



**TTAC**

**TelehealthTechnology.org**

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

# 2022 TELEHEALTH TECHNOLOGY SURVEY

General Summary

## Survey Description and Trends Overview

The National Telehealth Technology Assessment Center (TTAC) conducts a biennial technology survey. This survey consists of 17 questions with a goal of identifying:

1. Telemedicine Technologies that are currently being used in telemedicine programs,
2. Telemedicine Technologies that may be of interest for future assessment,
3. How TTAC can best provide relevant information and technology resources to telemedicine users.

TTAC uses the results of this survey to direct assessments, outreach, and future work.

The 2022 Telehealth Technology Survey opened on February 15, 2022 and closed on March 31, 2022. There were 394 responses collected from all 50 states and 6 US territories.

This document is a summary of key trend results from the survey that may be of use to the general public.

## Key Trends

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

- There continues to be a large interest in Remote Patient Monitoring technologies
- There is an expectation that telehealth will continue to expand in the next 1-2 years
- There is increased interest in assessing new telehealth technologies
- Interest is moving beyond basic video conferencing audio and video needs

In this report, we have provided a comparison of the 2014 and 2018 Telehealth Technology Survey data to the 2022 Telehealth Technology Survey. As there is no way to verify that the groups being sampled are similar between surveys we can only use these comparisons to draw general trending conclusion.

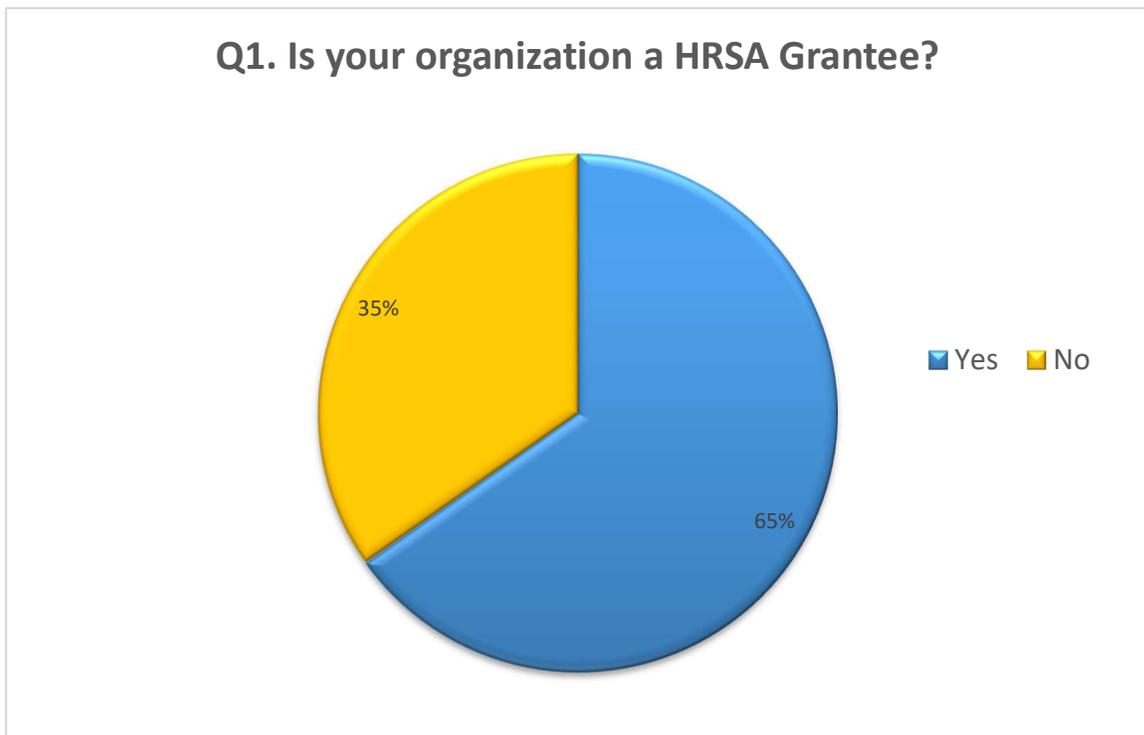
For each of the following survey questions we will provide a brief summary of responses and trends and provide graphs of collected data.

## Question 1. Is your organization a HRSA Grantee?

### Summary:

Nearly two-thirds of respondents indicated that their organization was a Health Resources and Services Administration (HRSA) Grantee. This indicates that while the primary audience being reached by NCTRC, TTAC, and the TRCs is primarily HRSA Grantees, we are also accessing other sorts of organizations and individuals.

HRSA Grantee	
Yes	257
No	137
<b>Total</b>	<b>394</b>



## Question 2. Organization Setting

### Summary:

This single-response question was added to the 2022 survey to identify the sorts of organizations participating in this survey. There is a high representation in the Associations/Organizations (National, State, or Regional) category. For future surveys it may be beneficial to break this category into smaller subcategories to gain more specificity. We were pleased with the number of responses from both Hospital and Health Systems, Private Practice, and Tribal Indian Health Services (IHS) organizations.

Organization	
Associations/Organizations	91
Hospital/Health System	71
Academic	51
Private Practice	47
Government Agency	47
Other	30
Funders	24
Tribal IHS	20
Vendor	11
Consumer	2
<b>Total</b>	<b>394</b>



### Question 3. Which of the following telehealth solutions does your program use?

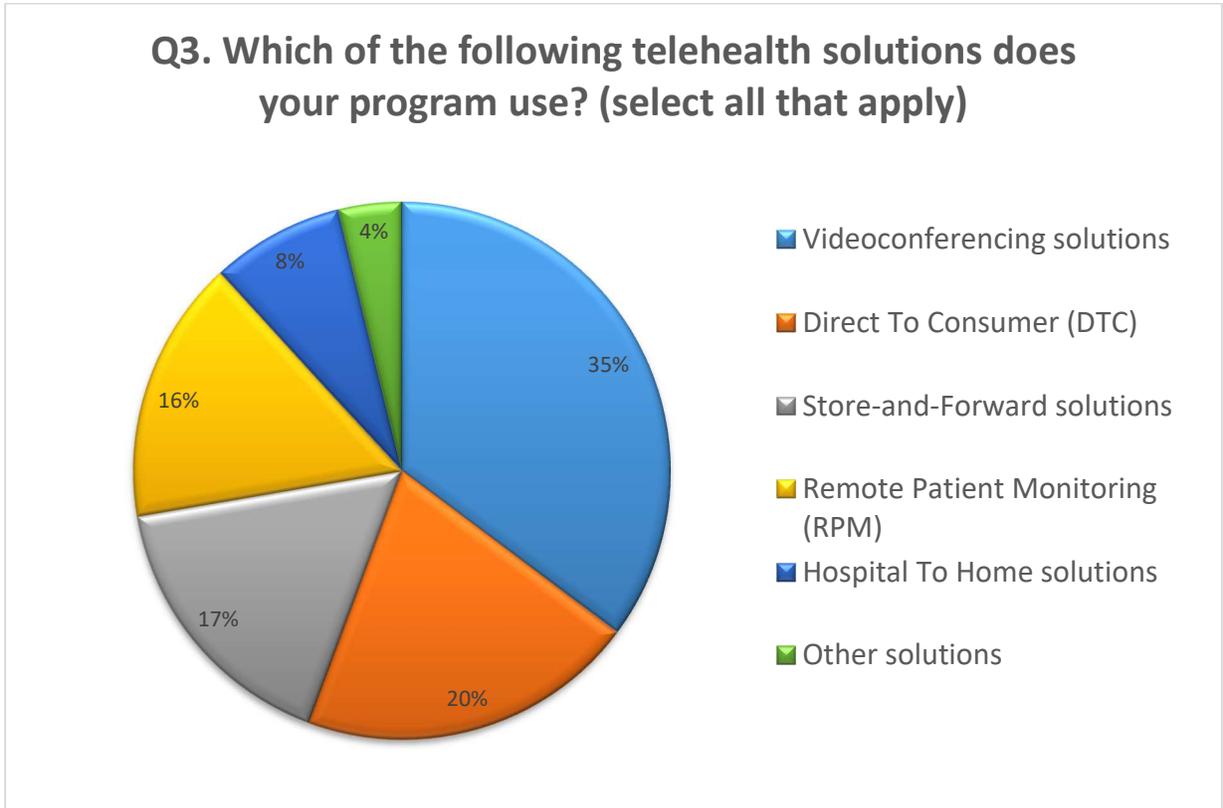
#### Summary:

This multi-response measure looked at the percentage of respondents using types of telehealth technology solutions in their programs. We see that 75% of respondents indicate they are using some sort of Videoconferencing solution in their programs. Newly included to the 2022 survey Direct to Consumer care is showing a substantial (43%) reported usage rate. This would align with our observation that many organizations integrated Direct to Consumer technologies during the COVID-19 pandemic. The increase in Direct to Consumer may also account for the reduction in overall usage of videoconferencing solutions as compared to 2018 and 2014. The delivery of care to the home may occur via video and be part of the percentages seen in 2018 and 2014, but this new category allows further distinction between those video visits.

A full third of respondents indicated they had solutions in use for both store-and-forward as well as remote patient monitoring services. A key metric we consider is the number of selections per respondent, this is an average of the number of selections made per respondent per question. We use this total to understand the likely hood of respondents supporting one or more technology at once. For Question 3 the average number of **selections per respondent was 2.12 (1.93 in 2018)** indicating a continued trend for programs to support multiple telehealth platforms at once.

Telehealth Solutions	2022	2018	2014
Videoconferencing solutions	74.9%	86.2%	89.2%
Direct To Consumer (DTC)	43.4%		
Store-and-Forward solutions	35.3%	33.8%	38.2%
Remote Patient Monitoring (RPM)	33.8%	21.0%	24.1%
Hospital To Home solutions	17.0%		
Other solutions	8.1%	17.1%	

Question 3. Which of the following telehealth solutions does your program use? Continued.



## Question 4. Which telehealth hardware technologies will you likely assess, research or acquire in the next 18 months?

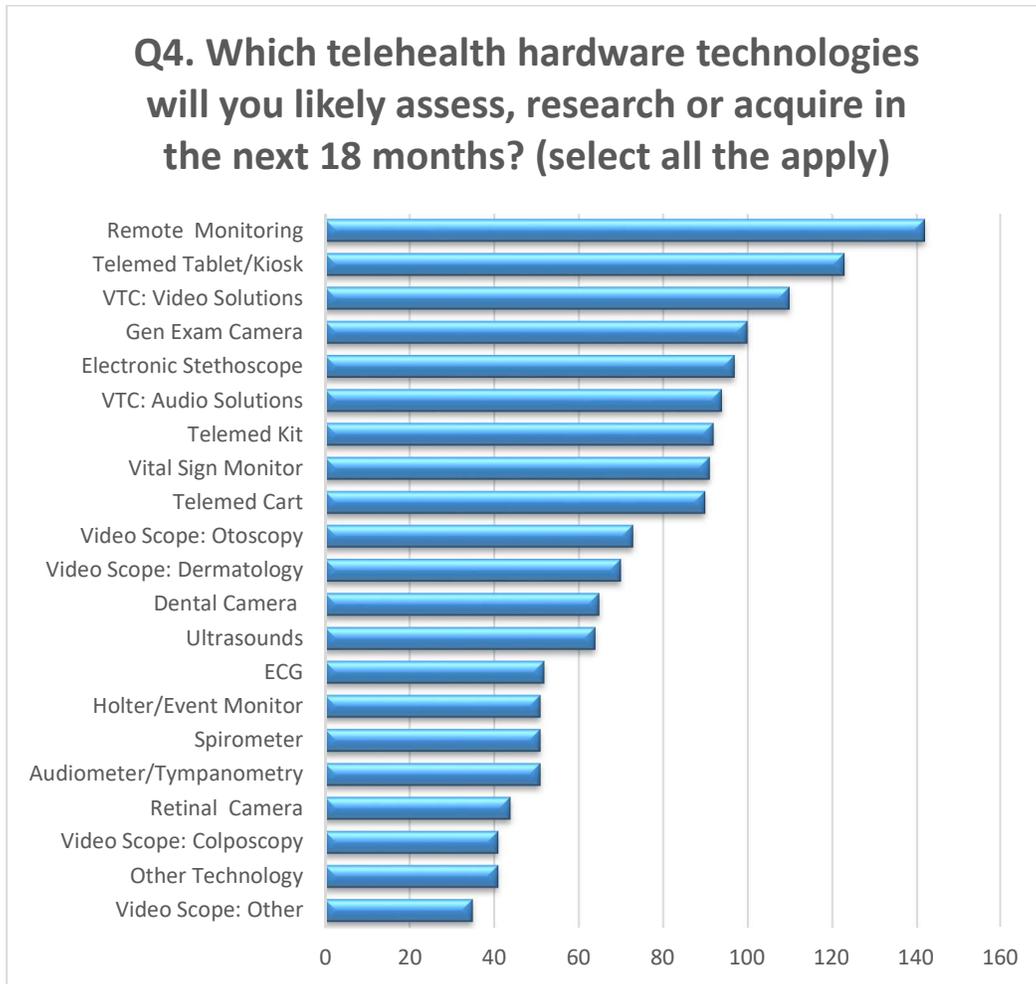
### Summary:

In this multi-response question respondents indicated what technologies they were most likely to assess. In 2022 we see Remote Monitoring, and Telemedicine Tablets and Kiosks supplant Video as the primary are of interest for assessment, research and acquisition. This is a major change from previous survey results. We believe this may indicate that many organizations have standardized on a video platform and are beginning to look at other technologies to add additional functionality to their telemedicine programs. These shifting interests also reflect an increased emphasis on solutions that provide care to the patient in their homes.

**Selections per respondent is 3.99** which indicates that respondents are interested in evaluating multiple technologies in the next 18 months.

Hardware/Technology	2022		2018	2014
Remote Monitoring	142	36%	25%	32%
Telemed Tablet/Kiosk	123	31%		
VTC: Video Solutions	110	28%	43%	53%
Gen Exam Camera	100	25%	20%	33%
Electronic Stethoscope	97	25%	26%	37%
VTC: Audio Solutions	94	24%		
Telemed Kit	92	23%		
Vital Sign Monitor	91	23%	22%	24%
Telemed Cart	90	23%		
Video Scope: Otoscopy	73	18%	12%	19%
Video Scope: Dermatology	70	18%		
Dental Camera	65	16%	11%	12%
Ultrasounds	64	16%	13%	16%
ECG	52	13%	11%	14%
Audiometer/Tympanometry	51	13%	5%	7%
Spirometer	51	13%	9%	8%
Holter/Event Monitor	51	13%	4%	5%
Retinal Camera	44	11%	13%	13%
Other Technology	41	10%	13%	
Video Scope: Colposcopy	41	10%	3%	4%
Video Scope: Other	35	9%	7%	9%

Question 4. Which telehealth hardware technologies will you likely assess, research or acquire in the next 18 months? Continued.



## Question 5. Which telehealth software, services, and systems will you likely assess, research or acquire in the next 18 months?

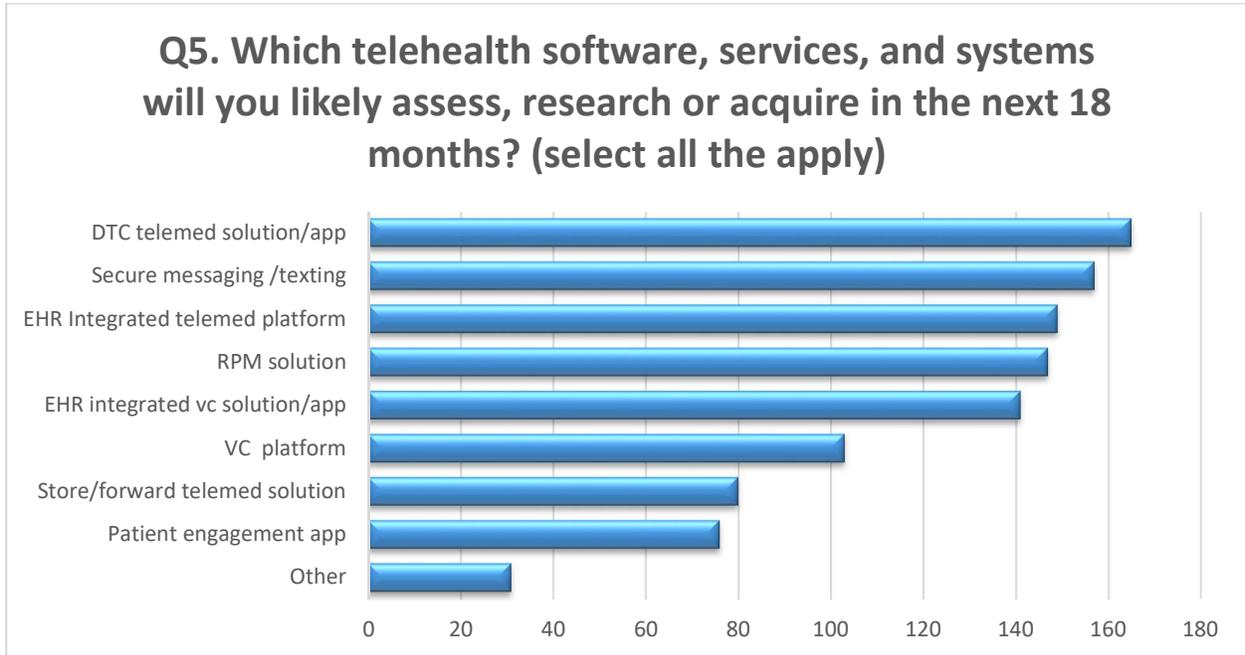
### Summary:

This is a new multi-response question for the 2022 survey. Anecdotally, software, service, and system selection have been a growing area of interest and source of question from our audience. This question allows us to look closer at what sorts of solutions are of interest to respondents. The top five listings have very similar response numbers ranging from 147-165, indicating that there is a similar interest in these solutions. These solutions also indicate an interest in continuing to move care into the patient home, as well as finding solutions that work within the EHR.

**Selection per respondent is 2.7** which indicates an interest in evaluating/selecting multiple software, services, and systems in the next 18 months.

Software/Services/Systems	Responses	%
Direct to consumer (DTC) solution/application	165	42%
Secure messaging/texting	157	40%
EHR integrated telemed platform	149	38%
Remote patient monitoring(RPM) solution/application	147	37%
EHR integrated video conferencing solution/application	141	36%
Video conferencing platform	103	26%
Store/forward telemed solution	80	20%
Patient engagement app	76	19%
Other	31	8%

Question 5. Which telehealth software, services, and systems will you likely assess, research or acquire in the next 18 months? Continued.



## Question 6. How would you categorize your organizations use of the following technologies?

### Summary:

This is a new question for the 2022 survey and focus on 7 identified key areas of future telehealth technology development identified by our Crystal Ball Project panel. It is interesting how consistent the ratings are between each of the future technologies in each time period. Many rated their organizations as unlikely to use these technologies in the next 3-5 years. A similar percentage indicate that their organization is either currently using these technologies, or will be implementing them in the next 1-2 years. It seems this indicates that in general, respondents are either planning to or already engaging with technologies, or are unsure how or if these technologies will be used within their organization. It would be interesting to see if these responses are in any way tied to organizational size or rurality.

Technology	Organizational Usage			
	Currently using	Planning to use in 1-2 years	Likely to use in 3-5 years	Unlikely to use
3D Printing	21%	24%	13%	43%
Patient Engagement Platform	21%	25%	13%	42%
Artificial Intelligence(AI)	21%	25%	12%	42%
Chat Bot	21%	25%	12%	43%
EHR Integrations	20%	25%	12%	43%
Wearable Bio Sensor	20%	24%	13%	43%
Robotics	20%	25%	13%	43%

## Question 8. Which clinical applications does your program support?

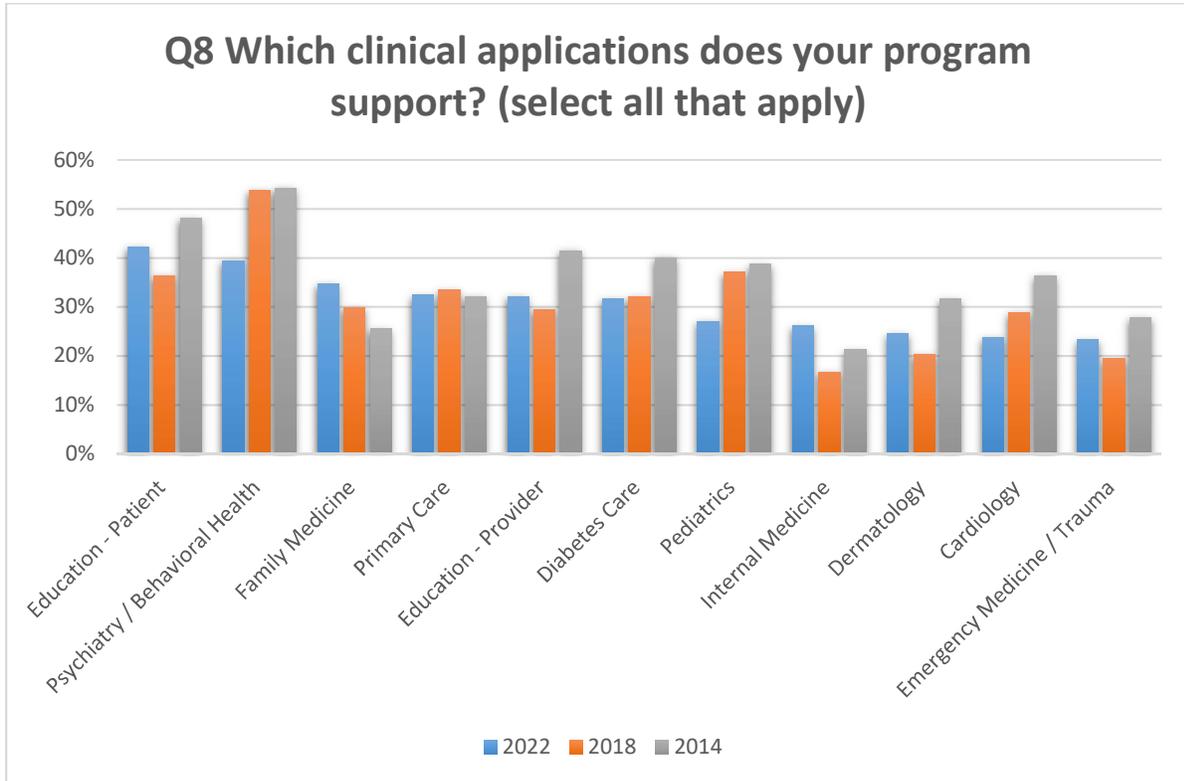
### Summary:

This multi-response question looks at the clinical applications supported by the respondents program. We have comparison data for 2018 and 2014, though directly comparing these sample groups is challenging as we have no way of now how similar the respondent sets are. Common applications include Patient Education and Psychiatry/Behavioral Health, although those percentages appear lower when compared to 2018/2014 data.

**Selection per respondent is 3.4** which is significantly fewer than the selection rate of 6.9 in 2018, which may indicate that while multiple programs are being supported in most respondent organizations, fewer overall programs are being supported per organization.

Clinical Applications	2022	%	2018	2022/2018 %Change	2014	2022/2014 %Change
Education - Patient	167	42.3%	36.39%	5.89%	48.11%	-5.83%
Psychiatry / Behavioral Health	156	39.5%	53.77%	-14.28%	54.25%	-14.76%
Family Medicine	137	34.7%	29.84%	4.84%	25.47%	9.21%
Primary Care	128	32.4%	33.44%	-1.03%	32.08%	0.33%
Education - Provider	127	32.2%	29.51%	2.64%	41.51%	-9.36%
Diabetes Care	125	31.6%	32.13%	-0.48%	40.09%	-8.44%
Pediatrics	107	27.1%	37.05%	-9.96%	38.68%	-11.59%
Internal Medicine	103	26.1%	16.72%	9.36%	21.23%	4.85%
Dermatology	97	24.6%	20.33%	4.23%	31.60%	-7.04%
Cardiology	94	23.8%	28.85%	-5.05%	36.32%	-12.52%
Emergency Medicine / Trauma	92	23.3%	19.37%	3.92%	27.83%	-4.54%

Question 8. Which clinical applications does your program support?  
Continued.



### Question 9. In the next 1-2 years I expect my organization to...

**Summary:**

This is a new question for the 2022 survey. This question is designed to measure the impression of the future growth of telemedicine within the respondent organizations. Expansion of telemedicine was clearly indicated in the responses.

<b>In the next 1-2 years I expect my organization to:</b>	
Expand telemedicine	72%
Keep telemedicine the same	22%
N/A	4%
Reduce telemedicine	2%



## Thank You

TTAC would like to thank all of the respondents, and the Telehealth Resource Centers for their support in collecting this data. The information we collect is key to helping TTAC provide the most up-to-date and relevant resources for our audience.

If you have questions about this survey, or would like to know more about TTAC and the resources we offer please contact us through our website.

[www.telehealthtechnology.org](http://www.telehealthtechnology.org)