# NCTRC Annual Report 2021

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As the United States went into a full calendar year wrestling with the COVID-19 pandemic, the National Consortium of Telehealth Resource Centers (NCTRC) continued to rise to the challenge of addressing the nation’s need for telehealth technical assistance.

After the first wave of demands that saw many healthcare organizations providing and experiencing telehealth for the first time and assisting with their questions and needs, the telehealth resource centers (TRCs) found 2021 to be a year of refining and improving. With providers settling into using telehealth and patients becoming accustomed to receiving services in that manner, the focus of the TRCs gravitated towards assisting these groups on how best to utilize the technology to provide efficient and effective care.

The TRCs are funded by the U.S. Department of Health and Human Services (HHS) Health Resources and Services Administration (HRSA) Telehealth Innovations and Services Division, Office for the Advancement of Telehealth (OAT) and they collectively make up the NCTRC. The NCTRC is a collaborative of the 12 regional and 2 national TRCs committed to assisting organizations in the implementation of telehealth programs for rural and underserved communities. The 12 regional TRCs cover all 50 states and the District of Columbia, the affiliated Pacific Islands, Puerto Rico, and the US Virgin Islands. The remaining two centers have a national focus and include the Center for Connected Health Policy and the Telehealth Technology Assistance and Resource Center.

The NCTRC provides unbiased, nonpartisan and expert telehealth technical assistance to various healthcare organizations throughout the country, with particular emphasis on rural and medically underserved areas. The regional TRCs are experts in telehealth implementation and are equipped to provide technical assistance, education, and resources on various topics. Each TRC has a regional uniqueness, allowing them to provide a wide range of assistance targeting local community needs. The NCTRC is dedicated to playing its part in expanding the reach of healthcare and sustainable telehealth programs in local, rural, and underserved communities for the most vulnerable populations.

While the fight against COVID-19 has made significant gains, we are still in the midst of a pandemic and telehealth will continue to play a key role in delivering services now and beyond the public health emergency. The TRCs and the NCTRC remain committed to ensuring telehealth can be used to allow communities to access the healthcare services they need.
Special Projects/Consortium Activities

Each TRC participates in several special projects each year. The extent of these projects has significantly expanded during the COVID-19 pandemic as the demand for telehealth technical assistance has dramatically increased. Two special project highlights per TRC from the 2020-2021 fiscal year are described below, followed by special project highlights from multiple TRCs working together, from the NCTRC as a whole, and from collaborations with external partners.

INDIVIDUAL TRC PROJECTS

| Center for Connected Health Policy (CCHP) |

✅ Policy Analyses: CCHP put together many analyses on new federal and state policies and distributed the changing information to the public in a timely, non-technical, accurate, easy-to-understand format. As new policies were constantly being issued and updated, CCHP would generate information and analyses within hours of the policies being publicly released.

✅ Telehealth & Medicaid Webinar Series: After the initial pandemic rush subsided, CCHP moved on to raise awareness on Medicaid programs by starting a Medicaid webinar series, which discusses a different topic each week over 90 minutes. Past webinars are recorded so they can serve as a continued resource for others.

| Telehealth Technology Assessment Resource Center (TTAC) |

✅ Virtual Technology Showcase: TTAC, along with the rest of the NCTRC, was preparing a hands-on showcase that was scheduled to be part of six live conferences throughout 2020, then had to make a rapid transition to make the showcase virtual. The revised Telehealth Technology Showcase combined PowerPoint Presentations with pre-recorded sessions and live demonstrations of technology in order to provide an opportunity for conference attendees to virtually renew and assess similar medical peripherals in a vendor neutral environment.

✅ Video Platform Assessment: TTAC used a network emulator to do an assessment of the largest video platforms to determine how they handled spotty cell networks, low bandwidth, delays, packet loss, satellite interruptions or extremely rural locations. A YouTube video captured the results of this network stress test, including the resulting audio and video outputs, allowing those evaluating and comparing platforms to make better informed decisions.
California Telehealth Resource Center (CTRC)

✔ Statewide Telehealth Training Program for Primary Care Clinics: Prior to the pandemic, CTRC completed a two-year, statewide telehealth training program for nine primary care clinics through the California Health Care Foundation. CTRC visited these clinics in-person and provided everything they needed to expand their telehealth programs, which also allowed CTRC to help other primary care clinics rapidly shift to telehealth during the pandemic by having established webinars and workflows available right away.

✔ Self-Serve Online Courses: CTRC quickly converted their in-person telehealth implementation workshops into online courses. Using a combination of videos, reading materials, click-through content, and other set-ups, CTRC created its cornerstone telehealth coordinator series, which encompasses eight modules that cover technology, program definition, billing, legal, success factors, and funding options.

Great Plains Telehealth Resource and Assistance Center (gpTRAC)

✔ Expansion of Telehealth Database: gpTRAC expanded and refined their technical assistance (TA) database for all the TRCs, adding COVID-related variables and a monthly report that broke down TA activity by week in order to monitor TA demand during the pandemic, which quickly doubled and then tripled during the first three months of the pandemic. The database helped TRCs better manage staff resources and it helped to unify the manner of collecting, reporting, and interpreting data to improve consistency across TRCs.

✔ Telehealth Billing Guides: gpTRAC contracted with a group to consolidate Medicare, Medicaid, and commercial payer information into state-specific comprehensive telehealth billing guides for each state in their region. These guides are extensively detailed with tables of billing codes, types of telehealth encounters and providers, payer service coverages, and so forth, and they are expected to be updated quarterly or as needed moving forward.

Heartland Telehealth Resource Center (HTRC)

✔ ECHO Programs: HTRC worked with the Missouri Telehealth Network to offer a nine-month virtual Telemedicine ECHO where participants learned how to leverage their current telehealth program into a permanent solution for patients, and newcomers to telehealth were introduced to best practices for building a budding program. HTRC also offered a Telehealth Collaborative, which included participation in the Telemedicine ECHO, individualized technical assistance, and a small stipend to assist with costs related to implementation of a telehealth program.

✔ Policy and Reimbursement Webinar Series: HTRC has sponsored an ongoing webinar series about policy and reimbursement, both an overview and how they apply to each of our three states. To answer policy and reimbursement questions in their region, HTRC worked with a lawyer and certified coder who is on the faculty of the University of Kansas Medical Center.

Mid-Atlantic Telehealth Resource Center (MATRC)

✔ Geriatric Telehealth: MATRC worked with the University of Virginia (UVA) to capture best practices and lessons learned in their work with local long-term care facilities. MATRC has put together an implementation toolkit and training module to help others working in this space. This work with the geriatric population has since morphed into a longer-term national senior-friendly telehealth initiative in partnership with West Health Institute in California.
Telehealth for Homeless Individuals: MATRC worked to capture best practices and lessons learned as UVA worked with a local hotel to serve its communities’ homeless individuals, providing telehealth services and connections to case managers and social workers. MATRC has put together resources about the program into a toolkit so others who are interested might be able to learn from their experiences.

Telehealth Finder Application: NRTRC launched an on-line telehealth mapping tool that will help link patients with facilities that offer telehealth in the Northwest Region. This tool will be updated twice per year to keep the data current and allows patients to filter their search by the specialty services they are looking for along with contact information for those facilities.

Northeast Telehealth Resource Center (NETRC)

Monthly Primary Care Association Meetings: NETRC continued to convene all eight of their primary care associations (PCAs) monthly to assess needs, share resources, tell NETRC what their members are asking for, and to get their input on new ideas. Although about 20 individuals attend this virtual meeting monthly, the information and resources are distributed to 200-300 additional staff within the PCA networks.

Integration of Telehealth Training at Colleges and Universities: NETRC helped many regional universities across multiple health professions programs with integration of telehealth training. Today, many universities see telehealth training as a vital part of their core curriculum.

Northwest Regional Telehealth Resource Center (NRTRC)

Online Telehealth Training Courses: NRTRC hosted bi-weekly office hours as well as created self-paced online telehealth training courses hosted on Canvas that offer continuing medical education (CME) credits. NRTRC also partnered with the Washington State Telehealth Collaborative (WSTC) to help create and host the state mandated Clinician Telehealth Training. To date they’ve had more than 41,000 people enroll in all course offerings with 27,000 participants completing courses.

Pacific Basin Telehealth Resource Center (PBTRC)

Broadband Hui: A statewide, multi-sector group of business members, government leaders, health educators, and telecom carriers have been convening every Wednesday since March 2020, when the gaps in broadband services became more important to address than ever before. The group focused on digital equity for ALL, which stands for Access, Livelihood, and Literacy and formed long-term working relationships that laid the foundation for a wide range of initiatives.

Hawaii Telehealth Access Points Program: PBTRC worked with the state department of health and the library system to provide telehealth access points in local libraries. The libraries provide a private room for telehealth consults and loan out devices that provide hot spots in the home. PBTRC is also hiring and providing training for local health navigators at the libraries who will help patients connect to and navigate through their appointments.
South Central Telehealth Resource Center (SCTRC)

- **Training Centers**: SCTRC opened training centers in different regions of its territory in order to reach underserved areas of their state, giving providers the opportunity to touch, feel, and envision how they could use telehealth technologies in their practices in a vendor neutral environment. SCTRC put together telehealth demonstration kits that could be loaned out to providers who couldn’t get to a training center.

- **Telehealth Video Analysis Monitoring Program for Training and Evaluation**: SCTRC partnered with the UAMS Institute for Digital Health & Innovation to assist with a telehealth video analysis monitoring program for training and evaluation. The clinical and technical teams developed a prototype to automatically gather information about a telehealth encounter and evaluate key metrics, provide feedback and training to healthcare or medical students performance, and help healthcare staff improve performance.

Southeast Telehealth Resource Center (SETRC)

- **Early Autism Intervention Program**: SETRC began working with the Global Partnership for Telehealth and experienced autism spectrum disorder (ASD) clinicians to create ToddlerTracks.org. Toddler Tracks provides free, evidence-based online autism early intervention training for families awaiting access to autism treatment services, as well as education for healthcare workers and teachers.

- **Telehealth Learning Center**: The Telehealth Learning Center is an educational trailer designed to promote experiential learning through a wide range of telehealth technology stations. The trailer will bring telehealth technology to universities, schools of higher learning, events, and other venues throughout the region to allow clinicians, healthcare students, and—when appropriate—the public, to learn about telehealth and gain hands-on experience trying different pieces of telehealth equipment.

Southwest Telehealth Resource Center (SWTRC)

- **Virtual Bi-Monthly Telehealth Training Sessions**: SWTRC transitioned their hybrid, bi-monthly training sessions on telehealth-related topics to be all virtual and to include new training programs specifically to COVID-related audiences. At its peak, they trained more than 400 participants and it’s plateaued at about 100 participants per session now, which is still far above the 30-person attendance pre-COVID.

- **Working with Native Nations**: SWTRC has always worked with various Native Nations, mostly Navajo, to provide support and assistance. During the pandemic, the organization provided emails, patient fact sheets, and other information for providers and patients in their own languages.
**TexLa Telehealth Resource Center (TexLa TRC)**

- **Frontiers in Telemedicine (FIT) Lab & Certificate Course:** TexLa TRC worked with the Texas Tech University Health Sciences Center (TTUHSC) to launch and manage the Frontiers in Telemedicine (FIT) Lab, which is the only competency-based, hands-on telehealth training facility for providers in the country. TexLa TRC and TTUHSC are developing curricula for a FIT Certificate Course to train clinical staff about telemedicine, including clinical encounters, telemedicine technology, etiquette and ethics, and telemedicine billing.

- **Monthly Telemedicine Project ECHO:** As part of the education and training offerings from TexLa TRC, the organization offered monthly telemedicine project ECHO webinars during the pandemic. They deal with important topics such as COVID 19 in pediatrics, caring for patients with disabilities, ICU care, mental health, the optimization of telemedicine, and remote patient monitoring.

**Upper Midwest Telehealth Resource Center (UMTRC)**

- **A Virtual View Podcast:** UMTRC used some of its CARES funding to create a podcast called A Virtual View that airs on the first and third Friday of every month. They cover a wide variety of topics, including updates on CMS proposed bill scheduling, and invite guest speakers to tease out different perspectives in the telehealth arena. The podcast audience continues to grow as they prepare for their second season beginning in January.

**Demonstration Center and Library:**
UMTRC has begun to create a demonstration center and library for telehealth-related peripherals and equipment, including webcams, lighting devices, thermometers, digital stethoscopes, otoscopes, and various exam kits. Their goal is to create a small vendor-neutral library of short demonstration videos, telehealth platforms, and equipment that providers can access virtually and in-person to help determine what technology can best suit their organization.
MULTIPLE TRC PROJECTS

Subject Matter Expert (SME) Interview Project - CTRC (lead) with TTAC, gpTRAC, MATRC, NETRC, PBTRC, SETRC, & TexLa: CTRC managed the workload for a national project for TRCs to interview and survey various SMEs about their telehealth experiences. TRC representatives interviewed 131 SMEs from over 50 FQHCs and RHCs, in 22 different states and the District of Columbia, with the goal of discovering best practices and success stories from clinic personnel who successfully transitioned to telehealth in response to the pandemic. These key points were found to be best practices for telehealth in response to COVID-19:

- Continue to use telehealth so clinics never have to begin anew
- Provide training/instruction to ensure a positive experience
- Explore emerging technology to provide remote health visits
- Provide technology and private, socially distanced space

FQHC Project ECHO Mini-Series - MATRC (lead), SETRC, TTAC, TexLa, SCTRC, NETRC, & gpTRAC: As a wrap up for the SME Interview project, MATRC hosted a four-session Project ECHO mini-series titled FQHC Telehealth Best Practices: Lessons Learned from the Pandemic. The series explored telehealth challenges encountered and lessons learned and included sessions focused on successfully engaging hard-to-reach populations with telehealth, successfully engaging staff with telehealth, making smart and effective telehealth technology decisions, and where to go with telehealth after the pandemic.

Telehealth Locator - NETRC, MATRC, SCTRC, UMTRC & PBTRC: Several TRCs are collaborating to create a Telehealth Locator, which is a mapping data tool that provides information for grant writers/researchers, policy makers, providers, and patients mapping out telehealth provider locations, designated rural areas, broadband, social determinants of health, and hundreds of other mapped data points to accurately assess population health needs and access to telehealth care.

Tribal Telehealth Workshop - SWTRC, gpTRAC, HTRC, & TTAC: Several TRCs jointly participated in “Introducing Telehealth to Indigenous Communities: A Telehealth 101 Virtual Workshop for Tribes” in November 2020. TRCs provided educational presentations on telehealth basics, business plans, and technology & facility design.

FQHC/RHC Video Library - CTRC, MATRC, NETRC, PBTRC, TTAC, & UMTRC: In order to meet the educational needs of FQHCs and RHCs, many of whom made a rapid pivot toward telehealth during COVID-19, this joint TRC project involves creating a series of brief (under 15 minute) videos that address key topics such as assessing clinical service needs, developing a program model, assessing financial feasibility and developing a business model, developing policies and procedures, determining technology requirements, training and process improvement, and program evaluation.

FQHC of the Future Visioning Project - MATRC (lead) with NETRC, gpTRAC, & TTAC: Several TRCs participated in a Roundtable composed of all HRSA-funded Training and Technical Assistance (TTA) Providers working with FQHCs. It was noted that while large healthcare organizations have teams of people tasked with thinking about future innovations, most efforts to assist FQHCs with telehealth integration have been in reaction to a need as opposed to proactively moving toward a vision. A group is coming together to develop a framework that will guide FQHCs into future transformation, particularly with respect to the role of technology and digital health.
FQHC Standardized Telehealth Data/ Metrics & Telehealth Performance and QI Toolkit Projects - MATRC (lead) with NETRC, gpTRAC, SWTRC, HTRC, & CTRC:
As a result of the pandemic and the rapid pivot toward telehealth, many have been looking to try to understand the impact of telehealth on healthcare access and outcomes. MATRC has engaged interested parties on two collaborative efforts related to telehealth data. The first is an effort to develop a telehealth taxonomy and make recommendations for a minimum dataset for FQHCs for data capture. The second is the development of a telehealth performance and quality improvement toolkit for clinics and practices.

NCTRC PROJECTS

Telehealth Hacks: Taking over for HHS Office of the Assistant Secretary for Preparedness and Response, the NCTRC held another series of Telehealth Hack webinars that lasted from October 2020 – March 2021. In total, the TRCs held 12 separate webinars that covered issues such as licensure, privacy, technology trends, FQHC models, post-acute and long-term care and telehealth on a college campus. Over 1,500 people in total attended the webinars that were overwhelmingly well-received.

Association of Maternal and Child Health Programs (AMCHP) Project: The NCTRC worked with AMCHP to provide assistance to their Maternal and Child Health Telehealth Capacity for Public Health Systems program that assisted in enhancing the use of telehealth in state and territorial Title V programs; enhanced public health telehealth infrastructure, and enhanced telehealth maternal, infant and early childhood home visiting services. The TRCs provided technical assistance and educational resources to the grant recipients under this program helping them to meet their intended goals.

New NCTRC Website: In February 2021, the NCTRC launched its new website with several advanced features. The new site includes an interactive map where users can easily find their regional TRC depending on their location. Additionally, the website acts as a clearinghouse for telehealth resources curated by the TRCs and a collections page including: 1) Telehealth Basics, 2) COVID-19 & Pandemics, 3) Technology & Broadband, and 4) FQHC Telehealth Resources.

Factsheet Redesign & Translated Resources: Over the past year, the NCTRC redesigned three of its most popular factsheets: What is Telehealth, How Patients Can Engage Telehealth, and the COVID-19 Telehealth Toolkit. All three factsheets were redesigned with similar formatting and colors consistent with NCTRC branding. Each of the factsheets were also translated to Arabic, Spanish, and Vietnamese and are now housed in the Translated Resources section of the website along with other TRC-created resources in different languages.
**Telehealth & Disability Factsheet:** The NCTRC created a new factsheet titled, Telehealth & Disability: Recommendations for Providers. This factsheet provides legal obligations and recommendations for providers when treating patients with disabilities via telehealth. It also includes specific tips when treating patients who are deaf or have hearing loss, patients who are blind or have vision loss, and patients with physical/developmental disabilities.

**Definition of Disability:**
A person who is blind or deaf is a person who has an impairment that substantially limits one or more major activities or a person who is deaf is a person who has a substan
tial limitation of hearing.

**Legal Obligations:**
Under Section 504 of the Rehabilitation Act, an individual with a disability need not be qualified in order to receive access to the benefits and services of an educational program or activity, and the American with Disabilities Act (ADA) protects individuals who have a record of a disability or are perceived to have a disability. In the context of healthcare, discrimination under the ADA includes the exclusion of physical access to healthcare services, whether those services are provided in person or via telehealth.

**Association Maternal & Child Health Programs (AMCHP) Webinars:**
AMCHP’s project on depression screening for children and youths were forced to pivot toward telehealth due to the pandemic. With participants who had little to no exposure to telehealth, AMCHP reached out to the NCTRC to educate their grantees as quickly as possible. The NCTRC held a series of educational webinars to provide the participants with the telehealth tools and resources they needed to continue with their programs in the face of the PHE.

**National Rural Health Resource Center:** The NCTRC provided a series of telehealth webinars on a variety of topics for the National Rural Health Resource Center for their state FLEX Programs. With many participants who had minimal or no experience with telehealth, the TRCs provided foundational information to help them navigate through the telehealth landscape during the PHE.

**National Rural Health Association:**
The NCTRC partnered with the National Rural Health Association for an educational webinar in advance of their Fall Critical Access Hospital Conference. The webinar, “Exploring Critical Success for Telehealth Implementation in the Era of COVID-19”, took place on September 2, 2021 and featured presentations from CTRC, gpTRAC, and TTAC representatives.

**EXTERNAL PARTNERSHIPS**

**Telehealth TTA Provider Roundtable:**
GPTRAC, CCHP, MATRC, NETRC, and CTRC collaborated with the National Association of Community Health Centers (NACHC) to create the National FQHC Telehealth Training and Technical Assistance Partners Roundtable. This forum allowed various training and technical assistance providers to meet to learn about each other’s ongoing work, pool learning and resources, and find out how they can work together to be even more successful in the future.
Data

TECHNICAL ASSISTANCE (TA) & OUTREACH

Since the beginning of the COVID-19 pandemic, technical assistance (TA) requests have skyrocketed among all TRCs. From September 1, 2020 through August 31, 2021, all of the TRCs combined had about 5,500 TA events and 9,500 contacts, about a third of whom were new contacts. In this timeframe, the TRCs hosted or participated in over 3,000 outreach events—a third of which were presentations—reaching a total of more than 175,000 people. The TRCs also produced many useful resources, including nearly 300 newsletters, podcasts, and blog posts. These resources were widely used, with about 8,000 factsheet downloads; 7,000 toolkit downloads; 8,000 learning module views; and 2.8 million website hits. See Table 1 for a summary of this information.

<table>
<thead>
<tr>
<th>TYPE OF INTERACTION</th>
<th>COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Assistance (TA)</td>
<td></td>
</tr>
<tr>
<td>TA Events</td>
<td>5,677</td>
</tr>
<tr>
<td>Contacts</td>
<td></td>
</tr>
<tr>
<td>New Contacts Added</td>
<td>2,906</td>
</tr>
<tr>
<td>Returning Contacts</td>
<td>6,515</td>
</tr>
<tr>
<td>TOTAL Contacts</td>
<td>9,421</td>
</tr>
<tr>
<td>Outreach</td>
<td></td>
</tr>
<tr>
<td>Outreach Events</td>
<td>3,184</td>
</tr>
<tr>
<td>Presentations (subset of outreach events)</td>
<td>1,061</td>
</tr>
<tr>
<td>Outreach Participants</td>
<td>175,247</td>
</tr>
<tr>
<td>Resources</td>
<td></td>
</tr>
<tr>
<td>Newsletters, Podcasts, &amp; Blog Posts Published</td>
<td>291</td>
</tr>
<tr>
<td>Fact Sheet Downloads</td>
<td>8,015</td>
</tr>
<tr>
<td>Toolkit Downloads</td>
<td>7,029</td>
</tr>
<tr>
<td>Learning Module Views</td>
<td>7,936</td>
</tr>
<tr>
<td>Web Hits</td>
<td>2,781,144</td>
</tr>
</tbody>
</table>

During the 2020-2021 fiscal year, the highest number of TA events was in November 2020 and February-March 2021, with a large decrease in late December 2020 through early January 2021 due to the holidays (Figure 1). There is a similar pattern for the number of TA recipients, COVID-19-related TA events, new contacts, and new contacts from outreach events.

Table 1. TA, contacts, outreach, resources, and website interactions from all TRCs combined from September 1, 2020 through August 31, 2021.
Outreach events among all TRCs remained relatively stable from September 1, 2020 through August 31, 2021, averaging 265 outreach events per month and peaking at 328 events in April 2021 (Figure 2). The number of outreach participants during this time was slightly more variable, ranging from 8,000 participants in June and July 2021 to 22,400 participants in September 2020.

During the 2020-2021 fiscal year, TA requests were highest among hospitals, academic research institutions, healthcare associations, academic hospitals, primary care providers, FQHCs/RHCs, HRSA telehealth research grantees, and mental/behavioral health providers (Figure 3). The majority (about 60%) of TA requests were received via email, 20% were received via website form, and 10% were received over the phone (Figure 4). There was a similar pattern for the methods in which TA was delivered, with the majority (about 65%) being delivered via email, 20% via video, and 10% over the phone.

### Figure 2.
**Total number of outreach events and outreach participants from all TRCs combined from September 1, 2020 through August 31, 2021.**

### Figure 3.
**TA requests by organization type from all TRCs combined from September 1, 2020 through August 31, 2021.**

<table>
<thead>
<tr>
<th>OrgType</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hospital - Other Hospital/Health...</td>
<td>613</td>
</tr>
<tr>
<td>2. Academic Institution - Research...</td>
<td>584</td>
</tr>
<tr>
<td>3. Healthcare Associations/Orga...</td>
<td>533</td>
</tr>
<tr>
<td>4. N/A</td>
<td>420</td>
</tr>
<tr>
<td>5. Academic Institution - Hospit...</td>
<td>329</td>
</tr>
<tr>
<td>6. Provider - Primary Care/Special...</td>
<td>284</td>
</tr>
<tr>
<td>7. Clinic - FQHC/RHC</td>
<td>263</td>
</tr>
<tr>
<td>8. HRSA Grantee - Telehealth Res...</td>
<td>262</td>
</tr>
<tr>
<td>9. Provider - Other Mental/Behav...</td>
<td>216</td>
</tr>
</tbody>
</table>

### Figure 4.
**Method of TA requests received and provided from all TRCs combined from September 1, 2020 through August 31, 2021.**
During the 2020-2021 fiscal year, website hits among all TRCs combined peaked at 373,000 in March 2021, then dipped to a low of 60,400 in July 2021, and began to rise again to 190,000 in August 2021 (Figure 5). There was a total of nearly 2.8 million website hits during this timeframe.

**Figure 5.** Number of website hits from all TRCs combined from September 1, 2020 through August 31, 2021.

### SEMI-ANNUAL MEETINGS

The 14 TRCs and HRSA convene business meetings on a semi-annual basis to discuss current projects and the future of the Consortium. The Spring 2021 meeting took place virtually on April 13-15, 2021 and was hosted by the NCTRC. The Fall 2021 meeting was hosted by MATRC and took place in Charlottesville, Virginia on October 19-20, 2021 with a hybrid format (in person & virtual).

### CONFERENCES

- MATRC and NETRC collaborated to host a virtual telehealth summit titled Launching into Telehealth across four Fridays in June and July 2020 with 1,054 attendees.
- MATRC and gpTRAC collaborated to host a virtual telehealth summit titled Disruptive Technologies & Innovations: Shaping the Future of Healthcare on March 28-31, 2021 with 607 attendees (55 from the gpTRAC region and 552 from the MATRC region).
- NETRC hosted their annual conference titled Telehealth Launchpad in Manchester, NH on September 23-24, 2021 with 212 attendees.
- NRTRC hosted a virtual conference titled Telehealth’s Big Bang: From Challenge to Opportunity on April 21-22, 2021 with 334 attendees.
- TexLa TRC hosted a virtual webinar series titled Telehealth at the Crossroads over the course of five Thursdays in July 2020 with 272 attendees. TexLa TRC hosted another virtual Telehealth at the Crossroads on July 21, 2021 with 66 attendees.
SELECTED TRC WEBINARS

From September 1, 2020 to August 31, 2021, all the TRCs combined had 3,184 outreach events, a third of which were presentations. This list contains about 10% of those presentations.

**SEPT 2020 - MAY 2021**

**SELECTED TRC WEBINARS**

**Sep 1, 2020.** gpTRAC. NACHC CHI at Home Conference - Telehealth Update. 1.5 hours, 150 attendees. Target audience: CHC leaders.

**Sep 2, 2020.** CTRC. Telehealth Summit Webinar Series - Virtual Technology Showcase. 1 hour, 171 attendees.

**Sep 2020 - May 2021.** TTAC. Virtual Showcase.

**Sep 3, 2020.** gpTRAC. BONUS HACK - Telebehavioral Health. 1.5 hours, 388 attendees. Target audience: attendees of ASPR "Telehealth Hack" series.


**Sep 18, 2020.** NCTRC. Multicultural Patient Engagement Strategies and Solutions. 1 hour, 151 attendees.


**Sep 29, 2020.** CTRC. CAHF Developmental Services Virtual Conference - Navigating Business in a COVID Era. 1 hour, 33 attendees.

**Sep 29, 2020.** NETRC. HRSA Telehealth Learning Series - Telehealth for HIV Care: A Follow-up Discussion. 3 hours, 389 attendees.

**Oct 2020.** gpTRAC. Blondin Foundation Conference.
  - Oct 6, 2020. Digital Showcase. 0.5 hours, 42 attendees.

**Oct 15, 2020.** NETRC. HRSA-NETRC Telehealth Webinar Series: Using Telehealth to Screen for Maternal Mental Health Issues CME Virtual Recording Launch. 0.5 hours, 320 attendees. Organization: HRSA.


  - Dec 10, 2020. Setting Your Campus Telemental Health Program up for Long Term Success. 1 hour, 52 attendees.
  - Feb 10, 2021. FQHC Program Models Post-COVID. 1 hour, 179 attendees.
  - Feb 17, 2021. Health Professions Training Models Post-COVID. 1 hour, 135 attendees.
  - Mar 10, 2021. Rehabilitation Services and Early Intervention. 1 hour, 102 attendees.


**Nov 11, 2020.** SCTRC. SEARCH 2020, Day 2 sessions (combined). 10 hours, 191 attendees. Target audience: digital health researchers, academicians, clinicians, administrators, educators.

**Nov 12, 2020.** SCTRC. SEARCH 2020, Day 3 sessions (combined). 9 hours, 191 attendees. Target audience: digital health researchers, academicians, clinicians, administrators, educators.

**Nov 12, 2020.** NETRC. Maine Behavioral Health Forum #1. 1 hour, 162 attendees. Organization: Maine DHHS - Commissioner’s Office.


**Nov 17, 2020.** NETRC. Maine Behavioral Health Forum #2. 1 hour, 205 attendees. Organization: Maine DHHS - Commissioner’s Office.

**Nov 17, 2020.** MATRC. VAFCC Webinar on Workflow and Best Practices. 1 hour, 40 attendees. Target audience: Virginia Association of Free and Charitable Clinics.

**Nov 18, 2020.** gpTRAC. Tribal Telehealth Workshop - HRSA Region 7. 2 hours, 1,006 attendees. Target audience: HRSA Region 7 Tribal providers.

**Nov 19, 2020.** TTAC. Telehealth Technology Trends. 1 hour, 1,050 attendees. Organization: Health Resources and Services Administration.

**Nov 23, 2020.** UMCRC. Reducing Length of Stay and Improving Outcomes Through the Use of Remote Monitoring. 1 hour, 25 attendees. Target audience: UMCRC stakeholders.

**Dec 1, 2020.** UMCRC. FQHC Billing for Behavioral Health/SUD. 1 hour, 14 attendees. Target audience: UMCRC stakeholders.


**Dec 8, 2020.** SCTRC. Telehealth Roundup: RPM Billing Panel Webinar. 1 hour, 48 attendees. Target audience: national audience, providers, administrators, billing and coding professionals.

**Dec 9, 2020.** MATRC. WIC Telehealth Training. 1 hour, 37 attendees. Target audience: DC Department of Health.

**Dec 11, 2020.** UMCRC. You Can’t have a picnic without ants: A Review of Quality Metrics and Reimbursement for Telehealth. 1 hour, 29 attendees. Target audience: UMCRC stakeholders.

**Dec 15, 2020.** NRTRC. Optimizing Telehealth Opportunities to Enhance Revenue Capture. 1 hour, 21 attendees. Target audience: NRTRC Region.


**Jan 12, 2021.** TTAC. Evaluation and Management Billing for FQHCs. 1 hour, 32 attendees. Target audience: UMTRC stakeholders.


**Jan 15, 2021.** NRTRC. Techno-Human Aspects of a Telehealth Visit (or Person-Centered Telehealth). 1 hour, 37 attendees. Target audience: NRTRC Region.

**Jan 2021 - May 2021.** CCHP. Telehealth & Medicaid (8-part series). Target audience: State Medicaid Agencies and those interested in learning more about Medicaid telehealth policies.
  - Jan 15, 2021. Waivers and State Plan Amendments. 1.5 hour, 656 attendees.
  - Jan 22, 2021. Provider Engagement & Education During the Public Health Emergency. 1.5 hours, 318 attendees.
• Jan 29, 2021. Patient Engagement & Education During the Public Health Emergency. 1.5 hours, 290 attendees.
• Feb 5, 2021. What’s Next? A Roadmap for Medicaid Telehealth Policy Beyond the Pandemic. 1.5 hours, 500 attendees.
• April 30, 2021. Access and Equity in Medicaid Telehealth Policy. 1.5 hours, 399 attendees.
• May 7, 2021. Medicaid Telehealth Policies for Children and Youth. 1.5 hours, 277 attendees.
• May 14, 2021. Medicaid Telehealth Policies for Seniors. 1.5 hours, 154 attendees.
• May 21, 2021. Telemental Health & State Medicaid Policies. 1.5 hours, 305 attendees.

Jan 21, 2021. MATRC. HRSA Public Health Town Hall Webinar. 0.5 hours, 98 attendees. Target audience: National, HRSA Federal Office of Rural Health Policy.
Feb 24, 2021. CTRC. ROCR Regional Meeting. 3 hours, 65 attendees.
Feb 25, 2021. TexLa TRC. ECHO: Telehealth Ten: A guide for a patient-assisted virtual physical exam. 1 hour, 74 attendees. Target audience: All levels of telehealth staff, clinical and non-clinical healthcare professionals, those interested in learning more about telehealth.
Feb 29, 2021. SWTRC. Telehealth Essentials for FQHCs and RHCs. 1 hour, 254 attendees. Target audience: FQHC, RHC, and healthcare professionals.
Mar 5, 2021. gpTRAC. TCI Summit Presentation - Integrated Telebehavioral Health. 1.5 hours, 96 attendees. Target audience: mostly independent mental health practitioners.
Mar 16, 2021. gpTRAC. IA SHIP Grant Webinar - Hometown Health. 0.5 hours, 57 attendees. Target audience: Iowa CAHs.
Mar 17, 2021. NTRC. Strategies to Deliver High Quality Telehealth in Rural Communities. 1 hour, 15 attendees. Target audience: NTRC Region.
• March 22, 2021. 1.5 hours, 48 attendees.
• March 23, 2021. 2 hours, 67 attendees.
• March 24, 2021. 2 hours, 193 attendees.

Mar - June 2021. NCTRC. OCHP HCCN TLC.
• March 31, 2021. Session 1: Framework for telehealth services and enhancing telehealth. 2 hours, 33 attendees.
• April 28, 2021. Session 2: Application of the telehealth framework to hybrid care. 2 hours, 33 attendees.
• May 26, 2021. Session 3: Patient barriers to accessing telehealth for in-person care. 4 hours, 30 attendees.
• June 23, 2021. Session 4: Creating a patient-centric approach for telephonic and in-person hybrid care. 2 hours, 30 attendees.

• Apr 22, 2021. Overcoming Telehealth Inequities. 1 hour, 80 attendees.
• Apr 22, 2021. Changing Challenges to Opportunities in a Post-Pandemic World. 75 attendees.
• Apr 22, 2021. NTRC 2021 Virtual Showcase. 2 hours, 60 attendees.
Apr 22, 2021. NCTRC. Federation of State Medical Boards: Provider Bridge. 1 hour, 33 attendees.
Apr 27, 2021. gpTRAC. Intro to FCC Round 2 Funding. 1 hour, 270 attendees. Target audience: Health Centers (at HRSA’s request).

Jun 17, 2021. NCTRC. The Synergy Between Care Coordination and Telehealth. 1 hour, 88 attendees.
Jun 30, 2021. MATRC. SBHA Summer Education Webinar on School-Based Telehealth Program Start-Up and Operations. 1 hour, 108 attendees. Target audience: National, School Based Health Alliance Members.
Jul 15, 2021. NCTRC. The Impact of Technology on Telehealth Treatment. 1 hour, 99 attendees.
Jul 21, 2021. gpTRAC. Intro to Telehealth for Nurses and Medical Professionals. 2 hours, 131 attendees. Target audience: nurses and medical professionals.
Jul 21, 2021. TexLa TRC. Telehealth at the Crossroads Conference. 6.5 hours, 66 attendees. Target audience: All levels of telehealth staff, clinical and non-clinical healthcare professionals, those interested in learning more about telehealth.
Aug 17, 2021. NTRC. RHNTC Telehealth Peer Learning Group. 1.5 hours, 22 attendees. Organization: JSH.
Aug 26, 2021. TexLa TRC. ECHO: Telehealth in a Unique Managed Care Population. 1 hour, 43 attendees. Target audience: All levels of telehealth staff, clinical and non-clinical healthcare professionals, those interested in learning more about telehealth.
Brand Growth Across the TRCs

For over a decade, TRCs have provided timely and accurate information and education in telehealth. TRCs are staffed by some of the most experienced and knowledgeable telehealth experts in the country. The first group of TRCs was funded in 2006, and for the last 15 years, the program has grown and expanded to all parts of the country. There are currently 14 TRCs advancing telehealth within their respective regions. Twelve regional centers combine to cover all 50 states and the District of Columbia, the affiliated Pacific Islands, Puerto Rico, and the US Virgin Islands. Two national centers focus on telehealth policy and technology, respectively.

Beginning in 2015, the 14 TRCs began working collaboratively to form the NCTRC. Forming the NCTRC has led to greater efficiency among the TRCs as they provide valuable telehealth information and resources throughout the country. During the COVID-19 pandemic, the field of telehealth has grown exponentially and demands for telehealth technical assistance and training by the TRCs have skyrocketed. In 2020, the TRCs fielded over 10,000 technical assistance requests and received over 3.2 million collective website visits. Throughout the pandemic, TRC staff have worked tirelessly to assist healthcare organizations, hospital systems, and universities implement sustainable telehealth programs. In the past year, the TRCs developed many COVID-19 telehealth resources, including a COVID-19 Telehealth Toolkit to help both providers and patients understand more about the benefits of telehealth during the pandemic. With financial support received through the CARES Act and contributed by its member TRCs, the NCTRC also rebranded its website to act as a central gateway for telehealth resources collectively curated by the TRCs.

Today, the NCTRC is well-known for providing trusted telehealth consultation, resources, and assistance. The vision of the NCTRC is to connect health providers to people through telehealth, starting with rural communities. Our voice will remain consistent and comprehensive, delivering accurate information to help providers and communities across the nation through the widespread adoption of telehealth. As the telehealth landscape continues to evolve, the NCTRC will help America’s health system transition into a new era.

The NCTRC works collaboratively to advance telehealth across the nation by providing services in these three areas: Expert Technical Assistance, Training, and Resources.

Expert Technical Assistance:
- Design and execution of needs assessments and program evaluations
- Identification of funding sources for strategic and business planning
- Selection and use of various telehealth technologies
- Policy analysis and guidance

Training:
- Educational programs through webinars, regional conferences, & technology showcases
- Training on policies, technologies, implementation of best practices and sustainability

Resources:
- Development of toolkits, factsheets, and educational webinars
- Specialized tools and templates for telehealth programs and providers
CCHP had to keep up with the constantly changing state and federal policies during COVID-19. They tracked and released information on policies for 52 separate jurisdictions, sometimes every few days, while also fielding related questions from state and federal policymakers regarding what more needed to be done. CCHP distributed continuously updated information to the public in a non-technical, accurate, easy-to-understand format, often turning information out within hours of policies being released.

CCHP managed to find a way to meet the tremendous demands put on the team. Mei Kwong, executive director of CCHP, put together analyses on any new policies coming out while Christine Calouro, policy associate, handled a massive number of individual questions. Laura Stanworth, CCHP deputy director, handled communications, coordination, news blasts, and format and design. The team conducted 20 different mass email blasts and created ten fact sheets between March and May 2020. The CCHP newsletter subscriber list went from 8,000 people to more than 17,000 people, all eager to access telehealth policy news and alerts.

CCHP expanded its 50-state report, published twice each year, to become an ever-evolving online resource, and adding a new category for COVID-19. It was well received and one of the most popular areas of CCHP’s website. CCHP also began putting together videos that discussed new policies as well as telehealth basics to help people better understand the changes occurring in the policy space. CCHP had an influx of new clients who had never heard of telehealth, while continuing to serve a more experienced audience. As a result, CCHP directed many people to the videos for the basics and then had them come back for more in-depth questions if needed.

The CCHP team was also being pulled into federal and state discussions about policies themselves, and they were contacted by reporters who had very little experience with telehealth. Because CCHP is an unbiased, non-partisan, and centralized resource, encompassing both federal- and state-level policies, many people felt comfortable turning to the center for information and appreciated knowing that they weren’t receiving partisan information. Since CCHP operates in multiple jurisdictions, people can get information and data regarding each state on a single website.

After the initial pandemic rush subsided, CCHP started a Telehealth & Medicaid webinar series to raise awareness about state Medicaid programs. The 90-minute webinars discuss a different topic each week. It’s been incredibly popular and well received from Medicaid programs and the general public, encouraging states to develop relationships with one another and exchange information. Past webinars are recorded so they can serve as a continued resource for others.

When the COVID pandemic began, TTAC quickly ramped up what they do best: sharing a wealth of telehealth knowledge to all who request assistance. TTAC offered webinars, toolkits, and other publications for those seeking information, and they pulled together a panel of experts to explore how the pandemic changed how people used telehealth. In addition, TTAC answered individual TA questions...
through email, phone calls, and video meetings. TTAC experienced a 1500 percent increase in inquiries on how to use telehealth, with a major focus on providing services to patients in their homes, how to access reliable connectivity, and how to create the best experience for patients and providers.

TTAC worked with organizations and individual providers seeking to set up their own telehealth programs as well as university systems who wanted to educate the next generation of providers with best practices. Initially, providers and clinics just wanted to know how to get started, but now these groups are trying to add functionality and scale for the long-term benefit of the organization.

TTAC was also preparing a hands-on telehealth technology showcase that was scheduled to be part of six conferences throughout 2020 when the pandemic started. TTAC had several cases full of a range of current and up-and-coming telehealth technologies prepared for the showcase. When all in-person events were cancelled due to COVID, TTAC made a rapid transition to creating a virtual showcase in their staff member’s living room. They combined PowerPoint presentations with pre-recorded and live vendor-neutral technology demonstrations that allowed providers to see and hear what they would experience in a real telehealth encounter. The revised telehealth technology showcase provided an opportunity for participants to test out and assess similar medical peripherals virtually in a vendor-neutral environment.

Bandwidth is a major concern when it comes to telehealth service delivery, especially for rural providers who often find it challenging to connect with specialists, other healthcare services, or patients in areas of limited or unreliable internet services. TTAC used a network emulator to do a video platform assessment on the largest video platforms: Amwell, Doxy.me, InTouchDesk, InTouchWeb, Microsoft Teams, Zoom, VidyoConnect, and Vidyo Desktop. They recorded more than 200 nonsense sentences with the same movements and vocalizations in order to determine how the platforms handled spotty cell networks, low bandwidth, delays, packet loss, satellite interruptions, or extremely rural locations. A YouTube video captured the results of this network stress test, including the resulting audio and video outputs, allowing those evaluating and comparing platforms to make better informed decisions.
created their cornerstone telehealth coordinator series, which encompasses eight modules that cover technology, program definition, billing, legal, success factors, and funding options. Three additional online courses were developed: a Telehealth 101 Course to provide education on how to quickly launch a successful program, a Reimbursement Course for FQHCs and RHCs to understand what is reimbursable for telehealth during the pandemic, and a Contracting with Providers FAQ.

In addition to these initiatives, CTRC spearheaded a national project for all TRCs to interview and survey various subject matter experts (SMEs) about their telehealth experiences. TRCs completed interviews for 131 FQHC and RHC staff, having in-depth conversations with the administrative staff, technical staff, and providers, about their use of telehealth technology. California made up about half of the interviews for this project. The CTRC team managed the workload for the SME Interviews Project and turned the results into usable data and resources.

Since they had already established a baseline before COVID, it was easy to see how TA encounters quickly doubled and then tripled during the first three months of the pandemic. Previously, the TRCs were sharing TA data with the Health Resources and Services Administration (HRSA) annually to help illustrate how funding was used, but during COVID the TRCs were able to provide more frequent and detailed reports. The database also helped unify the manner of collecting, reporting, and interpreting data to improve consistency across TRCs.

In addition, gpTRAC kept providers up-to-date on changing billing practices by contracting with a group to simplify and consolidate Medicare, Medicaid, and private payer policies into comprehensive telehealth billing guides for each state in their region. Guides are extensively detailed with tables of billing codes, types of telehealth encounters and providers, payer service coverages, and more. They include information about billing issues related to virtual visits, telephone visits, virtual check-ins, and other telehealth services, organized into quick-reference charts. These guides were updated monthly or as needed when policies changed, and they are expected to be updated quarterly or as needed moving forward.

gpTRAC created several other resources, including a set of four tailored policy and procedure guides that hospitals, clinics, mental health centers, and other organizations can use as templates and customize as needed. The team also worked with current and former advisory council members to develop an implementation and technology guide for remote monitoring services and a toolkit for physical therapy, occupational therapy, and speech-language pathology. All of these resources were made available online.

Just months before COVID began, gpTRAC provided resources, training, and personalized guidance to several healthcare facilities in their region, giving these organizations a head start and enabling them to continue providing services using telehealth when the pandemic started. GPTRAC also helped many primary care associations, the National Association of Community Health Centers, and other national groups to provide training and support.
Before COVID, gpTRAC viewed its job as introducing telehealth to people who hadn’t used it or were skeptical. Now the focus has shifted to providing the information and support organizations need to move forward. Everyone had to innovate and develop telehealth capacity during the early days of the pandemic, so now gpTRAC’s role has become more that of a convener -- bringing together groups to share what they’ve learned and what they need to move forward.

HEARTLAND TELEHEALTH RESOURCE CENTER (HTRC)
KANSAS, MISSOURI, AND OKLAHOMA
Eve-Lynn Nelson, PhD, Principal Investigator
www.heartlandtrc.org

HTRC worked with many different organizations and individuals to meet the growing needs during the pandemic. To answer policy and reimbursement questions in their region, HTRC worked with a lawyer and certified coder. HTRC has also sponsored an ongoing webinar series about policy and reimbursement, and they recently started doing a monthly podcast where they host a different guest from each of their states on a rotating basis to continue addressing these same topics.

The University of Missouri Center for Health Communications Research helped handle the increase in TA questions by promoting frequently asked questions on social media to a targeted audience. HTRC also worked with the center to create a brief animated video that helped introduce patients to what they could expect in a telehealth video visit.

When HTRC faced many new needs at the same time during the early days of the pandemic, the organization began championing a model to teach, support, and facilitate clinical telehealth programs. HTRC worked with the Missouri Telehealth Network (MTN) to offer a Telemedicine ECHO to help organizations in Missouri, Kansas, and Oklahoma quickly get their technology, protocols, and workflows up and running.

HTRC took a telementoring approach with the ECHO expert panels, sharing telehealth expertise through didactics and case presentations. Participants learned how to leverage their current telehealth program into a permanent solution for patients, and newcomers to telehealth were introduced to best practices for building a budding program.

The nine-month ECHO was conducted through online interactive learning sessions that are archived for future use and cover topics such as: Current State of Telehealth; Needs Assessments; Organizational Policies and Procedures; How Do We Choose Technology?; Project Planning; Provider Engagement and Training; Community Engagement; Telehealth Processes; Billing and Funding; and Evaluating Your Program.

In addition, HTRC offered a Telehealth Collaborative, which included participation in the MTN/HTRC Telemedicine ECHO, individualized technical assistance, and a small stipend to assist with costs related to implementation of a telehealth program. Topics included needs assessment, project planning, billing, provider engagement, and more. HTRC had many sites committing to these nine-month programs during the rapid transition to telehealth. HTRC helped them define their own goals to determine readiness, and a quality improvement coach helped them reach their implementation goal.
MATRC provided an enormous level of support to hundreds of providers who were dedicated to taking care of their patients throughout the pandemic. MATRC expanded their virtual office hours on several topics including telehealth basics, tele-mental health, school telehealth and remote patient monitoring. MATRC also prioritized collecting and creating frequently asked questions for their website in order to handle basic inquiries. They uploaded other information to their website as well, including best practices, policy documents, toolkits, and more. Directing people to this online information, which is updated, weekly, has saved the MATRC team a lot of time.

During the height of the pandemic, MATRC began working with the University of Virginia (UVA), where MATRC is housed, to capture best practices and lessons learned in deploying telehealth to vulnerable and isolated populations. These included those at area long-term care facilities, those who were homeless and those who were incarcerated. MATRC also gleaned lessons learned throughout the region. MATRC put together resources and developed implementation toolkits about the different programs so others who are interested can learn from their experiences.

Like many organizations, MATRC, in collaboration with NETRC, made a quick shift from a planned in-person conference to a virtual summit in 2020. They pulled together this virtual summit in about six weeks and covered Telehealth 101 topics, best practices, and the lessons learned from the first few months of the pandemic. Virtual attendance topped 800, compared to around 500 people typically attending the in-person conference.
NETRC inbox, especially for complex questions which take considerable time to research. Emails could then be triaged to a NETRC team member for response based on the specific topic and/or team availability. About 95 percent of NETRC’s emails were answered within 48 hours, which is a quality metric they’ve proudly maintained for years.

The decades of expertise available throughout the TRC community was particularly helpful during the pandemic. For example, with funding from the CARES Act, NETRC recruited a former NETRC staff member who already had familiarity and rapport with the TRC community to help during COVID. The pandemic also helped further strengthen relationships NETRC had within each of their states and with different regional partners. NETRC now convenes with all eight of their primary care associations (PCAs) monthly to assess needs and share resources. About 20 people attend this virtual meeting monthly, and the information and resources are distributed to 200-300 additional staff within the PCA networks. In addition, NETRC offered state-level office hours to answer key questions and also served as subject matter experts on multiple Project ECHOs, with a focus on the rapid implementation of telehealth.

Before COVID, NETRC had worked with a few regional universities to create telehealth elective courses, typically for physicians and nurses. When schools realized they’d need to pivot away from traditional clinical rotations during COVID, they reached out to NETRC to help with the integration of telehealth training across multiple health professions programs. These universities quickly learned the importance of preparing students for telehealth moving forward, and many now see telehealth training as a vital part of their core curriculum.

As soon as COVID hit, NRTRC started holding weekly office hours in order to answer multiple people’s questions at once and deal with the high volume of phone calls and emails. NRTRC also began a monthly newsletter to continue communications about telehealth highlights, news, survey results, upcoming webinars and telehealth success stories. In addition, NRTRC recently launched a telehealth finder application so patients can view a map of facilities that offer telehealth services in their area.

NRTRC created subawards with the additional funding they received during COVID and granted $60,000 to the telehealth collaborative or network in each of their member states. This funding was used to sponsor ECHO projects and regularly update their websites on their state’s declarations of emergency, licensing board information, state-specific policies and regulations (including waivers), and multi-state licensure data at different levels including medical, nursing, and various therapies.

Furthermore, NRTRC created online telehealth training courses to replace the in-person Telehealth 101 training sessions that were popular before COVID. The Telehealth 101 online course offers a high-level overview of how to create and sustain a telehealth program and covers needs assessment, program development, workflow, billing, clinical aspects, reimbursement, and more. Additional courses available focus on Telehealth 101 for telebehavioral health providers and those serving veterans.
NRTRC partnered with the state of Washington to create and host an online course titled Washington State Healthcare Professional Telehealth Training, which is mandated for clinicians who provide telehealth services in Washington. The University of Utah College of Nursing created online telehealth courses on primary care and long-term care, both of which are hosted on the NRTRC website. These courses offer continuing medical education credits and include self-guided material, PowerPoint slides, quizzes, and lecture recordings. More than 41,000 people have enrolled in these courses and more than 27,000 people have completed them since they were launched in December 2020. NRTRC also presented at several universities’ immersion courses to expose nurse practitioner students to telehealth and how it could be applied in their future practice.

Lastly, NRTRC partnered with the National Rural Health Resource Center Technical Assistance & Services Center (TASC) to create a guide for implementing and sustaining telehealth in critical access hospitals. The guide includes information on program assessment, engagement, privacy, health equity barriers, and solutions. Although originally created for CAH’s, the guide is appropriate for anyone wanting to implement a telehealth program.

PACIFIC BASIN TELEHEALTH RESOURCE CENTER (PBTRC)

Deborah Birkmire-Peters, PhD, Program Co-Director & Christina Higa, PhD, Program Co-Director

www.pbtrc.org

A statewide, multi-sector group called Broadband Hui has convened every Wednesday since the pandemic began. The word “hui” means “group” in Hawaiian, which is fitting considering that business members, government leaders, health educators, and telecom carriers across Hawaii were able to break down silos and work together for this initiative. This group started in March 2020 when kids had to stay home for school and there was a gap in broadband services. The group focuses on digital equity for ALL, which stands for Access, Livelihood, and Literacy. These long-term working relationships laid the foundation for a wide range of initiatives.

PBTRC asked a fellow Hui member from the library system about getting a parking spot to offer telehealth and broadband access. This idea evolved into a much larger project called the Hawaii Telehealth Access Points program, where PBTRC worked with the Hawaii State Department of Health and the Hawaii State Library System to address digital equity. Through this program, libraries provide private rooms for telehealth consults and loan out MiFi devices that provide hot spots in patients’ homes. The program is also hiring health navigators from the local communities who will be trained by PBTRC to help patients at the libraries connect to and navigate through their appointments.

Another initiative that was launched during the pandemic was learning how to provide better support services to long-term care facilities. PBTRC engaged a contractor who interviewed individuals from each of Hawaii’s long-term care facilities to identify telehealth-related challenges before and during COVID. As a result, PBTRC created a white paper outlining the training and service opportunities within long-term care settings, as well as a brochure, a list of resources, and webinars to address their challenges. Whenever these providers have a problem relating to telehealth, they can also call PBTRC and get a response within 48 hours.

In addition, PBTRC hired a faculty member from the University of Hawaii John A. Burns School of Medicine to develop a telehealth course as an elective. While they’re waiting for this course to get approved, PBTRC put together a telehealth cart so students can have hands-on experience with different telehealth equipment, as well as some online education modules that will be part of the elective course. PBTRC also collaborated with the Hawaii Interprofessional Education Initiative, the

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University of Hawaii School of Nursing and Dental Hygiene, and the Hawaii State Department of Health to develop an online module and complementing video vignette on interprofessional telehealth practices.

SOUTH CENTRAL TELEHEALTH RESOURCE CENTER (SCTRC)
ARKANSAS, MISSISSIPPI, AND TENNESSEE
Hari Eswaran, PhD, Principal Investigator, Co-Director & Wendy Ross, Co-Director
www.learntelehealth.org

The most popular TA questions that SCTRC faced during COVID revolved around the rapidly changing billing issues. SCTRC worked with their billing experts to create comprehensive state-specific billing guides for Arkansas, Mississippi, and Tennessee that are updated monthly and made easily accessible on the LearnTelehealth.org website. These guides provide specific information for each payer, and they address areas that couldn’t be billed prior to the pandemic, such as phone visits and physical therapy. SCTRC partnered with experts in billing, reimbursement, and overall revenue cycle management to offer corresponding webinars that discuss key policy changes.

SCTRC has operated a telehealth training center in partnership with the University of Arkansas for Medical Sciences (UAMS) Institute for Digital Health & Innovation (IDHI) as its digital innovation partner for years. This training center offers a vendor neutral environment for providers to touch, feel, and envision how they could incorporate telehealth technologies in their practice. SCTRC recently updated the center with new technology including remote patient monitoring devices as well as some wearables. Since COVID limited the ability for providers to travel as easily, SCTRC established similar centers in different regions of Arkansas as well as one in Tennessee. Regions with more underserved populations and who have more chronic medical conditions helped guide where to set up these satellite centers.

In addition to being open for local providers to come in and try telehealth devices, organizations are able to bring in groups for special training sessions. For providers who can’t get to a training center due to COVID, job demands, or budget, SCTRC put together telehealth demonstration kits that will soon be available to loan out. SCTRC will ship the kits to providers and train them virtually on how to set up and use the kits through self-guided online tours. When they’re done, the providers will send the kits back.

The UAMS IDHI, along with SCTRC, is also developing a telehealth video analysis program for training and evaluation. The clinical and technical teams developed a prototype using an automated artificial intelligence algorithm to gather information on both visual and emotional cues during a telehealth encounter. The system can use mock sessions or real sessions with patients, and it evaluates and provides feedback on key metrics such as sentiment, facial expressions, topics discussed, lighting caliber, and sound quality. This system will be used to evaluate telehealth encounters based on proven metric scores and best practices, provide feedback for those participating in telehealth training sessions, help healthcare staff improve performance, and evaluate team care and interactions. The system is in beta testing now and the team is beginning to work with other institutions to expand its use.

SOUTHEAST TELEHEALTH RESOURCE CENTER (SETRC)
ALABAMA, FLORIDA, GEORGIA, PUERTO RICO, SOUTH CAROLINA, AND US VIRGIN ISLANDS
Rena Brewer, MA, RN, Principal Investigator
www.setrc.us

Prior to COVID, SETRC managed about 30 to 35 TA requests per month. By March 2020 that number increased by 350%, and SETRC completed more than 1,300 TA requests between March and
October 2020. During the early weeks, SETRC fielded a near-constant stream of phone calls, emails, and web requests. To manage the demand, SETRC extended their hours to run webinars in the evening, and kept their website up-to-date with the most recent resources, including the constantly changing federal and state policies, waivers, and reimbursement and licensure data.

SETRC directed callers to first search their website for basic information, then call back to have a deeper conversation. Although SETRC worked with many associations, universities, and area health education centers, the majority of calls were from individual providers working to rapidly adopt virtual practices, and most questions revolved around reimbursement and technology.

In April 2021, the Georgia Rural Health Innovation Center at the Mercer University School of Medicine began an initiative to address the need for telehealth in rural Georgia. This initiative, supported by SETRC’s CARES Act award, gave rural providers access to six months of free telehealth capabilities and training. Nearly 150 rural providers participated in this program in which training sessions were offered to participating clinical office staff. Fourteen university staff were trained to deliver telehealth TA to rural providers and have addressed more than 100 TA requests since.

Availability of pediatric autism specialists was challenging prior to COVID due to provider shortages for both diagnosis and therapy. With the advent of the pandemic and the lockdown, access to diagnostic services and in-home therapy became nearly impossible, especially in rural communities. The need for parent-mediated intervention became even more acute, prompting SETRC to work with the Global Partnership for Telehealth and autism spectrum disorder (ASD) clinicians to create ToddlerTracks.org. Toddler Tracks provides clinicians and parents with free, online, evidence-based information and resources for early assessment, diagnosis, and intervention for infants and toddlers with ASD symptoms. Toddler Tracks strives to close the gap in access to care for the roughly 50% of young children with autism who do not receive treatment, especially in rural and underserved areas.

In addition, SETRC created the Telehealth Learning Center, an educational trailer designed to promote experiential learning through telehealth technology stations. The trailer will travel to universities, schools, events, and other venues throughout the region to allow clinicians, healthcare students, and the public to learn about telehealth and gain hands-on experience with telehealth.

SETRC also created University Telehealth Training, designed to introduce medical, nurse practitioner, physician assistant, nursing, and social work students to telehealth. The program includes expert telehealth training, materials, access to the SETRC training laboratory, and university administrative support. The goal is to help create a telehealth-ready workforce that is capable of addressing the increased demand for telehealth services.

Arizona published a report on issues that have hindered implementation of technologies like telehealth in 1996, which is the same year SWTRC started. For years, SWTRC has looked extensively at the policy, regulatory, and legal processes and reimbursement issues that have been holding telehealth back. When COVID hit, most of those barriers were eliminated within weeks and SWTRC’s study became extremely relevant overnight. They were able to teach about topics such as waivers that were being converted into statutes very rapidly.
For years, SWTRC has hosted hybrid, bi-monthly training sessions on telehealth-related topics. Typically, SWTRC would host these sessions at two sites (Phoenix and Tucson), with one location participating in-person and the other participating virtually. Once COVID hit, they transitioned the whole program to all virtual. Since SWTRC had an infrastructure already in place and a successful existing program, it was easy for them to quickly tailor new training programs specifically to COVID-related audiences.

The program had about 30 participants per session pre-COVID, and at its peak during COVID they had more than 400 participants. Attendance has now plateaued at about 100 participants per session. Feedback from the in-person and virtual participants during SWTRC’s pre-COVID hybrid training session was essentially the same, illustrating that the online training sessions are just as effective as the in-person ones.

SWTRC has developed many relationships over the years that have helped support telehealth information dissemination during COVID. In each state, they have key connections in academia, legislature, the offices of rural health, and hospitals. As an educational institute, SWTRC serves 60 to 70 different organizations in their alliances. They have also worked with universities, including medical schools and healthcare professional schools, to educate and train tomorrow’s healthcare workers. In addition, SWTRC has provided education and materials for legislators, federal agencies, and other government entities over the years.

SWTRC held regular office hours to deal with the influx of TA requests, tapping a vast network of professionals for their expertise, including billing and reimbursement experts, top professionals in telehealth, and coding specialists. In addition, SWTRC has always worked with various Native Nations, mostly Navajo, to provide support and assistance. During the pandemic they provided emails, patient fact sheets, and other information for providers and patients in their own languages.

During COVID, the demands for information skyrocketed. During the fiscal year 2020-2021, TexLa TRC provided technical assistance to 125 clients, which included information, tools, and resources to address topics such as technology, policy, and reimbursement. TexLa also reached 1,549 individuals during this time through speaking engagements, workshops, conference exhibits and booths, website encounters, and social media. In addition, TexLa offered monthly telehealth project ECHO webinars during the pandemic that addressed important topics such as COVID-19 in pediatrics, caring for patients with disabilities, ICU care, mental health, the optimization of telehealth, and remote patient monitoring.

TexLa has worked in cooperation with Texas Tech University Health Sciences Center (TTUHSC) in launching and managing many joint programs. During the pandemic, the organizations received CARES Act funding that helped accelerate their telehealth strategic plan, which was devised a year before the pandemic. The plan called for a stronger adoption of telehealth and clinical transformation for the healthcare delivery system throughout the region. One component of this plan called for more provider training through TexLa’s Frontiers in Telemedicine (FIT) Lab, which is the only competency-based hands-on training facility in the country.

TexLa and TTUHSC are developing curricula for a telehealth technician certificate and telemedicine practice, which can then be replicated across the region through Area Health Education Centers. The FIT Certificate Course is a unique program that trains clinical staff about telehealth, including clinical encounters, telemedicine technology, etiquette and ethics, and telemedicine billing.
The FIT Lab is also providing telehealth education to medical and healthcare college students, and they even piloted a high school telehealth curriculum, which is the first of its kind in the country and will provide early familiarization with telehealth as a consumer and future healthcare worker. During the fiscal year of 2020-2021, 51 providers were trained in the FIT lab and the in-person content was converted for online learning.

In addition, TexLa has collaborated with the Association of American Medical Colleges (AAMC) to create telehealth competencies, which will provide telehealth education across the continuum of learners including students, residents, fellows and practicing physicians. The competencies include six domains: patient safety and appropriate use of telehealth; data collection; communication; ethical practice and legal requirements; technology; and access and equity.

UMTRC’s call and email volume increased 100% between 2019 and 2020, prompting UMTRC staff to work long days and weekends to keep up with the demand. To handle the volume and deal with repetitive questions, UMTRC updated the frequently asked questions on their website, created introductory webinars, sent newsletters, and created videos and guides to share as resources.

UMTRC also added Virtual Office Hours for very specific topics in the spring of 2020 and continue to hold two virtual office hours every month. Initially the topics covered the basics, such as consent and documentation, website etiquette, and videoconferencing. Now, the topics are more complicated and include cross-state licensure and provider compacts.

Six weeks before UMTRC’s annual conference in July 2020, they decided to switch to a virtual format. UMTRC had just secured office space in Indianapolis and quickly created a film studio, where they ended up running the conference from. Fortunately, UMTRC found a good platform and worked with several other TRCs to find enough Zoom licenses to handle all breakout sessions. Nearly double the number of people attended virtually compared with the previous in-person attendance. The studio space has also become a place for photo shoots, recording videos, and other live events, and is often shared with other community organizations.

After the conference, UMTRC took feedback from participants to create a full-day virtual training workshop that was held monthly during the late winter and early spring, with an average attendance of 40 students.

In addition, UMTRC used some of its CARES funding to create a podcast that airs the first and third Fridays of each month called A Virtual View. The podcast covers a wide variety of topics, such as CMS proposed bill scheduling, and invites guests to talk about what they do and to tease out different perspectives in the telehealth arena. The podcast audience continues to grow as they prepare for their second season beginning in January.

Recently, UMTRC has started creating a vendor-neutral demonstration center and library for telehealth-related peripherals and equipment. They purchased the same type of equipment from several different vendors, including webcams, lighting options, thermometers, digital stethoscopes, otoscopes, and various exam kits. UMTRC is creating demonstration videos to post on their website illustrating how to use each piece of equipment, and some of these videos allow viewers to see both the patient and provider perspective. If a provider watches a demonstration and is interested in a specific peripheral, they can make an appointment to come into the office and try it out to see if it would work for their organization.
Conclusion

After the tremendous surge in requests for TA and Outreach that occurred as a result of the pandemic of 2020, the past year (September 1, 2020 to August 31, 2021) was slightly less eventful. Activities among the TRCs settled into a more stable pattern, with the first seven months of the project year (Sep-Mar) showing slightly higher overall levels of activity than the last five months (Apr-Aug). Despite this perceptible drop in TA and Outreach, overall levels of activity remained significantly higher than pre-pandemic levels as various collaborative projects and development of resources took up a greater share of TRC staff time and funds. Much of this increase in resource development has come from supplemental COVID/CARES funding which many TRCs received in 2020 and carried into 2021. Numerous new toolkits and fact sheets have been developed and posted to TRC websites and some significant projects are still forthcoming. An increased effort has been made to collect and categorize these new resources to promote easier discovery and maintenance.

Upgrades were also made to the TRC data collection system (called “TRC ALPHA”) to support more detailed reporting for CARES/COVID dollars as well as to provide greater reliability and better internal evaluation and administrative support for TRC operations.

This project year might well be categorized as something of an “interim” or “transitional” year, in that the frantic changes of the early pandemic have largely subsided, but a “new normal” has yet to emerge. Many telehealth policies, at both the federal and state levels, are still in flux, and providers still seem unsure of how best to proceed. Some are redoubling their efforts to develop telehealth programs, while others are happy to see a reduction in its overall use. Over the past year, government and private sources have made large investments in direct services, specific telehealth programs, and underlying broadband infrastructure, and more appears to be forthcoming. As a counter-force, however, workforce issues have risen to the top of the bottleneck hierarchy, limiting the potential for expansion of many programs in telehealth (similar to other segments of society).

During this grant period the TRC program was renewed through another round of competitive applications, and in the end, all legacy TRC cooperative agreements were renewed. In addition, the Office for the Advancement of Telehealth (the division within HRSA that funds the TRC program) was significantly reorganized, being removed from within the Federal Office of Rural Health Policy and placed directly under the HRSA Administrator. Requests for “rapid turnaround” information and technical assistance in new areas (FCC program support and patient-facing resources, for example) added to the range of expertise the TRCs are working to develop and maintain. These changes, along with many others, added to the perceived pace of change and the interim/transitional sense of the year.

Through all these changes, the brand recognition of the TRCs continues to grow and improve. As noted earlier, the NCTRC is a recognized national entity, and its members enjoy a collective reputation for objectivity, expertise, and service-orientation. Perhaps above all, we are seen as eager collaborators who are willing to bring our substantial resources and expertise to bear on almost any salient problem in the domain of telehealth. We are committed to continuing and expanding our collaborative efforts and the energetic and innovative contributions to collective efforts that have become our calling card.

As the pace of change in healthcare, and in telehealth specifically, continues to increase, the NCTRC will continue to reaffirm our core values. As a consortium, we are committed to:

- Providing objective information and training without commercial interest
- Producing and distributing resources without charge
- Focusing our efforts on supporting providers that serve rural, safety net, and underserved populations, and who are, in turn, focused on leveraging technology to provide the greatest impact for their patients
- Working together to improve our collective reach and effectiveness
- Expanding our roles as conveners and collaborators with those who share our mission
Contact the NCTRC for assistance:

We welcome the opportunity to connect with new partners and colleagues who believe in helping Americans receive quality healthcare through telehealth solutions. Please reach out to us at:

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