

# Final report on best Telehealth practices for Pediatric Behavioral Health

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# Final report on best Telehealth practices for Pediatric Behavioral Health

#### **Acknowledgements**

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## **Executive summary**

This report synthesizes findings of our stakeholder-engaged scoping review of best telehealth practices for pediatric behavioral health across the PN-25 spectrum (prenatal through young adult) with a focus on ascertaining the range and depth of existing evidence regarding 1) the identification of subgroups and/or settings that may be clinically inappropriate for telehealth delivery of behavioral health services, and 2) clinical best practices to optimize safety, effectiveness, access, equity, and the workforce and provider experience with telebehavioral health.

In reviewing existing clinical guidelines, consensus statements, and systematic reviews, we identified and discuss in this report:

- 1. Strong evidence and/or expert consensus regarding best practices for effectiveness of telebehavioral health among young adults
- 2. Moderate evidence and developing expert consensus on best practices for:
  - a. <u>effectiveness</u> among school-aged children and adolescents
  - b. safety among school-aged children, adolescents, and young adults
  - c. <u>access</u> among adolescents and young adults
  - d. workforce and provider experience in those treating young adults
- 3. Moderate evidence but little consensus on translation to actionable recommendations on best practices for:
  - a. equity in the perinatal, school-aged, adolescent, and young adult periods
  - b. access in the perinatal period and among school-aged children
  - c. <u>effectiveness</u> in the perinatal population
- 4. No expert consensus and little synthesized evidence on best practices for:
  - a. safety in the perinatal, infancy/postpartum, and early childhood periods
  - b. effectiveness, access, & equity in infancy/postpartum and early childhood
  - c. <u>workforce and provider experience</u> in those treating perinatal, infancy/postpartum, early childhood, school-aged, and adolescent populations
  - d. <u>Identifying subgroups clinically inappropriate for telebehavioral health</u> across all age strata of the PN-25 populations.

The latter was an especially notable gap given that many of the clinical guidelines included stressed the crucial importance of carefully ascertaining which patients were versus were not appropriate for telehealth delivery of behavioral health care. Other especially notable gaps identified in this scoping review included clinical guidelines or recommendations specific to care of PN-25 populations in acute crisis or post-crisis beyond the clear consensus regarding the need for individualized safety plans, or for best practices in telebehavioral health services for those with severe mental illness.

While there were relatively few recommendations for the perinatal, infancy / postpartum, and early childhood populations, those recommendations identified (such as ensuring that the field of camera view allows

adequate space for the child to play with toys and with a caregiver) illuminate the unique needs of these populations and how more universal guidelines may be inadequate. Likewise, relatively few of the clinical guidelines, consensus statements, or systematic reviews provided actionable recommendations for best practices around provider experience and workforce development beyond regulatory and IT training.

The creation of provider-friendly and actionable recommendations for best practices in telebehavioral health across these domains and PN-25 populations will require gathering additional information in the identified evidence gap areas. We propose that a combination of

- 1. targeted reviews of individual studies in these areas, and
- 2. a survey and follow-up focus group of pediatric telebehavioral health providers both within and outside of Washington State regarding perceived and utilized best practices and facilitators of implementation.

We will then be able to work with our stakeholder partners via a modified Delphi process to translate the collected evidence into actionable, feasible, and clear recommendations for best practices within each of the four pillars (access, safety, equity, and workforce), both overall across the PN-25 population and specific to age groups where indicated.

## Summary of previous reports

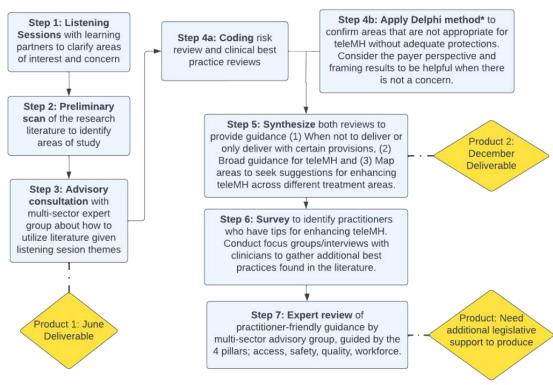
As required by ESSB 5092, our team submitted two previous reports detailing interim progress: December 2021 and June 2022. We briefly summarize those efforts here and refer the reader to the full reports for more details. Our approach to developing best practice guidance is informed by a seven-step process (below) guided by the Interactive Systems Framework and partner-engaged evidence review methods.

The Interactive Systems Framework is an implementation framework focused on aligning scholarly research evidence with practice and policy-relevant concerns. Partner-engaged evidence review methods are multistep processes through which policy, service delivery, and community partners guide the areas of focus and priorities for information gathering and synthesis.

As an initial step, our team gathered information from multiple sectors in Washington State about their chief concerns and hopes for telebehavioral health practices with pediatric (prenatal to age 25) populations. This report reflects activities through Step 7 and our recommendations for additional work needed to finalize recommendations as directed by legislation.

Diagram below lists telemental health, but for the purposes of this chart, that is the same as telebehavioral health

#### Best Telehealth Practices for Prenatal - 25 Behavioral Health



- 1. Identify the relevant literature: systematic reviews, then individual papers that comment on access, safety, quality, and workforce.
- 2. Code articles for when the conclusions/results points to an area of concern.
- 3. Code areas of concern for whether the literature offers solution to mitigation.
- 4. Clinical subject matter experts confirm synthesis

## Step 1a. Listening sessions

#### **Purpose**

The purpose of the listening sessions was to gather input on practical concerns from service delivery payers, providers, and consumers around best practices for telebehavioral health for prenatal through young adult populations.

#### **Approach**

We conducted three listening sessions between September and December 2021. Three of the listening sessions occurred during the meeting times of existing organizational partnerships. These included the Behavioral Health Institute's multidisciplinary advisory board, and the Thurston County Family and Youth System Partner RoundTable (FYSPRT). We also partnered with the Northwest Behavioral Health Research Alliance (NWBHRA), to conduct a listening session with mental health service consumers recruited from their network.

#### **Participating organizations**

Participants in the listening sessions represented the organizations and sectors listed in the table below.

#### Name of organization

**Northwest Mental Health Technology Transfer Network** 

**Healthier Here- Accountable Community for Health** 

**Lakeside-Milam Recovery Centers** 

**American Indian Health Commission of Washington State** 

**Valley Cities Behavioral Health Care** 

**Molina Health Care of Washington State** 

**Community Health Plan of Washington** 

**Health Care Authority** 

Northwest Behavioral Research Alliance (NWBHRA)

**Thurston Mason Family Youth System Partner Roundtable** (includes public mental and behavioral health service providers and consumers of mental health services)

### **Findings**

We identified five practical concerns from the listening sessions:

- 1. Safety
- 2. Effectiveness
- 3. Access
- 4. Workforce and provider experience
- 5. Equity

In addition, responses revealed an interest from providers in receiving practical, actionable guidance for addressing the five concerns as well as identifying whether certain age groups, diagnostic needs, or clinical severity are not appropriate for telebehavioral health.

# **Step 1b. Advisory group convenings**

#### **Purpose**

To support ongoing, diverse input on methods and approach, we convened a project advisory group designed to represent service, funder and policy expertise across service sectors for prenatal, infant, early childhood, adolescent, and young adult behavioral health services.

#### **Approach**

We convened two advisory group meetings between January and September 2022. The first meeting addressed the overall project approach, plans for scoping the literature, and methods for obtaining additional information from providers. The second meeting focused on obtaining feedback on a method of gathering provider innovations in advancing telehealth approaches. Both meetings were held as videoconferences to facilitate access and participation by advisory partners.

#### **Participants**

#### Name and organization

Julia O'Connor, MSW

Washington Council for Behavioral Health

Mary Stone Smith, MA, LMHC

Catholic Community Services & Washington Council for Behavioral Health

**Kenneth Dorais, MEd** 

Yakima Valley Farm Workers

Lucy Mendoza, MSW

Health Care Authority

**Marissa Ingalls** 

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**Bridget Lecheile, PhD** 

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**Kristin Wigigns** 

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**Christine Cole, MSW** 

**Health Care Authority** 

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Monica Oxford, MSW, PhD

Barnard Center for Infant and Early Childhood Mental Health

Sharon Brown, Senator

Washington 8th Legislative District

**Brad Felker, MD** 

UW Department of Psychiatry and Behavioral Sciences, Veterans Administration

#### **Findings**

Key findings from the first advisory group included the following:

- 1. Providers hold practical expertise that may not be currently captured in the scholarly literature.
- 2. Best practices need to cover multiple roles in behavioral health service delivery.
- 3. Providers will benefit from a document designed to be very practical rather than general in recommendations.

Key findings from the second advisory group included the following:

- 1. A survey obtaining innovations from providers is acceptable if it is brief and providers are clear on how responses will be used.
- 2. A survey of providers should assess whether providers are currently attempting to implement existing best practices, and which are new to telehealth.
- 3. Providers from different practice locations and specialties should be included in survey recruitment.

# Steps 2 and 3. Clinical research expert group and preliminary scan of the scholarly literature

#### **Purpose**

We conducted an initial review of the scholarly literature from February 2022 to April 2022 to inform a subsequent review of the literature and to obtain feedback from a clinical expert group on search terms and document coding approach.

#### **Approach**

Consistent with best practices for conducting formal reviews of the scholarly literature, we conducted iterative searches for existing clinical guidelines and systematic reviews of telebehavioral health covering the areas identified by ESSB 5092. This involves constructing codes for searching the literature indexed in academic databases as well as search strategies for the non-indexed literature using internet searches, expert word of mouth, and bibliographic references from other sources. We convened a group of U.S.-based telebehavioral research experts (n = 11) to inform the search strategy and terms in May 2022. We provided the experts with our search efforts, terms, and gathered literature to date.

#### **Participants**

We include a brief description of the experts convened for informing the scholarly literature. Full biographies are included in the appendix.

#### Kathleen Meyers, MD

Professor Emeritus Department of Psychiatry and Behavioral Sciences

#### **Donald Hilty MD, FAPPA, DLFAAP**

Co-author on most of the ATA's guidelines for TMH including for child and adolescent TMH (2017)

#### Bonnie Zima MD, MPH, DFAACAP, DFAPA

Professor-in-Residence for Child and Adolescent Psychiatry at University of California at Los Angeles (UCLA)

#### Johanna Folk, PhD

Clinical Psychologist and Assistant Professor at University of California at San Francisco

#### Jon Comer, PhD

Professor of Psychology and Psychiatry at Florida International University (FIU) and Director of Mental Health Interventions and Technology (MINT) at FIU

#### Joyce Harrison MD, DFAACAP

Psychiatrist at Kennedy Krieger Institute and Associate Professor of Psychiatry at Johns Hopkins, with expertise in infancy; Co-Chair of the Infancy Committee at AACAP and updating the Clinical Guidelines for the Assessment of Children Aged 0

#### Amritha Bhat, MBBS, MD, MPH

Perinatal psychiatrist and Assistant Professor in the Department of Psychiatry and Behavioral Sciences

#### Alissa Hemke, MD

Acting Assistant Professor, focus on early childhood, psychotherapy, and medical education

#### David Brieger, PhD

Clinical Associate Professor, focus on Neurocognitive outcome in children with brain tumors, and neurodevelopmental disorders

#### **Bradford Felker, MD**

Nationally recognized as a leader in veterans' telemental health services

#### Monica Oxford, MSW, PhD

Research professor, Family and Child Nursing; Executive Director, Barnard Center for Infant Mental Health; Director, Parent-Child Relationship Programs

#### **Results**

A primary question posed to the clinical research expert group was how to undertake adequately approaching the breadth of literature on telehealth for prenatal through young adult populations, covering all diagnostic areas and service sectors.

Results from initial searches returned thousands of research articles covering aspects of telebehavioral health service delivery. Discussion with the clinical research experts yielded the following guidance:

- 1. It will not be feasible to review the extant literature on "whether telebehavioral health is effective." Rather, the review should focus on whether there are instances in which telebehavioral health is harmful.
- 2. The review should begin with identifying a map of existing reviews to identify where there is expert consensus relevant to ESSB 5092 concerns and then delve into the literature covering specific age and diagnostic not covered by existing reviews.
- 3. Gathering innovative practices from the provider community will yield important insights.

The final recommendations should be clear that these are untested but may offer good opportunities for future research.

# **Clinical best practices initial summary**

The following table summarizes the initial clinical best practices results by population and theme.

	Perinatal	Infancy and Postpartum	Early Childhood	School Aged Children	Adolescence	Young Adults
Safety						
Effectiveness						
Access						
Equity						
Workforce and Provider Experience						
Identifying subgroups clinically inappropriate for telehealth						

Color Key	Adequacy of Evidence for Actionable Recommendations	Current Work	Needed Next Steps
	No expert consensus and negligible existing synthesized evidence	Identifying current gaps in the evidence or evidence synthesis	Expand literature search to individual studies in key target gap areas
	Moderate existing evidence, not yet translated into actionable recommendations	Identifying current gaps in actionable recommendations	Using Delphi process to develop
	Moderate existing evidence and developing expert consensus on recommendations	Identifying current gaps in <u>expert</u> <u>consensus</u>	actionable recommendations and consensus in key target gap areas
	Strong existing evidence and/or expert consensus on recommendations	Summarizing actionable recommendations	Update recommendations as field progresses

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# Step 4. "Risk" review and "Clinical guidelines" review

#### **Review strategy**

We conducted two scholarly reviews to inform conclusions about PN-25 telebehavioral health best practices: A "risk" review and a clinical guidelines review. The team, with the confirmation of the clinical experts and initial, exploratory reviews of the literature, determined that the research literature on telebehavioral health PN-25 was too broad in focus and methodology to extract information from studies about telebehavioral effectiveness. Much of the research literature on telebehavioral health does not make direct comparison to in-person care or studies are exploratory and not definitive.

Instead, we worked from the assumption that telebehavioral healthcare is, in general, effective and sought evidence that contradicted this assumption for specific demographics and diagnostic categories. For the clinical best practices review, we conducted a review of existing clinical guidelines to identify areas of common agreement across reviews and areas for additional study guided by the practical themes generated by listening sessions and the project advisory group.

#### **Risk review**

#### **Focus**

The purpose of the risk review was to identify methodologically rigorous studies suggesting telebehavioral health posed a risk in one or more of the five primary concerns of the study: safety, access, effectiveness, workforce experience, and equity.

The scope was peer-reviewed, published papers focused on prenatal to youth (up to age 25) client populations receiving synchronous telebehavioral health inclusive of video or audio modalities. Given the size of the research literature, we began with a review of existing systematic and meta-analytic reviews (umbrella review) to identify areas of scientific consensus and areas that require further study.

#### **Search strategy**

We adopted a scoping review methodology to conduct the umbrella review. Scoping reviews are methodologically rigorous approach to describing the range and depth of the scholarly literature on a topic of interest (Arskey & O'Malley, 2005). We used the most recent guidance for conducting high quality scoping review, drawing from foundational literature and update methods (Levac et al., 2010; Pham et al., 2014; Peters et al., 2020). The review was conducted with the Joanna Briggs Institute methodology for scoping reviews (Peters et al., 2015), with article selection and synthesis using the Preferred Reporting Items for Systematic Reviews and Meta- Analyses extension for Scoping Reviews (PRISMA\_ScR) checklist. Relevant published research articles were identified by a systematic search of the following databases conducted in July 2022: PubMed, Medline, Google Scholar, and using bibliographic indexes to identify additional relevant literature. The search included text words contained in titles, abstracts, and/or keywords. All keywords and index terms were adapted for each database.

#### **Search terms**

Search terms were selected to capture literature representing three overlapping concerns:

1. Review articles and clinical guidelines

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- 2. Prenatal to young adult populations
- 3. Telehealth, and
- 4. Mental and behavioral health.

("clinical guidance" or "clinical guidelines" or "clinical review" or "practice guidance" or "practice guidelines" or "best practice" or "review" or "limitations" or "considerations" or "innovation" or "strategy" or "strategies" or "systematic review" or "resource" or "recommendations") AND ("pediatric" or "youth" or "child" or "adolescent" or "teen" or "young adult" or "perinatal" or "postpartum" or "prenatal" or "infant" or "dyad" or "parent" or "transition age youth" or "pregnancy" or "youngsters") AND ("tele" or "tele health" or "telehealth" or "tele behavioral" or "telebehavioral" or "tele mental" or "telemental" or "telemedicine" or "e-health" or "remote" or "audio" or "video" or "phone").

#### **Inclusion criteria**

The review included only peer-reviewed review articles (systematic or meta-analytic) articles published in the last ten years (2012-2022). Studies included a focus on prenatal to youth (prenatal to 25 years of age) in which the mother, child or youth/young adult had identified mental health needs and services addressed by a trained mental health professional.

#### **Exclusion criteria**

Excluded articles include protocol papers (paper describing a study not yet carried out), digital, text, online, phone app-based, and asynchronous mental health or "mhealth" interventions, individual studies, and telehealth interventions not delivered by mental health professionals.

#### **Procedure**

#### **Data collection and analysis**

Papers were collated and uploaded into EPPI- Reviewer (UK 2020) to aggregate and remove duplicates from the different databases. Article titles and full text were independently reviewed by two coders, a doctoral graduate student and a PhD level health services researcher, to come to consensus about which articles to retain in the analysis.

#### **Number of papers included**

A total of 727 non-duplicated articles were identified from the initial search terms and 551 articles were removed about title review. An additional 87 articles were removed after full text review. Article coding of the remaining 18 articles was primarily conducted by a doctoral graduate student with frequent review for consensus from a PhD level health services researcher and faculty member.

#### **Coding strategy**

Coding categories to obtain information about potential risks of telebehavioral health included author information, type of article, age range addressed, diagnostic areas covered, level of clinical severity covered, whether the article addressed access, safety, effectiveness, workforce experience or equity, the outcome of direct comparisons, qualitative analysis, or non-experimental designs on these outcomes.

#### **Clinical guidelines review**

#### **Focus**

The purpose of the clinical guidelines review was to conduct a meta- synthesis of existing guidelines. The first phase of this process, given the size of the scoped literature, was to identify how well current guidelines cover the age groups, diagnostic categories, and areas of focus identified by the advisory and clinical review experts in this project, as well as areas of consensus across guidelines for best practices. In this report, we summarize this initial exploratory review, followed by a description of proposed next steps to complete the review, and develop practical guidelines for providers.

#### **Search strategy**

We adopted clinical guideline review methodology informed by Johnston et al. (2019), and Raine et al. (2005). We used these as complementary strategies as the Johnston (2019) recommendations are focused on the quality and rigor of the evidence underpinning clinical guidelines, and the Raine (2005) guidance is informed by the reality that personal expertise and experience necessarily informs clinical guidelines, even when guidance is informed by research evidence. Consequently, our review proceeded using the following steps:

- 1. Feedback from clinical experts on initial search terms and strategy
- 2. Revised search and coding approach
- 3. Summary of the breadth and scope of literature
- 4. Development of a plan for capturing practice- based evidence to inform guidelines and coding available literature using ACCESS-III, the standard protocol for assessing the quality of clinical guidelines recommendations (BMJ, 2016).

Relevant published research articles were identified by a systematic search of the following databases conducted in July 2022:

- PubMed
- Medline
- Google Scholar
- Bibliographic indexes to identify additional relevant literature.

The search included text words contained in headings and summaries of documents in PDF forms. All keywords and index terms were adapted for each database.

#### **Search terms**

In addition to the literature obtained through the peer reviewed literature using the same search as the "risk" review, we systematically searched the internet for clinical guidelines published through mental health and telehealth professional associations:

(telebehavioral OR telemental OR "tele-behavioral" OR "tele-mental") AND (~guidelines OR recommendations OR "best practice") AND (pediatric OR infant OR child OR adolescent OR teen OR parent OR dyad OR dyadic OR prenatal OR perinatal OR postpartum OR "young adult") filetype:pdf

- (telebehavioral OR telemental OR "tele-behavioral" OR "tele-mental") AND (guidelines OR recommendations OR "best practice" OR "practice guidance") AND (pediatric OR infant OR child OR adolescent OR teen OR parent OR dyad OR dyadic OR prenatal OR perinatal OR postpartum OR "young adult") site:.gov
- (telebehavioral OR telemental OR "tele-behavioral" OR "tele-mental") AND (guidelines OR recommendations OR "best practice" OR "practice guidance") AND (pediatric OR infant OR child OR adolescent OR teen OR parent OR dyad OR dyadic OR prenatal OR perinatal OR postpartum OR "young adult") site:.org
- (telebehavioral OR telemental OR "tele-behavioral" OR "tele-mental") AND (guidelines
- OR recommendations OR "best practice" OR "practice guidance") filetype:pdf
- (telebehavioral OR telemental OR "tele-behavioral" OR "tele-mental") AND (guidelines OR recommendations OR "best practice" OR "practice guidance") AND (pediatric OR infant OR child OR adolescent OR teen OR parent OR dyad OR dyadic OR prenatal OR perinatal OR postpartum OR "young adult") -filetype:pdf

#### **Inclusion criteria**

The review included clinical guidelines published in the gray and peer-reviewed literature from 2010 through 2020. Included clinical guidelines focused on telebehavioral health with prenatal clients to youth (prenatal to 25 years of age) in which the mother, child or youth had identified mental health needs and services were delivered by a trained mental health professional.

#### **Exclusion criteria**

Excluded articles included clinical guidelines for telebehavioral health that did not provide specific guidance for prenatal to youth-aged clients. We also excluded asynchronous and digital mental and behavioral health interventions including digital apps, texting, and online interventions.

#### **Procedure**

#### **Data collection and analysis**

Citations were collected in an Excel file. Article titles and full text were independently reviewed by two coders, a doctoral graduate student and a mental health nurse practitioner with twenty years of experience managing telebehavioral health services, to come to consensus about which articles to retain in the analysis.

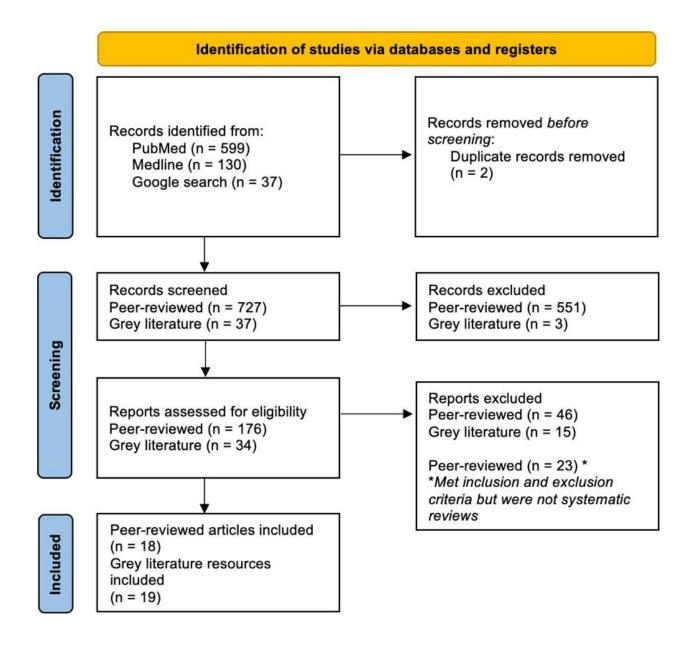
#### Number of resources included

A total of 37 non-duplicated resources were identified from the initial search terms and 3 articles were removed after title review. An additional 15 resources were removed after full text review. Article coding of the remaining 19 resources was conducted independently by the two reviewers who then met to compare codes and come to consensus.

#### **Coding strategy**

Coding categories to obtain information about the range of clinical guidance in this area included author information, sponsoring association, treatments included, operational guidance included, whether the

clinical guideline addressed safety, access, effectiveness, workforce experience, or equity, conclusions about these five focus areas, and level of practical guidance in the areas covered by the review.



#### **Results**

#### **Risk review**

#### Age range

Articles were coded to describe the article's specified or implied target age group of the treatment or intervention. Of the eighteen peer-reviewed articles, twelve addressed school-age children, eleven addressed adolescents, eight address youth adults, seven address early childhood and five addressed the perinatal period. The remaining review articles did not address outcomes by age groups.

#### **Diagnostic range**

We coded diagnostic areas within review articles as described by the study authors. The majority of articles synthesized findings of studies spanning multiple diagnostic areas (8 articles). Five review articles provided specific findings by perinatal mood disorders (5); otherwise, diagnostic specific was uncommon with the next most frequently addressed diagnostic areas including autism (2), neuropsychological assessment (2), ADHD (2), suicide (1), substance use disorder (1), and parent management (1). As noted, the majority of articles included multiple diagnostic and treatment areas under broad recommendations for service delivery including anxiety, depression, infant mental health, bipolar disorder, cognitive behavioral therapy, parent-child interaction, serious emotional disturbance, eating disorder, ecological assessment, and psychological assessment.

#### **Clinical severity range**

The reviews were coded with the level of treatment based on clinical severity or patient acuity. All articles discussed treatments targeted at early intervention or prevention (17) or patients with moderate severity (17). No articles discussed clinical recommendations specifically for patients with severe/significant behavioral health acuity.

#### **Safety**

Of the 18 review articles, only one identified a potential risk in delivering telebehavioral health. Schlief and colleagues (2022) noted that there are potential populations where the modality of virtual care could trigger patients with sexual trauma related to recording and cameras or may be inappropriate for distracted and dysregulated patients who may need redirecting or de-escalation from an in-person provider. The potential for harm suggests that these patients would generally not be suitable to receive mental health care in a telehealth format.

#### Access

The consensus across all articles was that telebehavioral health increases access to mental health care. Seven articles specifically described for whom telebehavioral health increased equity of access. Common findings across these studies included increased access for rural populations, clients being diagnosed with developmental disabilities, clients being assessed for suicide risk, and clients and families with transportation, time and resource challenges that make in person care difficult.

We briefly summarize these conclusions here. Nelson & Sharp (2016) describe how access is improved by reducing stigma of receiving care at in mental health setting as children and adolescents are able to

attend virtual care appointments at health clinics or schools. They note that children and adolescents in rural and underserved communities can access care virtually and otherwise may not have a local mental health option for diagnosis, treatment, or management. Chi and Demiris (2015) note that access improves to benefit both the child and the caregiver. With telebehavioral health, parents and caregivers have improved access to mental health providers who can give real-time support, answer questions, and recommend tools and strategies. La Valle, Johnston, & Tager-Flusberg (2022) describe how children and adolescents with developmental disabilities benefit from telebehavioral health, particularly during the stage of diagnosis. For patients who have mobility or transportation barriers, or live in remote areas, telebehavioral health offers access to specialty providers based in other locations. Similarly, Valentine et al. (2021) note that families in rural areas report high levels of satisfaction with remote or telebehavioral health diagnosis options due to minimal barriers to accessing care. The authors describe how telebehavioral health allows families to receive Autism management support remotely while reducing travel time, travel, and costs. Davidson et al. (2022) highlights the absence of travel time and associated costs as the primary mechanism of telebehavioral health access. Ros- DeMarize, Chung, & Stewart (2021) highlight the minimal costs, logistical issues, and stressors associated with telebehavioral health. Additionally, the authors recognize that access is often improved for families who live close to in-person services. These families face long waitlists and provider shortages and can also benefit from telebehavioral health care options if care is needed immediately. Exner-Cortens and colleagues (2021) focus on the access improvements of remote suicide risk assessments and interventions in rural communities. The use of telebehavioral health allows schools to offer suicide prevention and intervention services for students. Finally, Schlief et al. (2022) recognized both the opportunity for expanded access and the potential for widening access inequities. The authors note that telebehavioral health offers families alternatives that mitigate barriers but may also remain inaccessible for families with poor internet, unreliable electricity, and those without the necessary technology and devices.

#### **Quality**

All 18 articles discussed the quality of telebehavioral health. A sizeable number of review articles limited their review to studies with a control group (12), and/or pre and post-intervention comparisons (5). The majority of review articles concluded that telehealth is not different from in person care in quality across most diagnostic/treatment areas and client types(15). A number of review articles concluded that telebehavioral health increased quality (14), and one article concluded that telehealth could decrease quality (3). As noted above, the sole paper identifying potential risk for telebehavioral health was conducted by Zhao and colleagues (2021) and focused on postpartum women. The authors reference a single study where depression rates, as measured by the Edinburgh Postnatal Depression Scale, increased at 24 weeks post telebehavioral intervention. No other teleBH risk or observed decrease in quality of treatment was identified for any other age group.

#### **Equity**

The majority of review articles directly stated or implied that telebehavioral health promotes equity through increased access to and engagement with mental health care. The most commonly referenced mechanisms for this included decreased stigma of traveling to a mental health clinic, increased access to bilingual telehealth providers outside their region, decreased transportation and childcare costs, and increased availability for those in rural and remote areas.

Three articles mentioned potential negative impacts on equity (Sloan, Reese, & McClellan Schueller et al., 2019; Schlief et al., 2022). Access concerns may persist for those without reliable internet, without adequate technology or without the digital literacy skills to conduct a telebehavioral health visit, and those who are unsafe at home and cannot engage in mental health care due to safety.

#### **Clinical guidelines review**

#### **Sources**

In addition to clinical guidance provided through peer-reviewed articles obtained by our review, we found clinical guidelines through the following organizations: Association of Marital and Family Therapy Regulatory Boards; California Mental Health Services Oversight and Accountability Commission & Social Finance, Inc.; American Telemedicine Association; Centers for Medicare and Medicaid; New Jersey Department of Children and Families; Washington State Department of Social and Health Services; New Jersey Division of Consumer Affairs; California Children's Trust; Substance Abuse and Mental Health Association; Center for Health and Health Care in Schools; Harborview Medical Center; Behavioral Health Institute; US Department of Education; Kentucky Telehealth Program; Tennessee Department of Mental Health and Substance Abuse Services; UCLA Pediatric Psychology Consultation Liaison Service; BroadbandOhio.

#### **Treatment modalities**

The majority of the clinical guidelines discussed telebehavioral health broadly, without regard to individual treatment modalities. Specific diagnostic areas or treatments appearing in some clinical guidelines included substance use (1), severe mental illness (1), and disruptive behavior/attention problems (1). The majority of resources were focused on the treatment phase (18) versus prevention (3). None of the clinical guidelines specifically addressed best practices for crisis or serious mental health needs.

#### **Operational guidance**

All of the clinical guidelines included operational guidance for setting up telehealth services. We defined operational guidance as selecting vendors, establishing an appropriate office space, conducting the visit, regulations and legal considerations, designing protocols, technology assistance, and staff training. Recommendations varied from highly specific, such as checking encryption mode on the virtual platform (CMS), 2021), to generalized or broad recommendations, such as provide a post-visit plan for the patient (SAMHSA, 2020)

#### **Audio-only**

None of the guidelines included operational guidance for audio-only visits. The Centers for Medicare and Medicaid's guide recommended video use, instead of audio-only, whenever possible. None of the guidelines included recommendations for choosing between video and audio-only based on patient preference or technology limitations. Mentions of audio-only visits only appear in guidelines published after the start of the Covid-19 pandemic due to changes in Medicaid reimbursement policies.

#### **Mental health crises**

Four of the guidelines included specific guidance on planning for mental health emergencies that may emerge during or after the telebehavioral health visit (AMFTRB, 2016; MHSOAC, 2020; NJDCF, 2020, ATA, 2017). Common themes in clinical guidelines included:

- 1. Being aware of community resources in the patient's community.
- 2. Understanding potential safety concerns for the patient.
- 3. Know the address where the patient is staying during the visit.

The APA and ATA guidelines include recommendations for establishing a "Patient Support Person" who can be utilized in times of crisis and may be helpful in determining if emergency services need to be called (APA & ATA, 2018).

#### **Specificity of guidance**

The majority (13) of guidelines did not include detailed, practical guidance in their clinical recommendations. For example, The Association of Marital and Family Regulatory Boards stated that therapists should understand client culture and have cultural competency skills in their practice, although no specific recommendations were included to achieve this guidance. Similarly, the guidance published by the New Jersey Department of Children and Families states that special considerations should be in place for survivors of domestic and sexual violence but do not describe how to assess safety for these patients.

#### **Focus areas**

Six resources provided guidance on access, nine discussed safety, five resources discussed quality, and eight resources described the workforce experience. Across the pillars of access, safety, workforce, and quality, equity was included as a component in seven resources.

#### **Recommendations for access**

Best practices related to access were centered around equity for those with disabilities, those in rural areas, low-income families, and people who are unhoused (ATA, 2017; CMS, 2021; MHSOAC, 2020). There was consensus that telebehavioral health providers should understand the patient's technological and internet capabilities and limitations. Providers may want to explore how to ensure children have technology access, such as telehealth devices or internet hotspots so all families can benefit from telebehavioral health (CCT, 2021). Concrete recommendations for how to operationalize access was not shared. For example, it was unclear if it is best practice to have a technology loaning program or refer to community agencies who offer telehealth technology loans.

#### **Recommendations for safety**

Safety best practices can be categorized into safety before and safety during the telebehavioral health visit. There was agreement that providers should follow standardized steps to ensure safety prior to the visit, including safety/emergency planning, confirming patient identifiers, and assessing patient readiness for virtual care (AMFTRB, 2016; MHSOAC, 2020). During the visit, patient safety may change depending on family members listening to the conversation, the proximity of those who may harm the patient, or patient mental status (CMS, 2021; NJDCF, 2020). Safety planning is considered essential across all clinical practice guidelines. Safety or emergency planning would include designating a "safe word" if the patient

needs to drop off the call quickly, asking if there are firearms in the home, designating an emergency contact or support person, and understanding where the patient is joining the visit from and what the local resources are in the surrounding area (DSHS, 2022; ATA, 2017; CCT, 2021; ATA, 2014). Although the subject of telebehavioral health safety has the greatest consensus across the guidelines, there is still a lack of guidance for determining which patients are not suited for telebehavioral health and how to assess their fit for this modality over the course of their treatment.

#### **Recommendations for quality**

Guidance on maintaining or exceeding quality of in-person care through a telehealth format focused primarily on the patient experience and adapting visits to meet the patient needs. For example, privacy can be maintained during the visit if families place a fan, music, or sound machine outside the door where the visit is taking place (DSHS, 2022; CHHCS, 2020). Utilizing shared screens, online activities, or previously mailed workbooks may increase engagement (Schlief, 2022; MHSOAC, 2020; UCLA, 2020). Only one set of guidelines recommended patient evaluation and assessment of care (Schlief, 2022). It is not yet understood how quality should be evaluated by providers, and at what frequency and duration. For example, there is not clear clinical guidance regarding post-visit experience surveys or verbally asking patients if they have concerns or preferences regarding telebehavioral health.

#### **Recommendations for workforce experience**

Clinical best practice guidelines for the workforce concentration primarily on understanding telehealth rules, regulations, training, and preparing for visits. The majority of rules and regulations guidelines are state or region specific and cannot be generalized. Other workforce recommendations are framed to set up clinicians for success through careful consideration of the office environment, operational processes, structuring telebehavioral health visits, engaging with virtual teams, and supporting clients remotely (CHHCS, 2020; SAMHSA, 2021; ATA, 2017; AMFTRB, 2016). Although there is minimal guidance on avoiding burnout, prioritizing breaks, and maintaining a sense of camaraderie with coworkers virtually, there is not clear clinical guidance on how providers should prevent or manage telebehavioral-health related stressors (Schlief, 2022).

#### **Recommendations for equity**

The conclusions of equity are primarily focused on maintaining equitable access and preserving patient safety to prevent unintended harm. There were no published clinical guidelines on equity assessments or tools to identify gaps in telebehavioral health. All equity components of clinical guidelines suggested "consideration" of equity-based principles but no guidelines were centered around health equity.

#### Age range

Clinical guidelines were most likely to provide specific guidance for elementary-age youth (8), adolescents (7), and caregivers (6). For elementary-age youth, three guidelines included strategies for increasing or maintaining engagement with the patient. For example, van Dyk and colleagues suggest arts-based therapy, using cameras or screen-share to complete activities together, utilizing the virtual "whiteboard", or playing internet-based games via screen share (UCLA, 2020). In both school-age and adolescent populations, the guidelines were in agreement that youth satisfaction and comfort with telehealth increases with repeated use. There were relatively few guidelines for early childhood (3), young adult (2), and the perinatal (1) population. For early childhood, this may be due to few dyadic therapy programs

publishing guidelines or recommendations for telebehavioral health formats. With the perinatal and young adult populations, the labels of those subgroups was too specific and the search did not identify clinical guidelines for those groups.

#### **Practical guidance by age range**

Although the operational guidance was typically universal across ages, some clinical guidelines included age-specific recommendations.

#### **Prenatal**

Based on guidance from our clinical subject matter experts, recommendations for prenatal patients was included in the "perinatal" search due to the term encompassing both the pre and post-partum periods.

#### **Perinatal**

Only one clinical guideline discussed recommendations for the perinatal (infant) population. The recommendations focused on the provider's ability to give real-time recommendations and observations while watching parent and infant interactions (Roben & Costello, 2022). In this approach, parents are utilized as teachers and receive coaching from the provider.

#### **Early childhood**

Three guidelines noted that, for early childhood telebehavioral health, providers should maintain flexibility and a high level of animation in their interactions (MHSOAC, 2020; UCLA, 2020; ATA, 2014). The guidelines published by the Center for Health and Health Care in Schools recommended that providers limit visits to 20 minutes or less for kids under 5 years of age. For these patients, talking may not be engaging enough and clinicians may need to utilize activities such as "show and tell". A list of recommended activities for telebehavioral health with young children is included in that particular resource.

#### **Elementary age**

Specific guidance included recommendations for setting up an appropriate space and the role of the caregiver during the visit. For example, the ATA and APA guidelines specify that the patient's room should be arranged so that the camera will have clear view if the patient moves around the room and that there should be toys to play with if the child is very young (ATA, 2017). Caregivers may be expected to remain nearby the school-age child when a visit is occurring if the patient needs help with technology (CMS, 2021; NJDCF, 2020; ATA, 2017).

#### Adolescent

All nine guidelines that discussed safety were focused on the school-aged and adolescent populations. The recommendations were in agreement that safety planning should happen prior to the visit, an emergency plan should be in place for every visit, and providers should understand what community-based services are available.

#### Young adult

No clinical guidelines provided specific guidance for the young- adult population.

#### **Caregiver**

Clinical guidelines integrated recommendations for engaging caregivers within age-specific guidance. For example, guidance for young children included planning for the caregiver's role in the session, including helping to set up technology or in emergency planning (ATA, 2017). One resource mentioned the importance of managing the caregiver's expectations of telebehavioral health (CHHCS, 2020). The guidance from the Behavioral Health Institute suggested that providers encourage parents and caregivers to develop their own self-regulation plans to better support their child's emotions and behaviors in between visits.

There were two primary areas lacking information or guidance. First, there was minimal guidance discussing how to utilize telebehavioral health in schools. Although two resources mentioned the potential for offering virtual mental health care in the school setting, it was not clearly described how to establish these programs and best practices for engaging with patients in the school setting. Second, only one resource described specific strategies for running telebehavioral health groups (BHI, 2022). The guidance was detailed and specific but consensus could not be determined with only a single published resource.

# Step 5. Provider survey for innovative telehealth best practices

#### **Purpose**

With the guidance of the advisory group, the team developed a survey for gathering information from PN-25 behavioral health providers on innovations in the delivery of telehealth. The survey is intended to fill gaps identified in the literature in practical strategies to deliver best practices in the primary areas of concern: safety, access, effectiveness, workforce experience, and equity.

#### **Approach**

The team iteratively developed a survey with the feedback of the advisory team members. Advisory members provided critical input on length, understandability, relevance and feasibility. This feedback prompted significant revisions in survey tone, structure, and length.

The survey is currently being distributed among state and national provider networks including the following outlets: Behavioral Health Institute telehealth trainee listserv (>1,000 registrants); Washington State .gov communication platform through Health Care Authority (>1,000 registrants); American Academy of Child and Adolescent Psychiatry (AACAP); American Psychiatric Association (APA); TeleDoc (commercial telehealth company); and American Telehealth Association (ATA).

#### **Progress**

The survey effort is currently in a data gathering phase. As of December 9, 2022, the survey has over 100 respondents.

#### **Conclusions and recommendations**

#### **Conclusions**

The intent of ESSB 5092 is to provide mental health providers in Washington State with actionable guidance for how to deliver best practices in telebehavioral health among prenatal to young adult aged populations. The project team approached this large scope using a partner-engaged method to identify guiding concerns from policy, service provider, and consumer perspectives. These guiding concerns subsequently shaped our approach to data gathering, including reviews of the scholarly literature and input from the provider community.

Our team drew from the Interactive Systems Framework and published examples of partner-engaged information synthesis to develop a 7-step project plan. This included:

- 1. Listening sessions
- 2. Preliminary literature scans
- 3. Advisory group input
- 4. Clinical expert input
- 5. Formal literature reviews
- 6. Provider feedback
- 7. Information synthesis
- 8. Development of a practical guide

Partner-engaged approaches (i.e., research efforts that work in authentic collaboration with non-research partners) require flexibility within structure as researchers adapt to respond to practical (policy, service provider, consumer) input. In the current project, partner input guided every decision including how we approached our review of the scholarly literature and the focus and structure of a provider survey for state and national distribution. The scope of both efforts was significant. Initial returns of scholarly literature exceeded thousands of individual papers which were subsequently screened and reviewed for relevance. Development of the survey involved multiple iterations between research and advisory team members.

Our review of the scholarly literature identified large gaps in age and diagnostic specificity in existing systematic reviews and clinical guidelines. This is particularly true for younger ages, including postnatal (infant mental health) and elementary-aged children. As in-person treatment best practices for these age groups emphasize **dyadic** and **family-systems** approaches, we note the need for guideline development that addresses these specific modalities in particular.

Our review of the literature identified **one client population for whom telehealth poses a risk**: Clients with previous traumatic histories of sexual abuse involving online exploitation and cameras. No other areas were identified as posing risk to safety, access, effectiveness, workforce experience, or equity from systematic reviews of the literature. However, this is a continuously emerging area of study and areas of potential risk should be gathered from the practical expertise of providers delivering telebehavioral health in addition to an expanded review of individual studies in scholarly literature.

We identified several areas of consensus in existing clinical guidelines, particularly in operational guidance. However, despite finding consensus in broad domains of practice, **clinical guidance rarely** 

provided the level of specificity needed to provide the practical guidance requested by members of the project's advisory team. To develop this guidance, the project team identified the need to gather practical innovations from provider teams as well as continued collaboration from clinical experts.

#### Recommendations

To provide Washington State providers the level of practical guidance requested by the advisory team members to deliver high quality telebehavioral health, we provide the following recommendations:

- 1. Address gaps in the existing scholarly review and clinical guideline literature for postnatal and early childhood by reviewing individual studies and/or partnering with research groups currently running these scholarly reviews to build out best practice guidance for these age groups.
- 2. Address the lack of specificity in clinical guidelines by gathering innovative practices from existing providers to build out examples for:
  - a. Safety
  - b. Access
  - c. Effectiveness
  - d. Workforce experience
  - e. Equity across all diagnostic areas and age groups.
- 3. Develop a user-friendly and practical guide with the collaboration of provider groups and consumers.
- 4. Develop and implement a broad dissemination plan both for research results, and, once it is created, for the user-friendly, practical guide for TeleBehavioral Health Best Practices for Perinatal through Young Adult patients and clients.

# **Appendix A: Subject matter expert group biographies**

#### Kathleen Myers, MD

Professor Emeritus, Department of Psychiatry and Behavioral Sciences; former Director, Telemental Health, Seattle Children's Hospital; Board-Certified Child and Adolescent Psychiatrist; Fellow, American Academy of Child and Adolescent Psychiatry; Fellow, American Telemedicine Association. More than 20 years of experience in using telemental health (TMH) to treat youth with early onset psychiatric disorders; completed a large community-based comparative effective trial testing two models of TMH- facilitated care to treat youth with attention deficit hyperactivity disorder; focused on using TMH to increase access to psychiatric care for youth in under-served communities and to support their providers in improving their quality of care.

#### **Donald Hilty MD, FAPPA, DLFAAP**

Nationally known for work in telepsychiatry, formerly at University of Southern California and University of California Davis, currently at Veterans Administration Medical Center, editor of Journal of Technology in Behavioral Sciences (JTIBS), co-author on most of the ATA's guidelines for TMH including for child and adolescent TMH (2017).

#### Bonnie Zima MD, MPH, DFAACAP, DFAPA

Professor-in-Residence for Child and Adolescent Psychiatry at University of California at Los Angeles (UCLA); Associate Director of the UCLA Center for Health Services and Society, and Associate Chair for Academic Affairs for the UCLA Department of Psychiatry and Biobehavioral Sciences. Leading child and adolescent psychiatrist across age groups but especially school-aged children; special focus on children enrolled in Medicaid-funded programs, high risk, and underserved youth.

#### Johanna Folk PhD

Clinical Psychologist and Assistant Professor at University of California at San Francisco. She has expertise in the age range with focus on juvenile justice, substance abuse, low SES, foster, and minority youth many of whom have low level telehealth capability and often just telephony.

#### Jon Comer PhD

Professor of Psychology and Psychiatry at Florida International University (FIU) and Director of Mental Health Interventions and Technology (MINT) at FIU, an interdisciplinary clinical research program. He has particular expertise in Parent-Child Interaction Therapy (PCIT) with preschool children and in telemental health, both synchronous and asynchronous.

#### **Joyce Harrison MD, DFAACAP**

Psychiatrist at Kennedy Krieger Institute and Associate Professor of Psychiatry at Johns Hopkins, with expertise in infancy. Co- Chair of the Infancy Committee at AACAP and updating the Clinical Guidelines for the Assessment of Children Aged 0 to 5.

#### Amritha Bhat, MBBS, MD, MPH

Perinatal psychiatrist and Assistant Professor in the Department of Psychiatry and Behavioral Sciences. Brings expertise in utilizing telehealth and digital technologies to deliver perinatal mental health care to patients and to support community-based providers in providing perinatal metal health care.

#### Alissa Hemke, MD

Acting Assistant Professor, focus on early childhood, psychotherapy, and medical education.

#### **David Brieger, PhD**

Clinical Associate Professor, focus on Neurocognitive outcome in children with brain tumors, and neurodevelopmental disorders; Neurocognitive functioning in children with heart failure, urea cycle disorders, sports concussions and the role of expectancy in patient's responses to illness.

#### **Bradford Felker, MD**

Nationally recognized as a leader in veterans' telemental health services, he brings expertise in leveraging emerging telehealth technologies to improve mental health care; developed, implemented, and led the first Telemental Health Service at VA Puget Sound, and his research has focused on evaluation and implementation of telemental health programs. He also serves as a Professor in the University of Washington Department of Psychiatry and Behavioral Sciences.

#### Monica Oxford, MSW, PhD

Research professor, Family and Child Nursing; Executive Director, Barnard Center for Infant Mental Health; Director, Parent-Child Relationship Programs. Dr. Oxford's research focuses on birth to five Parent-Child relationship quality and how that dyadic relationship impacts child developmental outcomes for vulnerable families living in challenging environments. As the director of Barnard Center, she is also involved in training providers (home visitors, nurses, social workers, child care professionals) about infant mental health and how parenting behaviors and context operate to support or detract from healthy outcomes. Dr. Oxford is principal investigator of three NIH grants aimed at examining the impact of a relationship-based intervention program in different populations: parents involved with child protective services, American Indian families in a rural setting, and parents recently reunified with their child after foster care placement. She is PI on a fourth NIH grant is aimed at addressing the interaction between family, school, child, and contextual risk such as poverty and early child developmental outcomes; and is co-PI on four NIH funded grants testing the effectiveness of intervention programs for vulnerable populations.

# **Appendix B: Reviewed documents**

Author	Title	Year	Type of Document	Ages Covered	Focus Areas	Treatment Areas
Association of Marital and Family Therapy Regulatory Boards	Teletherapy Guidelines	2016	Clinical guidelines	School- aged; adolescent	Operational, safety, quality, workforce	Nonspecific / general
Mental Health Services Oversight Accountability Commission	Best Practices in Delivering Virtual Counseling	2020	Clinical guidelines	Not age- specific	Operational, access, safety	Nonspecific / general
Centers for Medicare and Medicaid	Telehealth for Providers: What you need to know	2021	Clinical guidelines	Not age- specific	Operational, access, safety	Nonspecific / general
NJ Department of Children and Families	Guidance for Providers of Home and Community Based Services Operating Under Contract with the New Jersey Department of Children and Families	2020	Clinical guidelines	School- aged; adolescent	Operational, safety,	Nonspecific / general
WA Department of Social and Health Services	Washington State Telehealth Implementation Guidebook	2022	Clinical guidelines	Not age- specific	Operational, safety	Nonspecific / general
NJ Division of Consumer Affairs	Telehealth Services During the Covid-19 Pandemic Frequently Asked Questions	2020	Clinical guidelines	Not age- specific	Operational, workforce	Nonspecific / general
American Telemedicine Association	Practice Guidelines for Telemental Health with Children and Adolescents	2017	Clinical guidelines	Early childhood; school- aged; adolescent; young- adult	Operational, access, safety, quality, workforce	Nonspecific / general
California Children's Trust	Providing Telemental Health Services to California Children and	2021	Clinical guidelines	Not age- specific	Operational, access, safety,	Nonspecific / general

	Youth After the Pandemic				quality, workforce	
American Telemedicine Association	Core Operational Guidelines for Telehealth Services Involving Provider- Patient Interaction	2014	Clinical guidelines	Not age- specific	Operational, safety	Nonspecific / general
Substance Abuse and Mental Health Services Administration	Telehealth for the Treatment of Serious Illness and Substance Use Disorders	2021	Clinical guidelines	Not age- specific	Operational, access, quality, workforce	Substance use; Severe mental illness
Center for Health and Health Care in Schools	Conducting Effective Telehealth Sessions Tips	2020	Clinical guidelines	Early childhood; school- aged; adolescent; caregiver	Operational, workforce	Nonspecific / general
US Department of Education	Supporting Child and Student Social, Emotional, Behavioral, and Mental Health Needs	2021	Clinical guidelines	School- aged; adolescent; young- adult	Operational	Nonspecific / general
Behavioral Health Institute	Building Telehealth Capacity for Behavioral Health	2022	Clinical guidelines	School- aged; adolescent	Operational	Disruptive behaviors; attention problems
Kentucky Telehealth Program	Telehealth Program Guidelines: Implementing a Telehealth Program	2019	Clinical guidelines	Not age- specific	Operational	Nonspecific / general
Tennessee Department of Mental Health and Substance Abuse Services	Telecommunication Guidelines for Tennessee Department of Mental Health and Substance Abuse Services Designated Crisis Services	2012	Clinical guidelines	Not age- specific	Operational, safety	Nonspecific / general
Substance Abuse and Mental Health Services Administration	Telehealth Clinical and Technical Considerations for Mental Health Providers	2020	Clinical guidelines	Not age- specific	Workforce	Nonspecific / general

UCLA Pediatric Psychology Consultation Liaison Service	COVID-19 Tips: Building Rapport with Youth via Telehealth	2020	Clinical guidelines	School- age; adolescent	Operational	Nonspecific / general
BroadbandOhio	Telehealth in Schools	2020	Clinical guidelines	School- age; adolescent	Operational	Nonspecific / general
Society for Research in Child Development	Increasing Support for Home Visiting Innovation is Critical for Young Children and their Families	2022	Clinical Guidelines	Early childhood; school- aged; adolescent; caregiver	Access, quality, workforce	Nonspecific / general
Schlief et al.	What Works for Whom in Telemental Health: Rapid Realist Review	2022	Clinical Guidelines & Risk Review	School aged; adolescent; young- adult	Access, safety, quality	Nonspecific / general
Nelson & Sharp	A Review of Pediatric Telemental Health	2016	Risk Review	Early childhood; school- aged; adolescent; young- adult; caregiver	Access, quality	Nonspecific / general
Chi & Demiris	A systematic review of telehealth tools and interventions to support family caregivers	2015	Risk Review	School- aged; adolescent	Access, quality	Nonspecific / general
La Valle, Johnston, & Tager-Fulsberg	A systematic review of the use of telehealth to facilitate a diagnosis for children with developmental concerns	2022	Risk Review	Early childhood; school- aged; adolescent	Access, safety, quality	Autism; Neuropsychol ogical assessment
Davidson et al.	Best Practice During Teleconsultations with Adolescents: a scoping review	2022	Risk Review	School- aged; adolescent; young- adult	Access, safety, quality	Nonspecific / general

Bayrampour, Triu, & Tharmaratnam	Effectiveness of eHealth Interventions to Reduce Perinatal Anxiety: A systematic review and meta- analysis	2019	Risk Review	Perinatal	Access, quality	Perinatal mood disorder
Zhao et al.	Effectiveness of Telehealth Interventions for Women with Postpartum Depression: systematic review and meta- analysis	2021	Risk Review	Perinatal	Access, quality	Perinatal mood disorder
McLean et al.	Exploring the Efficacy of Telehealth for Family Therapy Through Systematic, Meta-analytic, and Qualitative Evidence	2021	Risk Review	School- aged; adolescent; caregiver	Access, safety, quality	Nonspecific / general
Campbell, Theodoros, Hartley, Russell, & Gillespie	Implementation factors are neglected in research investigating telehealth delivery of allied health services to rural children: A scoping review	2020	Risk Review	Early childhood; school- aged; adolescent; caregiver	Access, quality	Nonspecific / general
Valentine et al.	Implementation of Telehealth Services to Assess, Monitor, and Treat Neurodevelopmental Disorders: Systematic Review	2021	Risk Review	Early childhood; school- aged; adolescent; young- adult; caregiver	Access, quality	Neuropsychological assessment
Ros-DeMarize, Chung, & Stewart	Pediatric behavioral telehealth in the age of COVID-19: Brief evidence review and practice considerations	2021	Risk Review	Early childhood; school- aged; adolescent; young- adult; caregiver	Access, safety, quality	ADHD

Exner-Cortens et al.	School-Based Suicide Risk Assessment Using eHealth for Youth: Systematic Scoping Review	2021	Risk Review	School- aged; adolescent	Access, safety, quality	Suicide
Shah & Badawy	Telemedicine in Pediatrics: Systematic Review of Randomized Controlled Trials	2021	Risk Review	Early childhood; school- aged; caregiver	Access, quality	ADHD
Liu, Huang, Hu, & Wang	The effectiveness of telemedicine interventions on women with postpartum depression: A systematic review and meta-analysis	2022	Risk Review	Perinatal	Access, quality	Perinatal mood disorder
Nair, Armfield, Chatfield, & Edirippulige	The effectiveness of telemedicine interventions to address maternal depression: A systematic review and meta-analysis	2018	Risk Review	Perinatal	Quality	Perinatal mood disorder
Hanach, de Vries, Radwan, & Bissani	The effectiveness of telemedicine interventions, delivered exclusively during the postnatal period, on postpartum depression in mothers without history or existing mental disorders: A systematic review and meta-analysis	2021	Risk Review	Perinatal	Access, quality	Perinatal mood disorder
Shams et al.	Understanding eHealth Cognitive Behavioral Therapy Targeting Substance Use: Realist Review	2021	Risk Review	Caregiver	Access, quality	Substance use disorder

Alfuraydan,	Use of telehealth for	2020	Risk	Early	Access,	Autism
Croxall, Hurt,	facilitating the		Review	childhood;	quality	
Kerr, & Brophy	diagnostic assessment			school-		
	of Autism Spectrum			aged;		