

# TELEHEALTH: INDISPENSABLE CARE MODALITY

## A Multistakeholder Symposium to Explore Barriers and Opportunities to Improve Equity and Value of Virtual Care

March 11, 2022



### American Academy of Pediatrics

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## BACKGROUND AND PURPOSE OF THE SYMPOSIUM

In 2020, telehealth and virtual care became de facto parts of the healthcare system during the pandemic. At a time when there was a significant decline in in-person pediatric office visits, there was rapid uptake of telehealth which allowed providers to maintain a connection with children and families and provide continuity of care. From this natural experiment in telehealth implementation, many providers and other stakeholders have generated evidence, ideas, and insights that can lead to an improved healthcare system. There is evidence that telehealth can increase access to care and improve care coordination and disease management. The expansion of telehealth provides an opportunity to increase equitable healthcare and achieve health and well-being for all children and youth. Yet, challenges remain that can hinder continued progress and sustainability. Time is of the essence – the public health system and its partners must work quickly to incorporate the beneficial aspects of telehealth usage into standards of pediatric care, while addressing its inherent challenges, to ensure high quality, equitable care for all children and families.

As SARS-COV-2 moves toward endemicity and we begin a return to “normal,” we risk backsliding into siloed, uncoordinated approaches to care.

To this end, the American Academy of Pediatrics (AAP) in partnership with the Supporting Pediatric Research on Outcomes and Utilization of Telehealth (SPROUT)–Clinical Translational Science Awards (CTSA) Collaborative Telehealth Research Network<sup>1</sup>, and with leadership from the Department of Accountable Care and Clinical Integration at Boston Children's Hospital, convened a group of experts for a two-day virtual symposium, “*Telehealth: Indispensable Care Modality: A Multistakeholder Symposium to Explore Barriers and Opportunities to Improve Equity and Value of Virtual Care*” (November 18–19, 2021). Attendees included clinicians, families, family advocates, representatives from academic institutions and hospitals, federal agencies, non-profit organizations, health insurance payers, quality measurement organizations, and AAP Sections, Committees, and Councils. **Appendix A** includes a list of symposium planning committee members, participating AAP staff, and attendees. The symposium was supported through a grant that AAP received from the U.S. Department of Health and Human Services’ (HHS), Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau (MCHB) titled, “*Supporting Providers and Families to Access Telehealth and Distant Care Services for Pediatric Care.*” The symposium was also supported in part by SPROUT–CTSA Collaborative Telehealth Research Network.

The aim of the symposium was to facilitate discussion that would lead to the identification and prioritization of achievable action items related to continuing and enhancing telehealth as we move forward. It began with plenary sessions addressing three domains – feasibility/usability, health equity, and measurement – followed by multidisciplinary breakout discussion groups on each domain topic, culminating in the identification and prioritization of recommended action items based on their criticality and feasibility. A few days prior to the symposium, invitees were provided a program guide containing pre-reading materials on these topics. A reference list of pre-reading materials is available in **Appendix B**.

This brief is a summary of the discussion and prioritized recommended action items identified regarding the continued use of telehealth in pediatric care. It is, most importantly, a call to action to all stakeholders to consider what they can do in both the short- (zero to six months) and long-term (six to thirty-six months), to ensure this valuable care modality remains available and accessible to the children and families who need it most.

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<sup>1</sup> SPROUT–CTSA Collaborative Telehealth Research Network is funded by the National Institutes of Health (NIH) National Center for Advancing Translational Sciences (NCATS).

## INTRODUCTION

The symposium began with opening remarks focused on the need and urgency to continue to provide telehealth for families and children as we move closer to the end of the public health emergency and back to in-person healthcare visits. Representatives from Family Voices, a family advocacy organization and recipient of funding from the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020, emphasized the benefit families receive from telehealth, the need for resources for families to effectively use telehealth, and the fear some families feel that telehealth will “go away.” Representatives from MCHB provided feedback on the work that has been funded through the CARES Act, including efforts to increase telehealth access and infrastructure for providers and families to help prevent and respond to COVID-19 in the areas of maternal healthcare, state public health systems, family engagement, and pediatric care.

As a recipient of funding from the CARES Act, the AAP has been implementing a project titled “*Supporting Providers and Families to Access Telehealth and Distant Care Services.*” The goal of this project is to support telehealth access and infrastructure for the provision of comprehensive care to children and adolescents, including children and youth with special health care needs (CYSHCN) and other vulnerable pediatric populations, utilizing a medical home approach. Representatives from the AAP provided further information about its broader telehealth and equity efforts, including the recent publication of a policy statement, “[Telehealth: Improving Access to and Quality of Pediatric Healthcare](#),” activities of the AAP Section on Telehealth, and the SPROUT–CTSA Collaborative Telehealth Research Network, all of which align with the AAP’s [Equity Agenda](#).

Participants then heard from two presenters who discussed “Voices from the Frontlines,” describing findings from initiatives that identified benefits, challenges, and promising practices in the use of telehealth in pediatric care. One such initiative, telehealth promising practices, was a collection of telehealth strategies/practices submitted to the AAP by clinicians and other partners as part of the AAP’s CARES Act-funded project. These promising practices span a wide range of categories, including general implementation tips, teleconsultation models, interdisciplinary care, assessment strategies via telehealth, and care coordination for CYSHCN. Anecdotal data collected through these promising practices indicate that telehealth improved access to care for families (reducing transportation costs, missed work/school, and weather-related cancellations), reduced risk of infection, reduced patient costs, decreased emergency room visits, and provided levels of patient satisfaction similar to in-person care.

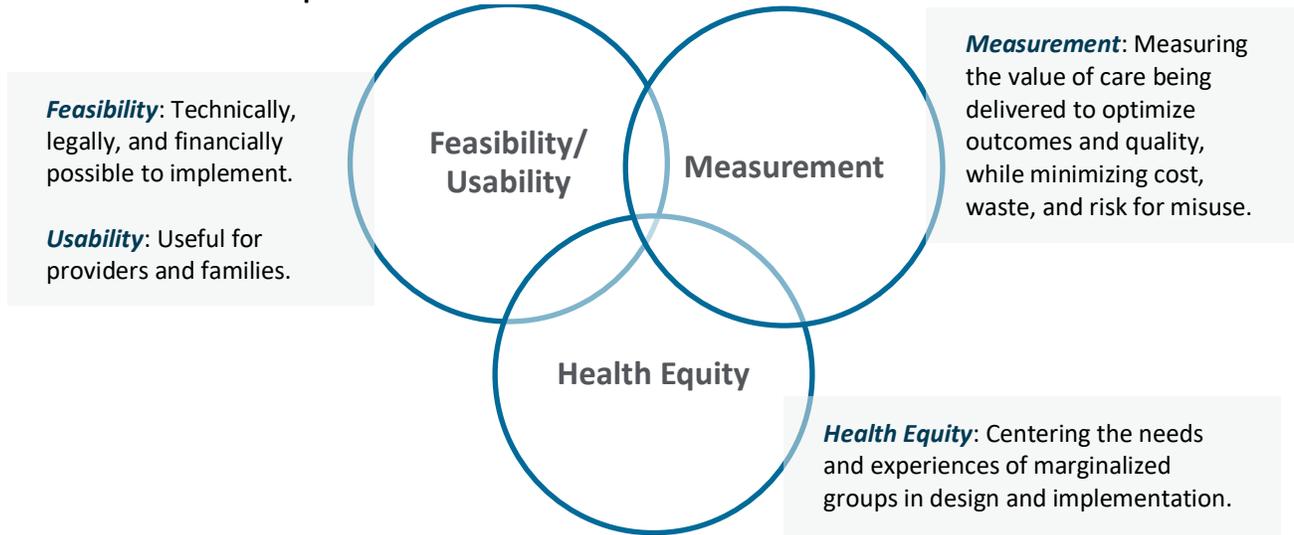
The second presentation reviewed the results of a SPROUT-sponsored survey of providers measuring usability, feasibility, equity, and implementation of telehealth using attention-deficit/ hyperactivity disorder (ADHD) management as proof of concept. The results of the survey indicate that telehealth can improve provider ability to coordinate with other team members, improve visit processes, positively impact quality and equity of care, and increase efficiency. Challenges to telehealth implementation include language barriers, technology issues, and patient and family engagement. Improved payment models, shared records and care plans, integration of technology into workflows, and equitable access to telehealth care areas for further consideration and research. While the survey context and methods limit broad generalizations, they supply insights into the state of telehealth implementation and areas for future exploration.

## PLENARY SESSIONS AND DOMAIN DISCUSSIONS

The symposium then shifted to plenary sessions focused on three domains: 1) feasibility/usability, 2) health equity, and 3) measurement. For each domain, presenters shared information on current thinking within the field, followed by a moderated discussion. The planning committee identified the three domains while conceptualizing the symposium over the course of several months. While the pandemic provided an opportunity to scale up telehealth implementation, it also highlighted barriers and challenges in the three domain areas that could hinder further progress and sustainability. The domains are also interdependent, requiring stakeholders to discuss and address them in a coordinated way. Planners hypothesized that, with engagement of a diverse set of

expert stakeholders, symposium discussions would produce a set of priorities to guide a path forward in designing a more effective, value-driven, equitable, healthcare system. **Exhibit 1** provides an overview of the domains.

### Exhibit 1. Domains to Improve Telehealth



Plenary sessions were followed by small group, multidisciplinary, domain-specific breakout sessions on the second day of the symposium. Attendees were pre-assigned to a breakout room based on domain knowledge and expertise. In each domain-specific breakout room, participants first identified recommended action items for the field. For each recommended action item, breakout room participants discussed **timeline**, grouping recommended action items by length of time to implement: in the first six (6) months and in six (6) to thirty-six (36) months. They also discussed **criticality** (importance of this action item to the implementation of sustainable, feasible, and equitable telehealth) and **feasibility** (how easy would it be for stakeholders in the field to act on the recommendation).<sup>2</sup>

The following sections summarize stakeholder input on what is working well, existing gaps, what is needed, stakeholders, and barriers to action for each of the domains. Each domain-specific section concluded with a list of the short- and long-term recommended action items identified by attendees to improve telehealth.

### Feasibility/Usability

**Feasibility** refers to whether it is technically, legally, and financially possible to implement something (*can* you do it, and if you cannot, why not?), and **usability** refers to whether it is useful for providers and families, and what is enabling or preventing its use (*are* you doing it, and if you are not, why not?). Both are essential considerations in the future use of telehealth and were considered together during the symposium.

#### What's Working?

Several supports that were in place prior to the pandemic, as well as changes implemented during the pandemic, contributed to the successful pivot to telehealth in pediatric care. Examples of existing supports include organizations with existing infrastructure, including staff who are trained and comfortable with technology; Managed Care Organizations assisting providers with provision of platforms and patients/families with hardware; electronic health records (EHRs) that are integrated into the practice's workflow; and processes and policies, such as those around patient consent and confidentiality. In addition, the flexibility afforded during the pandemic regarding the type of modality used (e.g., telephone visits for those without access to other technology and internet), services offered, and payment supported by engaged state and/or federal legislatures

<sup>2</sup> Feasibility was discussed during the symposium within two different contexts: 1) feasibility related to implementing telehealth initiatives within healthcare or healthcare-adjacent systems and 2) feasibility for stakeholder organizations participating in the symposium to act on recommended action items within the next thirty-six (36) months.

and payers, were critical to the successful use of telehealth services. Among the many benefits that have been attributed to telehealth, the ability of families and providers to coordinate care with providers in different disciplines and across different systems (e.g., healthcare and school) was consistently cited by participants, as was the convenience for families in terms of transportation, weather challenges, missed work and schools, etc.

### What Are the Challenges?

Participants fear that the flexibility around the provision of telehealth will disappear in a post-pandemic world, particularly as it relates to payment models and different insurers. Providers need assurances of payment parity, regardless of care modality. There are also challenges around ensuring confidentiality, privacy, and security for patients and their families. Improved infrastructure and training are needed for providers to address these concerns. Families need equitable access to technology and broadband, and providers must consider how the use of different platforms amongst practices impacts families’ abilities to use telehealth and toggle between various providers in their care team. Improving care coordination gaps between systems, such as providers, schools, and social services will help the move toward a more equitable system.

### What Does the Future Look Like, and How Do We Get There?

While telehealth is not a substitute for in-person care, it can expand options for families. It is essential for this tool to be available for all members of the care team, including the patient- and family-centered medical home. To realize the vision of improved care for pediatric populations, especially those with complex needs, participants identified several action items. Telehealth should be leveraged to promote and improve care coordination for families and improve equity for underserved populations. Telehealth can provide greater continuity of care by serving as a bridge between the systems that serve children, particularly for CYSHCN transitioning to adult care. Effective care coordination also includes mechanisms to ensure that data and information collected across currently siloed portals, platforms, and systems are coordinated and integrated. This will require that patients, families, and payors are engaged in the design and implementation of systems improvements.

“

I see telehealth as a tool which has its place as one tool in our bag, which needs to be supported, available to all equitably, and resourced appropriately for all providers.”

– Symposium Attendee

Providers need continued flexibility, in terms of both regulation and payment, to use the best modality to meet the needs of patients and families, as well as alignment of what is permitted and payable across different insurers (e.g., allowing multiple providers to receive payment for services provided on the same day). Participants also identified a need to explore alternative payment models, such as value-based care and capitation/partial capitation, and review of legislative requirements that may result in barriers to the provision of telehealth services.

**Exhibit 2** highlights the short- and long-term recommended action items to improve feasibility and usability of telehealth identified by breakout session participants.

### Exhibit 2. Recommended Action Items to Improve Feasibility and Usability of Telehealth

Recommended Action Items to Accomplish Within Zero to Six (0-6) Months
Define features of telemedicine clinical service that prioritize/facilitate value and equity.
Develop and agree upon a code set and modifiers for telemedicine use that adequately describes telemedicine work.
Develop program characteristics for programs that could participate in a “provider-based authorization” system.
Recommended Action Items to Accomplish Within Six to Thirty-six (6-36) Months
Define and have transparency of cost and value of telemedicine care.
Define features of tech/apps/portals that prioritize equity.
Define risk stratification for social risk, including family and community factors.
Define technical standards for telehealth platforms.
Identify and improve state-based licensure/payment issues.

Outline a process for coding, billing, and payment for the following three areas: care coordination in healthcare; care integration across systems; and care transitions.

## Health Equity

In the context of the telehealth dialogue, **health equity** refers to the idea of centering the needs and experiences of marginalized groups in the design and implementation to ensure the accessibility and relevance of telehealth services, ultimately leading to equitable service provision. While the concept of equity should be considered in all aspects of the telehealth conversation and across all domains, it is also important to elevate equity as its own domain.

### What's Working?

Much of what is identified as a success in the other domains can improve equity. For example, the improved feasibility and usability of telehealth during the pandemic led to more flexible and accessible options with conducive billing policies. Telehealth has been able to adapt to the needs of the patient and family rather than asking the patient or family to adjust to the healthcare delivery system. With enhanced access to and increased coverage of telehealth services by major payors, many barriers to care have been reduced or eliminated. Several factors contribute to equitable access and use of telehealth, including early identification of language needs, and the prioritization of inclusive health technology design by organizational leadership.

### What are the Challenges?

Efforts to ensure equity in the provision of telehealth services can be beset by challenges at several levels, including barriers created by local, state, and federal policy; lack of telehealth equity as an organizational priority and legal concerns regarding risk; vendor constraints; and slow uptake of technological advances by the very priority populations that may derive the most benefit from using telehealth. Additionally, technological and informatics interventions that work to improve healthcare, may not be accessible to individuals and families that are socially, economically, or geographically disadvantaged or have linguistic needs, potentially increasing inequities and health disparities.

“

Priority populations are those most vulnerable to being left behind.”

– Symposium Attendee

In some cases, the solution can contribute to the root cause of inequities. Consider the digital divide – does better access to technology mean better care, thereby increasing inequities? This same challenge can also be connected to digital literacy – having access but not able to use it due to disability, language, or understanding of the technology. Finally, real equity will only be achieved when the standard of care is financially viable. Beyond access and usability challenges, payment approaches that incentivize equity are needed to achieve true system change.

### What Does the Future Look Like, and How Do We Get There?

Equity in telehealth is about more than access to devices and the internet. We must also consider usability, outcomes, and design systems to meet people where they are, considering language preferences/English language proficiency, disabilities, age, digital literacy, and health literacy. To simplify complex interfaces and workflows, there is a need for “facilitators,” “digital ambassadors,” or supportive intermediaries to bridge the system and the family, including interpreters, care coordinators, community health workers, and cultural brokers. Participants emphasized the need to prioritize inclusive health technology design. This includes identifying and incentivizing innovations that place the most vulnerable populations at the center of design and implementation, engaging with those populations during the design process, and having equity as a primary goal.

Local, state, and federal policies should support telehealth integration in payment approaches, standardize equitable and inclusive health information technology design, provide free/low-cost broadband, and fund the equipment and digital infrastructure for providers serving vulnerable populations. There is also a need for infrastructure to capture data to better understand inequities (e.g., whether there is a differential in wait time to access services for families whose primary language is not English versus families whose primary language is

English, and by disability status). **Exhibit 3** highlights the short- and long-term recommended action items to address equity in telehealth as identified by breakout session participants.

**Exhibit 3. Recommended Action Items to Improve Equity in Telehealth**

Recommended Action Items to Accomplish Within Zero to Six (0-6) Months
Assess organizational readiness to implement equitable telehealth (i.e., do they have technical requirements needed for equitable electronic health record platforms)
Complete an assessment of digital health literacy for patients and families and disseminate relevant education.
Identify and establish partnerships with stakeholder entities who are currently engaged (e.g., community health workers, education systems) in efforts to deliver equitable care.
Identify policies and regulations that are currently barriers to access. Identify models of care that currently prioritize equity.
Include patient/family voices from marginalized populations in co-design of action items.
Partner with education systems and professional health providers.
Recommended Action Items to Accomplish Within Six to Thirty-six (6-36) Months
Conduct pilots, in the accreditation space, for innovation with emphasis on co-design with patients, families, and communities. Include qualitative measurements to monitor progress and family experience.
Define features of tech/apps/portals that prioritize equity.
Define technical standards for telehealth platforms.
Develop an understanding of differential wait time for families from marginalized groups.
Develop digital health equity checklist for vendors/industry standards (that are equity-centered).
Engage Centers for Medicare & Medicaid Services (CMS) and state Medicaid agencies to incentivize adoption of equitable technical standards.
Identify and establish partnerships among entities to work on longer term objectives, not just low hanging fruit.
Examine and identify alternative payment models that support payment for equitable care.
Identify equity and technical standards relevant to telehealth.
Identify how to incentivize vendors to improve their products; initiate pilots for innovation; reimbursement for equitable care; engage with policy organizations; engage with CMS on Medicaid waivers
Identify measurement capability as part of implementation that can track equity.
Modify policies/regulations to remove barriers and promote equitable access.

**Measurement**

When thinking about *measurement*, it is important to start with the end result in mind – what are we trying to achieve, and why is it important to take the time, effort, and resources to measure it? Ultimately, our goal is to deliver the highest possible value healthcare for everyone – patient, families, provider, payer, and health system – maximizing outcomes and quality, while minimizing cost, waste, and risk for misuse. Collecting meaningful data will allow us to measure the value of care being delivered and help inform payers, policymakers, and providers as to how best to use telehealth to advance health.

**What’s Working?**

A variety of organizations, including the National Quality Forum, the National Committee for Quality Assurance, the World Health Organization, the Agency for Healthcare Research and Quality (AHRQ), and the SPROUT-CTSA Collaborative Telehealth Research Network, have developed useful frameworks, questionnaires, and/or measures that can directly or indirectly assess telehealth performance in a number of domains, including health outcomes, quality and cost of delivering care, the individual’s experience, program key performance indicators and operations, and equity stratifiers. There are several initiatives underway regarding the measurement of telehealth. For example, the SPROUT-CTSA Collaborative Telehealth Research Network is building a meaningful and actionable framework and corresponding telehealth registry, through crowdsourcing and consensus-building approaches, to help inform payers, providers, and implementers to use telehealth to the highest value. In addition, National Institutes of Health (NIH), HRSA, AHRQ, and Centers for Disease Control and Prevention recently held a workshop on provider-to-provider telehealth, and a report and a systematic literature review will be generated based on that meeting.

## What Are the Challenges?

Challenges to measuring the impact of telehealth revolve around the administrative burden and other process concerns, as well as the lack of an evidence base for some current measures of telehealth. A key barrier is the effort it takes to collect the data, particularly in primary care practices where the primary goal is not to measure, but to take care of patients. As we think about how to measure telehealth impact, we must consider the administrative burden at the practice level and to families (if patient reported outcomes are collected) and be prudent in our analysis of the risks and benefits of data collection. How can we make it easier and more reliable for frontline clinicians to collect measurement data?

“

Don't create a parallel universe but think thematically about the value of telehealth.”

– Symposium Attendee

## What Does the Future Look Like, and How Do We Get There?

As some states begin to reconsider and pull back from telehealth, it is imperative that we collect meaningful data that can measure the value of care being delivered without reinventing the wheel. Telehealth is a tool for caring for patients, and as such, does not need its own measures but should be included in how we currently measure care. There are many measures already available that can be applied and adapted to telehealth.

“

Figuring out measures exclusively for telehealth is missing the point.”

– Symposium Attendee

In considering the future state of measurement in telehealth, a few questions emerged for further consideration:

- How do we develop measures that incentivize the development of a value-based approach to care?
- How do we measure care coordination, convenient access to care, and secondary impacts on quality of life, across modalities and at various points of care?
- How do we define value and measures in a way that allows comparison of an integrated model compared to standalone telehealth or in-person service?

**Exhibit 4** highlights the short- and long-term recommended action items to address measurement in telehealth as identified by breakout session participants.

### Exhibit 4. Recommended Action Items to Improve Measurement of Telehealth

Recommended Action Items to Accomplish Within Zero to Six (0-6) Months
Plan on how to come to consensus on a framework for telehealth measurement.
From measures that exist, determine which are relevant to telehealth. Many of these may be process measures rather than outcome measures.
Gather information from families and caregivers to understand how they are experiencing telehealth.
Identify strategies to measure care coordination.
Recommended Action Items to Accomplish Within Six to Thirty-six (6-36) Months
Develop a payer-level database of data/standards (i.e., care coordination strategies).
Develop digital health equity checklist for vendors/industry standards (that are equity-centered).
Formulate approach that integrates disability status and other Race, Ethnicity, Language, Disability (RELD) stratifiers when identifying and calculating measures.
Identify equity and technical standards relevant to telehealth.
Identify measurement capability as part of implementation that can track equity.

## CROSS-CUTTING THEMES & FUTURE DIRECTIONS

The continuation and improvement of telehealth as a service modality in the wake of the pandemic offers a huge opportunity for value creation around pediatric care integration and coordination. However, challenges remain, including lack of alignment with current payment structures, policy barriers, and the need for incentives to develop systems that prioritize equity and value-based care.

“

The imperative of leadership...is that we seize the opportunities when they occur and make sure that we move the world forward. We don't have the opportunity to watch things pass by.”

– Symposium Attendee

Several cross-cutting themes and needs emerged from the discussions:

- The promise and the challenge of telehealth is improved care integration and care coordination at all levels, including systems (e.g., schools, community organizations, healthcare system), specialties, settings, and technologies. How do we incentivize this integration through policy and payment systems?
- We are starting to re-imagine and improve the healthcare system, creating a more integrated approach where “families are really getting what they need instead of what we want to give them.” How patients and families access care should be flexible, taking into account their unique needs and circumstances. That may mean an audio-only telehealth visit, a video telehealth visit, an asynchronous interaction, or an in-person visit. Part of this integration involves placing families at the center of the design and implementation of telehealth systems and services, and the inclusion of intermediaries, such as community health workers and cultural brokers, in the telehealth experience.
- It is imperative to define and describe telehealth, particularly the features that prioritize and facilitate value and equity, and then develop or adapt measures to capture that value. How we do measure care coordination, convenient access to care, and the impact on quality of life? How do we demonstrate telehealth's impact on equity?

The symposium was intended to be the beginning of a multistakeholder effort to advance pediatric telehealth effectively and equitably. To this end, a survey was sent to all symposium invitees in January 2022 to offer them an opportunity to comment on the list of prioritized recommended action items that resulted from the symposium, and to consider what they and their organizations are planning to advance in the next six months, and in six (6) to thirty-six (36) months. The symposium planning committee will utilize the results for future activity planning and execution by action groups. The aim of the groups will be to continue to reduce siloes and bring diverse stakeholders together to take collective action towards solutions.

However, the symposium participants cannot do it on their own. There is an urgent need for “all hands on deck” to begin addressing the recommended action items identified in this report, and achieve national oversight of these efforts to track implementation based on equity and outcomes. The symposium demonstrated that there is a role for all interested stakeholders, including providers, patients, payers, policy makers, and families, in moving toward a more effective and equitable system of care, resulting in better health and well-being for all children.

For more information or to get involved, contact SPROUT–CTSA Collaborative Telehealth Research Network managers Christina Coleman at [colemach@musc.edu](mailto:colemach@musc.edu) or Jessie Leffelman at [jleffelman@aap.org](mailto:jleffelman@aap.org).

## APPENDIX A. ATTENDEE LIST

The following registrants consented to have their name, title, and organization information included in the symposium proceedings report.

### Symposium Planning Committee

<b>Name</b>	<b>Organization</b>	<b>Job Title</b>
<b>Christina Coleman, MSPA, MPH</b>	Medical University of South Carolina	SPROUT-CTSA Collaborative Telehealth Research Network Program Manager
<b>David McSwain, MD, MPH, FAAP</b>	Medical University of South Carolina	Chief Medical Information Officer, Professor of Pediatric Critical Care
<b>Jeffrey Schiff, MD, MBA, FAAP</b>	AcademyHealth	Senior Scholar
<b>John Chuo, MD, FAAP</b>	Children's Hospital of Philadelphia	Neonatal Quality Officer of Newborn Network, Co-Director of Digital Health Innovative Core
<b>Marie Y Mann, MD, MPH, FAAP</b>	No organizational affiliation	Pediatrician
<b>Richard Antonelli, MD, MS, FAAP</b>	Boston Children's Hospital	Medical Director of Integrated Care
<b>Sonja Ziniel, PhD, MA</b>	University of Colorado School of Medicine / Children's Hospital Colorado	Assistant Research Professor/Senior Survey Methodologist

### Symposium Panelists & Speakers

<b>Name</b>	<b>Organization</b>	<b>Job Title</b>
<b>Allysa Ware, MSW</b>	Family Voices	Associate Director of Programs and Strategy
<b>Andrea Milne Wenderlich, MD, FAAP</b>	University of Rochester Medical Center	Assistant Professor
<b>Ryan Van Ramshorst, MD, MPH, FAAP</b>	Texas Health and Human Services Commission	Chief Medical Director, Medicaid & CHIP Services
<b>Sansanee Craig, MD</b>	Children's Hospital of Philadelphia	Physician
<b>Steve North, MD, FAAP</b>	Center for Rural Health Innovation	Medical Director
<b>Suzinne Pak-Gorstein, MD, MPH, PhD, FAAP</b>	University of Washington	Associate Professor

## American Academy of Pediatrics Staff

<b>Name</b>	<b>Job Title</b>
<b>Debra Waldron, MD, MPH, FAAP</b>	Senior Vice President, Healthy and Resilient Children, Youth, and Families
<b>Trisha Calabrese, MPH</b>	Senior Director, Pediatric Population Health
<b>Mary Crane, PhD, LSW</b>	Senior Director, Systems of Services for Children and Youth with Special Health Care Needs
<b>Christina Boothby, MPA</b>	Director, CYSHCN Initiatives
<b>Shannon Limjuco, MPH</b>	Director, Telehealth & ECHO
<b>Alex Kuznetsov</b>	Senior Manager, Disabilities and Special Health Care Needs
<b>Jessica Leffelman</b>	Manager, Telehealth & ECHO Initiatives
<b>Lauren Geary, MPH</b>	Program Manager, Adolescent and Behavioral Telehealth Initiatives
<b>Oyin Oloniniyi, MPH</b>	Program Manager, ECHO Initiatives
<b>Robinn Yu, MHSA</b>	Program Coordinator, Telehealth for Pediatric Care Initiatives

## Health Resources & Services Administration, Maternal & Child Health Bureau

<b>Name</b>	<b>Job Title</b>
<b>Laura Ramos, MPH</b>	Division Director
<b>Rita Maldonado, MPH</b>	Public Health Analyst

## Altarum

Name	Job Title
<b>Dakota Staren, MPH</b>	Research Analyst
<b>Denise Rayon, MPH</b>	Project Director
<b>Julia Fantacone, MPP, PMP</b>	Project Manager
<b>Karah Mantinan, MPH, RD</b>	Project Director
<b>Laura McGovern, MPA</b>	Analyst
<b>Sheryl Mathis, MSW, MPH</b>	Director, Center for Women's Health

## Symposium Attendees

Name	Organization	Job Title
<b>Elizabeth Alderman, MD, FAAP, FSAHM</b>	AAP Committee on Adolescence	Chairperson
<b>Michael Colburn, MD, MEd, FAAP</b>	AAP Committee on Adolescence	Committee Member
<b>Jesse Hackell, MD, FAAP</b>	AAP Committee on Practice and Ambulatory Medicine	Chairperson
<b>Dennis Kuo, MD, MHS, FAAP</b>	AAP Council on Children with Disabilities	Immediate Past Chairperson
<b>Kathryn Cheek, MD, FAAP</b>	AAP Council on Clinical Information Technology	Executive Committee Member
<b>Rachel Tellez, MD, MS, FAAP</b>	AAP Section on Minority Health, Equity, and Inclusion	Member-at-large
<b>Erin O'Malley, JD</b>	American Heart Association	Advocacy Consultant
<b>Brooke McSwain, MSc, MA, RRT</b>	American Heart Association	Policy Research Analyst
<b>Dyba Syed</b>	American Heart Association	Director
<b>Josh Roll</b>	American Heart Association	Government Relations Manager
<b>Asfiya Mariam</b>	Association for Community Affiliated Plans	Program Associate
<b>Enrique Martinez Vidal, MPP</b>	Association for Community Affiliated Plans	Vice President, Quality and Operations
<b>Dan Slater, MD, FAAP</b>	Atrius Health	Executive Chair, Pediatrics, Medical Director MassHealth ACO
<b>Peter Hagan</b>	Atrius Health	Digital Health Implementation Manager
<b>Alanna Hughes, MPH</b>	Boston Children's Hospital	Project Manager
<b>Hanalise Huff MD, MPH</b>	Boston Children's Hospital	Child Neurology Resident
<b>Michael Duyzend, MD, PhD</b>	Boston Children's Hospital	Resident Physician

<b>Rena Xu, MD, MBA</b>	Boston Children's Hospital	Pediatric Urology
<b>Stephanie Donatelli, MD</b>	Boston Children's Hospital	Physician
<b>Ellen Marie Whelan, PhD, CRNP, FAAN</b>	Center for Medicare and Medicaid Services	Chief Population Health Officer
<b>Mary Beth Hance</b>	Center for Medicare and Medicaid Services	Senior Policy Advisor
<b>Kim Newsome, BSN, MPH</b>	Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities	Health Scientist
<b>Katie Hentges</b>	Child Neurology Foundation	Director, Programs
<b>Christina Olson, MD, FAAP</b>	Children's Hospital Colorado	Telehealth Medical Director
<b>Stephen Neal, PA-C</b>	Chinle Service Unit	Chief of Staff
<b>Andrew Beck, MD, MPH, FAAP</b>	Cincinnati Children's Hospital Medical Center	Pediatrician
<b>Suzanne Bakken RN, PhD, FAAN, FACMI</b>	Columbia University	Professor
<b>Nanfi Lubogo</b>	Family Voices	Vice President & Co-Executive Director of PATH
<b>Roseáni Sanchez Algarín, MED</b>	Family Voices National	Program Director
<b>Mark Carroll, MD, FAAP</b>	Health Choice Arizona/Blue Cross Blue Shield Arizona	Chief Medical Officer
<b>Treeby Brown</b>	Health Resources & Services Administration	Branch Chief
<b>Sarah Beth McLellan</b>	Health Resources & Services Administration, Maternal & Child Health Bureau	Project Officer
<b>David Gray</b>	Healthcare Information and Management Systems Society	Director, Government Relations and Connected Health Policy
<b>Robert Havasy</b>	Healthcare Information and Management Systems Society	Senior Director, Personal Connected Health
<b>Justine Mrosak, MD</b>	Hennepin Healthcare	Informatics fellow, pediatric hospitalist
<b>Kelly Menachof</b>	Indian Health Service	Pediatrician
<b>Jillian Mador, MD, FAAP</b>	Indian Health Services	Pediatric Physician
<b>Kevin Wiley, Jr.</b>	Indiana University	PhD Student, Health Policy and Management
<b>Helen Kinsman Hughes, MD, MPH, FAAP</b>	Johns Hopkins University School of Medicine	Associate Medical Director, Office of Telemedicine
<b>Susan Kressly, MD, FAAP</b>	Kressly Pediatrics	Founding Partner/Pediatrician
<b>Jason Goldwater</b>	Laurel Health Advisors, LLC	President/Chief Operating Officer
<b>Yael Harris, MD</b>	Laurel Health Advisors, LLC	Chief Executive Officer
<b>Alison Curfman, MD, FAAP</b>	Mercy Children's Hospital	Pediatric Emergency Medicine Physician
<b>Mary Barton, MD</b>	National Committee for Quality Assurance	Vice President

<b>Mary Barton, MD</b>	National Committee for Quality Assurance	Vice President, Performance Measurement
<b>Audie Atienza, PhD</b>	National Institutes of Health, National Center for Advancing Translational Sciences	Program Officer
<b>Charles Amos, MBA</b>	National Quality Forum	Director, Emerging Initiatives
<b>Kevin Larsen, MD</b>	Optum Labs	Senior Vice President
<b>Carly Paterson Khan, PhD, RN, MPH</b>	Patient-Centered Outcomes Research Institute	Associate Director
<b>Andrea Shore</b>	School-Based Health Alliance	Chief Program Officer
<b>Robert Boyd, MCRP, MDiv</b>	School-Based Health Alliance	President/Chief Executive Officer
<b>Alicia Tieder</b>	Seattle Children’s Hospital	Senior Director, Health Equity, Diversity & Inclusion
<b>Denise Joseph, MS</b>	U.S. Department of Health and Human Services	Public Health Analyst
<b>Georgia Simpson</b>	U.S. Department of Health and Human Services, OASH Region 1	Regional Minority Health Analyst
<b>CAPT David Wong, MD, FAAP</b>	U.S. Department of Health and Human Services, Office of Minority Health	Chief Medical Officer
<b>Samantha Meklir</b>	U.S. Department of Health and Human Services, Office of the National Coordinator for Health Information Technology	Senior Policy Advisor
<b>Kristin Ray, MD, MS, FAAP</b>	University of Pittsburgh	Associate Professor/Director, Health Systems Improvement
<b>Rachel Gerhardt, MPH</b>	University of Pittsburgh Medical Center	Director of Operations
<b>Ricardo Mosquera, MD</b>	University of Texas – Houston	Associate Professor, Division Chief – Pulmonary Medicine, & Clinic Director - High Risk Comprehensive Care Clinic

## APPENDIX B. SUGGESTED PRE-SYMPOSIUM READINGS

### General

- Hummel K, Slater D, Payvandi L, Huth K, and Antonelli R. Care Planning and Coordinating Transitions from Inpatient to Outpatient Settings: 11-year-old with Multisystem Inflammatory Syndrome in Children (MIS-C) as a result of COVID-19 infection, 2021. In, Antonelli R, Huth K, Rosenberg H, Bach A. Pediatric Care Coordination Curriculum: An Interprofessional Resource to Effectively Engage Patients and Families in achieving Optimal Child Health Outcomes, 2nd Edition. Boston Children’s Hospital, 2019. Available at: [https://downloads.aap.org/AAP/PDF/CCCC\\_TelehealthCaseStudies\\_Inpatient\\_to\\_Outpatient\\_Final\\_2021.pdf](https://downloads.aap.org/AAP/PDF/CCCC_TelehealthCaseStudies_Inpatient_to_Outpatient_Final_2021.pdf)
- Payvandi L, Hummel K, Huth K, and Antonelli R. Using Telehealth to Coordinate Care for Youth with Complex Needs Transitioning from Pediatric to Adult Care: 19-year-old young adult with autism spectrum disorder, intellectual disability, and attention-deficit/hyperactivity disorder, 2021. In, Antonelli R, Huth K, Rosenberg H, Bach A. Pediatric Care Coordination Curriculum: An Interprofessional Resource to Effectively Engage Patients and Families in achieving Optimal Child Health Outcomes, 2nd Edition. Boston Children’s Hospital, 2019. Available at: [https://downloads.aap.org/AAP/PDF/CCCC\\_TelehealthCaseStudies\\_Pediatric\\_to\\_Adult\\_Final\\_2021.pdf](https://downloads.aap.org/AAP/PDF/CCCC_TelehealthCaseStudies_Pediatric_to_Adult_Final_2021.pdf)

### Feasibility/Usability

- Curfman A, McSwain SD, Chuo J, et al. Pediatric Telehealth in the COVID-19 Pandemic Era and Beyond. *Pediatrics*. 2021;148(3);e2020047795. Available at: [https://publications.aap.org/pediatrics/article-pdf/148/3/e2020047795/1194473/peds\\_2020047795.pdf](https://publications.aap.org/pediatrics/article-pdf/148/3/e2020047795/1194473/peds_2020047795.pdf)
- Curfman AL, Hackell JM, Herendeen NE, et al; AAP Section on Telehealth Care, Committee on Practice and Ambulatory Medicine, Committee on Pediatric Workforce. Telehealth: Improving Access to and Quality of Pediatrics Health Care. *Pediatrics*. 2021;148(3);e2021053129. Available at: [https://publications.aap.org/pediatrics/article-pdf/148/3/e2021053129/1194526/peds\\_2021053129.pdf](https://publications.aap.org/pediatrics/article-pdf/148/3/e2021053129/1194526/peds_2021053129.pdf)
- Medicaid Medical Directors Network: Perspective on Telehealth Modernization. March 2021. Available at: <https://academyhealth.org/publications/2021-03/medicaid-medical-directors-offer-key-perspectives-telehealth>

## Health Equity

- Lion KC, Raphael JL. Partnering health disparities research with quality improvement science in pediatrics. *Pediatrics*. 2015; 135(2): 354 -361. Available at: <https://publications.aap.org/pediatrics/article-abstract/135/2/354/33417/Partnering-Health-Disparities-Research-With?redirectedFrom=fulltext>
- Rodriguez JA, Clark CR, Bates DW. Digital Health Equity as a Necessity in the 21st Century Cures Act Era. *JAMA*. 2020; 323(34): 2381-2382. Available at: <https://jamanetwork.com/journals/jama/article-abstract/2766776>
- Shaw J, Brewer LC, Veinot T. Recommendations for Health Equity and Virtual Care Arising From the COVID-19 Pandemic: Narrative Review. *JMIR Form Res* 2021; 5(4):e23233. Available at: <https://formative.jmir.org/2021/4/e23233/>

## Measurement

- Chuo J, Chandler A, Lorch S. Evaluating Neonatal Telehealth Programs Using the STEM Framework. *Semin Perinatol*. 2021 Aug;45(5):151429. doi: 10.1016/j.semperi.2021.151429. Epub 2021 Apr 5. PMID: 33994012. Available at: <https://pubmed.ncbi.nlm.nih.gov/33994012/>
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- Totten AM, Womack DM, Eden KB, et al. Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2016 Jun. Report No.: 16-EHC034-EF. PMID: 27536752. Available at: <https://pubmed.ncbi.nlm.nih.gov/27536752/>

## APPENDIX C. RECOMMENDED ACTION ITEMS

Within the time periods of zero to six (0-6) months and six to thirty-six (6-36) months, recommendations are listed alphabetically by domain.

Domains are indicated with a symbol as follows:

-  Health Equity
-  Measurement
-  Feasibility/Usability

Recommended Action Items to Accomplish Within Zero to Six (0-6) Months	Domain(s)
Assess organizational readiness to implement equitable telehealth (i.e., do they have technical requirements needed for equitable electronic health record platforms).	
Complete an assessment of digital health literacy for patients and families and disseminate relevant education.	
Identify and establish partnerships with stakeholder entities who are currently engaged (e.g., community health workers, education systems, federal and state programs, national organizations such as the Alliance for Connected Care) in efforts to deliver equitable, high quality and safe care.	
Identify policies and regulations that are currently barriers to access. Identify models of care that currently prioritize equity.	
Include patient/family voices from marginalized populations in co-design of action items.	
Partner with education systems and professional health providers.	
Come to a consensus on a strategy to capture actionable and meaningful telehealth measurement.	
From measures that exist, determine which are relevant to telehealth. Many of these may be process measures rather than outcome measures.	
Gather information from families & caregivers to understand how they are experiencing telehealth.	
Identify strategies to measure care coordination.	
Define features of telemedicine clinical service that prioritize/facilitate value and equity.	
Develop and agree upon a code set and modifiers for telemedicine use that adequately describes telemedicine work.	
Develop program characteristics for programs that could participate in a “provider-based authorization” system.	

Recommended Action Items to Accomplish Within Six to Thirty-six (6-36) Months	Domain(s)
Conduct pilots, In the accreditation space, for innovation with emphasis on co-design with patients, families, and communities. Include qualitative measurements to monitor progress and family experience.	○
Develop an understanding of differential wait time for families from marginalized groups.	○
Engage Centers for Medicare & Medicaid Services (CMS) and state Medicaid agencies to incentivize adoption of equitable technical standards.	○
Examine and identify alternative payment models that support payment for equitable care.	○
Identify and establish partnerships among entities to work on longer term objectives, not just low hanging fruit.	○
Identify how to incentivize vendors to improve their products; initiate pilots for innovation; reimbursement for equitable care; engage with policy organizations; engage with CMS on Medicaid waivers	○
Modify policies/regulations to remove barriers and promote equitable access.	○
Develop digital health equity checklist for vendors/industry standards (that are equity-centered).	○□
Identify equity and technical standards relevant to telehealth.	○□
Identify measurement capability as part of implementation that can track equity.	○□
Develop a payer-level database of data/standards (i.e., care coordination strategies).	□
Formulate approach that integrates disability status and other Race, Ethnicity, Language, Disability (RELD) stratifiers when identifying and calculating measures.	□
Define and have transparency of cost and value of telemedicine care.	◆
Define risk stratification for social risk, including family and community factors.	◆
Identify and improve state-based licensure/payment issues.	◆
Outline a process for coding, billing, and payment for the following three areas: care coordination in health care; care integration across systems; and care transitions.	◆
Define features of tech/apps/portals that prioritize equity.	◆○
Define technical standards for telehealth platforms.	◆○