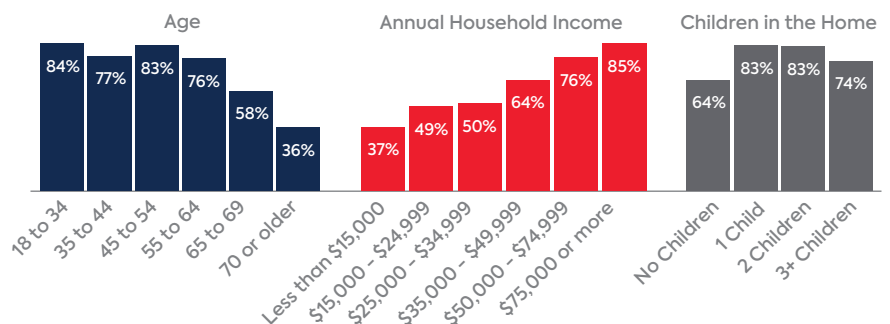
Figure 4. Telehealth Usage and Consideration
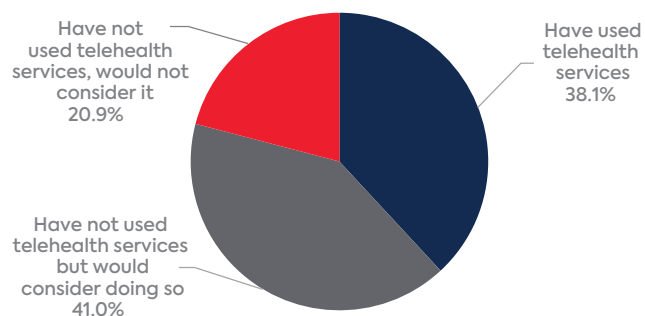
Figure 5. Respondents Who Know At Least One Other Person Who Had a Telehealth Appointment
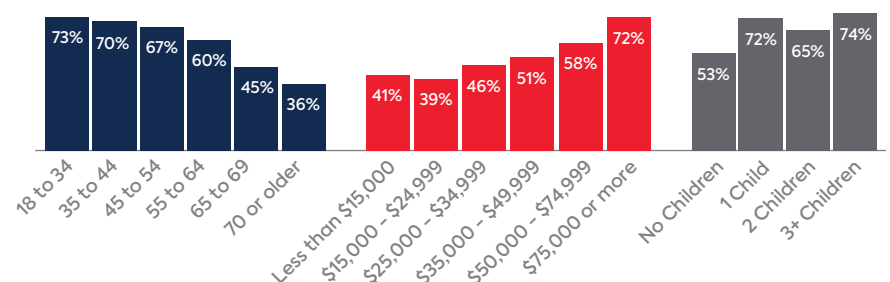
Survey Results

In assessing the community's awareness of telehealth-related tools and resources, only one-third of households (34.7%) feel adequately informed about their telehealth options (Figure 6).

Respondents over the age of 65 feel the least informed about telehealth, along with those whose income is below $75,000 (Figure 7).

An additional 69.5% are unsure if their insurance covers telehealth visits, and a mere 17.4% are aware that the Indian Health Service (IHS) covers telehealth services. Levels of uncertainty regarding telehealth coverage are quite high across all demographic categories regardless of age, income, and the number of children in the household. This suggests that people are inadequately informed about the telehealth resources available to them, which could potentially discourage some individuals from using this valuable service (Figures 8–9).

Figure 6. Telehealth Awareness

Feel adequately informed about telehealth options	Don't know whether their insurance covers telehealth visits	Are aware that the IHS covers telehealth services	Would use an online portal to access their medical information
34.7%	69.5%	17.4%	65.0%
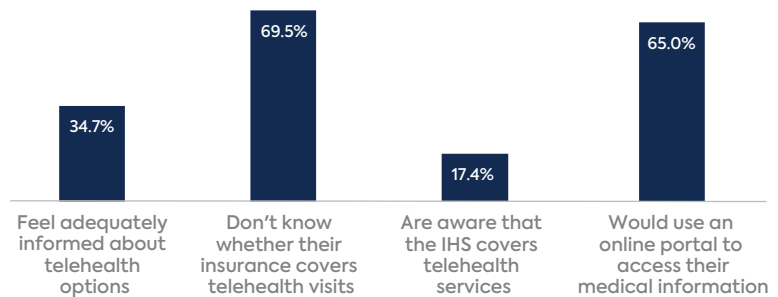
Figure 7. Respondents Who Feel Adequately Informed on the Telehealth Services Available

18 to 34	35 to 44	45 to 54	55 to 64	65 to 69	70 or older	Less than $15,000	$15,000 - $24,999	$25,000 - $34,999	$35,000 - $49,999	$50,000 - $74,999	$75,000 or more	No Children	1 Child	2 Children	3+ Children
37%	41%	44%	38%	28%	25%	36%	28%	28%	32%	34%	43%	34%	38%	36%	50%
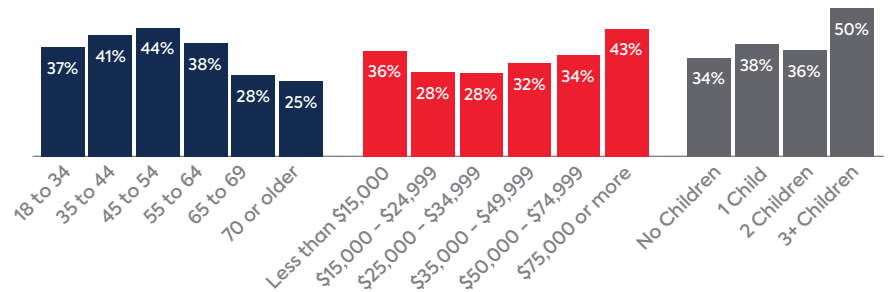
Figure 8. Respondents Who Are Unsure if Their Health Insurance Provider Covers Telehealth Services

18 to 34	35 to 44	45 to 54	55 to 64	65 to 69	70 or older	Less than $15,000	$15,000 - $24,999	$25,000 - $34,999	$35,000 - $49,999	$50,000 - $74,999	$75,000 or more	No Children	1 Child	2 Children	3+ Children
57%	57%	54%	62%	71%	75%	64%	75%	74%	69%	66%	54%	65%	58%	60%	63%
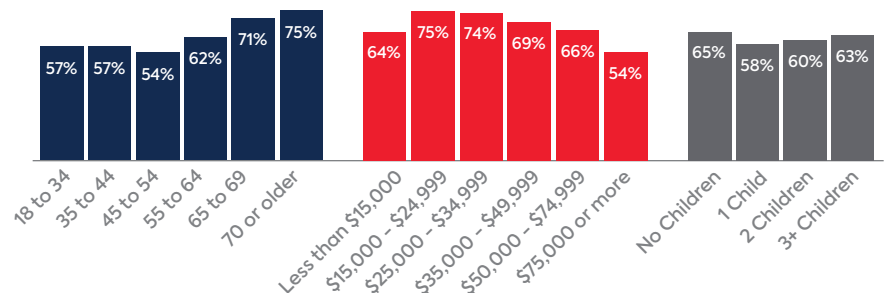
Figure 9. Respondents Who Are Aware that the IHS Covers Telehealth Services

18 to 34	35 to 44	45 to 54	55 to 64	65 to 69	70 or older	Less than $15,000	$15,000 - $24,999	$25,000 - $34,999	$35,000 - $49,999	$50,000 - $74,999	$75,000 or more	No Children	1 Child	2 Children	3+ Children
16%	19%	22%	16%	13%	19%	14%	16%	19%	21%	15%	20%	18%	17%	12%	23%
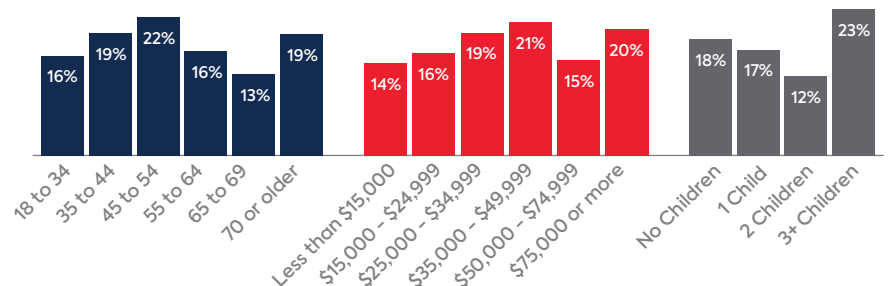
Survey Results

When gauging interest in online services, one-third of respondents (33.9%) expressed interest in accessing online health tools and services (Figure 10).

A slightly larger share of respondents (37.2%) said they might be interested, but it depends on the app being used; 18.2% said they were not interested, while 10.7% stated they were unsure. (Figure 11).

Overall, this shows that there is interest in using telehealth tools; however, there is still hesitation among some members of the tribe. Community outreach and the promotion of telehealth services could increase awareness and participation, especially in remote areas where health resources are thin.

Respondents interact with their health care providers in a variety of ways. The most common use of online health care application usage is through telehealth appointments (38.1%), followed by email (Figure 12).

Figure 10. Interest in Access to Online Health Tools and Services

- Yes 33.9%
- No 18.2%
- Maybe (depending on the app) 37.2%
- Unsure 10.7%
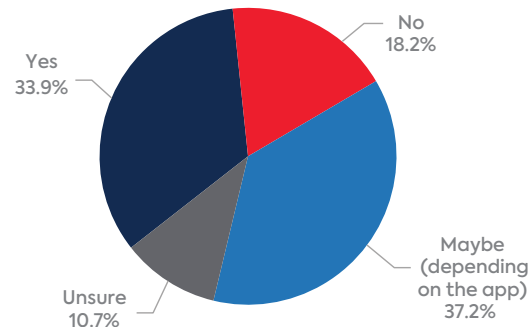
Figure 11. Respondents Who Would Be Interested In Using Online Tools If Offered by Their Health Care Provider

CHILDREN IN THE HOME
	Yes	No	Maybe, but it depends on the tool	Unsure
3+ Children	11%	40%	46%	3%
2 Children	12%	48%	32%	8%
1 Child	12%	45%	36%	7%
No Children	19%	36%	34%	12%

ANNUAL HOUSEHOLD INCOME
	Yes	No	Maybe, but it depends on the tool	Unsure
$75,000 or more	11%	43%	40%	6%
$50,000 – $74,999	14%	35%	38%	13%
$35,000 – $49,999	23%	30%	36%	11%
$25,000 – $34,999	22%	37%	25%	15%
$15,000 – $24,999	18%	36%	32%	14%
Less than $15,000	30%	42%	20%	8%

AGE
	Yes	No	Maybe, but it depends on the tool	Unsure
70 or older	24%	32%	28%	17%
65 to 69	24%	31%	32%	13%
55 to 64	16%	38%	35%	11%
45 to 54	18%	38%	37%	7%
35 to 44	6%	45%	44%	4%
18 to 34	13%	44%	33%	10%

■ Yes ■ No ■ Maybe, but it depends on the tool ■ Unsure

Figure 12. Households That Have Interacted with Health Care Providers in the Following Ways

Telehealth appointment	38.1%
Via email	27.1%
Health care provider's website	26.3%
Video chats	23.7%
Texting	19.3%
Website provided by insurance	12.2%
Smart phone app	8.7%
Social media	3.5%
Other	3.7%
None of the above	46.9%
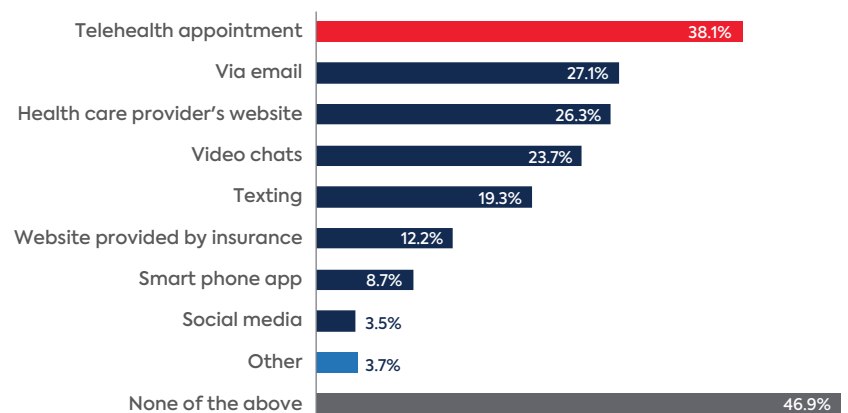
Survey Results

More than 1 in 4 respondents said they had gone online to interact with health care providers through email (27.1%) or the provider's website (26.3%). Tribe members also report using video chats (23.7%), texting (19.3%), websites provided by an insurance company (12.2%), social media (3.5%), and other ways (3.7%). Notably, 46.9% of respondents claimed they have not interacted with any of the methods stated above.

Not all respondents went online to interact with health care providers at the same rate. Figure 13 shows the rate of these interactions by age group.

Younger respondents were most likely to interact with health care providers online; among those age 18 to 34, roughly 2 out of 5 respondents interacted with them via video chat (42%) and through a health care website (40%). Only 30% of that age group had not interacted with a health care provider online.

With older age brackets, fewer respondents had interacted with health care providers online. Among those 70 and older, more than 3 in 5 (63%) had never interacted with a health care provider online.

Figure 14 shows the rate of these interactions by household income level.

Respondents from households with the highest income level ($75,000 or more) interacted with health care providers online the most — most often through email (39%) and a health care provider's website

(38%). Only 30% of this population had never used these online tools, compared with two-thirds of households earning less than $15,000 per year.

Respondents from households with lower income levels interacted with health care providers online less. For household incomes below $75,000,

the percentage of respondents that did not interact with a health care provider online range from 45% ($50,000 to $74,999) to 66% (less than $15,000).

Figure 15 below illustrates the rate of these interactions by the number of children in the respondent's household.

Figure 13. Telehealth Interactions through Various Modes of Communication by Age

	18 to 34	35 to 44	45 to 54	55 to 64	65 to 69	70 or older
Email	33%	39%	31%	32%	21%	16%
Social Media	1%	3%	3%	4%	5%	3%
Health Care Website	40%	35%	32%	28%	24%	15%
Insurance Provider's Website	22%	22%	10%	14%	9%	5%
Text Messaging	26%	28%	27%	21%	11%	13%
Video Chat	42%	43%	27%	19%	22%	12%
Smart Phone App	16%	14%	13%	10%	5%	3%
Other	7%	4%	5%	4%	1%	4%
None	30%	32%	40%	47%	52%	63%

Figure 14. Telehealth Interactions through Various Modes of Communication by Annual Household Income

	Less than $15,000	$15,000–$24,999	$25,000 – $34,999	$35,000–$49,999	$50,000–$74,999	$75,000 or more
Email	14%	21%	21%	25%	29%	39%
Social Media	5%	5%	2%	3%	3%	4%
Health Care Website	15%	17%	19%	22%	31%	38%
Insurance Provider's Website	7%	8%	4%	12%	14%	19%
Text Messaging	8%	14%	13%	20%	23%	26%
Video Chat	16%	19%	18%	20%	30%	31%
Smart Phone App	4%	4%	4%	7%	13%	14%
Other	1%	4%	2%	2%	3%	7%
None	66%	55%	59%	49%	45%	30%

Figure 15. Telehealth Interactions through Various Modes of Communication by the Number of Children in the Household

	0	1	2	3+
Email	27%	31%	30%	37%
Social Media	4%	4%	4%	0%
Health Care Website	26%	29%	29%	46%
Insurance Provider's Website	11%	14%	16%	34%
Text Messaging	19%	24%	23%	31%
Video Chat	21%	32%	34%	66%
Smart Phone App	8%	9%	12%	14%
Other	4%	7%	3%	6%
None	49%	40%	44%	11%

Survey Results

Respondents in households with three or more children interacted with health care providers online at a significantly higher rate than respondents in other households. In fact, only 1 out of 10 (11%) had not interacted with them via one of the modalities above. For respondents from households with zero to two children, that rate ranges from 40% to 49%. The most common ways that larger households interacted with health care providers online included through video chat (66%), through a health care provider's website (46%), and through an insurance provider's website (34%).

Survey respondents also used online monitoring applications to improve or monitor their health, though at lower rates. For example, nearly 1 in 20 respondents (4.7%) said that someone in their household had used a remote heart rate monitoring application in the 12 months prior to taking the survey (Figure 16).

Other monitoring applications used by household members include health or motivational coaching (4.7%); electronic reminders to take medications (3.8%); remote blood sugar monitoring (3.2%); remote blood pressure monitoring (2.9%); and gait, seizure, or fall monitoring (1.1%).

Once again, different respondents used these applications at different rates.

Figure 17 depicts the use of these applications among different age groups.

By and large, most respondents had not engaged with these technologies. Those age 35 to 44 were most likely to have exposure to them;

1 out of 4 (25%) respondents had used at least one of the applications. For respondents age 55 to 64, only 14% had used at least one of them.

The most commonly used application depended on the age group. Younger respondents (age 18 to 34) were most likely to have used electronic reminders to take medications. Those

age 35 to 44 had utilized health or motivational coaching the most (15%). The older respondents surveyed, ages 65 to 69 and 70 and older, had utilized remote heart rate monitoring the most (7%).

Figure 18 below breaks down application utilization by different income levels.

Figure 16. Households Where Individuals Have Used Online Health Services in the Past 12 Months

Service	Percentage
Remote heart rate monitoring	4.7%
Health or motivational coaching	4.7%
Electronic reminders to take medications	3.8%
Remote blood sugar monitoring	3.2%
Remote blood pressure monitoring	2.9%
Gait, seizure, or falls monitoring	1.1%
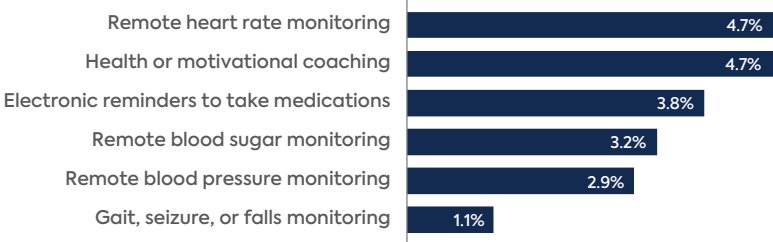
Figure 17. Use of Online Health Services by Age

	18 to 34	35 to 44	45 to 54	55 to 64	65 to 69	70 or older
Gait, seizure, or falls monitoring	1%	1%	2%	1%	2%	1%
Health or motivational coaching	5%	15%	6%	4%	2%	2%
Electronic reminders to take medications or follow a health care protocol	9%	7%	3%	5%	1%	2%
Remote heart rate monitoring	3%	6%	4%	1%	7%	7%
Remote blood pressure monitoring	1%	6%	2%	2%	3%	3%
Remote blood sugar monitoring	5%	3%	5%	3%	3%	3%
None	79%	75%	79%	86%	84%	85%

Figure 18. Use of Online Health Services by Annual Household Income

	Less than $15,000	$15,000–$24,999	$25,000–$34,999	$35,000–$49,999	$50,000–$74,999	$75,000 or more
Gait, seizure, or falls monitoring	1%	3%	1%	1%	1%	0%
Health or motivational coaching	4%	4%	3%	2%	5%	8%
Electronic reminders to take medications or follow a health care protocol	5%	2%	2%	3%	7%	5%
Remote heart rate monitoring	1%	11%	3%	5%	4%	4%
Remote blood pressure monitoring	0%	4%	3%	2%	3%	3%
Remote blood sugar monitoring	1%	5%	3%	2%	3%	4%
None	89%	79%	84%	85%	83%	78%

Survey Results

Respondents with the highest incomes ($75,000 or more) were most likely to have used one of the applications – more than 1 in 5 (22%). Meanwhile, respondents with the lowest incomes ($15,000 or less) were least likely to have used one of the applications (only 11%). That said, household income does not appear to have a large impact on utilization; higher incomes were not more likely to have used these applications overall.

Figure 19 below shows utilization of online monitoring applications by the number of children that live in the household.

While the rate of utilization is similar regardless of how many children the respondent had, respondents from households with three or more children used more applications on average. For example, more than 1 in 4 (26%) of those respondents had relied on health or motivational coaching through online monitoring applications, and roughly 1 in 10 of those respondents had relied on electronic reminders to take medications (11%) and remote blood sugar monitoring (9%).

Although fewer respondents used these applications, there is still demand for them. One-quarter of responding households (25.1%) said that someone in their household could have benefited from access to services such as these.

In addition, 33.9% of respondents said they would have used online tools if their health care provider had offered them.

More than 3 out of 5 respondents (65%) also said that they would use online portals, websites, or apps to access their medical records, schedule appointments, or request

consultations (Figure 20). This suggests an unmet demand for telehealth services among tribe members.

For those who use telehealth applications, there are numerous benefits. These include the ability

to schedule a same-day visit (40.7%), receive a basic prescription or treatment plan (33.4%), avoid commutes to save money (30.8%), take less time off work (30.6%), and the affordability of using telehealth applications (30.3%) (Figure 21).

Figure 19. Use of Online Health Services by the Number of Children in the Household

	0	1	2	3+
Gait, seizure, or falls monitoring	1%	1%	1%	0%
Health or motivational coaching	4%	5%	7%	26%
Electronic reminders to take medications or follow a health care protocol	4%	4%	7%	11%
Remote heart rate monitoring	5%	2%	4%	6%
Remote blood pressure monitoring	3%	1%	3%	3%
Remote blood sugar monitoring	3%	2%	4%	9%
None	83%	86%	81%	60%

Figure 20. Interest in Online Portal Offered by Health Care Provider for Medical Tasks

18.5%
16.5%
65.0%

- Yes
- No
- Unsure
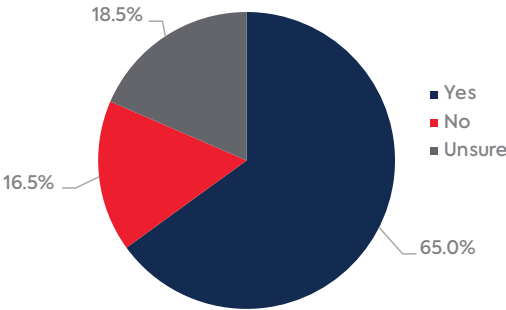
Figure 21. How Much Potential Benefits Impact the Decision to Use Telehealth Services

	No impact at all	Minimal impact	Moderate impact	Major impact
The ability to schedule a same-day visit	20.3%	13.5%	25.6%	40.7%
Receiving a basic prescription or treatment plan	23.4%	17.4%	25.9%	33.4%
Avoiding commutes to save money	27.3%	21.4%	20.5%	30.8%
Taking less time off work	46.2%	10.7%	12.5%	30.6%
Affordability of using telehealth applications	28.4%	20.0%	21.4%	30.3%
Getting a diagnosis without being around other sick patients	30.3%	25.4%	21.7%	22.6%
Receiving confirmation of a self-diagnosis	30.1%	21.5%	26.5%	22.0%
Avoiding commutes for safety	32.5%	24.9%	20.7%	21.9%
Eliminates the need to schedule transportation	58.2%	16.2%	8.9%	16.7%

Survey Results

In addition, more than one-quarter of households (27.6%) affirmed that accessing health information online helped prevent visits to a doctor or other health care provider (Figure 22).

Households reported saving 2.96 visits to the doctor per year by accessing health information online. In Sault Sainte Marie, Michigan, where a 15-minute office visit costs $134.00 at a fair price, respondents saved $74,504 in total, or $396.00 each through online tools. If all 7,765 households used telehealth at the 2.96-visits-per-12-months rate, then households with tribal members would save $3,079,909.60 each year.

PERCEPTIONS OF TELEHEALTH AND FUTURE USE

Understanding perceptions of telehealth is crucial for predicting how services will be used, and the rate of use among community members in the future.

Nearly one-quarter of respondents (23.7%) said that telehealth visits are comparable to in-person visits (Figure 23).

Another 41.8% of respondents said that telehealth visits are good for initial consultations or basic care, while 34.5% believed that telehealth visits will never match the quality of an in-person visit.

Figure 24 below shows respondents' perceptions of telehealth in different age groups.

In general, younger respondents had more favorable views of telehealth. Among those age 18 to 34, only 1 in 5 (21%) believed that telehealth could never match the quality of an in-person visit; among those age

35 to 44, only 19% believed that. Meanwhile, 77% of the youngest group believed that telehealth was either comparable to an in-person visit or a good option for an initial consultation; in the second youngest group, 4 out of 5 (80%) responded with one of those two options.

Older respondents were more likely to say that telehealth will never match the quality of an in-person visit — 43% of respondents between ages 65 and 69, and 49% of respondents 70 and older reported that they felt this to be true.

Figure 22. Accessing Health Information Online Prevented Visits to a Doctor or Health Care Provider

Yes
27.6%

No
72.4%
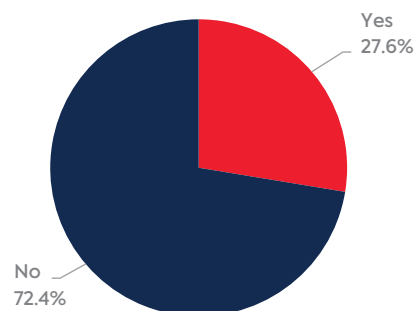
Figure 23. Perceptions of Telehealth Quality

Telehealth visits will never match the quality of an in-person visit
34.5%

Telehealth visits are comparable to in-person visits
23.7%

Telehealth visits are good for initial consultations or basic care
41.8%
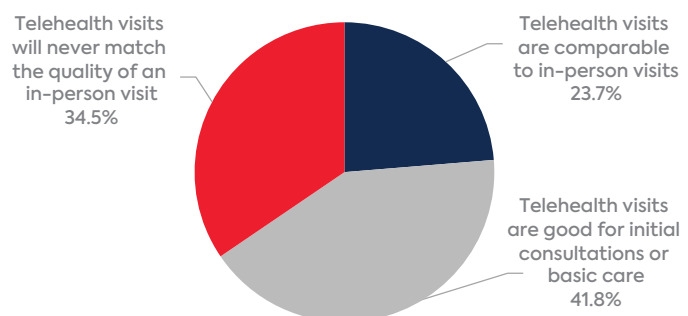
Figure 24. Perceptions of Telehealth Quality by Age

Age	No, will never match	No, but good option	Yes, comparable
18 to 34	20%	45%	36%
35 to 44	15%	58%	27%
45 to 54	31%	41%	29%
55 to 64	31%	43%	26%
65 to 69	43%	36%	21%
70 or older	52%	35%	14%

■ No, telehealth care will never match the quality of an in-person visit
■ No, but telehealth is a good option for the initial consultation and/or basic care
■ Yes, I think the care is comparable
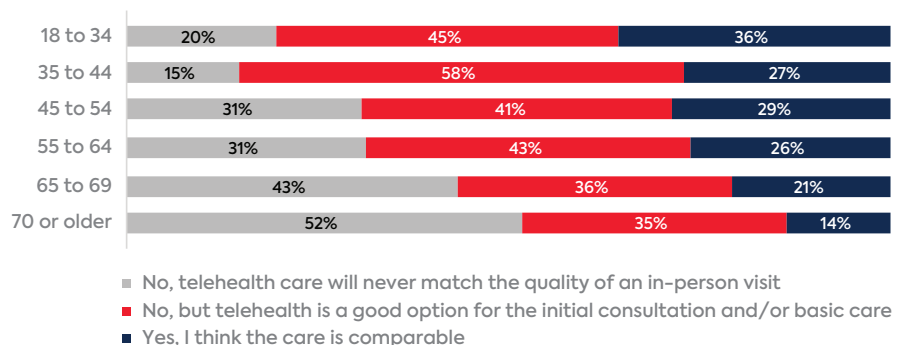
Survey Results

Figure 25 below illustrates respondents' perceptions of telehealth by income level.

Respondents from households with higher incomes reported that telehealth was a good option for the initial consultation at a marginally higher rate than respondents from households with lower incomes. One in 3 (33%) respondents from households making under $15,000 said so; this number increases to 51% for households making $75,000 or more.

Figure 26 below depicts perceptions of telehealth depending on the number of children living in the respondent's household.

Overall, respondents from households with three or more children had the most positive impressions of telehealth; more than one-third of them (37%) said telehealth was comparable to an in-person visit. Another 37% indicated that it was a good option for an initial consultation. Respondents from households without children had the least favorable perceptions of telehealth. Over a third of this population (36%) said that telehealth could never match the quality of an in-person visit.

According to community members surveyed, valid concerns exist when it comes to using telehealth, concerns that could limit utilization among households.

Cost and the ability to have telehealth services covered by their insurance were cited as very concerning by the largest share of survey respondents (Figure 27).

Figure 25. Perceptions of Telehealth Quality by Annual Household Income

Income	No, telehealth care will never match the quality of an in-person visit	No, but telehealth is a good option for the initial consultation and/or basic care	Yes, I think the care is comparable
Less than $15,000	33%	33%	33%
$15,000 – $24,999	43%	35%	22%
$25,000 – $34,999	50%	43%	8%
$35,000 – $49,999	38%	36%	27%
$50,000 – $74,999	34%	44%	22%
$75,000 or more	20%	51%	28%

- ■ No, telehealth care will never match the quality of an in-person visit
- ■ No, but telehealth is a good option for the initial consultation and/or basic care
- ■ Yes, I think the care is comparable

Figure 26. Perceptions of Telehealth Quality by Number of Children in the Household

Children	No, telehealth care will never match the quality of an in-person visit	No, but telehealth is a good option for the initial consultation and/or basic care	Yes, I think the care is comparable
No Children	36%	40%	23%
1 Child	29%	48%	22%
2 Children	17%	59%	24%
3+ Children	26%	37%	37%

- ■ No, telehealth care will never match the quality of an in-person visit
- ■ No, but telehealth is a good option for the initial consultation and/or basic care
- ■ Yes, I think the care is comparable

Figure 27. Concerns About Using Telehealth Applications

Concern	Not at all concerned	A little concerned	Somewhat concerned	Very concerned
Your insurance provider's willingness to pay for telehealth	19.9%	16.0%	20.6%	43.5%
The privacy of your information	22.1%	14.6%	24.3%	39.1%
The quality of the health care services	14.6%	15.7%	32.7%	37.0%
Health issues possibly not being addressed or misdiagnosed	15.9%	19.6%	28.0%	36.5%
The potential for higher costs than in-person appointments	23.0%	20.2%	22.0%	34.9%
The health care provider's response time	19.5%	17.0%	32.1%	31.4%
Your ability to access internet from your home	49.6%	15.3%	15.0%	20.1%
Your familiarity with using a computer or the internet	48.0%	16.9%	15.6%	19.5%

- ■ Not at all concerned
- ■ A little concerned
- ■ Somewhat concerned
- ■ Very concerned

Survey Results

Data privacy and the quality of the health care services they receive through an online visit are also top concerns among respondents. The possibility that health issues may not be addressed or misdiagnosed, the potential for higher costs than in-person appointments, the health care provider's response time, the ability to access the internet from home, and the respondent's familiarity with using a computer or the internet are also concerns.

Not all respondents had the same concerns, however.

When looking at issues respondents reported they are "very concerned" and "somewhat concerned" about, the top concern among respondents age 35 to 69 is the quality of the health care services provided onl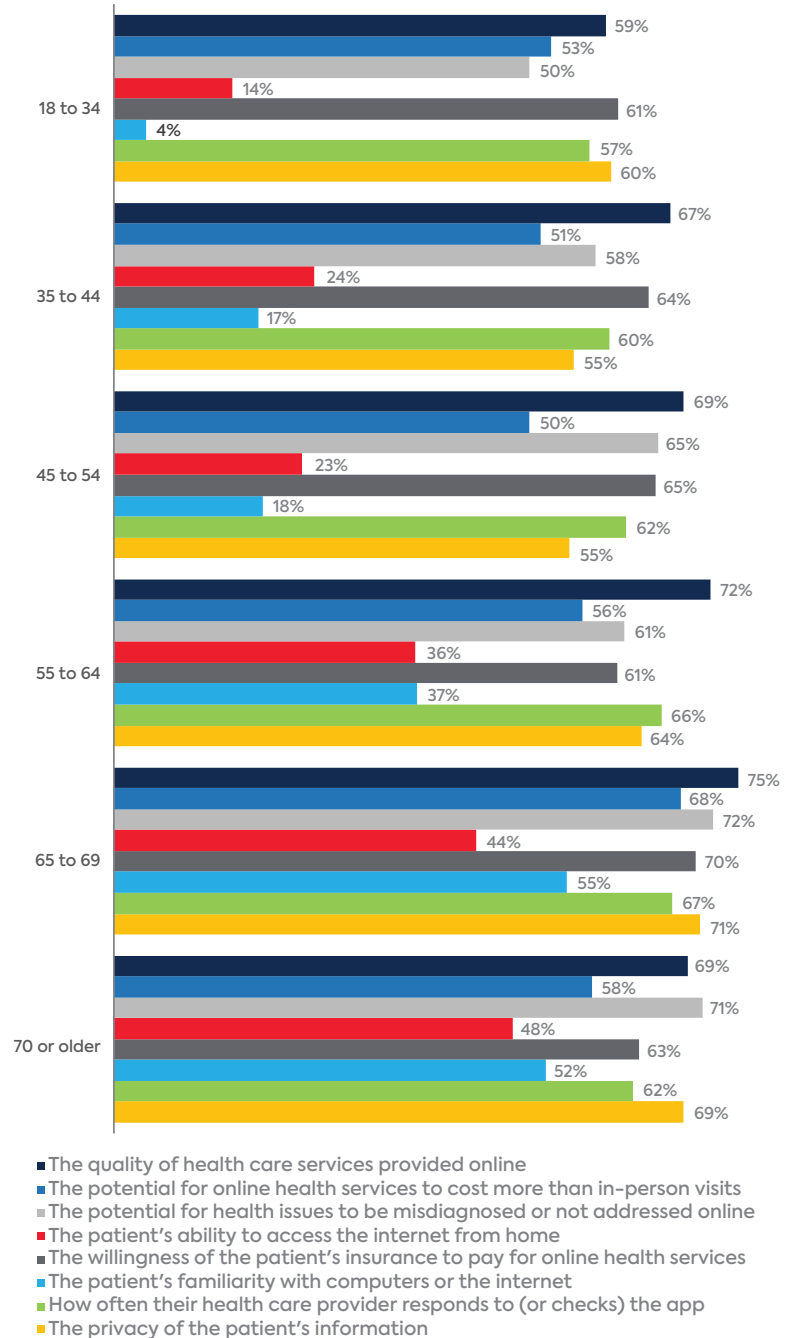ine. The greatest concern among respondents between 18 and 34 is the willingness of their insurance provider to pay for online services. Respondents above the age of 70 were most concerned about the potential for health issues being misdiagnosed or not addressed. Additionally, as age increases, respondents are more likely to be concerned about access, whether that is access to the internet or familiarity with online service providers. Of those 18 to 34, only 14% are concerned with having access from home, while in the 70 and older group, 48% have this concern. Likewise, 4% of respondents in the 18 to 34 age group are concerned with familiarity with computers and the internet. However, in the 70 or older group, 52% have this concern (Figure 28).

Figure 28. Respondents Who Are "Very Concerned" or "Somewhat Concerned" About Telehealth Elements by Age

Legend:
- The quality of health care services provided online
- The potential for online health services to cost more than in-person visits
- The potential for health issues to be misdiagnosed or not addressed online
- The patient's ability to access the internet from home
- The willingness of the patient's insurance to pay for online health services
- The patient's familiarity with computers or the internet
- How often their health care provider responds to (or checks) the app
- The privacy of the patient's information

Survey Results

There are similar trends among households when looking at varying levels of income. The lower the household income, the higher concern there is for access to the internet from home. Each group shares a similar amount of concern for the patient's insurance to pay for online health care. The lowest being 62% with household income between $50,000 to $75,000 and less than $15,000, and the highest being 66% for households with income from $25,000 to $35,000. Data points toward higher-income households having a better familiarity with computers or internet. As income increases, concern regarding computers or internet lowers (Figure 29).

Figure 29. Respondents Who Are "Very Concerned" or "Somewhat Concerned" About Telehealth Elements by Annual Household Income

Less than $15,000
- The quality of health care services provided online: 74%
- The potential for online health services to cost more than in-person visits: 53%
- The potential for health issues to be misdiagnosed or not addressed online: 59%
- The patient's ability to access the internet from home: 48%
- The willingness of the patient's insurance to pay for online health services: 62%
- The patient's familiarity with computers or the internet: 49%
- How often their health care provider responds to (or checks) the app: 57%
- The privacy of the patient's information: 67%

$15,000 – $24,999
- The quality of health care services provided online: 67%
- The potential for online health services to cost more than in-person visits: 67%
- The potential for health issues to be misdiagnosed or not addressed online: 69%
- The patient's ability to access the internet from home: 41%
- The willingness of the patient's insurance to pay for online health services: 64%
- The patient's familiarity with computers or the internet: 52%
- How often their health care provider responds to (or checks) the app: 65%
- The privacy of the patient's information: 71%

$25,000 – $34,999
- The quality of health care services provided online: 68%
- The potential for online health services to cost more than in-person visits: 60%
- The potential for health issues to be misdiagnosed or not addressed online: 73%
- The patient's ability to access the internet from home: 47%
- The willingness of the patient's insurance to pay for online health services: 66%
- The patient's familiarity with computers or the internet: 51%
- How often their health care provider responds to (or checks) the app: 62%
- The privacy of the patient's information: 70%

$35,000 – $49,999
- The quality of health care services provided online: 73%
- The potential for online health services to cost more than in-person visits: 58%
- The potential for health issues to be misdiagnosed or not addressed online: 70%
- The patient's ability to access the internet from home: 39%
- The willingness of the patient's insurance to pay for online health services: 65%
- The patient's familiarity with computers or the internet: 41%
- How often their health care provider responds to (or checks) the app: 69%
- The privacy of the patient's information: 67%

$50,000 – $74,999
- The quality of health care services provided online: 64%
- The potential for online health services to cost more than in-person visits: 56%
- The potential for health issues to be misdiagnosed or not addressed online: 58%
- The patient's ability to access the internet from home: 29%
- The willingness of the patient's insurance to pay for online health services: 62%
- The patient's familiarity with computers or the internet: 32%
- How often their health care provider responds to (or checks) the app: 64%
- The privacy of the patient's information: 60%

$75,000 or more
- The quality of health care services provided online: 69%
- The potential for online health services to cost more than in-person visits: 49%
- The potential for health issues to be misdiagnosed or not addressed online: 59%
- The patient's ability to access the internet from home: 23%
- The willingness of the patient's insurance to pay for online health services: 63%
- The patient's familiarity with computers or the internet: 16%
- How often their health care provider responds to (or checks) the app: 60%
- The privacy of the patient's information: 54%

Legend:
- The quality of health care services provided online
- The potential for online health services to cost more than in-person visits
- The potential for health issues to be misdiagnosed or not addressed online
- The patient's ability to access the internet from home
- The willingness of the patient's insurance to pay for online health services
- The patient's familiarity with computers or the internet
- How often their health care provider responds to (or checks) the app
- The privacy of the patient's information

Survey Results

The quality of health care is a main concern amongst all households, with households of three or more children sharing the most concern (71%). (Figure 30).

Altogether, this leads to varying levels of comfort and preference when it comes to telehealth application usage. More than two-thirds of respondents (67.7%) said they would be willing to use telehealth applications to interact with a general practitioner or family physician, while more than one-half (53.8%) said they would go online to interact with a physician who specializes in a particular field (Figure 31).

Figure 30. Respondents Who Are "Very Concerned" or "Somewhat Concerned" About Telehealth Elements by the Number of Children in Household

3+ Children
- The quality of health care services provided online: 71%
- The potential for online health services to cost more than in-person visits: 37%
- The potential for health issues to be misdiagnosed or not addressed online: 56%
- The patient's ability to access the internet from home: 20%
- The willingness of the patient's insurance to pay for online health services: 57%
- The patient's familiarity with computers or the internet: 26%
- How often their health care provider responds to (or checks) the app: 60%
- The privacy of the patient's information: 53%

2 Children
- 65%
- 54%
- 59%
- 19%
- 66%
- 20%
- 51%
- 56%

1 Child
- 70%
- 59%
- 53%
- 26%
- 66%
- 13%
- 68%
- 64%

No Children
- 70%
- 58%
- 67%
- 37%
- 64%
- 39%
- 64%
- 64%

Legend:
- ■ The quality of health care services provided online
- ■ The potential for online health services to cost more than in-person visits
- ■ The potential for health issues to be misdiagnosed or not addressed online
- ■ The patient's ability to access the internet from home
- ■ The willingness of the patient's insurance to pay for online health services
- ■ The patient's familiarity with computers or the internet
- ■ How often their health care provider responds to (or checks) the app
- ■ The privacy of the patient's information

Figure 31. Health Care Providers with Whom Respondents Would Feel Comfortable Interacting Online

Provider	Percentage
General practitioner or family physician	67.7%
A physician who specializes in a particular field	53.8%
Convenient care facility or walk-in clinic	47.0%
Therapist or other mental health provider	40.1%
Emergency room or hospital	21.9%
Eye doctor or optician	19.7%
Dentist or dental hygienist	17.3%
None of the above	21.6%
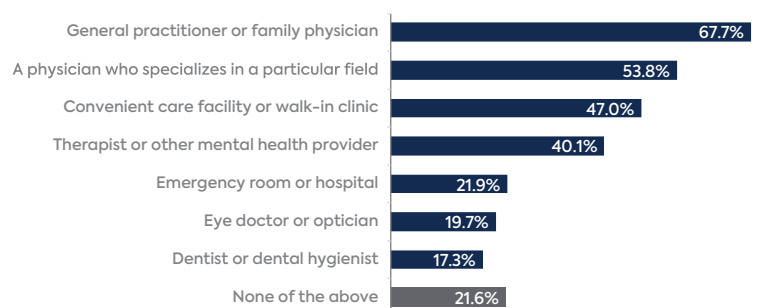
Survey Results

Others said they would use telehealth applications to interact with a convenient care facility, walk-in clinic, or a mental health provider such as a therapist. Respondents feel less comfortable interacting online with the emergency rooms or hospitals, eye doctors or opticians, and dentists.

Meanwhile, more than 1 in 5 respondents (21.6%) stated they did not feel comfortable interacting online with any of the above providers.

Figure 32 below shows the providers that respondents felt comfortable interacting with via telehealth, depending on their age group.

Consistent with the results above, older respondents felt more hesitant about interacting with any of these providers via telehealth; 2 in 5 (40%) expressed that they would not feel comfortable interacting with any provider. This percentage decreases with each younger age group – from 24% for ages 65 to 69 to 9% for respondents 18 to 34 and 35 to 44.

That said, age did not impact willingness to interact with certain health care providers, including hospitals, dentists, and eye doctors.

Consistent with the results above, older respondents felt more hesitant about interacting with any of these providers via telehealth; 2 in 5 (40%) expressed that they would not feel comfortable interacting with any provider. This percentage decreases with each younger age group – from 24% for ages 65 to 69 to 9% for respondents 18 to 34 and 35 to 44.

That said, age did not impact willingness to interact with certain health care providers, including hospitals, dentists, and eye doctors.

Figure 33 below summarizes willingness to interact with different health care providers online by the respondent's income level.

Figure 32. Health Care Providers with Whom Respondents Would Feel Comfortable Interacting Online by Age

	18 to 34	35 to 44	45 to 54	55 to 64	65 to 69	70 or older
General practitioner	82%	84%	76%	71%	66%	51%
Specialist	69%	63%	68%	57%	51%	36%
Convenient care	64%	69%	64%	48%	31%	31%
Hospital	18%	24%	24%	24%	24%	18%
Therapist	70%	71%	51%	42%	24%	17%
Dentist	20%	18%	22%	17%	16%	15%
Eye Doctor	22%	19%	24%	20%	16%	19%
None	9%	9%	13%	20%	24%	40%

Figure 33. Health Care Providers with Whom Respondents Would Feel Comfortable Interacting Online by Annual Household Income

	Less than $15,000	$15,000–$24,999	$25,000 –$34,999	$35,000–$49,999	$50,000–$74,999	$75,000 or more
General practitioner	47%	58%	54%	64%	79%	81%
Specialist	41%	41%	40%	51%	61%	68%
Convenient care	32%	37%	48%	38%	51%	62%
Hospital	18%	22%	21%	21%	27%	22%
Therapist	34%	37%	28%	30%	43%	56%
Dentist	14%	17%	17%	17%	18%	21%
Eye Doctor	12%	22%	20%	17%	23%	22%
None	37%	30%	32%	28%	13%	10%

Survey Results

Overall, respondents from households with lower incomes felt greater hesitation in interacting with any of these providers via telehealth. More than one-third (37%) of respondents making under $15,000 would not be willing to interact with a provider online. For those making $75,000 or more, only 10% would not interact with any of these providers.

Again, certain providers, like hospitals (a range of 18% to 27% willingness to try among all income levels), dentists (14% to 21%), and eye doctors (12% to 22%) have limited but consistent appeal, regardless of income.

Figure 34 depicts willingness to interact with different health care providers online by the number of children living in the respondent's household.

Respondents from households without children felt marginally less willing to interact with these health care providers online than the rest of the sample. One in 4 respondents without children (24%) would not interact with any of these providers online, compared with 8% for respondents with one child at home, 14% with two children at home, and 3% with three or more children at home.

The COVID-19 pandemic changed how patients interact with their health care providers. During the peak of the pandemic, telehealth appointments were the only option for many who sought medical care — a modality some would not have considered in the past.

More than 1 out of 4 respondents (26.3%) said COVID-19 increased their willingness to try telehealth in the future; this trend that coincides with the uptick in telehealth usage post-pandemic (Figure 35).

The impact of the COVID-19 pandemic on interest in using telehealth depends on several demographic factors.

Figure 36 below shows how the pandemic influenced telehealth decisions for different age groups.

Figure 34. Health Care Providers with Whom Respondents Would Feel Comfortable Interacting Online by the Number of Children in the Household

	0	1	2	3+
General practitioner	67%	81%	75%	83%
Specialist	53%	66%	59%	66%
Convenient care	45%	60%	62%	69%
Hospital	23%	20%	21%	26%
Therapist	36%	65%	56%	69%
Dentist	18%	19%	16%	23%
Eye Doctor	20%	19%	19%	26%
None	24%	8%	14%	3%

Figure 35. The Impact of COVID-19 on Telehealth Decisions

No effect 67.6%
A minor effect 11.7%
Unsure 8.0%
A moderate effect 8.2%
A major effect 4.5%
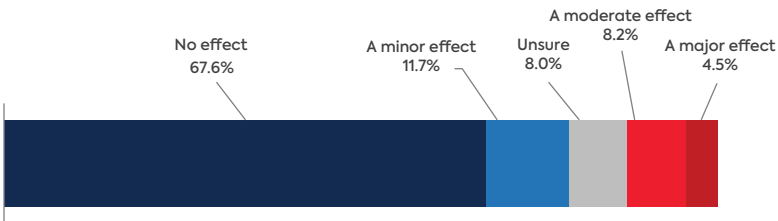
Figure 36. Has the COVID-19 Pandemic Increased Your Willingness to Try Telehealth by Age

Age	Yes	No	Unsure
18 to 34	43%	46%	11%
35 to 44	38%	54%	8%
45 to 54	29%	61%	11%
55 to 64	27%	58%	15%
65 to 69	19%	65%	16%
70 or older	16%	64%	20%

■ Yes ■ No ■ Unsure
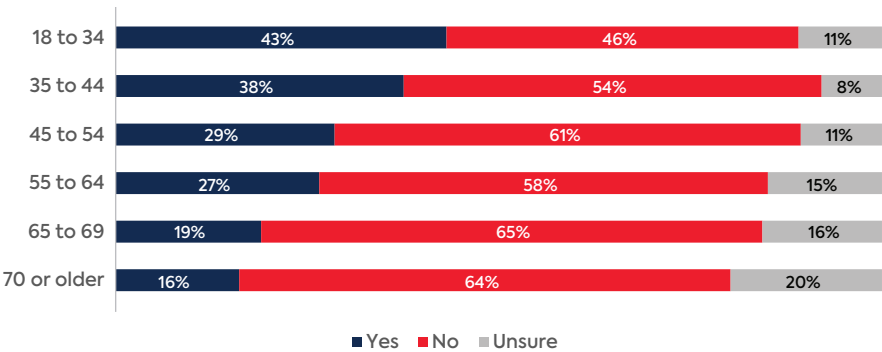
Survey Results

Overall, the pandemic had the greatest effect on younger respondents. With each older age group, the share of respondents that said the pandemic influenced their willingness to try telehealth increased – from 43% for those age 18 to 34 to 16% for those age 70 and older. Meanwhile, the share that said the pandemic did not influence their decision increased from 46% for the youngest cohort to 64% for the oldest cohort.

Figure 37 below indicates the impact of the COVID-19 pandemic on willingness to try telehealth by income level.

Interestingly, respondents from households with the lowest and highest income levels reported the greatest impact of the pandemic on their willingness to try telehealth (about one-third of both groups). Respondents from households making between $25,000 and $35,000 were most likely to say that the pandemic did not influence their willingness – at 70%.

Figure 38 below breaks down the impact of the pandemic on willingness to try telehealth depending on the number of children living in the respondent's household.

Exactly one-half of respondents (50%) from households with three or more children reported that the pandemic made them more willing to try telehealth – much higher than respondents from other households (which ranged from 23% to 35% who said yes).

For most respondents, telehealth is part of the "new normal" as part of their health care routines. Nearly one-half of respondents (48.5%) stated they plan to use telehealth applications about as frequently as they do now, while more than 1 in 8 (13%) plan to use telehealth more frequently in the future (Figure 39).

Figure 37. Has the COVID-19 Pandemic Increased Your Willingness to Try Telehealth by Annual Household Income

Income	Yes	No	Unsure
Less than $15,000	31%	46%	22%
$15,000 – $24,999	24%	56%	19%
$25,000 – $34,999	15%	70%	15%
$35,000 – $49,000	26%	65%	10%
$50,000 – $74,999	29%	60%	11%
$75,000 or more	32%	56%	12%

■ Yes ■ No ■ Unsure
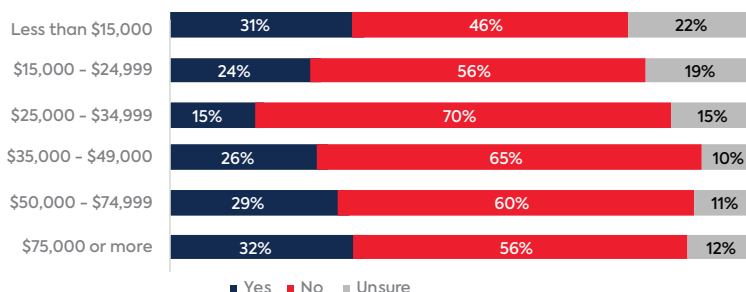
Figure 38. Has the COVID-19 Pandemic Increased Your Willingness to Try Telehealth by Number of Children in the Household

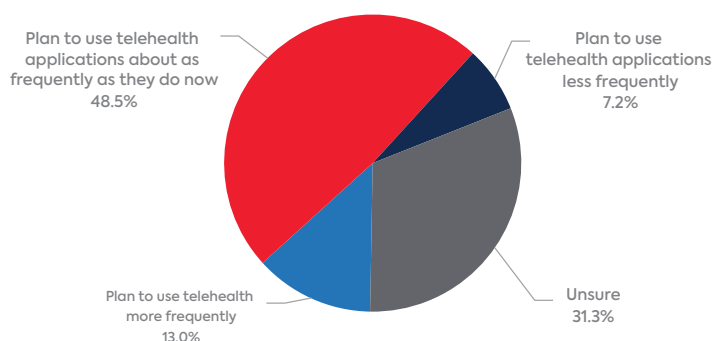|	Yes	No	Unsure
No Children	25%	61%	14%
1 Child	35%	55%	11%
2 Children	23%	65%	12%
3+ Children	50%	35%	15%

■ Yes ■ No ■ Unsure
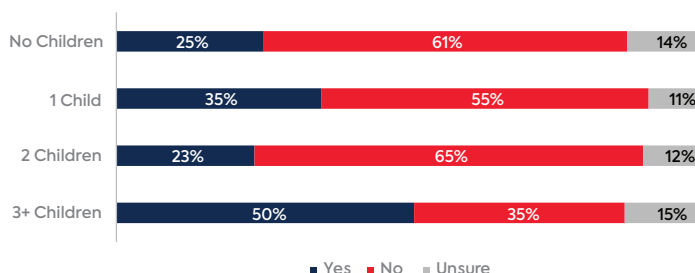
Figure 39. Plans for Future Telehealth Application Usage

Plan to use telehealth applications about as frequently as they do now 48.5%

Plan to use telehealth applications less frequently 7.2%

Plan to use telehealth more frequently 13.0%

Unsure 31.3%

Survey Results

Figure 40 assesses how frequently respondents plan to use telehealth in the future depending on their age.

In general, most respondents said that they would use telehealth about the same frequency as they currently do. That said, younger respondents reported a higher interest in using it more frequently than older respondents; 17% of respondents 18 to 34 said so, as did 24% of respondents 35 to 44. Older respondents were more likely to indicate that they would use it less frequently — roughly 1 in 10 of those 55 to 64 (10%), 65 to 69 (8%), and 70 and older (11%).

Figure 41 illustrates intended frequency of using telehealth in the future by the respondent's income level.

Respondents living in households with an annual income under $50,000 were more likely to report that they would use telehealth less frequently in the future (roughly 1 in 10 for each income bracket).

Figure 42 below summarizes these findings based on how many children lived in the respondent's household.

In line with previous results, respondents from households with three or more children indicated more favorable impressions of telehealth here; 1 in 3 (29%) expressed that they would use telehealth more frequently in the future. This is higher than respondents from other households, which expressed the same sentiment from 12% (households without children) to 18% (households with one child). Households without children were much more likely to indicate that they were not sure about their future telehealth use — at 34%.

Figure 40. Frequency of Future Telehealth by Age

Age	More Frequently	Same	Less Frequently	Unsure
18 to 34	17%	60%	1%	21%
35 to 44	24%	53%	5%	17%
45 to 54	13%	54%	4%	29%
55 to 64	16%	47%	10%	28%
65 to 69	9%	46%	8%	38%
70 or older	5%	41%	11%	44%
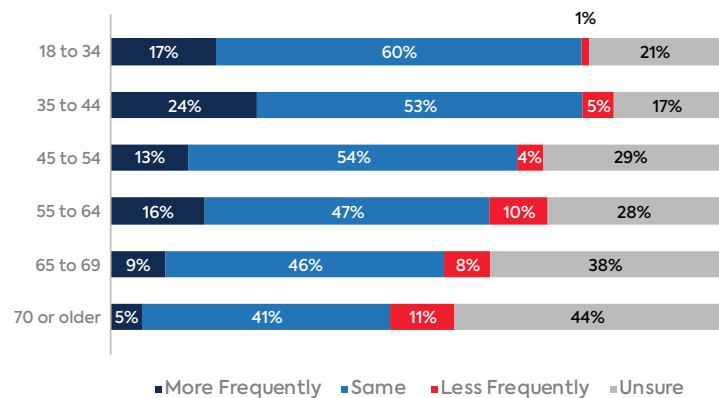
Figure 41. Frequency of Future Telehealth by Income

Income	More Frequently	Same	Less Frequently	Unsure
Less than $15,000	14%	41%	9%	36%
$15,000 – $24,999	12%	40%	10%	38%
$25,000 – $34,999	8%	48%	9%	36%
$35,000 – $49,999	11%	46%	11%	32%
$50,000 – $74,999	16%	51%	5%	29%
$75,000 or more	16%	56%	4%	24%
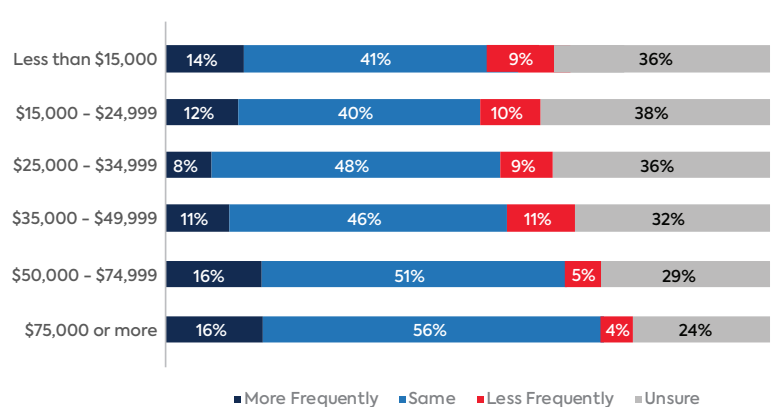
Figure 42. Frequency of Future Telehealth Use by the Number of Chidren in the Household

	More Frequently	Same	Less Frequently	Unsure
No Children	12%	47%	8%	34%
1 Child	18%	54%	5%	23%
2 Children	15%	59%	3%	23%
3+ Children	29%	54%	9%	9%
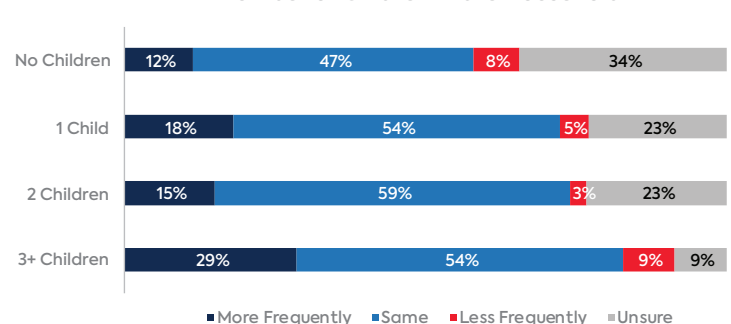
Telehealth from the Health Care Provider's Perspective

In addition to learning about how tribe members view telehealth services from a patient's perspective, Connected Nation Michigan also spoke with members of tribal leadership and its health care providers. Discussions included tribal physicians, health clinic administrators, and others who are responsible for seeing patients and supporting the operation of the tribe's nine health centers in Michigan's Upper Peninsula. These clinics serve the tribal communities who participated in the surveys, so learning about the services that are currently (or will soon be) offered is important to determine how telehealth services are serving the tribal community services.
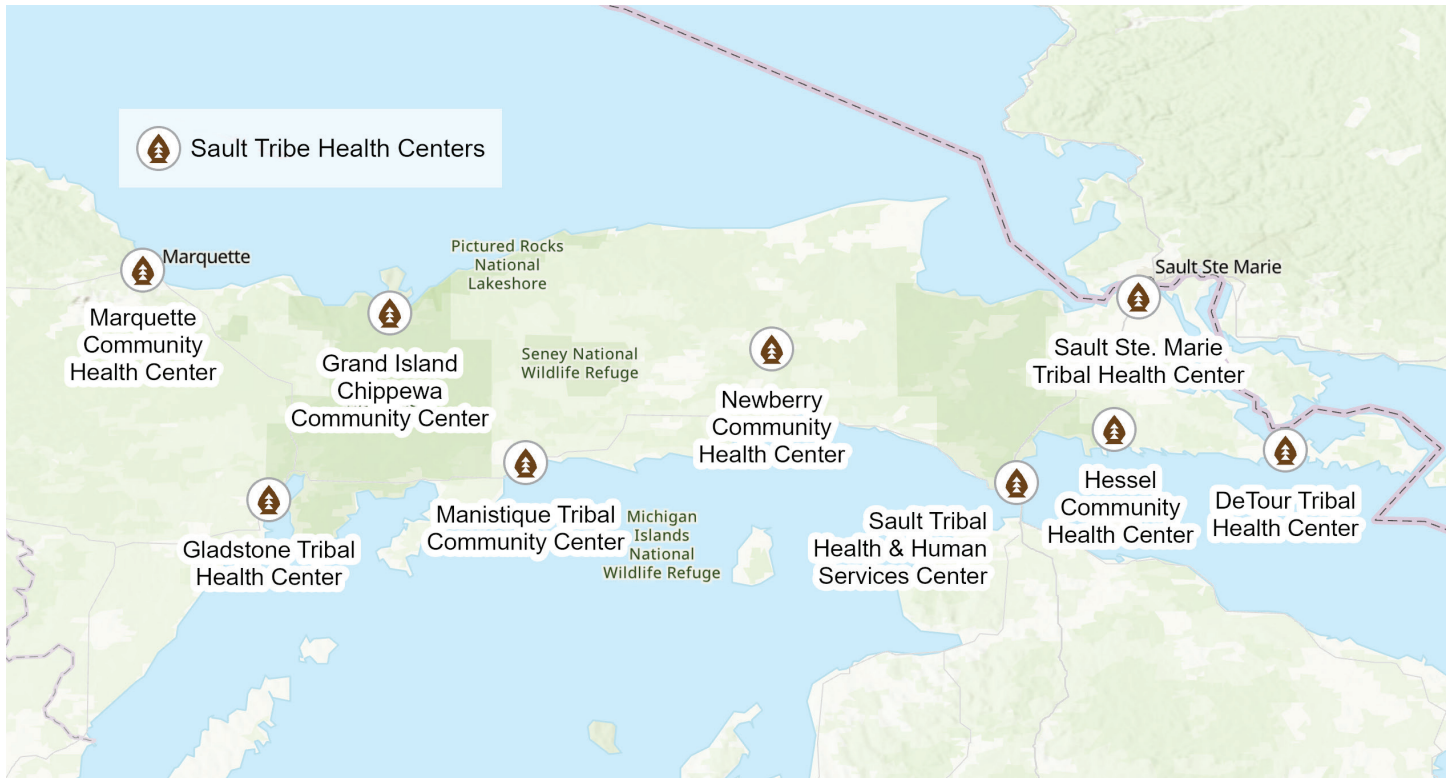
KEY DISCUSSION TAKEAWAYS INCLUDE:

1 Telehealth services are currently being offered to patients through tribal health clinics.

2 Expanding broadband infrastructure in the Upper Peninsula is crucial for improving telehealth access.

3 Health care providers and their patients face challenges when adapting to telehealth services, but they consider the numerous benefits to be worth the extra effort.

Telehealth from the Health Care Provider's Perspective

Through these conversations, several themes arose that could impact tribe member's ability to access and use telehealth.

1 **Telehealth services are currently being offered to patients through tribal health clinics.**

According to focus group participants, telehealth services are currently provided through the tribe's Gladstone, Marquette, and Newberry health care centers. Telehealth options are also offered at the Veterans Affairs Office in Sault Sainte Marie.

Pilot telehealth programs implemented in January 2023, using telehealth units at the remote Tribal Community Health Centers located in Detour, Hessel, Newberry, Gladstone and Marquette, were successfully connected to the main tribal ambulatory care clinics located in Sault Ste. Marie, St. Ignace, Manistique and Munising. Through this program, patients can access telehealth care at remote locations instead of traveling over an hour to visit their primary care provider in person. So far, these new telehealth units have served 283 patient visits for tribal members living in those remote communities. The one tribal site not yet connected due to the lack of technology connections to high-speed internet is in Detour.

2 **Expanding broadband infrastructure in the Upper Peninsula is crucial for improving telehealth access.**

Discussions with health care providers highlighted the progress that has been made in terms of telehealth utilization in the Upper Peninsula. To make telehealth accessible to all tribe members, improved access to reliable broadband service is necessary for both patients and their health care providers. That infrastructure has been slowly improving in the area.

First, new fiber-optic cable was laid in the Upper Peninsula last year, which supplied the region with the bandwidth required for providing and receiving telehealth services. Improving broadband infrastructure is the first step in getting households and health clinics connected.

Establishing connectivity and options for patients to remotely see their health care providers is the next step. Currently, all five telehealth units acquired last year are operational, except Detour because of connectivity issues and the lack of available high-speed internet service. The recent installation of the Peninsula High Fiber Network resolved many connectivity challenges faced by the other clinics. A 2016–2019 pilot study of telehealth units between the Escanaba and Manistique sites revealed maintenance and technical support challenges; however, those issues have since been addressed, resulting in improved maintenance and technical support services for the units.

This model has laid the foundation for how the clinics operate during and after the COVID-19 pandemic. Overall, patients using the remote health clinics provide positive feedback because they do not have to travel to and from appointments, saving them time and money. While several physicians still prefer in-person appointments for physical examinations, they said they were able to adapt to the use of telehealth technology.

3 **Health care providers and their patients face challenges when adapting to telehealth services, but they consider the numerous benefits to be worth the extra effort.**

The focus group participants brought up several challenges that they face in their efforts to expand their telehealth offerings. Health centers continue to experience technological and connectivity issues in several of the remote clinics. Some of the equipment purchased over a year ago is still not operational. The health clinics also had challenges with vendor support for their devices and telehealth systems, so they had to search for another internet provider who would give them the support they needed. In remote areas where internet service providers and device technicians are harder to find than in major urban centers, these can present difficult challenges to overcome.

Patient awareness of telehealth programs also appears to remain low, according to anecdotal evidence shared by the health clinics. This is supported by the survey results, which showed only 17.4% of respondents are aware the IHS covered telehealth services. Increased funding for marketing and outreach efforts to promote the telehealth services offered at remote clinics is oftentimes not available.

Participants recognize there is room for growth within the current model of the telehealth program and hope that future studies will provide them with more feedback on the areas in which the model can improve. Overall, providers and patients have been pleased with the health services provided and see the health benefits that communities receive from remote access.

Recommendations

Based on research of both local and national trends, Connected Nation Michigan and tribal leadership have identified some ways that telehealth services can be promoted to tribal members to improve health equity for all tribal households.

Tribal health clinics should work to promote their telehealth services. Nearly 2 out of 3 households (65%) do not feel adequately informed about telehealth options. Through the promotion of telehealth services, tribal community members would be more aware of the remote services available to them and therefore would likely utilize telehealth more frequently. Clinics should market their telehealth services and resources on websites, social media, by mail, and through office materials, like brochures. Promotional content should address telehealth benefits, including those reported by survey respondents, the ways in which telehealth can be used, where the remote clinics are located, as well as common concerns such as cost, insurance coverage, information privacy, and the quality of services. By bringing awareness to telehealth options and benefits, clinics could capture the 41% who said they have not used telehealth but would be interested in doing so.

Clinics should prepare all patients receiving telehealth to engage with their provider prior to the appointment. When households were asked about their interest in access to online health care tools and services, 37.2% said they might be interested but it depended on the app. This suggests that there is hesitancy around the use of some virtual applications to address medical needs. Clinics should schedule a check-in prior to the patient's appointment to address any concerns to ensure the patient feels comfortable during the appointment and with the mode of communication being used. This would be beneficial for the aging population who may not be as well-versed in technology. In a phone call or video conference, a health care professional could explain what the patient can expect during the appointment, address any concerns, and resolve any technical issues the patient may be experiencing. This would allow both the patient and the provider to make the most of their allotted time, enhancing the quality of the interaction.

All health care providers in the region should provide training to medical staff to ensure tribe members are met with cultural sensitivity. When asked about the preferred ethnic background of health care providers, 4.7% stated that their provider did not have to be Native American, but they would prefer a provider who is trained through the IHS to work with Native Americans. It is recommended that all health care workers receive cultural sensitivity training through the IHS or another trusted organization to ensure that all patients feel safe and comfortable with their physician. Having a medical staff that is trained through the IHS to provide culturally sensitive care would continue to build trust between the community and the health care system.

Tribal health clinics should create a systemwide online patient portal. Online portals make it easy for patients to access their medical records, obtain lab results, and other valuable health information all in one place. Nearly two-thirds of respondents (65%) said they would use an online portal to access their medical information. Online portals are another valuable way for providers to communicate with their patients via chat and through the provision of educational materials, public health announcements, and other vital health-related information. Past studies indicate that online patient portals have the potential to enhance the doctor-patient relationship and increase individual health awareness among users. This is another online tool that could facilitate better health outcomes for the tribal community.

Policymakers should continue to support efforts around the expansion of broadband infrastructure. The most recent iteration of the Federal Communication Commission's map of broadband availability indicates that, in Chippewa County, Michigan, only 59.35% of housing units in the county have access to fixed or licensed wireless broadband service at acceptable speeds of 25 Mbps downstream and 3 Mbps upstream, leaving more than 2 out of 5 buildings without the ability to connect to high-speed internet service. In addition, more than half (52.59%) of households in Chippewa County have fixed broadband access at preferred speeds of 100/20. According to the survey, 15.5% of respondents do not subscribe to any home internet service at all.

Patients without internet at home will be less likely to utilize telehealth services. Despite the installation of a new fiber-optic cable in the Upper Peninsula, discussion group participants conveyed that the clinics still experience connectivity issues, suggesting there is room for further development. Without sufficient broadband, health care clinics will be unable to deliver the quality of services patients require.

Conclusion

As telehealth continues to evolve and expand nationwide, it is imperative to ensure that communities in the most need of care are not left out. This includes the expansion of high-speed broadband internet that is accessible, affordable, and of high quality, particularly for those in under-resourced or remote areas, to address their health care needs effectively. Within the Sault Sainte Marie Tribe of Chippewa Indians, a considerable number of individuals face barriers to accessing high-speed internet or do not own a computer that allows them to connect online. In addition to infrastructure challenges, it is crucial to address the valid concerns of community members who would be interested in telehealth services but do not feel comfortable doing so. Concerns revolve around the quality of care, privacy, cost of appointments, and insurance coverage. Health care providers must take these concerns into consideration as telehealth continues to grow and develop. Ensuring telehealth services maintain the standards of in-person care is crucial for building trust and fostering widespread adoption.

These survey results highlight a lack of understanding among community members regarding telehealth and the services offered. Many do not feel adequately informed about certain aspects of telehealth, which could discourage them from taking advantage of this resource. By providing information, community members can make informed decisions around the use of telehealth services and overcome their hesitation that stems from a lack of information. Addressing these multifaceted challenges is integral to ensuring equitable access to health services for all. The successful integration of telehealth into the health care landscape could enhance the well-being of all tribe members.