



TTAC

TelehealthTechnology.org

National **T**elehealth **T**echnology **A**ssessment Resource **C**enter

2024 TELEHEALTH TECHNOLOGY SURVEY

National Summary

Survey Description and Details

The National Telehealth Technology Assessment Center (TTAC) conducts a biennial technology survey. This survey consists of 15 questions with 26 sub-questions with a goal of identifying:

1. Key and emerging technologies that are currently being used in telemedicine programs
2. Types of technology of interest for future assessment
3. Attitudes of respondents to new and emerging technologies
4. Ways TTAC can best provide relevant information and technology resources

The information used in this survey is used to direct future TTAC assessments, provide context for outreach and special projects, and to provide context for future work.

The 2024 Telehealth Technology Survey opened on March 7, 2024, and closed on May 15, 2024. There were 326 total respondents, with responses collected from all 50 states and 6 US territories.

Key Trends

In reviewing, the data collected by this survey TTAC would like to highlight the following trends:

- Rising Interest in Direct To Consumer Technologies- A growing interest in Direct To Consumer technologies has supplanted video conferencing and remote patient monitoring as the technologies of greatest interest for respondents.
- Increasing deployment of Behavioral Health related services- Behavioral health is now the most indicated type of telehealth service being delivered by respondents, with focus on general behavioral health and substance use disorder care
- AI Generating Interest and Uncertainty: New Artificial Intelligence questions indicate that respondents are either actively using or interested in using AI to improve patient care. Many users are unsure of how their organizations plan to interact with AI.
- Telehealth Growth Expected- Respondents expect growth in telehealth but seem less sure of telehealth expansion compared to previous year data.

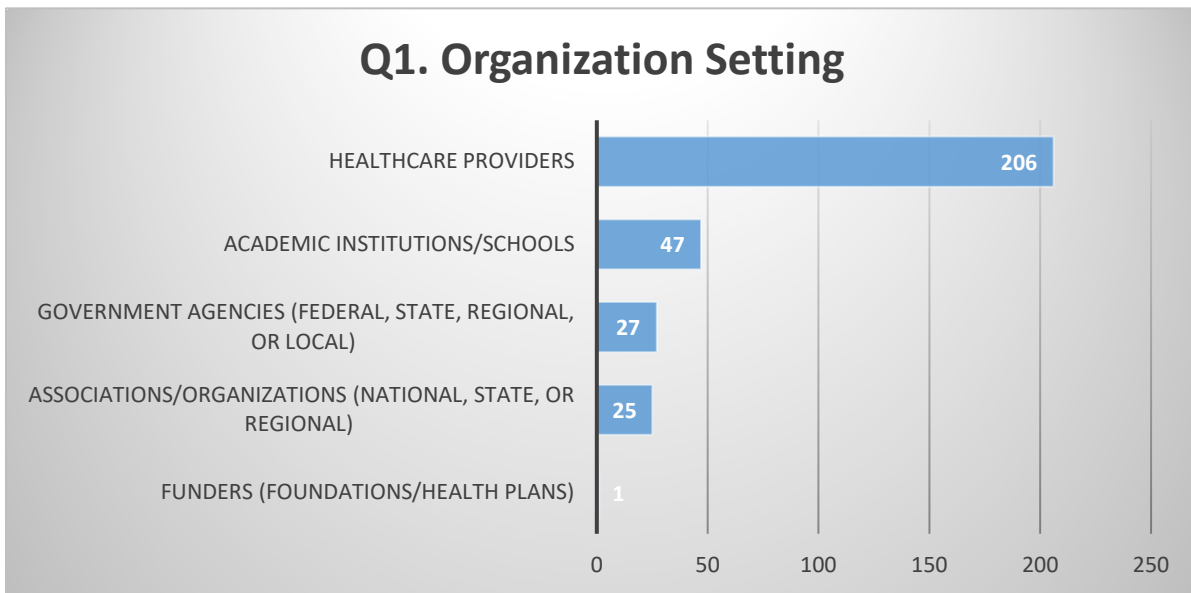
NOTE: Throughout this report, we have provided comparisons to 2022 Telehealth Technology Survey data. We should note that there is no way to verify that the individuals being sampled in this survey (2024) are similar to previous survey respondents (2022). Additionally, the 2024 survey has been significantly updated with branching logic questions, improvements to question language and structure, and includes different emerging technologies. Any comparisons to previous data should be considered anecdotal and used only to draw general trend conclusion.

For each of the following survey questions we will provide a summary of responses, trends, and graphs of collected data.

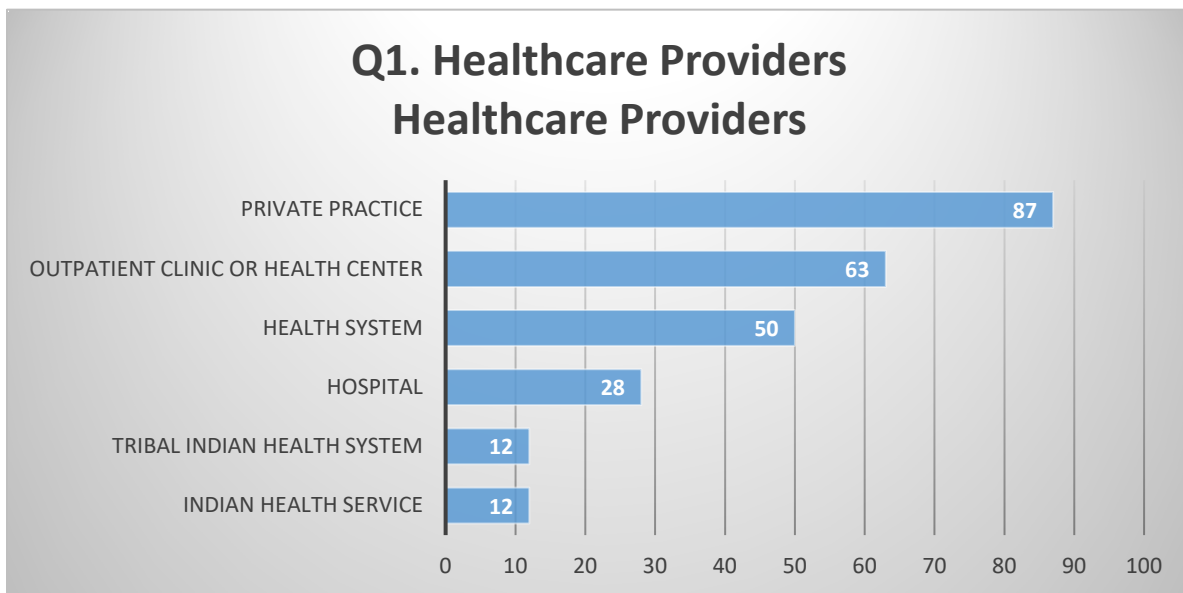
Question 1. Organization Setting

Organization settings reflect the locations and types of organizations responding to the survey, and their roles in providing telehealth services. For the 2024 survey we included organization sub-categories to provide more insight into our organizational audience. A majority of our respondents (67%) identified as healthcare providers. Within that healthcare provider subcategory, it was interesting to note that many

respondents identified as private practitioners. Compared to previous years' survey data, there seems to be a higher representation of private practice respondents.



Q1E. Healthcare Providers



Question 2. Your Role in Organization

While the previous question focuses on the roles of organizations, question two focuses on the roles of individual respondents. This question shows a high response rate from individuals engaged in telehealth administration and leadership, as well as individuals who are providers or supporting telehealth clinically. We are pleased with these responses as this is a key audience for TTAC and the Telehealth

Resource Centers at Large.



Questions 3. Please select all the states where you provide services

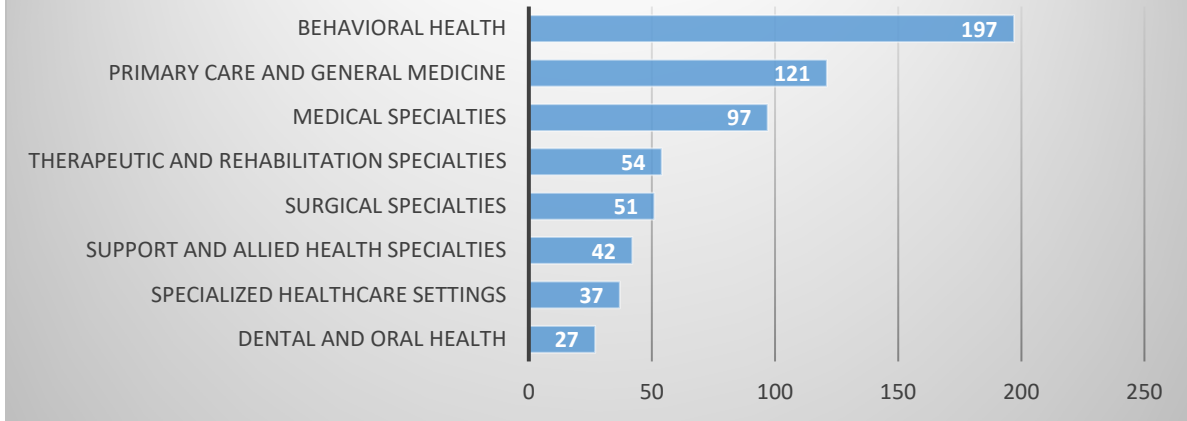
This multi-response question allows us to see the states and territories where respondents are providing services. The table below show the 10 most selected service states. It is important to note that telehealth providers often serve multiple states. Overall, there were 1,163 state selections, which indicates, on average, that our 326 respondents provide services to 3.6 states.

State	Responses	Percent of Total
Florida	48	15%
Georgia	45	14%
Alaska	38	12%
Hawaii	37	11%
Virginia	35	11%
North Carolina	34	10%
California	31	10%
Washington	30	9%
Alabama	28	9%
Texas	27	8%

Question 4. Which clinical services does your program provide through telehealth?

For question 4 we used general service groups and sub-groups to break down the types of clinical services being provided by respondents. It is important to note that multiple services, and sub-services could be selected per respondent. Respondents selected 1.9 services on average.

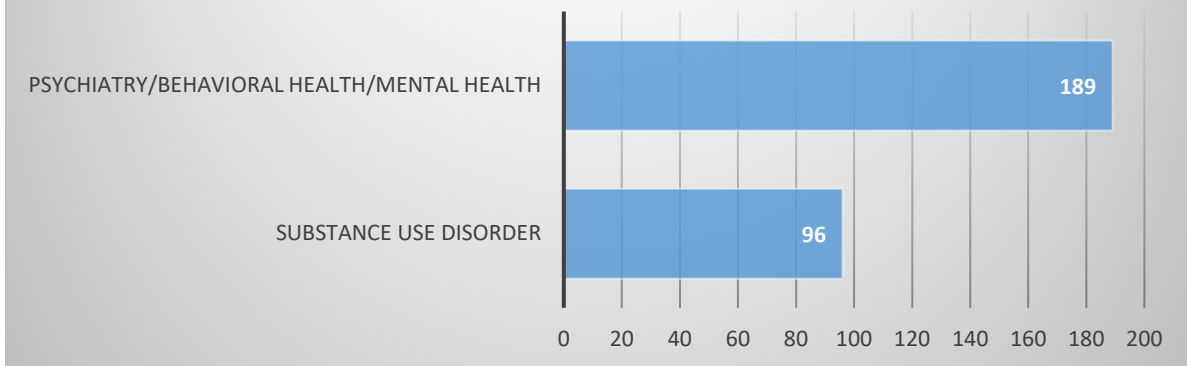
Q4. Which clinical services does your program provide through telehealth?



At the general service group level Behavioral Health, Primary Care/General Medicine, and Specialty Care were the most common services offered with behavioral health offerings being a leading service category. This is a change from previous years, and reflects the increasing patient need for behavioral health services, and the overwhelming acceptance of tele-behavioral health services for those needs. Within the Behavioral Health service group, we see primary demand for psychiatry and mental health services with a growing secondary demand for substance use disorder services.

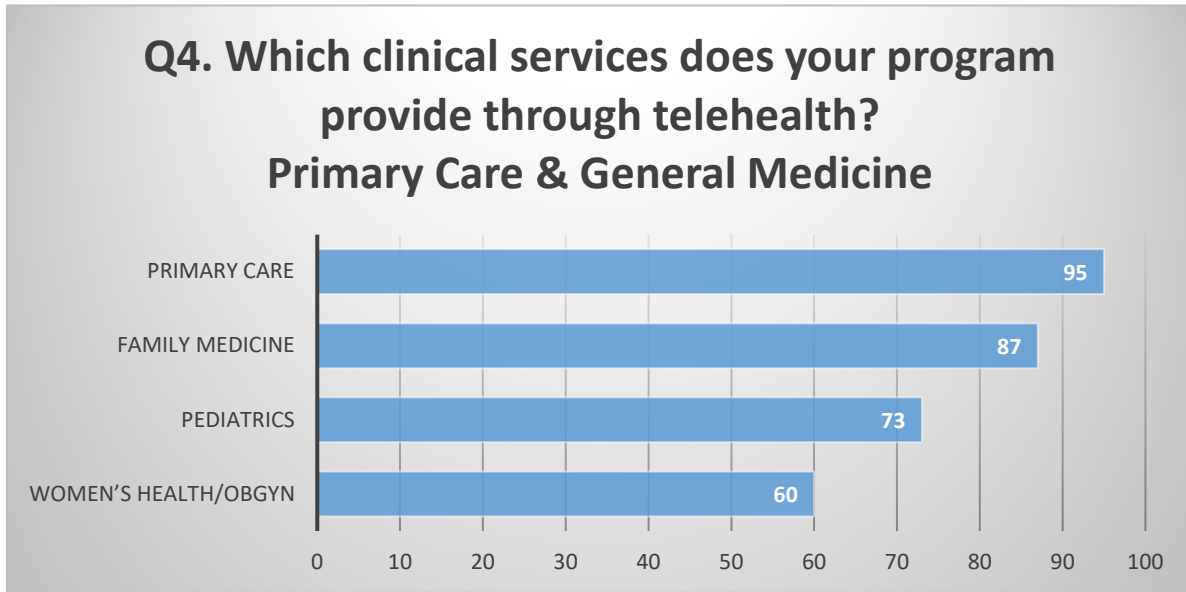
Q4H. Behavioral Health

Q4. Which clinical services does your program provide through telehealth? Behavioral Health



Average selection per respondent: 1.4

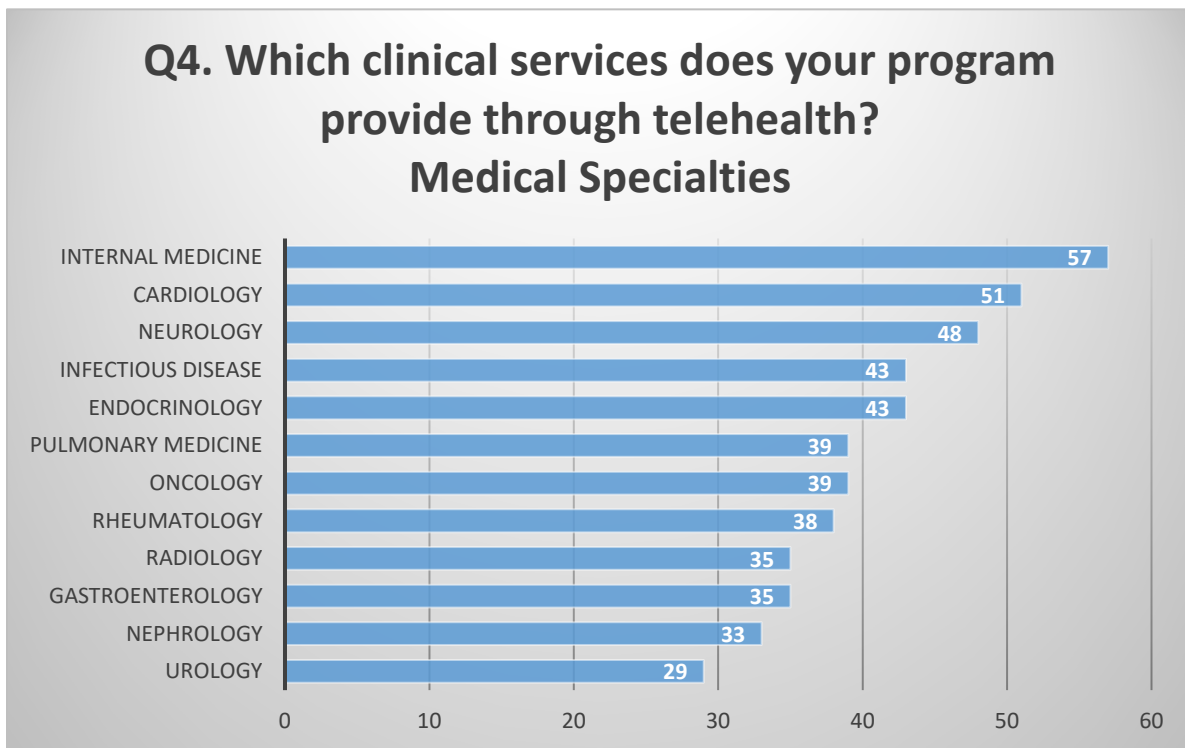
Q4C. Primary Care and General Medicine



Average selection per respondent: 2.6

The Primary and General Medicine subgroup shows a diverse group of services, with most respondents selecting at least two of the listed services. Primary Care and Family Medicine represent the strongest categories, but all sub-groups are well represented by respondents.

Q4A. Medical Specialties

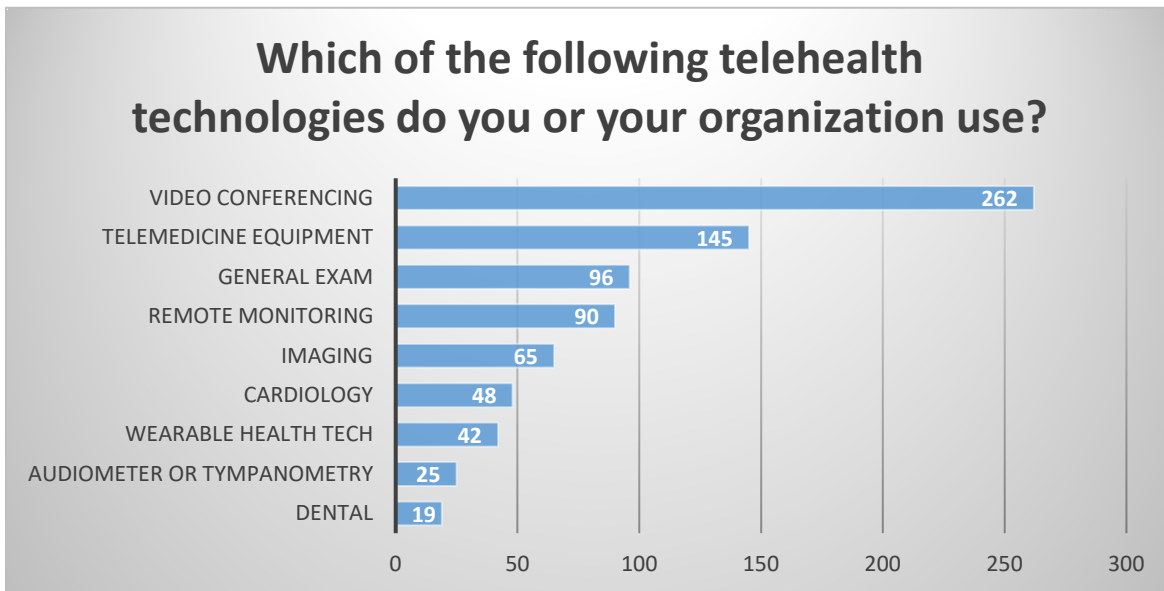


Average selection per respondent: 5.05

In the Medical Specialty subgroups what is most of note is the number of selections per respondent. Respondents on average selected over 5 subspecialties giving a strong indication that if specialty services were offered, programs are likely to provide a variety of specialty services. It is also worth noting that while Internal Medicine, Cardiology, and Neurology are the leading subspecialties there is solid distributions between all the offered medical specialties.

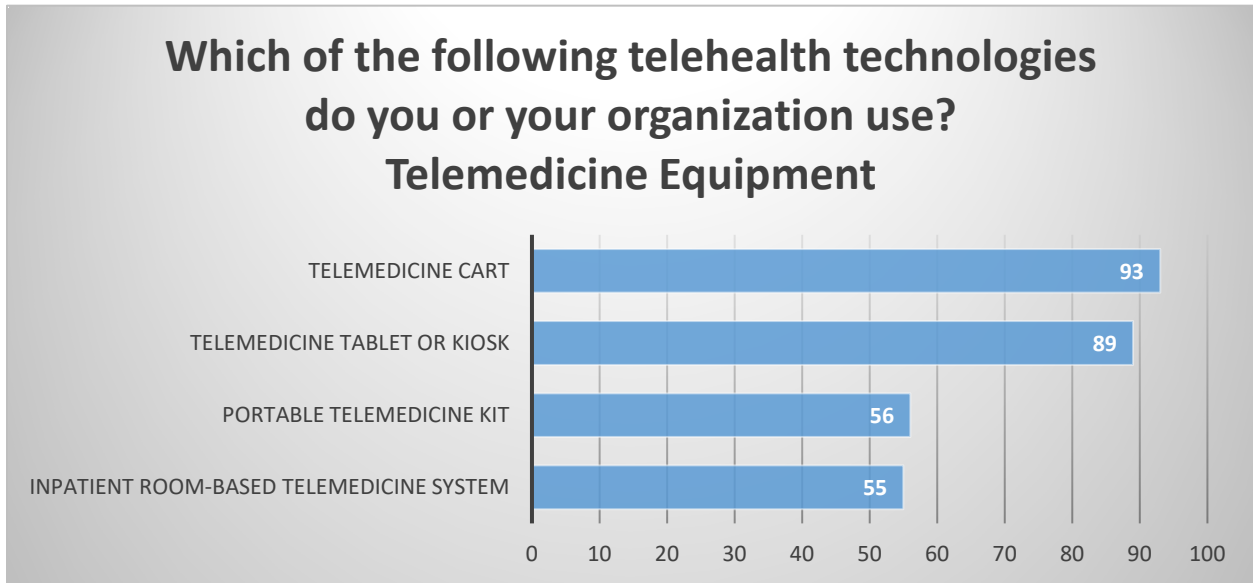
Question 5. Which of the following telehealth technologies do you or your organization use?

There are a variety of technologies that can be used to deliver telehealth services. Question five used a branching logic question to ask respondents to select between types of technology they (or their organization) used to deliver services. By a very significant margin video conferencing technologies remain the primary selection of respondents, though a variety of other solutions like dedicated telemedicine equipment, exam cameras, and remote monitoring technologies showed strong responses.



Average selection per respondent: 2.4

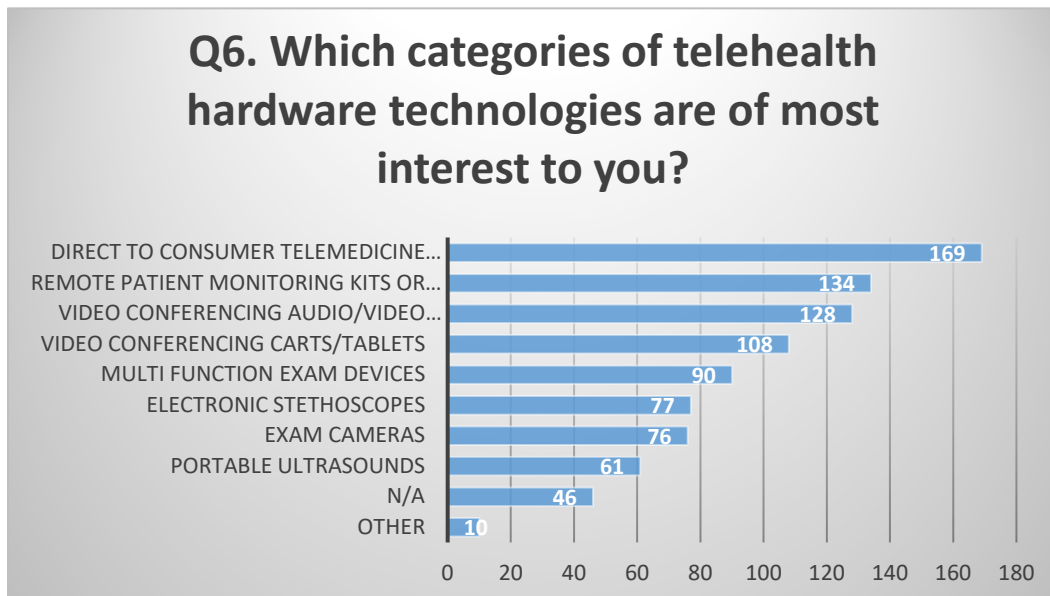
Q5H. Telemedicine Equipment



Further break down of the Telemedicine Equipment sub-question shows that there is significant interest in carts and kiosks, with secondary interest in portable kits and inpatient room systems.

Question 6. Which categories of telehealth hardware technologies are of most interest to you or your organization in the next 18 months?

Direct to consumer is of keen interest to respondents and has replaced Remote Patient Monitoring technology as the primary technology of interest. It is also worth noting that in 2022, when RPM technology was of the most interest only 36% of respondents selected this technology compared to the 52% who indicated interest in direct to consumer hardware.



2024 Telehealth Technology Survey

Technologies	Responses	%
Direct to consumer telemedicine solutions or services	169	52%
Remote patient monitoring kits or devices	134	41%
Video conferencing audio/video peripherals	128	39%
Video Conferencing Carts/Tablets	108	33%
Multi-function exam devices	90	28%
Electronic Stethoscopes	77	24%
Exam Cameras	76	23%
Portable Ultrasounds	61	19%
N/A	46	14%
Other	10	3%

Question 7. Which telehealth software, services, and systems are of most interest to you or your organization in the next 18 months?

EHR integration of video conferencing, as well as secure messaging with patients were the two key areas of interest in the software, services and systems category. Both these areas have shown substantial growth compared to our 2022 survey.

Software, Services, Systems		2024	2022
EHR integrated video conferencing solution/application	171	52%	38%
Secure messaging/texting for patients	165	51%	40%
Patient engagement application	136	42%	19%
Remote patient monitoring solution	122	37%	
Direct to consumer telemedicine solution/application	113	35%	
EHR integrated telemedicine platform (non-video conferencing)	102	31%	
Store and forward telemedicine solution	83	25%	
Non-EHR integrated video conferencing solution/application	64	20%	
Other	20	6%	

Question 8. How likely is your organization to utilize Artificial Intelligence (AI) enhanced telehealth technologies in the next 18 months?

Artificial intelligence is an emerging trend in telehealth and healthcare in general. This question reflects movement of organizations into using more AI health tools. Combined 45% of respondents indicated their organizations are or will be using enhanced telehealth technology. It is also noteworthy that another large group of respondents (35%) expressed uncertainty about the direction their organizations will take concerning AI.

2024 Telehealth Technology Survey

Category	#
Charting	10
Administrative Work	6
Scribe	6
Risk Management/Prevention	4
Clinical Decision	4
Chatbot	3
Patient Messaging	3
Radiology/Imaging	3
EHR Embedded AI	3
Neurology Assessment	3
Care Standards Support	2
Educational Content Creation	2
Don't know	2
Research	2
Video	1
Population Health	1
Patient Triage	1
ECG Analysis	1
Tele Sitting	1
Robotics	1
Data Analytics	1
Scheduling	1
Grand Total	61

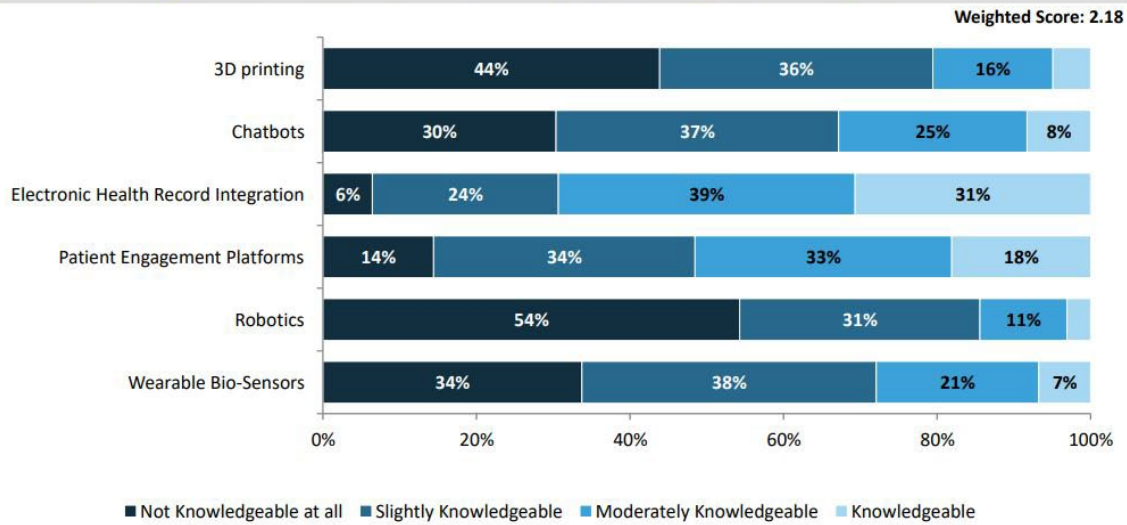
Question 9. How knowledgeable do you feel about the following technologies?

This question is concerned with how comfortable individuals feel around emerging technology topics. Six key emerging topics were provided, and respondents were asked to rate how knowledgeable they felt on these subjects. Respondents felt much more knowledgeable about EHR integration and patient engagement platforms, and much less knowledgeable around the other topics. This is understandable as the two more comfortable technologies are becoming more and more prevalent in the telehealth care space.

This is the first year we have fielded this question with these specific technologies. It will be of interest to note how opinions shift as new technology emerges, and existing technology becomes more commonly used and practical for telehealth applications.

2024 Telehealth Technology Survey

How knowledgeable do you feel about the following technologies.



Graphic captured from Sogolytics testing platform.

Question 10. In the next 18 months I expect my organization to

This question is recurring from the previous survey cycle. It gauges respondent expectations around the organizational growth of telehealth. Like in 2022 most respondents expected growth in organizational telemedicine overall. Of note, however, this was a reduction in percentage from the previous year, with more respondents indicating that telemedicine might stay the same, or actually be reduced in the next 18 months. These results may reflect fatigue, or a change in attitude towards the growth of telehealth following the end of the Covid-19 Public Health Emergency.

In the next 18 months I expect my organization to:		2024	2022*
Expand telemedicine	192	59%	72%
Keep telemedicine the same	108	33%	22%
N/A	24	7%	4%
Reduce telemedicine	2	1%	2%

**In the 2022 data respondents were asked to consider their responses over a two-year period instead of the 18-month period requested in this survey. We don't believe that this change in time period represents a significant change in the overall sentiment reflected in the respondent's feedback.*



Question 11. What kinds of educational resources would you and/or your organization’s staff most likely use?

This question focuses on the types of educational resources respondents expect to use related to telehealth technologies, moreover it gives TTAC an ability to see if the sorts of materials being produced match the interests of our audience.

Some of the categories were slightly re-worded from the 2022 survey, but in general these results are fairly consistent with previous survey results. General summaries of technologies, and overviews of specific products are likely to be of the most use.

Educational Resources		2024	2022
Summaries of technology for clinical programs	209	64%	58%
Technology product overview	190	58%	53%
Technology demonstration and setup	174	53%	45%
Success stories of telehealth technology in use	171	52%	48%
Explanation of technical terms related to telehealth products	132	40%	42%
Other	15	5%	3%

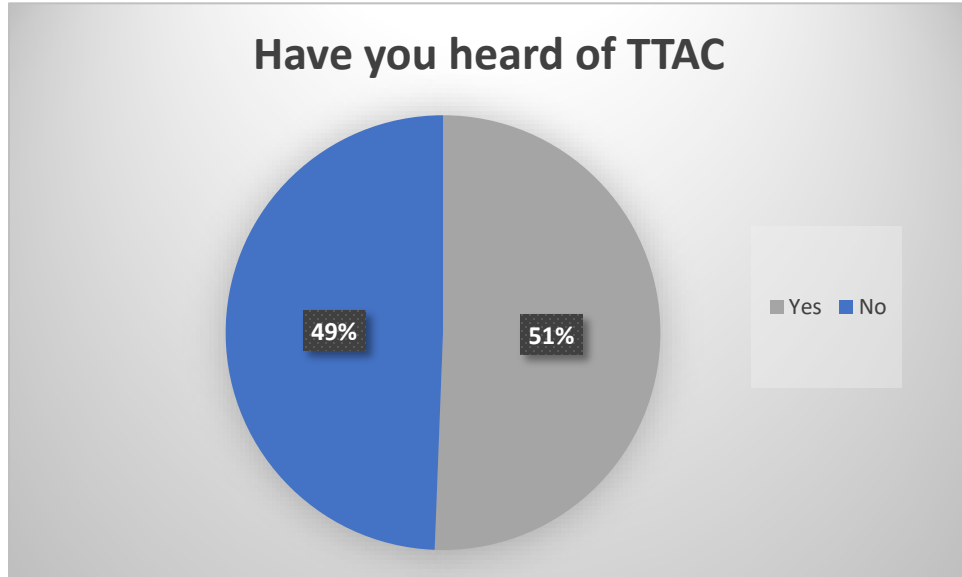
Question 12. Which social networks and online platforms do you use within your organization?

Social media remains a key method for TTAC to engage our audiences. It is helpful to understand the types of platforms respondents are most likely to use, and to address our efforts to content that works within those platforms. There has been a significant reduction in X (formerly Twitter), Facebook, and LinkedIn have all shown a reduction in responses in 2024. YouTube and the Telehealth Resource Center websites have shown double digit growth in this period. TTAC will consider how to leverage more video content, and increased collaboration with TRC partners.

Social Networks	2024	2022
Facebook	52%	62%
LinkedIn	45%	50%
X (formerly Twitter)	17%	33%
Telehealth Resource Center websites	39%	24%
YouTube	33%	23%
We do not use social networks or online platforms within our organization	15%	19%
Telehealth industry specific organizations or websites	29%	-
N/A	6%	-
Other	6%	8%

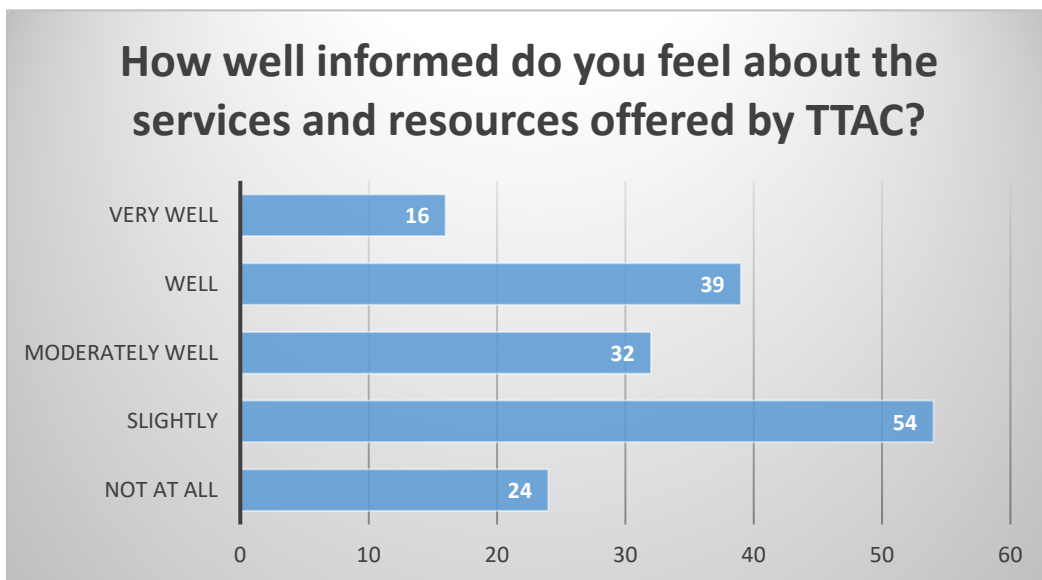
Question 13. Have you heard of the National Telehealth Technology Assessment Center (TTAC)

Question 13 features a series of questions focused on gauging how informed respondents felt about TTAC and our resources. We used branching logic on this question, so that respondents who indicated that they had heard of TTAC were then asked how familiar they were with services and resources offered by TTAC.



Q13A. How well informed do you feel about the services and resources offered by TTAC?
 This question is more granular than our 2022 question. It shows a potential growth area for TTAC, indicating an opportunity to better share our resources to the public in general.

2022 - How well informed do you feel about the research, services and resources offered by TTAC?	
Not informed	23%
Somewhat informed	59%
Well informed	18%



2024 Telehealth Technology Survey

Q13B. How has TTAC best been able to provide technological education or support for your telehealth program?

TTAC uses this question to understand the types of services that our audience find the most useful. Compared with 2022 we see solid growth in the number of respondents who have engaged with us in Webinars, through our website, and in conferences. We also believe that update and refreshing our toolkit offerings will make those offerings more valuable in the coming years.

Education or Support	2024		2022
Webinars	87	57%	46%
TTAC's website	84	55%	35%
Regional or National Conferences	57	38%	18%
Telehealth technology showcase	45	30%	30%
Technology toolkits	42	28%	23%
Innovation Watch articles	26	17%	-
YouTube videos or social media	17	11%	-
Other	9	6%	-

Question 14. Of the toolkits TTAC has published online, which topics would be of the most value to you or your organization?

This is a new question, with the intent to understand which of our toolkit offerings was the most valuable to readers. Interest in our “Technology of Impact in 3-5 years” (informally known as the “Crystal Ball”) shows our audience is interested in emerging healthcare technologies and how they might be implemented. Our Video Platforms and RPM toolkits also showed general interest from our audience.

Toolkits		
What Technology will most impact Healthcare in the next 3-5 years?	188	58%
Clinician's Guide to Video Platforms	145	44%
Remote Patient Monitoring	120	37%
Direct to Consumer	101	31%
Technology Assessment 101	89	27%
Count of Patient Exam Cameras	72	22%
Electronic Stethoscopes	69	21%
None of the above	49	15%
Video Oscopes	48	15%
Pandemic Response Technology Plan	40	12%

Acknowledgements

We would like to thank our 326 respondents for the time and attention they spent in completing this survey. We would also like to thank the National Consortium of Telehealth Resource Centers (NCTRC), the Center for Connected Health Policy (a national Telehealth Resource Center), and each of the regional Telehealth Resource Centers for their efforts in dispersing and promoting this survey to their audiences. Finally, we would like to thank the Health Resources Service Administration, and particularly the Office for the Advancement of Telehealth for their continued funding support of this and other TTAC efforts. This resource has been created with funding from the HRSA Grant # U6743495.