



Telehealth Service Recommendations

Clinical guidance for pediatric primary care

January 2022

TABLE OF CONTENTS

INTRODUCTION	3
SPECIAL PEDIATRIC CONSIDERATIONS	5
PRIMARY CARE – PEDIATRIC RECOMMENDATIONS	
Routine Care	6
Acute Symptoms	9
Chronic Condition Management	16
Behavioral Health	22
OPERATIONAL RESOURCES	24
METHODS	25
REFERENCES	26

INTRODUCTION

Purpose & Intent

The recommendations in this document were developed by the members of Oregon Health Leadership Council's (OHLC) Telehealth Workgroup (see Methods section for more information). They are meant to provide guidance to primary care providers in determining whether a pediatric patient's condition may be clinically appropriate for telehealth care. They were developed from available evidence-based literature and expert opinion, but do not guarantee successful outcomes, nor set a medical or legal standard.

Evidence pertaining to the effectiveness of telehealth is not yet available for many health conditions and patient populations. This document is meant to provide information to assist practitioners in developing their own practice standards. They are not prescriptive and are not intended to be used in a regulatory manner. Providers should continue to exercise their own clinical judgement in determining whether telehealth services are appropriate on an individual patient basis.

We advocate for the continued use of telehealth as an effective platform to deliver high quality health care services for children, youths, and families. The hope is that these recommendations help facilitate safe and effective remote care and build strong patient-provider relationships, while maintaining patient privacy and adequate communication with all parties involved. We recognize that significant inequities in accessing telehealth care exist among different sociodemographic populations.¹ It is recommended that a high priority is placed on ensuring access to vulnerable patients, to prevent furthering the already existing health inequities in these populations. Lastly, we support permanent reimbursement for all modes of telehealth delivery, which is essential to the development of an innovative, stable telehealth infrastructure.

Telehealth

"Telehealth" is a mode of delivering healthcare services or medical information from one physical location to another through the use of telecommunications technologies. Services may be delivered asynchronously or synchronously, via audio, visual, and/or written communications.

This document focuses on visits with a patient located in a home setting, and utilizes the following definitions for telehealth platforms:

Video: Synchronous audio and video communication, through smartphone, tablet, or computer

Telephone: Synchronous audio-only communication

Remote Monitoring: Use of digital technologies to collect patient health data and transmit it electronically to a provider

E-Visit: Asynchronous communication between a patient and provider through a secure online messaging portal

Virtual Check-In: A brief discussion by phone or video with a patient to determine whether an office visit or other service is needed

Providers should utilize the most comprehensive telehealth platform feasible. Therefore, telephone visits should be used only when audio/video platforms are unachievable or declined by the patient. It is recommended that E-visits are primarily used for established patients, for symptom-specific evaluation, when the condition is of low-acuity, low-risk, and not time-sensitive.²

INTRODUCTION

When In-Person Visits are Necessary

No population or diagnosis is inherently appropriate or inappropriate for remote care. Providers should continue to **exercise clinical judgement**, considering clinical factors such as age, medical history, cognitive capacity, distance to the nearest emergency facility, patient's support system, potential for disease exposure, most recent in-person visit, and current medical status.

Certain conditions may necessitate in-person visits. In general, these include:^{2,3}

- Need for a hands-on physical examination
- Outcome may be changed by an in-person evaluation
- Poorly controlled conditions at risk for acute complications
- Urgent procedures or interventions are anticipated
- Patient does not have the requisite telehealth technology
- Patient or guardian prefers to receive in-person care
- Need to assess patient safety
- Privacy cannot be ensured via virtual visit

If there is uncertainty regarding the appropriateness of a telehealth visit, providers may conduct a brief **virtual check-in** to determine if a hands-on assessment will be necessary.⁴

Keep in mind that an in-person visit may provide information not obtainable during a virtual session. **The option to perform an in-person evaluation should always remain available.**

Telehealth Principles

It is recommended that organizations abide by the following standards, adapted from agreed upon telehealth principles of the West Coast Compact:⁵

1. **Access:** Telehealth will be used as a means to promote adequate and equitable access to health care.
2. **Confidentiality:** Patient confidentiality, including interactions and patient records, will be protected; and patients should provide informed consent verbally or in writing about both care and the specific technology used to provide it.
3. **Equity:** Telehealth will be available to every patient, regardless of race, ethnicity, sex, gender identify, sexual orientation, age, income, class, disability, immigration status, nationality, religious belief, language proficiency or geographic location. Telehealth services will comply with civil rights law.
4. **Standard of Care:** Standard of care requirements will apply to all services and information provided via telehealth, including quality, utilization, cost, medical necessity, and clinical appropriateness.
5. **Stewardship:** Providers will employ the use of evidence-based strategies, deliver quality care, and will continue to take steps to mitigate and address fraud, waste, and abuse.
6. **Patient choice:** Patients, in conjunction with their providers, should be offered their choice of service delivery mode. Patients will be made aware of the limitations of virtual visits and retain the right to receive health care in person.

Payment and Benefits

Benefits for telehealth vary by type of service and health plan. Additionally, telehealth coverage changed significantly during the COVID-19 pandemic, and it remains unclear whether (or for how long) expanded payments will continue. **These recommendations pertain to clinical use of telehealth services, regardless of benefit coverage.** We attempted to align recommended services with those that are currently covered by Medicare (CMS) and the Oregon Health Plan (OHP). However, coverage should always be confirmed prior to providing any telehealth services.

SPECIAL PEDIATRIC CONSIDERATIONS

Current Guidance

The American Academy of Pediatrics (**AAP**) **supports the use of telehealth within the medical home model.** They note that incorporation of telehealth “eliminates access barriers, increases consumer satisfaction, preserves the integrity of the pediatric medical home, and prevents fragmentation of care...” and that “outcome studies demonstrate high parent satisfaction, reduced absenteeism due to illness, reduced travel time and costs, high rates of visit completion..., and reduced emergency department use for nonurgent conditions.”⁶

However, the AAP and the American Telemedicine Association (ATA) both caution that **remote care should meet the same standard of care as in-person visits.** The ATA states, “If the provider is unable to comply with the standard of care for diagnosis and management in any clinical situation, due to technical limitations or provider comfort level, the provider shall refer the patient for additional evaluation where they can receive the appropriate standard of care, whether that is an in-person encounter or a telehealth encounter that is not subject to the specific limitations.”⁷

At Home Examination Devices

At home examination devices that allow for enhanced imaging, auscultation, etc. are an emerging technology that may be a helpful addition to a telehealth visit if available. However, due to inequitable access and lack of efficacy data, **it is not recommended to endorse or require use of these devices at this time.** Per the ATA, “...further study of the accuracy and effectiveness of these devices is required before any recommendations can be made regarding their use”⁷

Legal Considerations & Consent

- Providers should follow all state and federal telehealth regulations including those pertaining to privacy, confidentiality, security, and informed consent, such as HIPAA, HITECH, and FERPA.⁷
- **In Oregon, minors may consent to medical services without parental consent at the age of 15.** A minor 14 years or older may consent to outpatient mental health, drug, or alcohol treatment without parental consent. However, the parent is expected to be involved to some extent prior to the end of treatment. Access to birth control, as well as STI testing and treatment is allowed at any age without parental consent.⁸

Parent/Guardian Involvement

- In Oregon, children 15 and over must give consent for parents to access their medical portal.
- Parents or legal representatives may participate in remote visits; however, arrangements should be made to ensure that the patient has **access to a private space** during confidential portions of the visit⁷, or the entire visit if appropriate.
- To facilitate communication, providers should confirm that they have **contact information** for the parent/guardian prior to the telehealth visit,⁷ and that the parent has access to the patient’s online medical portal **if appropriate.**
- In some circumstances, examination of the pediatric patient may not be necessary, and the primary focus of the visit will be discussion with the parent or guardian. It is still recommended that the visit be via video if possible and that the **provider visualizes the patient**, at least briefly, during the visit to verify the patient is present, safe, and no concerning issues are apparent.

PRIMARY CARE – PEDIATRICS

Routine Care

General Recommendations for Routine Care

These recommendations are applicable to pediatric patients due for **non-urgent, routine recommended** care.

During the telehealth visit, if it becomes clear to the provider that an in-person visit is necessary based on clinical need or acuity, the provider should take responsibility for ensuring a visit is scheduled and transportation is arranged.

Recommended telehealth uses:

1. Routine or follow-up care in established patients or new patients 2 years of age or older, after screening to ensure they do not meet any in-person visit criteria (below). Selected new patients under 2 may benefit from a telehealth visit with a subsequent in-person visit, as deemed appropriate by the provider.

E-Visits are appropriate for the following scenarios:

1. Established patients in need of evaluation, education, or clinical guidance for an issue or condition that is not time sensitive

Consider in-person visits for patients who meet any of the following criteria:

1. History, symptoms, or triage findings warrant a physical assessment, test, and/or procedure to determine a diagnosis or plan of care
2. Visit evaluation or outcome would be changed by an in-person exam
3. Lack of access to necessary monitoring devices either at home or at a satellite clinic location
4. Lack of access to telehealth technology or lack of necessary telehealth technical skills
5. Patient or guardian preference to visit provider in person
6. Need to assess patient safety
7. Privacy cannot be ensured with a virtual visit

Well-child visits & sports physicals

It is recommended that all well-child visits are conducted in-person. Although some aspects of the visit could be adequately performed via telehealth, such as education or visual assessment, it may be difficult to guarantee that patients complete portions of the exam that require an office visit. Given the vital importance of hands-on physical examination and screenings, accurate vital signs, timely immunizations, and assessment of safety, it is recommended that the entire well-child visit is performed in person if possible.

Similarly, it is recommended that sports physicals (Preparticipation Physical Evaluations) are performed in-person to ensure a quality physical exam. This is particularly important given increased concerns following COVID infection. It is recommended that sports physicals are performed in conjunction with a well-child visit whenever possible, as this allows an opportunity to complete important screenings for behavioral and social health needs.

Condition Specific Recommendations for Routine Care

In addition to the general recommendations above, consider the condition specific recommendations below when determining clinical appropriateness for telehealth services for **pediatric patients in need of routine or follow-up services**.

This list is not comprehensive, but is intended to assist primary care providers in developing their own criteria for selected common conditions.

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Hospital/ED follow up	Yes	Video – preferred Telephone – if video is not possible. Not recommended for patients that require visual assessment of wounds, swelling, range of motion, etc.	<ul style="list-style-type: none"> • Obtain history and assessment • Provide education, medication reconciliation, medication management, self-management support • Review plan of care provided at discharge and answer questions • As appropriate, provide counseling and social needs screening • Ensure needed supplies, medications, medical equipment, in-home support, and specialist/ancillary follow up care are arranged 	<ul style="list-style-type: none"> • Vital signs are warranted, and patient does not have access to accurate remote monitoring • Patient’s condition has worsened since discharge • Patient is unstable or at high risk for readmission • Patient requires follow up labs, imaging, or other diagnostics 	9,10,11
Medication follow up	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Assess medication effectiveness, adherence, side effects, etc., and adjust as needed • Determine future follow-up schedule and plan 	<ul style="list-style-type: none"> • Vital signs are warranted, and patient does not have access to accurate remote monitoring • Patient requires lab monitoring or other diagnostics related to medication 	12,13
Results follow up	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Explanation of results, education, counseling • As appropriate, development of care plan, specialist referrals, medication management 	<ul style="list-style-type: none"> • Additional in-office diagnostics are warranted 	
Sports physical	No	N/A	N/A	N/A	14,15
Well-child visit	No	N/A	N/A	N/A	16,17

Adolescents (ages 11-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Sexual health/ birth control	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Assess/discuss medical, sexual, and psychosocial history, screen for sexual abuse, mental health, substance use, and social needs • Provide education, safe sexual behavior counseling, contraceptive counseling, family planning, medication management 	<ul style="list-style-type: none"> • Physical examination, vital signs, or imaging is necessary • Need for STI or pregnancy testing • Patient is due for immunizations 	18,19,20,21

PRIMARY CARE – PEDIATRICS

Acute Symptoms

General Recommendations for Acute Symptoms

These recommendations are applicable to pediatric patients with **non-urgent** acute symptoms.

During the telehealth visit, if it becomes clear to the provider that an in-person visit is necessary based on clinical need or acuity, the provider should take responsibility for ensuring a visit is scheduled and transportation is arranged.

Recommended telehealth uses:

1. Established patients or new patients 2 years of age or older, after screening to rule out the need for emergent care and to ensure they do not meet any other in-person visit criteria (below). Selected new patients under 2 may benefit from a telehealth visit with a subsequent in-person visit, as deemed appropriate by the provider.

E-Visits are appropriate for the following scenarios:

1. Established patients in need of symptom-specific evaluation, when the condition is low-acuity, low-risk, and not time sensitive

Consider in-person visits for patients who meet any of the following criteria:

1. History, symptoms, or triage findings warrant a physical assessment, test, and/or procedure to determine a diagnosis or plan of care
2. Visit evaluation or outcome would be changed by an in-person exam
3. Symptoms of systemic illness (constitutional symptoms)
4. Lack of access to necessary monitoring devices either at home or at a satellite clinic location
5. Lack of access to telehealth technology or lack of necessary telehealth technical skills
6. Patient or guardian preference to visit provider in person
7. Need to assess patient safety
8. Privacy cannot be ensured with a virtual visit

Note: Some patients who require ancillary services such as lab work or radiology exams may receive those in-person services without a face-to-face visit to their primary care provider.

Condition Specific Recommendations for Acute Symptoms

In addition to the general recommendations above, consider the condition specific recommendations below when determining clinical appropriateness for telehealth services for **pediatric patients with non-urgent acute symptoms**.

This list is not comprehensive, but is intended to assist primary care providers in developing their own criteria for selected common conditions.

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Abdominal pain	Yes, but due to the risk of urgent conditions, clinical triage evaluation is recommended	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> • Obtain history and assess acuity • For benign presentations, provide education, supportive care, nutrition education, medication management, follow-up plan, assess need for specialist referral 	<ul style="list-style-type: none"> • Need for lab testing or diagnostic imaging • Red flags are present, such as recent trauma, severe pain, fever, bilious vomiting, bloody diarrhea, voluntary guarding, rigidity, rebound tenderness, right lower quadrant pain, lethargy, etc. • In males, red flags may include tender scrotum and enlarged testis • In adolescent females, red flags may include irregular vaginal bleeding and acute onset low abdominal pain 	22,23,24,25
Constipation	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Obtain history and assessment • Provide education, diet modifications, medication management, follow-up plan, assess for specialty referral 	<ul style="list-style-type: none"> • Infant less than one month old • Physical exam, imaging, or occult blood testing are necessary to rule out organic causes • Patient has chronic constipation and needs initial physical exam • Red flags are present, such as delayed passage of meconium, abdominal distension, vomiting/fever, etc. 	25,26,27,28

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Diarrhea	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> Obtain history and assessment, including hydration evaluation Provide education, rehydration instruction, nutrition management, medication management, follow-up plan 	<ul style="list-style-type: none"> Infant less than 6 months old Symptoms lasting 7 or more days Red flags are present, such as bilious or bloody vomiting, bloody diarrhea, cyanosis, inconsolable crying/irritability, petechial rash, rapid breathing, high fever, signs of dehydration, or toxic appearance Lab testing, stool culture, or IV rehydration is needed 	29,30,31
Ear pain	No	N/A	N/A	N/A	32,33,34
Eye redness/ discharge	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> Obtain history and assessment Provide education, symptom management, medication management, follow-up plan, refer to specialist as needed 	<ul style="list-style-type: none"> Child less than 2 years old Need for culture or other laboratory analysis Red flags are present, such as vision loss, moderate to severe pain, copious purulent discharge, recent eye surgery, history of traumatic eye injury, etc. 	35,36,37,38
Fever	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> Obtain history and assess acuity For benign presentations, provide education, supportive care, medication management, follow-up plan 	<ul style="list-style-type: none"> Infant less than 3 months old Fever >3 days, or additional symptoms such as ear pain, vomiting, excessive fussiness, lethargy, poor feeding, dehydration, etc. Presence of pre-existing conditions such as prematurity or immune compromise Urinalysis, urine culture, or other lab testing is needed Red flags are present, such as breathing changes, neck pain/stiffness, petechiae, signs of poor perfusion, drowsiness, inconsolability, seizures, etc. 	39,40,41,42

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Fussiness/crying	Yes, for follow up visits only	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> Obtain history and assessment Provide education, reassurance, support, and treatment/management options, follow-up plan 	<ul style="list-style-type: none"> Infant less than 1 month old Physical exam is necessary for initial diagnosis to rule out organic causes Red flags are present, such as inconsolability, distended abdomen, fever, or lethargy 	43,44
Head injury	Yes, if 4 or more hours after initial injury. Due to the risk of urgent conditions, clinical triage evaluation is recommended	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> Obtain history, symptom screening, vestibular/ocular screening, and neurocognitive assessment Provide education, symptom management, counseling, discussion of return-to-learn and return-to-play progress, refer to specialist as needed 	<ul style="list-style-type: none"> Child less than 2 years old Initial exam within 4 hours of injury requires in-person assessment for diagnosis and plan of care Red flags are present, such as repeat injury, vomiting, mental status change, lethargy, severe or worsening symptoms, etc. 	45,46,47,48, 49,50
Headache/migraine	Yes, but due to the risk of urgent conditions, clinical triage evaluation is recommended	Video – preferred Telephone – not recommended for initial assessment, may be appropriate for follow-up care	<ul style="list-style-type: none"> Obtain history and assessment Provide education, medication management, self-management support, follow-up plan, assess for specialist referral As appropriate, screen for psychosocial stressors, mental health, substance use 	<ul style="list-style-type: none"> Child less than 5 years old Need for evaluation of tone, deep tendon reflexes, or fundoscopy Red flags are present, such as abnormal neurologic findings, history of trauma, increase in severity, new onset severe headache, constitutional symptoms, etc. 	51,52,53,54, 55,56
Musculoskeletal pain	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> Obtain history and assessment, including use of a validated, age appropriate pain tool Provide education, non-pharmaceutical strategies, medication management, follow-up plan, refer to specialist as needed 	<ul style="list-style-type: none"> Child less than 3 years old Need for diagnostic imaging Concern for non-accidental injury Red flags are present, such as severe pain, inconsolability, deformity, signs of poor perfusion, signs of systemic illness, complete inability to move or bear weight 	57,58,59,60, 61

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Poor Feeding/ loss of appetite	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> Obtain history and assessment, including feeding style of the caregiver Provide education, support, self-management techniques, follow-up plan, referral to GI, SLP, nutritionist, behavioral health, etc. as needed 	<ul style="list-style-type: none"> Infant 3 months old or younger Height/weight cannot be accurately measured remotely Red flags are present, such as infant that has not fed in over 4 hours, vomiting, diarrhea, dysphagia, aspiration, pain with feeding, developmental delay, chronic cardiac or respiratory symptoms, weight loss or growth failure 	62,63,64
Skin concern (rash, acne, other)	Yes	Video – preferred (ideally with high quality images sent prior to visit) Telephone – not recommended E-Visit – high quality images may be shared asynchronously	<ul style="list-style-type: none"> Obtain history and assessment Provide education, medication management, self-management support, follow-up plan, assess for specialist referral 	<ul style="list-style-type: none"> Need for full body skin exam or examination of hair-bearing skin, pigmented lesions, mucosal lesions, or if skin color makes virtual assessment difficult Biopsy, lab testing, culture, or diagnostic imaging are needed Signs of systemic allergy or illness Red flags are present, such as erythroderma, desquamation, petechiae/purpura, severe pain, etc. 	65,66,67,68,69,70,71
Upper respiratory infection (URI) symptoms (sore throat, cough, sinus congestion)	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> Obtain history and triage for acuity For non-concerning presentations, provide self-management support, symptom management, education, medication management, follow-up plan 	<ul style="list-style-type: none"> Need for vital signs, radiology exam, lung auscultation, or other physical assessment Lab or culture testing is needed Red flags are present, such as rapid respiratory rate, difficulty breathing, intermittent apnea, infant that is not feeding adequately 	72,73,74,75
Urinary complaints (possible UTI)	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> Obtain history and assessment Provide education, medication management, self-management support, follow-up plan, assess for specialist referral 	<ul style="list-style-type: none"> Child less than 2 years old Urinalysis, culture, or diagnostic imaging are needed 	76,77,78,79,80,81

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Vomiting	Yes, but due to the risk of urgent conditions, clinical triage evaluation is recommended	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> • Obtain history and assessment, including hydration evaluation • Provide education, rehydration instruction, nutrition management, self-management techniques, medication management, follow-up plan, assess for referral to specialist as needed 	<ul style="list-style-type: none"> • Need for physical exam to better assess hydration or abdomen • Need for diagnostic imaging or lab testing • Red flags are present, such as bilious or bloody vomiting, bloody diarrhea, cyanosis, inconsolable crying/irritability, high fever, distended abdomen, severe abdominal pain, weight loss, change in mental status, vomiting that causes wake from sleep, intractable vomiting, clinical dehydration, or toxic appearance • Lab work, stool culture, or IV rehydration is indicated 	82,83
White lesions in mouth (possible thrush)	Yes	Video – preferred (ideally with high quality images sent prior to visit) Telephone – not recommended	<ul style="list-style-type: none"> • Obtain history and assessment • Provide education, discuss prevention, symptom management, medication management 	<ul style="list-style-type: none"> • Need for culture • Poor hydration or poor feeding • Unable to properly visualize lesions via video or photos 	65,84

Adolescents (ages 11-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Breast pain, changes, or concerns	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> • Obtain history and assessment • Provide education, medication management, self-management support, follow-up plan, assess for specialist referral 	<ul style="list-style-type: none"> • Presence of breast mass • Need for diagnostic imaging or biopsy 	85,86,87,88
Menstrual pain	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Obtain history and assessment • For presentations suggesting primary dysmenorrhea, provide self-management support, symptom management, education, medication management, follow-up plan 	<ul style="list-style-type: none"> • Need for pelvic exam or imaging due to abnormal findings, lack of improvement with medical therapy, or concerning history • Symptoms of STI are also present • Signs of secondary dysmenorrhea are present, such as severe or worsening pain, abnormal uterine bleeding, mid-cycle pain, family hx of endometriosis, dyspareunia, congenital anomalies, etc. 	89,90,91,92
Sexually transmitted infection (STI) symptoms	Yes, primarily for follow-up. Initial visit only if significant barriers to in-person visit exist	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Obtain history and assessment • Provide test result discussions, education, self-management support, medication management, safe sex counseling, follow-up plan, discuss partner therapy options 	<ul style="list-style-type: none"> • Need for lab testing or culture (unless patient has access to self-swab kit) • Need for pelvic, genital, or rectal exam • Need for injectable medication • Signs of PID are present, such as fever, lower abdominal pain or dyspareunia 	91,92,93,94,95

PRIMARY CARE – PEDIATRICS

Chronic Condition Management

General Recommendations for Chronic Conditions

These recommendations are applicable to pediatric patients with one or more **established chronic conditions**. They do not reflect the initial diagnosis, nor the possible need for in-person specialist visits. These recommendations pertain to primary care visits performed **in addition to in-person routine well-child visits** where chronic conditions are evaluated.

During the telehealth visit, if it becomes clear to the provider that an in-person visit is necessary based on clinical need or acuity, the provider should take responsibility for ensuring a visit is scheduled and transportation is arranged.

Recommended telehealth uses:

1. Routine chronic condition follow-up in new or established patients or new patients 2 years of age or older, after screening to ensure they do not meet any in-person visit criteria (below). Selected new patients under 2 may benefit from a telehealth visit with a subsequent in-person visit, as deemed appropriate by the provider.
2. New or worsening symptomology in established patients or new patients 2 years of age or older, that does not require hands on or urgent/emergent assessment. Selected new patients under 2 may benefit from a telehealth visit with a subsequent in-person visit, as deemed appropriate by the provider.

E-Visits are appropriate for the following scenarios:

1. Established patients in need of evaluation, education, or clinical guidance for an issue or condition that is not time sensitive

Consider in-person visits for patients who meet any of the following criteria:

1. History, symptoms, or triage findings warrant a physical assessment, test, and/or procedure to determine a diagnosis or plan of care
2. Visit evaluation or outcome would be changed by an in-person exam
3. Lack of access to necessary monitoring devices either at home or at a satellite clinic location (i.e., pulse oximeter)
4. Lack of access to telehealth technology or lack of necessary telehealth technical skills
5. Patient or guardian preference to visit provider in person
6. Need to assess patient safety
7. Most recent visit(s) were performed via telehealth and provider deems an in-person visit necessary based on patient risk and time elapsed since last in-person visit.
8. Privacy cannot be ensured with a virtual visit

Note: Some patients who are due for ancillary services such as lab work, radiology exams, or vaccinations may receive those in-person services without a face-to-face visit to their primary care provider.

Condition Specific Recommendations for Chronic Conditions

In addition to the general recommendations above, consider the condition specific recommendations below when determining clinical appropriateness for **pediatric patients with established chronic conditions**.

This list is not comprehensive, but is intended to assist primary care providers in developing their own criteria for selected common conditions.

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
ADD/ADHD	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Obtain history and assessment. • Provide education, medication reconciliation, medication management, self-management support, caregiver support, classroom interventions, follow-up plan, screening tools (such as Vanderbilt forms) as appropriate • As appropriate, provide counseling, necessary screenings (social needs, substance use, anxiety, depression, etc.), assess for referral to behavioral specialist or group program 	<ul style="list-style-type: none"> • Need to obtain vital signs such as weight or blood pressure • Recent medication dose adjustment 	12,96,97,98, 99
Asthma	Yes	Video – preferred Telephone – if video is not possible Remote Monitoring – recommended as adjunct to visits	<ul style="list-style-type: none"> • Obtain history and assessment, consider use of asthma screening tool • Review inhaler technique and discuss medication adherence • Provide education, medication management, self-management plans, assess for specialist referral • Connect with school-based programs to involve educators and school nurses in patient care • Remote monitoring for symptom tracking between visits 	<ul style="list-style-type: none"> • Worsening symptoms (cough, wheezing, chest tightness, difficulty breathing, etc.) not relieved by current medications • Acute asthma exacerbation • Signs of potential secondary infection such as prolonged fever, worsening cough, chest pain 	13,100,101, 102,103,104, 105,106

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Cerebral palsy	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> Obtain history and assessment Discuss and coordinate care with medical/educational care team, connect patient/family with community or social support programs Provide support, education, medication management, assess need for assistive equipment, follow-up plan, refer to specialty, social worker, case management, etc. as needed 	<ul style="list-style-type: none"> Need for in-office injectable medication Co-occurring physical conditions necessitate hands on physical assessment Changes in health status, function, strength, or mobility necessitate hands on physical assessment 	107,108,109
Cystic fibrosis	Yes, but not recommended for routine visits	Video – preferred Telephone – if video is not possible Remote Monitoring – recommended as adjunct to visits	<ul style="list-style-type: none"> Questions, concerns, or non-acute symptoms, occurring between routinely scheduled visits, that do not require hands-on assessment Remote Monitoring for spirometry and symptom tracking if possible 	<ul style="list-style-type: none"> Routine follow-up visits New or worsening symptoms that require a hands-on assessment, lab tests, or imaging 	110,111,112, 113,114,115, 116,117
Diabetes type I & Diabetes type II	Yes	Video – preferred Telephone – if video is not possible Remote Monitoring – recommended as adjunct to visits	<ul style="list-style-type: none"> Obtain history and assessment Provide education, medication management, self-management support, nutrition & exercise counseling, follow-up plan, assess for specialist referral Assess & address patient and caregiver psychosocial well-being Refer to social worker, case management, community supports as needed. Remote monitoring of blood glucose 	<ul style="list-style-type: none"> Patient is due for eye exam, foot exam, lab testing, or immunizations 	118,119,120, 121,122,123, 124

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Disability - Developmental, intellectual, or learning disability (including autism)	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Obtain history and assessment • Discuss and coordinate care with medical/ behavioral/educational care team • Connect patient/family with community or social support programs as needed • Develop/discuss individual care plan, provide support, education, medication management, follow-up plan, assess need for referral to specialty, social worker, case management, etc. 	<ul style="list-style-type: none"> • Co-occurring physical conditions necessitate hands on physical assessment 	125,126,127, 128,129,130
Down syndrome	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Obtain history and assessment • Provide therapeutic conversations, support, education • Discuss and coordinate care with medical/behavioral/educational care team • Refer to specialty providers, PT/OT, social work, community supports, as needed 	<ul style="list-style-type: none"> • Infant less than 1 month old • Need to assess atlanto-axial stability, muscle tone, or neurologic function • Need for lab testing • Patient is due for hearing exam, eye exam, or cardiac function testing 	131,132,133, 134
Epilepsy	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> • Obtain history and assessment • Review seizure activity, medication side effects, and screen for anxiety/depression • Provide support, education, medication management, self-management techniques, follow-up plan, refer to specialty or community supports as needed 	<ul style="list-style-type: none"> • Need for full neurological examination • Need for EEG or diagnostic imaging • Need for lab testing 	135,136,137, 138,139

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Hypertension (primary)	Yes	Video – preferred Telephone – if video is not possible Remote Monitoring - may be used as an adjunct to visits	<ul style="list-style-type: none"> • Provide support, education, medication management, exercise and nutrition planning, stress reduction techniques • Refer to specialty as needed 	<ul style="list-style-type: none"> • Patient does not have access to an appropriate blood pressure measurement device or is unable to accurately measure blood pressure remotely • Signs of hypertensive crisis are present, such as headache, dizziness, altered consciousness, or visual changes • Need for lab testing or diagnostic imaging 	140,141,142, 143,144,145
Migraines	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Obtain history and assessment • Review headache diary and screen for mood and anxiety disorders • Provide support, education, medication management, non-pharmacologic treatment techniques, follow-up plan, refer to specialty or behavioral health as needed 	<ul style="list-style-type: none"> • Need for full neurological examination • New or worsening symptoms that require a hands-on assessment, lab testing, or imaging • Signs or symptoms of secondary headache, such as sudden change in headache, blurred vision, focal deficits, or seizures 	51,52,53, 146,147,148
Obesity	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Provide family support, counseling, education, nutrition and activity coaching, follow-up plan • As appropriate, screen for mental health, psychosocial stressors • Refer to nutrition, physical therapy, behavioral health, athletic training program, community supports, or surgery as needed 	<ul style="list-style-type: none"> • Child under 2 years old • Height, weight, or blood pressure cannot be measured accurately remotely • Need for lab testing or sleep study 	149,150,151, 152,153,154, 155

All pediatric patients (ages 0-21 years)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Sickle cell disease	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> • Obtain history and assessment, including psychosocial assessment, develop/discuss care plan • Provide education, support, medication management, self-management techniques, refer to specialty or community supports as needed. • Discuss and coordinate care with specialty care team 	<ul style="list-style-type: none"> • Child less than 1 year old • Patient is due for immunizations, lab tests, or eye exam • Need for diagnostic imaging or pulmonary function testing • New or worsening red flag symptoms such as fever >38.5°C, cough, chest pain, difficulty breathing, severe pain, jaundice, pallor, fatigue, priapism, weakness, hand/foot swelling, enlarged spleen, or stroke symptoms 	156,157,158
Tic disorder/ Tourette syndrome	Yes	Video – preferred Telephone – not recommended	<ul style="list-style-type: none"> • Obtain history and assessment, including psychosocial assessment • Provide education, support, medication management, self-management techniques, refer to specialty or community supports as needed. • Discuss and coordinate care with multi-disciplinary care team 	No additional considerations	159,160,161,162

PRIMARY CARE – PEDIATRICS

Behavioral Health

General Recommendations for Behavioral Health

These recommendations are applicable to pediatric patients with **established behavioral health diagnoses and non-emergent symptoms**. They do not reflect the initial diagnosis, nor the possible need for in-person specialist visits. They pertain to primary care visits performed **in addition to in-person routine well-child visits** where behavioral health conditions are evaluated. Prior to a telehealth visit, high risk patients should be screened carefully to rule out any possible need for emergent care. A safety plan for acute crises should be established for all patients seen via telehealth.¹⁶³

During the telehealth visit, if it becomes clear to the provider that an in-person visit is necessary based on clinical need or acuity, the provider should take responsibility for ensuring a visit is scheduled and transportation is arranged.

Recommended telehealth uses:

1. New and established patients in need of treatment and monitoring of common behavioral health conditions, after screening to ensure they do not meet any in-person visit criteria (below)
2. Any patient who is not in need of emergent care, that would not otherwise have access to care or is more comfortable speaking about behavioral health issues via a telehealth platform

Consider in-person visits for patients who meet any of the following criteria:

1. Provider feels that an in-person visit is necessary to assess full clinical picture and detect subtle nuances of interpersonal communication
2. Privacy cannot be ensured with a virtual visit
3. History, symptoms, or triage findings warrant a physical assessment to determine a diagnosis or plan of care
4. Visit evaluation or outcome would be changed by an in-person exam
5. Lack of access to telehealth technology or lack of necessary telehealth technical skills
6. Patient or guardian preference to visit provider in person
7. Need to assess patient safety
8. Most recent visit(s) were performed via telehealth and provider deems an in-person visit necessary based on patient risk and time elapsed since last in-person visit.

Connect patient with a behavioral health provider or emergency services for anyone experiencing a mental health emergency or crisis such as acute suicidality, psychosis, acute intoxication, delirium, drug withdrawal, or aggression

Note: Some patients who require ancillary services such as lab work may receive those in-person services without a face-to-face visit to their primary care provider.

Condition Specific Recommendations for Behavioral Health

In addition to the general recommendations above, consider the condition specific recommendations below when determining clinical appropriateness for **pediatric patients with established behavioral health needs**.

This list is not comprehensive, but is intended to assist primary care providers in developing their own criteria for selected common conditions.

All Children (aged 0-21)

Reason for visit	Telehealth Candidate?	Platforms	Recommended telehealth services	In addition to general recommendations above, consider in-person visit for the following:	References
Anxiety and/or Depression	Yes	Video – preferred Telephone – if video is not possible	<ul style="list-style-type: none"> • Obtain history and behavioral health assessments using validated screening tools. Perform home and psychosocial needs assessments • Provide education, support/coaching for patient and family, self-management techniques, medication management, safety planning • Refer to behavioral health specialists and community supports as needed 	<ul style="list-style-type: none"> • Lack of a trusted on-site adult to participate and/or intervene if needed in patients under 18 years old • History of maltreatment or lack of safety in the home 	164,165,166, 167,168,169
Disordered eating	No	N/A	N/A	N/A	170,171,172

OPERATIONAL CONSIDERATIONS

Resources for successful telehealth integration

How can I implement telehealth in my practice?

- American Academy of Pediatrics Telehealth Resources
<https://www.aap.org/en/practice-management/care-delivery-approaches/telehealth/>
- American Academy of Pediatrics Promoting Telehealth Campaign Toolkit
<https://www.aap.org/en/news-room/campaigns-and-toolkits/promoting-telehealth/>
- American Medical Association Telehealth Implementation Playbook
<https://www.ama-assn.org/system/files/2020-04/ama-telehealth-playbook.pdf>
- American Academy of Family Physicians – A Toolkit for Building and Growing a Sustainable Telehealth Program in Your Practice
https://www.aafp.org/dam/AAFP/documents/practice_management/telehealth/2020-AAFP-Telehealth-Toolkit.pdf
- American Academy of Child & Adolescent Psychiatry – Telepsychiatry Guidelines & Policies
https://www.aacap.org/AACAP/Clinical_Practice_Center/Business_of_Practice/Telepsychiatry/Telepsychiatry_Guide_and_Pol.aspx
- Health and Human Services (HHS) – Telehealth resources for health care providers
<https://telehealth.hhs.gov/providers/>

What telehealth services are covered by insurance?

- Medicare
 - Centers for Medicare and Medicaid Services (CMS) – General Provider Telehealth and Telemedicine Toolkit
<https://www.cms.gov/files/document/general-telemedicine-toolkit.pdf>
 - Centers for Medicare and Medicaid Services (CMS) – List of Telehealth Services
<https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes>
- Medicaid
 - Oregon Health Authority, Health Systems Division – Oregon Medicaid COVID-19 Provider Guide
<https://www.oregon.gov/oha/HSD/OHP/Announcements/Oregon%20Health%20Plan%20coverage%20of%20telemedicine%20services.pdf>

Can I provide care to an out-of-state patient?

- Physicians and Physician Assistants: <https://www.oregon.gov/omb/Topics-of-Interest/Pages/Telemedicine.aspx>
- Naturopathic Physicians: <https://www.oregon.gov/obnm/Documents/Rules/TelemedicineGuidelines.pdf>

METHODS

These recommendations were developed by the members of Oregon Health Leadership Council's (OHLC) Telehealth Workgroup, with the guidance and support of OHLC's Best Practice Committee. These groups are comprised of providers, clinical leaders, and telehealth experts representing health systems, clinics, and health plans throughout Oregon. More information about the Best Practice Committee can be found here: <http://www.orhealthleadershipcouncil.org/ebbp/>.

The information in this document was collected via evidence-based literature searches, as well as expert opinion from Telehealth Workgroup members and their colleagues. The conditions listed within each condition specific guideline section were derived from the most common reasons for visits in the pediatric primary care setting, as well as input from pediatricians.

The recommendations provided in this document reflect information available to the OHLC Telehealth Workgroup at the time of its development. However, research on the safety, quality, and effectiveness of telehealth in the pediatric population is ongoing. We encourage organizations to use these recommendations as an aide in building their telehealth procedures and continue to refine their processes as new research becomes available.

REFERENCES

1. Eberly, L. A., Kallan, M. J., Julien, H. M., Haynes, N., Khatana, S., Nathan, A. S., Snider, C., Chokshi, N. P., Eneanya, N. D., Takvorian, S. U., Anastos-Wallen, R., Chaiyachati, K., Ambrose, M., O'Quinn, R., Seigerman, M., Goldberg, L. R., Leri, D., Choi, K., Gitelman, Y., Kolansky, D. M., ... Adusumalli, S. (2020). Patient Characteristics Associated with Telemedicine Access for Primary and Specialty Ambulatory Care During the COVID-19 Pandemic. *JAMA network open*, 3(12), e2031640. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2774488>
2. CareOregon. *CareOregon telemedicine technical assistance guide*. <http://careoregon.org/docs/default-source/covid-19/cor-covid-19-telehealth-ta-guide.pdf>
3. Bree Collaborative. *Telehealth* (2021). <https://www.qualityhealth.org/bree/wp-content/uploads/sites/8/2021/09/Telehealth-Guidelines-Final.pdf>
4. Oregon Health Authority Health Systems Division. (2021, Dec 23). *Oregon Medicaid COVID-19 Provider Guide*. <https://www.oregon.gov/oha/HSD/OHP/Tools/Oregon%20Medicaid%20COVID-19%20Provider%20Guide.pdf>
5. State of Oregon. West Coast Compact Telehealth Principles. <https://www.oregon.gov/newsroom/Pages/NewsDetail.aspx?newsid=53256>
6. Burke, B. L., Jr, Hall, R. W., & SECTION ON TELEHEALTH CARE (2015). Telemedicine: Pediatric Applications. *Pediatrics*, 136(1), e293–e308. <https://doi.org/10.1542/peds.2015-1517>
7. McSwain, S. D., Bernard, J., Burke, B. L., Jr, Cole, S. L., Dharmar, M., Hall-Barrow, J., Herendeen, N., Herendeen, P., Krupinski, E. A., Martin, A., McCafferty, D., Mulligan, D. A., North, S., Ruschman, J., Waller, M., Webster, K., Williams, S., Yamamoto, S., & Yeager, B. (2017). American Telemedicine Association Operating Procedures for Pediatric Telehealth. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, 23(9), 699–706. <https://doi.org/10.1089/tmj.2017.0176>
8. Oregon Health Authority Public Health Division. (2016, Aug). *Minor Rights: Access and consent to health care*. <https://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/YOUTH/Documents/minor-rights.pdf>
9. Fang, J. L., & Chuo, J. (2021). Using telehealth to support pediatricians in newborn care. *Current problems in pediatric and adolescent health care*, 51(1), 100952. <https://doi.org/10.1016/j.cppeds.2021.100952>
10. Robinson, C., Gund, A., Sjöqvist, B. A., & Bry, K. (2016). Using telemedicine in the care of newborn infants after discharge from a neonatal intensive care unit reduced the need of hospital visits. *Acta paediatrica (Oslo, Norway : 1992)*, 105(8), 902–909. <https://doi.org/10.1111/apa.13407>
11. Willard, A., Brown, E., Masten, M., Brant, M., Pouppirt, N., Moran, K., Lioy, J., & Chuo, J. (2018). Complex surgical infants benefit from postdischarge telemedicine visits. *Advances in neonatal care : official journal of the National Association of Neonatal Nurses*, 18(1), 22–30. <https://doi.org/10.1097/ANC.0000000000000460>
12. Spencer, T., Noyes, E., & Biederman, J. (2020). Telemedicine in the management of ADHD: Literature review of telemedicine in ADHD. *Journal of attention disorders*, 24(1), 3–9. <https://doi.org/10.1177/1087054719859081>
13. Lin, N. Y., Ramsey, R. R., Miller, J. L., McDowell, K. M., Zhang, N., Hommel, K., & Guilbert, T. W. (2020). Telehealth delivery of adherence and medication management system improves outcomes in inner-city children with asthma. *Pediatric pulmonology*, 55(4), 858–865. <https://doi.org/10.1002/ppul.24623>
14. American Academy of Pediatrics. (2021, June 22). *Preparticipation physical examination*. <https://services.aap.org/en/patient-care/preparticipation-physical-evaluation>
15. Oregon School Activities Association. (2017, May). *School sports pre-participation examination form*. <https://www.osaa.org/docs/forms/PhysicalExamination-English2017.pdf>
16. American Academy of Pediatrics. (2018). *Medical screening reference tables*. Bright Futures. <https://brightfutures.aap.org/materials-and-tools/tool-and-resource-kit/Pages/Medical-Screening-Reference-Tables.aspx>
17. Stanford Medicine. (2020, June 19). *Tele-well-visit guides by age*. Visit guides: Practical guidelines for tele visits. <https://med.stanford.edu/pediatric-telehealth/VisitGuides.html>
18. Marcell, A.V. & Burstein, G.R. (2017). Sexual and reproductive health care services in the pediatric setting. *Pediatrics*, 140 (5). <https://doi.org/10.1542/peds.2017-2858>
19. Barlow, E., Aggarwal, A., Johnstone, J., Allen, L., Kives, S., Ornstein, M., Spitzer, R. F., & Caccia, N. (2012). Can paediatric and adolescent gynecological care be delivered via telehealth? *Paediatrics & child health*, 17(2), e12–e15. <https://doi.org/10.1093/pch/17.2.e12>

20. American College of Obstetricians and Gynecologists' Committee on Adolescent Health Care, Polis, R. L., & Lee, S. E. (2020). ACOG committee opinion: The initial reproductive health visit. *Obstetrics & gynecology*, 136(4), e70–e80. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2020/10/the-initial-reproductive-health-visit>
21. Garrett, C. C., Hocking, J., Chen, M. Y., Fairly, C. K., & Kirkman, M. (2011). Young people's views on the potential use of telemedicine consultations for sexual health: results of a national survey. *BMC infectious diseases*, 11(285). <https://doi.org/10.1186/1471-2334-11-285>
22. Reust, C. E., & Williams, A. (2016). Acute abdominal pain in children. *American family physician*, 93(10), 830–836. <https://www.aafp.org/afp/2016/0515/p830.html>
23. Hijaz, N. M., & Friesen, C. A. (2017). Managing acute abdominal pain in pediatric patients: current perspectives. *Pediatric health, medicine and therapeutics*, 8, 83–91. <https://doi.org/10.2147/PHMT.S120156>
24. Tsao, K., & Anderson, K. T. (2021, January 21). *Evaluation of abdominal pain in children*. BMJ best practice. <https://bestpractice.bmj.com/topics/en-us/787>
25. Berg, E. A., Picoraro, J. A., Miller, S. D., Srinath, A., Franciosi, J. P., Hayes, C. E., Farrell, P. R., Cole, C. R., & LeLeiko, N. S. (2020). COVID-19-A guide to rapid implementation of telehealth services: A playbook for the pediatric gastroenterologist. *Journal of pediatric gastroenterology and nutrition*, 70(6), 734–740. <https://doi.org/10.1097/MPG.0000000000002749>
26. Nurko, S., & Zimmerman, L. A. (2014). Evaluation and treatment of constipation in children and adolescents. *American family physician*, 90(2), 82–90. <https://www.aafp.org/afp/2014/0715/p82.html>
27. Tabbers, M. M., DiLorenzo, C., Berger, M. Y., Faure, C., Langendam, M. W., Nurko, S., Staiano, A., Vandenplas, Y., Benninga, M. A., European Society for Pediatric Gastroenterology, Hepatology, and Nutrition, & North American Society for Pediatric Gastroenterology (2014). Evaluation and treatment of functional constipation in infants and children: evidence-based recommendations from ESPGHAN and NASPGHAN. *Journal of pediatric gastroenterology and nutrition*, 58(2), 258–274. <https://doi.org/10.1097/MPG.0000000000000266>
28. Borowitz, S. M. (2018). Pediatric constipation treatment & management. *Medscape*. <https://emedicine.medscape.com/article/928185-overview>
29. Hartman, S., Brown, E., Loomis, E., & Russell, H. A. (2019). Gastroenteritis in children. *American family physician*, 99(3), 159–165. <https://www.aafp.org/afp/2019/0201/p159.html>
30. Lo Vecchio, A., Dias, J. A., Berkley, J. A., Boey, C., Cohen, M. B., Cruchet, S., Liguoro, I., Salazar Lindo, E., Sandhu, B., Sherman, P., Shimizu, T., & Guarino, A. (2016). Comparison of Recommendations in Clinical Practice Guidelines for Acute Gastroenteritis in Children. *Journal of pediatric gastroenterology and nutrition*, 63(2), 226–235. <https://doi.org/10.1097/MPG.0000000000001133>
31. Guarino, A., Lo Vecchio, A., Dias, J. A., Berkley, J. A., Boey, C., Bruzzese, D., Cohen, M. B., Cruchet, S., Liguoro, I., Salazar-Lindo, E., Sandhu, B., Sherman, P. M., & Shimizu, T. (2018). Universal Recommendations for the Management of Acute Diarrhea in Nonmalnourished Children. *Journal of pediatric gastroenterology and nutrition*, 67(5), 586–593. <https://doi.org/10.1097/MPG.0000000000002053>
32. Lieberthal, A. S., Carroll, A. E., Chonmaitree, T., Ganiats, T. G., Hoberman, A., Jackson, M. A., Joffe, M. D., Miller, D. T., Rosenfeld, R. M., Sevilla, X. D., Schwartz, R. H., Thomas, P. A., & Tunkel, D. E. (2013). The Diagnosis and Management of Acute Otitis Media. *Pediatrics*, 131(3), e964–e999. <https://doi.org/10.1542/peds.2012-3488>
33. Conover, K. (2013). Earache. *Emergency medicine clinics of North America*, 31(2), 413–442. <https://doi.org/10.1016/j.emc.2013.02.001>
34. Rosenfeld, R. M., Schwartz, S. R., Cannon, C. R., Roland, P. S., Simon, G. R., Kumar, K. A., Huang, W. W., Haskell, H. W., & Robertson, P. J. (2014). Clinical practice guideline: acute otitis externa. *Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology-Head and Neck Surgery*, 150(1 Suppl), S1–S24. <https://doi.org/10.1177/0194599813517083>
35. Teoh, D. L., & Reynolds, S. (2003). Diagnosis and management of pediatric conjunctivitis. *Pediatric emergency care*, 19(1), 48–55. <https://doi.org/10.1097/00006565-200302000-00014>
36. Penza, K. S., Murray, M. A., Myers, J. F., Maxson, J., Furst, J. W., & Pecina, J. L. (2020). Treating pediatric conjunctivitis without an exam: An evaluation of outcomes and antibiotic usage. *Journal of telemedicine and telecare*, 26(1-2), 73–78. <https://doi.org/10.1177/1357633X18793031>
37. Beal, C., & Giordano, B. (2016). Clinical Evaluation of Red Eyes in Pediatric Patients. *Journal of pediatric health care : official publication of National Association of Pediatric Nurse Associates & Practitioners*, 30(5), 506–514. <https://doi.org/10.1016/j.pedhc.2016.02.001>
38. Cronau, H., Kankanala, R. R., & Mauger, T. (2010). Diagnosis and management of red eye in primary care. *American family physician*, 81(2), 137–144. <https://www.aafp.org/afp/2010/0115/p137.html>
39. Hamilton, J. L., Evans, S. G., & Bakshi, M. (2020). Management of Fever in Infants and Young Children. *American family physician*, 101(12), 721–729.
40. Aronoff, S.C. (2021). Fever in the Infant and Toddler: Clinical Presentation. *Medscape*. <https://emedicine.medscape.com/article/1834870-clinical>

41. Jhaveri, R., Byington, C. L., Klein, J. O., & Shapiro, E. D. (2011). Management of the non-toxic-appearing acutely febrile child: a 21st century approach. *The Journal of pediatrics*, 159(2), 181–185. <https://doi.org/10.1016/j.jpeds.2011.03.047>
42. Rose, E. (2021). Pediatric Fever. *Emergency medicine clinics of North America*, 39(3), 627–639. <https://doi.org/10.1016/j.emc.2021.04.011>
43. Johnson, J. D., Cocker, K., & Chang, E. (2015). Infantile colic: Recognition and treatment. *American family physician*, 92(7), 577–582. <https://www.aafp.org/afp/2015/1001/p577.html>
44. Roberts, D. M., Ostapchuk, M., & O'Brien, J. G. (2004). Infantile colic. *American family physician*, 70(4), 735–740. <https://www.aafp.org/afp/2004/0815/p735.html>
45. Caze li, T., Knell, G. P., Abt, J., & Burkhart, S. O. (2020). Management and Treatment of Concussions via Tele-Concussion in a Pediatric Setting: Methodological Approach and Descriptive Analysis. *JMIR pediatrics and parenting*, 3(2), e19924. <https://doi.org/10.2196/19924>
46. Rivera, R. G., Roberson, S. P., Whelan, M., & Rohan, A. (2015). Concussion evaluation and management in pediatrics. *MCN. The American journal of maternal child nursing*, 40(2), 76–E6. <https://doi.org/10.1097/NMC.000000000000114>
47. Master, C. L., Curry, A. E., Pfeiffer, M. R., Metzger, K. B., Kessler, R. S., Haarbauer-Krupa, J., DePadilla, L., Greenspan, A., Breiding, M. J., & Arbogast, K. B. (2020). Characteristics of Concussion in Elementary School-Aged Children: Implications for Clinical Management. *The Journal of pediatrics*, 223, 128–135. <https://doi.org/10.1016/j.jpeds.2020.04.001>
48. Ellis, M. J., Boles, S., Derksen, V., Dawyduk, B., Amadu, A., Stelmack, K., Kowalchuk, M., & Russell, K. (2019). Evaluation of a pilot paediatric concussion telemedicine programme for northern communities in Manitoba. *International journal of circumpolar health*, 78(1), 1573163. <https://doi.org/10.1080/22423982.2019.1573163>
49. Ellis, M. J., & Russell, K. (2019). The Potential of Telemedicine to Improve Pediatric Concussion Care in Rural and Remote Communities in Canada. *Frontiers in neurology*, 10, 840. <https://doi.org/10.3389/fneur.2019.00840>
50. Lumba-Brown, A., Yeates, K. O., Sarmiento, K., Breiding, M. J., Haegerich, T. M., Gioia, G. A., Turner, M., Benzel, E. C., Suskauer, S. J., Giza, C. C., Joseph, M., Broomand, C., Weissman, B., Gordon, W., Wright, D. W., Moser, R. S., McAvoy, K., Ewing-Cobbs, L., Duhaime, A. C., Putukian, M., ... Timmons, S. D. (2018). Centers for Disease Control and Prevention Guideline on the Diagnosis and Management of Mild Traumatic Brain Injury Among Children. *JAMA pediatrics*, 172(11), e182853. <https://doi.org/10.1001/jamapediatrics.2018.2853>
51. Rosenthal, S., & Yonker, M. (2021). Telemedicine in Pediatric Headache: A Review and Practical Implementation. *Current neurology and neuroscience reports*, 21(6), 27. <https://doi.org/10.1007/s11910-021-01112-3>
52. Qubty, W., Patniyot, I., & Gelfand, A. (2018). Telemedicine in a pediatric headache clinic: A prospective survey. *Neurology*, 90(19), e1702–e1705. <https://doi.org/10.1212/WNL.0000000000005482>
53. Sharawat, I. K., & Panda, P. K. (2021). Caregiver Satisfaction and Effectiveness of Teleconsultation in Children and Adolescents With Migraine During the Ongoing COVID-19 Pandemic. *Journal of child neurology*, 36(4), 296–303. <https://doi.org/10.1177/0883073820968653>
54. Rametta, S. C., Fridinger, S. E., Gonzalez, A. K., Xian, J., Galer, P. D., Kaufman, M., Prelack, M. S., Sharif, U., Fitzgerald, M. P., Melamed, S. E., Malcolm, M. P., Kessler, S. K., Stephenson, D. J., Banwell, B. L., Abend, N. S., & Helbig, I. (2020). Analyzing 2,589 child neurology telehealth encounters necessitated by the COVID-19 pandemic. *Neurology*, 95(9), e1257–e1266. <https://doi.org/10.1212/WNL.0000000000010010>
55. Noutsios, C. D., Boisvert-Plante, V., Perez, J., Hudon, J., & Ingelmo, P. (2021). Telemedicine Applications for the Evaluation of Patients with Non-Acute Headache: A Narrative Review. *Journal of pain research*, 14, 1533–1542. <https://doi.org/10.2147/JPR.S309542>
56. Bain, J. M., Dyer, C. A., Galvin, M., Goldman, S., Selman, J., Silver, W. G., & Tom, S. E. (2021). How Providers in Child Neurology Transitioned to Telehealth During COVID-19 Pandemic. *Child neurology open*, 8, 2329048X211022976. <https://doi.org/10.1177/2329048X211022976>
57. Hsu, J. R., Mir, H., Wally, M. K., Seymour, R. B., & Orthopaedic Trauma Association Musculoskeletal Pain Task Force (2019). Clinical Practice Guidelines for Pain Management in Acute Musculoskeletal Injury. *Journal of orthopaedic trauma*, 33(5), e158–e182. <https://doi.org/10.1097/BOT.0000000000001430>
58. American Medical Association (2010). *Module 6 Pain Management: Pediatric Pain Management*. <https://files.sld.cu/anestesiologia/files/2012/01/pediatric-pain-management.pdf>
59. Boisvert-Plante, V., Noutsios, C. D., Perez, J., & Ingelmo, P. (2021). The Telemedicine-Based Pediatric Examination of the Neck and Upper Limbs: A Narrative Review. *Journal of pain research*, 14, 3173–3192. <https://doi.org/10.2147/JPR.S336168>
60. Noutsios, C. D., Boisvert-Plante, V., Laberge, E., Perez, J., & Ingelmo, P. (2021). The Telemedicine-Based Pediatric Examination of the Back and Lower Limbs: A Narrative Review. *Journal of pain research*, 14, 2959–2979. <https://doi.org/10.2147/JPR.S329173>
61. Michaleff, Z. A., Kamper, S. J., Stinson, J. N., Hestbaek, L., Williams, C. M., Campbell, P., & Dunn, K. M. (2017). Measuring Musculoskeletal Pain in Infants, Children, and Adolescents. *The Journal of orthopaedic and sports physical therapy*, 47(10), 712–730. <https://doi.org/10.2519/jospt.2017.7469>

62. Raatz, M., Ward, E. C., Marshall, J., & Burns, C. L. (2021). Evaluating the Use of Telepractice to Deliver Pediatric Feeding Assessments. *American journal of speech-language pathology*, 30(4), 1686–1699. https://doi.org/10.1044/2021_AJSLP-20-00323
63. Kerzner, B., Milano, K., MacLean, W. C., Jr, Berall, G., Stuart, S., & Chatoor, I. (2015). A practical approach to classifying and managing feeding difficulties. *Pediatrics*, 135(2), 344–353. <https://doi.org/10.1542/peds.2014-1630>
64. Arts-Rodas, D., & Benoit, D. (1998). Feeding problems in infancy and early childhood: Identification and management. *Paediatrics & child health*, 3(1), 21–27. <https://doi.org/10.1093/pch/3.1.21>
65. Jorg, H. (1997). Treatment of oropharyngeal candidiasis and candidal diaper dermatitis in neonates and infants: review and appraisal. *The Pediatric Infectious Disease Journal*, 16(9), 885-894. https://journals.lww.com/pidj/Fulltext/1997/09000/Treatment_of_oropharyngeal_candidiasis_and.13.aspx
66. American Telemedicine Association. (2016). *Practice guidelines for dermatology*. <https://www.americantelemed.org/resources/practice-guidelines-for-tele dermatology/>
67. Cartron, A. M., Aldana, P. C., & Khachemoune, A. (2021). Pediatric tele dermatology: A review of the literature. *Pediatric dermatology*, 38(1), 39–44. <https://doi.org/10.1111/pde.14479>
68. O'Connor, D.M., Jew, O.S., Perman, M.J., Castelo-Soccio, L.A., Winston, F.K., & McMahon, P.J. (2017). Diagnostic Accuracy of Pediatric Tele dermatology Using Parent-Submitted Photographs: A Randomized Clinical Trial. *JAMA Dermatol*, 153(12),1243–1248. <https://doi:10.1001/jamadermatol.2017.4280>
69. Giavina Bianchi, M., Santos, A. P., & Cordoli, E. (2019). The majority of skin lesions in pediatric primary care attention could be managed by Tele dermatology. *PloS one*, 14(12), e0225479. <https://doi.org/10.1371/journal.pone.0225479>
70. Allmon, A., Deane, K., & Martin, K. L. (2015). Common Skin Rashes in Children. *American family physician*, 92(3), 211–216. <https://www.aafp.org/afp/2015/0801/p211.html>
71. Philopena, R. L., Hanley, E. M., & Dueland-Kuhn, K. (2020). Emergency department management of rash and fever in the pediatric patient. *Pediatric emergency medicine practice*, 17(1), 1–24. <https://clinicaldecisionmaking.com/wp-content/uploads/sites/45/2020/06/Pediatric-Rash-and-Fever-EB-Medicine.pdf>
72. Paul, S., Wilkinson, R., & Routley, C. (2014). Management of respiratory tract infections in children. *Nursing: Research and Reviews*, 4. 135-148. https://www.researchgate.net/publication/270047895_Management_of_respiratory_tract_infections_in_children
73. Ray, K. N., Martin, J. M., Wolfson, D., Schweiberger, K., Schoemer, P., Cepullio, C., Iagnemma, J., & Hoberman, A. (2021). Antibiotic Prescribing for Acute Respiratory Tract Infections During Telemedicine Visits Within a Pediatric Primary Care Network. *Academic pediatrics*, 21(7), 1239–1243. <https://doi.org/10.1016/j.acap.2021.03.008>
74. Fashner, J., Ericson, K., & Werner, S. (2012). Treatment of the common cold in children and adults. *American family physician*, 86(2), 153–159. <https://www.aafp.org/afp/2012/0715/p153.html>
75. Pappalardo, M., Fanelli, U., Chiné, V., Neglia, C., Gramegna, A., Argentiero, A., & Esposito, S. (2021). Telemedicine in Pediatric Infectious Diseases. *Children (Basel, Switzerland)*, 8(4), 260. <https://doi.org/10.3390/children8040260>
76. Gan, Z., Lee, S. Y., Weiss, D. A., Van Batavia, J., Siu, S., Frazier, J., Zderic, S. A., Shukla, A. R., Srinivasan, A. K., Kolon, T. F., Zaontz, M. R., Canning, D. A., & Long, C. J. (2021). Single institution experience with telemedicine for pediatric urology outpatient visits: Adapting to COVID-19 restrictions, patient satisfaction, and future utilization. *Journal of pediatric urology*, S1477-5131(21)00280-1. Advance online publication. <https://doi.org/10.1016/j.jpuro.2021.05.012>
77. Finkelstein, J. B., Nelson, C. P., & Estrada, C. R. (2020). Ramping up telemedicine in pediatric urology- Tips for using a new modality. *Journal of pediatric urology*, 16(3), 288–289. <https://doi.org/10.1016/j.jpuro.2020.04.010>
78. Vallasciani, S., Abdo, B., Rauf, Z., Anjum, A., Ghulman, S., Alghammas, H., & AlTaweel, W. (2019). Telehealth for the Assessment of Patients Referred for Pediatric Urological Care: A Preliminary Cost Savings Analysis and Satisfaction Survey. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, 25(8), 756–761. <https://doi.org/10.1089/tmj.2018.0159>
79. Practice parameter: the diagnosis, treatment, and evaluation of the initial urinary tract infection in febrile infants and young children. American Academy of Pediatrics. Committee on Quality Improvement. Subcommittee on Urinary Tract Infection. (1999). *Pediatrics*, 103(4 Pt 1), 843–852. <https://doi.org/10.1542/peds.103.4.843>
80. Chua, M., Ming, J., Chang, S. J., Santos, J. D., Mistry, N., Silangcruz, J. M., Bayley, M., & Koyle, M. A. (2018). A critical review of recent clinical practice guidelines for pediatric urinary tract infection. *Canadian Urological Association journal = Journal de l'Association des urologues du Canada*, 12(4), 112–118. <https://doi.org/10.5489/cuaj.4796>
81. Kaufman, J., Temple-Smith, M., & Sancil, L. (2019). Urinary tract infections in children: an overview of diagnosis and management. *BMJ paediatrics open*, 3(1), e000487. <https://doi.org/10.1136/bmjpo-2019-000487>
82. Shields, T. M., & Lightdale, J. R. (2018). Vomiting in Children. *Pediatrics in review*, 39(7), 342–358. <https://doi.org/10.1542/pir.2017-0053>
83. Chandran, L., & Chitkara, M. (2008). Vomiting in children: reassurance, red flag, or referral?. *Pediatrics in review*, 29(6), 183–192. <https://doi.org/10.1542/pir.29-6-18>

84. Pappas, P. G., Kauffman, C. A., Andes, D. R., Clancy, C. J., Marr, K. A., Ostrosky-Zeichner, L., Reboli, A. C., Schuster, M. G., Vazquez, J. A., Walsh, T. J., Zaoutis, T. E., & Sobel, J. D. (2016). Clinical Practice Guideline for the Management of Candidiasis: 2016 Update by the Infectious Diseases Society of America. *Clinical infectious diseases: an official publication of the Infectious Diseases Society of America*, 62(4), e1–e50. <https://doi.org/10.1093/cid/civ933>
85. Pruthi, S., Jones, K. N., Boughey, J. C., & Simmons, P. S. (2012). Breast masses in adolescents: clinical pearls in the diagnostic evaluation. *American family physician*, 86(4), 325–326. <https://www.aafp.org/afp/2012/0815/p325.html>
86. Greydanus, D.E. & Matytsina-Quinlan, L. (2019). Breast concerns in disorders in adolescent females. *Pediatric Medicine*, 2(28). <https://pm.amegroups.com/article/view/4916/html>
87. Karaayvaz S. (2019). Clinical Evaluation of Breast in Childhood. *European journal of breast health*, 15(3), 137–140. <https://doi.org/10.5152/ejbh.2019.4745>
88. Grewal, H. & Lindholm, E. (2021, May 3). *Pediatric Breast Disorders*. Medscape. <https://emedicine.medscape.com/article/935410-overview#showall>
89. Ferries-Rowe, E., Corey, E., & Archer, J. S. (2020). Primary Dysmenorrhea: Diagnosis and Therapy. *Obstetrics and gynecology*, 136(5), 1047–1058. <https://doi.org/10.1097/AOG.0000000000004096>
90. The American College of Obstetricians and Gynecologists. (2018, December). *ACOG Committee Opinion: Dysmenorrhea and Endometriosis in the Adolescent*. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/12/dysmenorrhea-and-endometriosis-in-the-adolescent>
91. Shim, J. Y., Kaur, R., Laufer, M. R., & Grimstad, F. W. (2021). The Use of Telemedicine in Pediatric and Adolescent Gynecology. *Journal of pediatric and adolescent gynecology*, S1083-3188(21)00298-9. Advance online publication. <https://doi.org/10.1016/j.jpag.2021.09.010>
92. Weltin, A., & Etcher, L. (2021). The role of telemedicine in gynecologic healthcare: A narrative review. *The Nurse practitioner*, 46(5), 24–31. <https://doi.org/10.1097/01.NPR.0000742912.87293.02>
93. Grimes, C., Balk, E., Dieter, A., Singh, R., Wieslander, C., Jeppson, P., Aschkenazi, S., Kim, J., Truong, M., Gupta, A., Keltz, J., Hobson, D., Sheyn, D., Petruska, S., Adam, G., & Meriwether, K. (2020). Guidance for gynecologists utilizing telemedicine during COVID-19 pandemic based on expert consensus and rapid literature reviews. *International Journal of Gynecology & Obstetrics* 150(3), 288-298. <https://doi.org/10.1002/ijgo.13276>
94. Cohen, M. A., Powell, A. M., Coleman, J. S., Keller, J. M., Livingston, A., & Anderson, J. R. (2020). Special ambulatory gynecologic considerations in the era of coronavirus disease 2019 (COVID-19) and implications for future practice. *American journal of obstetrics and gynecology*, 223(3), 372–378. <https://doi.org/10.1016/j.ajog.2020.06.006>
95. Department of Health and Human Services. (2020, April 6). *Providing effective care and prevention when facility-based services and in-person patient-clinician contact is limited*. Centers for Disease Control and Prevention. <https://www.cdc.gov/std/dstdp/DCL-STDTreatment-COVID19-04062020.pdf>
96. Nelson, E. L., Duncan, A. B., Peacock, G., & Bui, T. (2012). Telemedicine and adherence to national guidelines for ADHD evaluation: a case study. *Psychological services*, 9(3), 293–297. <https://doi.org/10.1037/a0026824>
97. Milne Wenderlich, A., Li, R., Baldwin, C. D., Contento, N., Herendeen, N., & Rand, C. M. (2021). A Quality Improvement Initiative to Improve Attention-Deficit/Hyperactivity Disorder Follow-Up Rates Using School-Based Telemedicine. *Academic pediatrics*, 21(7), 1253–1261. <https://doi.org/10.1016/j.acap.2021.04.004>
98. Wolraich, M. L., Hagan, J. F., Jr, Allan, C., Chan, E., Davison, D., Earls, M., Evans, S. W., Flinn, S. K., Froehlich, T., Frost, J., Holbrook, J. R., Lehmann, C. U., Lessin, H. R., Okechukwu, K., Pierce, K. L., Winner, J. D., Zurhellen, W., & SUBCOMMITTEE ON CHILDREN AND ADOLESCENTS WITH ATTENTION-DEFICIT/HYPERACTIVE DISORDER (2019). Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. *Pediatrics*, 144(4), e20192528. <https://doi.org/10.1542/peds.2019-2528>
99. Tse, Y. J., McCarty, C. A., Stoep, A. V., & Myers, K. M. (2015). Teletherapy delivery of caregiver behavior training for children with attention-deficit hyperactivity disorder. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, 21(6), 451–458. <https://doi.org/10.1089/tmj.2014.0132>
100. Nkoy, F. L., Fassl, B. A., Wilkins, V. L., Johnson, J., Unsicker, E. H., Koopmeiners, K. J., Jensen, A., Frazier, M., Gaddis, J., Malmgren, L., Williams, S., Oldroyd, H., Greene, T., Sheng, X., Uchida, D. A., Maloney, C. G., & Stone, B. L. (2019). Ambulatory Management of Childhood Asthma Using a Novel Self-management Application. *Pediatrics*, 143(6), e20181711. <https://doi.org/10.1542/peds.2018-1711>
101. MacGeorge, C. A., Lintzenich Andrews A., & King, K. L. (2021). Telehealth for Pediatric Asthma. In D. W. Ford & S. R. Valenta (Eds.), *Telemedicine: Overview and application in pulmonary, critical care, and sleep medicine* (pp. 129-141). Humana Press. <https://doi.org/10.1007/978-3-030-64050-7>
102. Culmer, N., Smith, T., Stager, C., Wright, A., Burgess, K., Johns, S., Watt, M., & Desch, M. (2020). Telemedical Asthma Education and Health Care Outcomes for School-Age Children: A Systematic Review. *The journal of allergy and clinical immunology. In practice*, 8(6), 1908–1918. <https://doi.org/10.1016/j.jaip.2020.02.005>
103. Halterman, J. S., Fagnano, M., Tajon, R. S., Tremblay, P., Wang, H., Butz, A., Perry, T. T., & McConnochie, K. M. (2018). Effect of the School-Based Telemedicine Enhanced Asthma Management (SB-TEAM) Program on Asthma Morbidity: A Randomized Clinical Trial. *JAMA pediatrics*, 172(3), e174938. <https://doi.org/10.1001/jamapediatrics.2017.4938>

104. Bian, J., Cristaldi, K. K., Summer, A. P., Su, Z., Marsden, J., Mauldin, P. D., & McElligott, J. T. (2019). Association of a School-Based, Asthma-Focused Telehealth Program With Emergency Department Visits Among Children Enrolled in South Carolina Medicaid. *JAMA pediatrics*, 173(11), 1041–1048. <https://doi.org/10.1001/jamapediatrics.2019.3073>
105. Davies, B., Kenia, P., Nagakumar, P., & Gupta, A. (2021). Paediatric and adolescent asthma: A narrative review of telemedicine and emerging technologies for the post-COVID-19 era. *Clinical and experimental allergy : journal of the British Society for Allergy and Clinical Immunology*, 51(3), 393–401. <https://doi.org/10.1111/cea.13836>
106. van den Wijngaart, L. S., Roukema, J., Boehmer, A., Brouwer, M. L., Huguen, C., Niers, L., Sprij, A. J., Rijkers-Mutsaerts, E., Rottier, B. L., Donders, A., Verhaak, C. M., Pijnenburg, M. W., & Merkus, P. (2017). A virtual asthma clinic for children: fewer routine outpatient visits, same asthma control. *The European respiratory journal*, 50(4), 1700471. <https://doi.org/10.1183/13993003.00471-2017>
107. Liptak, G. S., Murphy, N. A., & Council on Children With Disabilities (2011). Providing a primary care medical home for children and youth with cerebral palsy. *Pediatrics*, 128(5), e1321–e1329. <https://doi.org/10.1542/peds.2011-1468>
108. Patel, D. R., Neelakantan, M., Pandher, K., & Merrick, J. (2020). Cerebral palsy in children: a clinical overview. *Translational pediatrics*, 9(Suppl 1), S125–S135. <https://doi.org/10.21037/tp.2020.01.01>
109. Ben-Pazi, H., Beni-Adani, L., & Lamdan, R. (2020). Accelerating Telemedicine for Cerebral Palsy During the COVID-19 Pandemic and Beyond. *Frontiers in neurology*, 11, 746. <https://doi.org/10.3389/fneur.2020.00746>
110. Enochs, C., Filbrun, A.G., Iwanicki, C., Moraniec, H., Lehrmann, J., Stiffler, J., Dagher, S., Tapley, C., Phan, H., Raines, R., & Nasr, S.Z. (2021). Development of an interdisciplinary telehealth care model in a pediatric cystic fibrosis center. *Telemedicine Reports*, 2(1), 224–232. <http://doi.org/10.1089/tmr.2021.0021>
111. Beşer, Ö. F., Karaboğa, E., Hepkaya, E., Kılınç Sakallı, A. A., Dönmez Türkmen, A., Dilek, T. D., Çokuğraş, H., & Çullu Çokuğraş, F. (2021). The Role of Telehealth Services in Children with Cystic Fibrosis During Coronavirus Disease 2019 Outbreak. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, 10.1089/tmj.2021.0228. Advance online publication. <https://doi.org/10.1089/tmj.2021.0228>
112. Tagliente, I., Trieste, L., Solvoll, T., Murgia, F., & Bella, S. (2016). Telemonitoring in Cystic Fibrosis: A 4-year Assessment and Simulation for the Next 6 Years. *Interactive journal of medical research*, 5(2), e11. <https://doi.org/10.2196/ijmr.5196>
113. Jaclyn, D., Andrew, N., Ryan, P., Julianna, B., Christopher, S., Nauman, C., Powers, M., Gregory S, S., & George M, S. (2021). Patient and family perceptions of telehealth as part of the cystic fibrosis care model during COVID-19. *Journal of cystic fibrosis : official journal of the European Cystic Fibrosis Society*, 20(3), e23–e28. <https://doi.org/10.1016/j.jcf.2021.03.009>
114. Perkins, R. C., Davis, J., NeSmith, A., Bailey, J., Powers, M. R., Chaudary, N., Siracusa, C., Uluer, A., Solomon, G. M., & Sawicki, G. S. (2021). Favorable Clinician Acceptability of Telehealth as Part of the Cystic Fibrosis Care Model during the COVID-19 Pandemic. *Annals of the American Thoracic Society*, 18(9), 1588–1592. <https://doi.org/10.1513/AnnalsATS.202012-1484RL>
115. Vagg, T., Shanthikumar, S., Morrissy, D., Chapman, W. W., Plant, B. J., & Ranganathan, S. (2021). Telehealth and virtual health monitoring in cystic fibrosis. *Current opinion in pulmonary medicine*, 27(6), 544–553. <https://doi.org/10.1097/MCP.0000000000000821>
116. Cystic Fibrosis Foundation. (2009, December). *Management of CRMS in first two years and beyond clinical care guidelines*. <https://www.cff.org/Care/Clinical-Care-Guidelines/Age-Specific-Clinical-Care-Guidelines/Management-of-CRMS-in-First-2-Years-and-Beyond-Clinical-Care-Guidelines/>
117. Cystic Fibrosis Foundation, Borowitz, D., Robinson, K. A., Rosenfeld, M., Davis, S. D., Sabadosa, K. A., Spear, S. L., Michel, S. H., Parad, R. B., White, T. B., Farrell, P. M., Marshall, B. C., & Accurso, F. J. (2009). Cystic Fibrosis Foundation evidence-based guidelines for management of infants with cystic fibrosis. *The Journal of pediatrics*, 155(6 Suppl), S73–S93. <https://doi.org/10.1016/j.jpeds.2009.09.001>
118. Balkhi, A. M., Reid, A. M., Westen, S. C., Olsen, B., Janicke, D. M., & Geffken, G. R. (2015). Telehealth interventions to reduce management complications in type 1 diabetes: A review. *World journal of diabetes*, 6(3), 371–379. <https://doi.org/10.4239/wjd.v6.i3.371>
119. Crossen, S., Glaser, N., Sauers-Ford, H., Chen, S., Tran, V., & Marcin, J. (2020). Home-based video visits for pediatric patients with poorly controlled type 1 diabetes. *Journal of telemedicine and telecare*, 26(6), 349–355. <https://doi.org/10.1177/1357633X19828173>
120. Wood, C. L., Clements, S. A., McFann, K., Slover, R., Thomas, J. F., & Wadwa, R. P. (2016). Use of Telemedicine to Improve Adherence to American Diabetes Association Standards in Pediatric Type 1 Diabetes. *Diabetes technology & therapeutics*, 18(1), 7–14. <https://doi.org/10.1089/dia.2015.0123>
121. De Guzman, K. R., Snoswell, C. L., Taylor, M. L., Senanayake, B., Haydon, H. M., Batch, J. A., Smith, A. C., & Caffery, L. J. (2020). A Systematic Review of Pediatric Telediabetes Service Models. *Diabetes technology & therapeutics*, 22(8), 623–638. <https://doi.org/10.1089/dia.2019.0489>
122. Guttman-Bauman, I., Kono, J., Lin, A. L., Ramsey, K. L., & Boston, B. A. (2018). Use of Telehealth Videoconferencing in Pediatric Type 1 Diabetes in Oregon. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, 24(1), 86–88. <https://doi.org/10.1089/tmj.2017.0072>

123. Smith, A., & Harris, C. (2018). Type 1 Diabetes: Management Strategies. *American family physician*, 98(3), 154–162. <https://www.aafp.org/afp/2018/0801/p154.html>
124. Xu, H., & Verre, M. C. (2018). Type 2 Diabetes Mellitus in Children. *American family physician*, 98(9), 590–594. <https://www.aafp.org/afp/2018/1101/p590.html>
125. Shahidullah, J. D., Azad, G., Mezher, K. R., McClain, M. B., & McIntyre, L. L. (2018). Linking the Medical and Educational Home to Support Children With Autism Spectrum Disorder: Practice Recommendations. *Clinical pediatrics*, 57(13), 1496–1505. <https://doi.org/10.1177/0009922818774344>
126. Hyman, S. L., Levy, S. E., Myers, S. M., & COUNCIL ON CHILDREN WITH DISABILITIES, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS (2020). Identification, Evaluation, and Management of Children With Autism Spectrum Disorder. *Pediatrics*, 145(1), e20193447. <https://doi.org/10.1542/peds.2019-3447>
127. Solomon, D., & Soares, N. (2020). Telehealth Approaches to Care Coordination in Autism Spectrum Disorder. *Interprofessional Care Coordination for Pediatric Autism Spectrum Disorder: Translating Research into Practice*, 289–306. https://doi.org/10.1007/978-3-030-46295-6_19
128. Ellison, K. S., Guidry, J., Picou, P., Adenuga, P., & Davis, T. E., 3rd (2021). Telehealth and Autism Prior to and in the Age of COVID-19: A Systematic and Critical Review of the Last Decade. *Clinical child and family psychology review*, 24(3), 599–630. <https://doi.org/10.1007/s10567-021-00358-0>
129. Langkamp, D. L., McManus, M. D., & Blakemore, S. D. (2015). Telemedicine for children with developmental disabilities: a more effective clinical process than office-based care. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, 21(2), 110–114. <https://doi.org/10.1089/tmj.2013.0379>
130. Curtin, M. J., Willis, D. R., & Enneking, B. (2019). Specific Learning Disabilities: The Family Physician's Role. *American family physician*, 100(10), 628–635. <https://www.aafp.org/afp/2019/1115/p628.html>
131. Santoro, S. L., Donelan, K., Haugen, K., Oreskovic, N. M., Torres, A., & Skotko, B. G. (2021). Transition to virtual clinic: Experience in a multidisciplinary clinic for Down syndrome. *American journal of medical genetics. Part C, Seminars in medical genetics*, 187(1), 70–82. <https://doi.org/10.1002/ajmg.c.31876>
132. Choi, H., & Van Riper, M. (2020). mHealth Family Adaptation Intervention for Families of Young Children with Down Syndrome: A Feasibility Study. *Journal of pediatric nursing*, 50, e69–e76. <https://doi.org/10.1016/j.pedn.2019.03.010>
133. Bull, M. J., & Committee on Genetics (2011). Health supervision for children with Down syndrome. *Pediatrics*, 128(2), 393–406. <https://doi.org/10.1542/peds.2011-1605>
134. Saenz R. B. (1999). Primary care of infants and young children with Down syndrome. *American family physician*, 59(2), 381–396. <https://www.aafp.org/afp/1999/0115/p381.html>
135. Rametta, S. C., Fridinger, S. E., Gonzalez, A. K., Xian, J., Galer, P. D., Kaufman, M., Prelack, M. S., Sharif, U., Fitzgerald, M. P., Melamed, S. E., Malcolm, M. P., Kessler, S. K., Stephenson, D. J., Banwell, B. L., Abend, N. S., & Helbig, I. (2020). Analyzing 2,589 child neurology telehealth encounters necessitated by the COVID-19 pandemic. *Neurology*, 95(9), e1257–e1266. <https://doi.org/10.1212/WNL.0000000000010010>
136. Sattar, S., & Kuperman, R. (2020). Telehealth in pediatric epilepsy care: A rapid transition during the COVID-19 pandemic. *Epilepsy & behavior : E&B*, 111, 107282. <https://doi.org/10.1016/j.yebeh.2020.107282>
137. Fesler, J. R., Stanton, S., Merner, K., Ross, L., McGinley, M. P., Bena, J., Rasmussen, P., Najm, I., & Punia, V. (2020). Bridging the gap in epilepsy care: A single-center experience of 3700 outpatient tele-epilepsy visits. *Epilepsia*, 61(8), e95–e100. <https://doi.org/10.1111/epi.16619>
138. Klotz, K. A., Borlot, F., Scantlebury, M. H., Payne, E. T., Appendino, J. P., Schönberger, J., & Jacobs, J. (2021). Telehealth for Children With Epilepsy Is Effective and Reduces Anxiety Independent of Healthcare Setting. *Frontiers in pediatrics*, 9, 642381. <https://doi.org/10.3389/fped.2021.642381>
139. Liu, G., Slater, N., & Perkins, A. (2017). Epilepsy: Treatment Options. *American family physician*, 96(2), 87–96. <https://www.aafp.org/afp/2017/0715/p87.html>
140. Wensel, T.M. & Williams, S. (2010). Pediatric Hypertension: A review of diagnosis and treatment. *U.S. Pharmacist*, 35(3), HS5–HS15. <https://www.uspharmacist.com/article/pediatric-hypertension-a-review-of-diagnosis-and-treatment>
141. Flynn, J. T., Kaelber, D. C., Baker-Smith, C. M., Blowey, D., Carroll, A. E., Daniels, S. R., de Ferranti, S. D., Dionne, J. M., Falkner, B., Flinn, S. K., Gidding, S. S., Goodwin, C., Leu, M. G., Powers, M. E., Rea, C., Samuels, J., Simasek, M., Thaker, V. V., Urbina, E. M., & SUBCOMMITTEE ON SCREENING AND MANAGEMENT OF HIGH BLOOD PRESSURE IN CHILDREN (2017). Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and Adolescents. *Pediatrics*, 140(3), e20171904. <https://doi.org/10.1542/peds.2017-1904>
142. Raina, R., Mahajan, Z., Sharma, A., Chakraborty, R., Mahajan, S., Sethi, S. K., Kapur, G., & Kaelber, D. (2020). Hypertensive Crisis in Pediatric Patients: An Overview. *Frontiers in pediatrics*, 8, 588911. <https://doi.org/10.3389/fped.2020.588911>
143. Riley, M., Hernandez, A. K., & Kuznia, A. L. (2018). High Blood Pressure in Children and Adolescents. *American family physician*, 98(8), 486–494. <https://www.aafp.org/afp/2018/1015/p486.html>
144. Chowdhury, D., Hope, K. D., Arthur, L. C., Weinberger, S. M., Ronai, C., Johnson, J. N., & Snyder, C. S. (2020). Telehealth for Pediatric Cardiology Practitioners in the Time of COVID-19. *Pediatric cardiology*, 41(6), 1081–1091. <https://doi.org/10.1007/s00246-020-02411-1>

145. Bedra, M., & Finkelstein, J. (2015). Introducing Home Blood Pressure Telemonitoring for Children with Hypertension. *Studies in health technology and informatics*, 216, 889. <https://pubmed.ncbi.nlm.nih.gov/26262191/>
146. Joshi, C. N., Yang, M. L., Eschbach, K., Tong, S., Jacobson, M. P., Stillman, C., Kropp, A. E., Shea, S. A., Frunzi, G. M., Thomas, J. F., & Olson, C. A. (2021). Quality and Safety Analysis of 2,999 Telemedicine Encounters During the COVID-19 Pandemic. *Neurology. Clinical practice*, 11(2), e73–e82. <https://doi.org/10.1212/CPJ.0000000000001025>
147. Oskoui, M., Pringsheim, T., Billingshurst, L., Potrebic, S., Gersz, E. M., Gloss, D., Holler-Managan, Y., Leininger, E., Licking, N., Mack, K., Powers, S. W., Sowell, M., Victorio, M. C., Yonker, M., Zanitsch, H., & Hershey, A. D. (2019). Practice guideline update summary: Pharmacologic treatment for pediatric migraine prevention: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology and the American Headache Society. *Neurology*, 93(11), 500–509. <https://doi.org/10.1212/WNL.0000000000008105>
148. Oskoui, M., Pringsheim, T., Holler-Managan, Y., Potrebic, S., Billingshurst, L., Gloss, D., Hershey, A. D., Licking, N., Sowell, M., Victorio, M. C., Gersz, E. M., Leininger, E., Zanitsch, H., Yonker, M., & Mack, K. (2019). Practice guideline update summary: Acute treatment of migraine in children and adolescents: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology and the American Headache Society. *Neurology*, 93(11), 487–499. <https://doi.org/10.1212/WNL.0000000000008095>
149. Moorman, E. L., Koskela-Staples, N. C., Mathai, B. B., Fedele, D. A., & Janicke, D. M. (2021). Pediatric Obesity Treatment via Telehealth: Current Evidence and Future Directions. *Current obesity reports*, 10(3), 371–384. <https://doi.org/10.1007/s13679-021-00446-w>
150. DeSilva, S., & Vaidya, S. S. (2021). The Application of Telemedicine to Pediatric Obesity: Lessons from the Past Decade. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, 27(2), 159–166. <https://doi.org/10.1089/tmj.2019.0314>
151. Whitley, A., & Yahia, N. (2021). Efficacy of Clinic-Based Telehealth vs. Face-to-Face Interventions for Obesity Treatment in Children and Adolescents in the United States and Canada: A Systematic Review. *Childhood obesity (Print)*, 17(5), 299–310. <https://doi.org/10.1089/chi.2020.0347>
152. Lukenbill, T., San Giovanni, C. B., Simpson, A., Chew, M., Basco, W., & Roberts, J. (2021). Assessing anthropometric and laboratory outcomes of a paediatric telehealth weight management program. *Journal of telemedicine and telecare*, 1357633X20986022. Advance online publication. <https://doi.org/10.1177/1357633X20986022>
153. American Academy of Pediatrics Institute for Healthy Childhood Weight. (2015). *Algorithm for the Assessment and Management of Childhood Obesity in Patients 2 Years and Older*. https://ihcw.aap.org/Documents/Assessment%20%20and%20Management%20of%20Childhood%20Obesity%20Algorithm_FINAL.pdf
154. Cuda, S. E., & Censani, M. (2019). Pediatric Obesity Algorithm: A Practical Approach to Obesity Diagnosis and Management. *Frontiers in pediatrics*, 6, 431. <https://doi.org/10.3389/fped.2018.00431>
155. Moran R. (1999). Evaluation and treatment of childhood obesity. *American family physician*, 59(4), 861–873. <https://pubmed.ncbi.nlm.nih.gov/10068710/>
156. Section on Hematology/Oncology Committee on Genetics, & American Academy of Pediatrics (2002). Health supervision for children with sickle cell disease. *Pediatrics*, 109(3), 526–535. <https://doi.org/10.1542/peds.109.3.526>
157. Noronha, S. A., Sadreameli, S. C., & Strouse, J. J. (2016). Management of Sickle Cell Disease in Children. *Southern medical journal*, 109(9), 495–502. <https://doi.org/10.14423/SMJ.0000000000000523>
158. Shaner, S., Hilliard, L., Howard, T., Pernell, B., Bhatia, S., & Lebensburger, J. (2021). Impact of telehealth visits on hydroxyurea response in sickle cell anemia. *Pediatric blood & cancer*, 68(12), e29354. <https://doi.org/10.1002/pbc.29354>
159. Cen, S. S., Yu, J., Wang, Q., Deeb, W., Wang, K. L., Shukla, A. W., Malaty, I., Ramirez-Zamora, A., Zhang, J. G., Hu, W., & Meng, F. G. (2020). Multidisciplinary Telemedicine Care for Tourette Syndrome: Minireview. *Frontiers in neurology*, 11, 573576. <https://doi.org/10.3389/fneur.2020.573576>
160. Himle, M. B., Freitag, M., Walther, M., Franklin, S. A., Ely, L., & Woods, D. W. (2012). A randomized pilot trial comparing videoconference versus face-to-face delivery of behavior therapy for childhood tic disorders. *Behaviour research and therapy*, 50(9), 565–570. <https://doi.org/10.1016/j.brat.2012.05.009>
161. Yadegar, M., Guo, S., Ricketts, E. J., & Zinner, S. H. (2019). Assessment and Management of Tic Disorders in Pediatric Primary Care Settings. *Current developmental disorders reports*, 6(3), 159–172. <https://doi.org/10.1007/s40474-019-00168-8>
162. Bagheri, M. M., Kerbeshian, J., & Burd, L. (1999). Recognition and management of Tourette's syndrome and tic disorders. *American family physician*, 59(8), 2263–2274. <https://www.aafp.org/afp/1999/0415/p2263.html>
163. Zero Suicide Institute. *Telehealth and suicide care during the COVID-19 pandemic*. <https://zerosuicide.edc.org/sites/default/files/Telehealth%20and%20Suicide%20Care%20During%20the%20COVID-19%20Pandemic.pdf>
164. Wehry, A. M., Beesdo-Baum, K., Hennelly, M. M., Connolly, S. D., & Strawn, J. R. (2015). Assessment and treatment of anxiety disorders in children and adolescents. *Current psychiatry reports*, 17(7), 52. <https://doi.org/10.1007/s11920-015-0591-z>

165. Panganiban, M., Yeow, M., Zugibe, K., & Geisler, S. L. (2019). Recognizing, diagnosing, and treating pediatric generalized anxiety disorder. *JAAPA : official journal of the American Academy of Physician Assistants*, 32(2), 17–21. <https://doi.org/10.1097/01.JAA.0000552719.98489.75>
166. Selph, S. S., & McDonagh, M. S. (2019). Depression in Children and Adolescents: Evaluation and Treatment. *American family physician*, 100(10), 609–617. <https://www.aafp.org/afp/2019/1115/p609.html>
167. Myers, K., Nelson, E. L., Rabinowitz, T., Hilty, D., Baker, D., Barnwell, S. S., Boyce, G., Bufka, L. F., Cain, S., Chui, L., Comer, J. S., Craddock, C., Goldstein, F., Johnston, B., Krupinski, E., Lo, K., Luxton, D. D., McSwain, S. D., McWilliams, J., North, S., ... Bernard, J. (2017). American Telemedicine Association Practice Guidelines for Telemental Health with Children and Adolescents. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, 23(10), 779–804. <https://doi.org/10.1089/tmj.2017.0177>
168. Cunningham, N. R., Ely, S. L., Barber Garcia, B. N., & Bowden, J. (2021). Addressing Pediatric Mental Health Using Telehealth During Coronavirus Disease-2019 and Beyond: A Narrative Review. *Academic pediatrics*, 21(7), 1108–1117. <https://doi.org/10.1016/j.acap.2021.06.002>
169. Frank, H. E., Grumbach, N. M., Conrad, S. M., Wheeler, J., & Wolff, J. (2021). Mental health services in primary care: Evidence for the feasibility of telehealth during the COVID-19 pandemic. *Journal of affective disorders reports*, 5, 100146. <https://doi.org/10.1016/j.jadr.2021.100146>
170. Barney, A., Buckelew, S., Mesheriakova, V., & Raymond-Flesch, M. (2020). The COVID-19 Pandemic and Rapid Implementation of Adolescent and Young Adult Telemedicine: Challenges and Opportunities for Innovation. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, 67(2), 164–171. <https://doi.org/10.1016/j.jadohealth.2020.05.006>
171. Harrington, B. C., Jimerson, M., Haxton, C., & Jimerson, D. C. (2015). Initial evaluation, diagnosis, and treatment of anorexia nervosa and bulimia nervosa. *American family physician*, 91(1), 46–52. <https://www.aafp.org/afp/2015/0101/p46.html>
172. Hornberger, L. L., Lane, M. A., & COMMITTEE ON ADOLESCENCE (2021). Identification and Management of Eating Disorders in Children and Adolescents. *Pediatrics*, 147(1), e2020040279. <https://doi.org/10.1542/peds.2020-040279>