

To: Telehealth Nurses Using Pediatric Telehealth Triage Protocols: Office-Hours

From: Bart Schmitt, MD, FAAP (bart.schmitt@stcc-triage.com)

Kelli Massaro, RN (kelli.massaro@stcc-triage.com)

Lisa Swerczek, RN (lisa.swerczek@stcc-triage.com)

Date: July 20, 2021

Re: 2021 Major Changes in the Pediatric Clinical Content: A Self-Study Guide for Nurses

Yearly updates and new topics bring with them the responsibility to read and study the major changes in advance of implementation. Trying to learn new material while managing an actual call can be difficult. We hope this summary of changes will serve as a self-study guide, direct your reading and help you transition to the 2021 pediatric clinical content.

New Pediatric Protocols

The 2021 version contains 250 active protocols. This version contains 2 new protocols. This year, we have **inactivated** the “No Protocol - Well Child”, so now there is just one “No Protocol Available” for this content set. During the past year, the COVID-19 protocols were updated six times, including minor changes for this release.

Read, or at least scan, all **New Pediatric Protocols** listed below:

- Food Allergy - Diagnosed
- Hiccups

Title Changes to Existing Pediatric Protocols

There are 5 existing protocols that we made minor changes to the title:

| 2021 Title | 2020 Title |
|---------------------------|---------------------------------|
| Food Reactions - General | Food Reactions |
| No Protocol Available | No Protocol Call – Sick Child |
| Scarlet Fever Suspected | Scarlet Fever |
| STI Exposure or Questions | STD (STI) Exposure or Questions |
| Substance Use or Problems | Substance Abuse |

See More Appropriate Protocol (SMAP) Prompts

- Updated with title changes as above
- Added SMAPs for our new protocols where appropriate

New References

- Every year, new references from the pediatric literature are reviewed and incorporated into the clinical content. A new reference list for 2021 is contained in the Supplemental Information folder.

New Search (Key) Words

- Every year, new search words are added to existing protocols based upon repeated search testing.
- If you are uncertain which protocol is best for your patient, please enter a search word. The keyword search system has become very selective and should meet your needs.
- Do not use the “No Protocol Available” protocol without first trying at least two search words.

Indexes for Pediatric Protocols

There are 4 general indexes for these protocols. In addition, there is also a Behavioral Health index that specifically lists behavioral/mental health protocols. Indexes are contained in the Supplemental Information folder. Reviewing them may help you improve your protocol selection skills.

- Alphabetical Index
- Anatomical Index
- Behavioral Health Index
- System Index
- Type Index

Pediatric Care Advice (PCA) Handouts

- PCAs are handouts that cover what callers want to know about specific symptoms and some common diseases.
- They are written at a 6th grade or lower health literacy level.
- Many triage protocols have one or more matching PCA (s).
- They are completely compatible with the advice in the triage protocols.
- You can send the PCA to the caller at the end of your call.
- This process should reduce your call times. Reason: You can address the most pertinent Care Advice live and provide non-essential information via the PCA.
- Even more important, they help the caller with normal memory limitations and prevent repeat calls about forgotten advice.
- Ask your software vendor for information on how to access these PCAs.
- The existing PCA handouts have already been updated for 2021 to match changes in the Office Hours protocols.
- New PCA topics have been added. These PCAs will be released in July 2021.

Universal Changes

Disposition Wording and Care Advice: We changed some of the standard disposition titles and the associated care advice for the Office Hours 2021 adult/pediatric release. This updated 2021 Disposition table in our database was previously released with the COVID-19 updates in March, 2021. We have not made any further changes. A standard list of our current dispositions are found in the Office Hours supplement materials folder under “Dispositions”.

Telemedicine Tagging of Triage Questions

The 2021 update of the Pediatric (and Adult) Office Hours Telehealth Triage Content includes telemedicine tagging to support the hand-off from nurse triager to a telemedicine provider. We have marked all the Triage Assessment Questions (TAQs) with our recommendation for being eligible (Yes) or not eligible (No) for telemedicine care. Telemedicine eligible means that a patient with a positive response to this TAQ usually can be evaluated and managed in a video (virtual) telemedicine encounter without referral to another site of care. Our telemedicine eligible tagging decisions were based on the following goals:

- **Safety:** Patient safety was our highest priority. The telemedicine encounter must meet standard of care.
 - **Efficacy:** A virtual visit is considered effective if the diagnosis and treatment capabilities are comparable to that of an in-person visit.
 - **Conservative:** When in doubt, we tagged specific TAQs as not eligible (No). That allows individual HCPs and health systems to expand upon our recommended indications for telemedicine encounters.
-

Telemedicine Alternate Dispositions and Care Advice: Telemedicine alternate dispositions and care advice were added to the database for 2021. Please see the excerpt from Dr. Thompson’s adult Office Hours nurse letter regarding “Telemedicine Support” (attached) for more information. The reports that list the telemedicine dispositions and care advice are found in the Office Hours supplement materials folder under “Dispositions”.

Important Note Regarding Redlines Showing Changes from Previous Versions

The redline Word documents were created using *Workshare Compare*. Redline files can be challenging to read, especially if substantial changes have been made. Be careful to cross-reference and refer to the un-redlined, updated PDF file. *If you have any doubt, review and cross-check using the updated 2021 PDF version.*

Protocol Specific Changes

Abdominal Pain protocols

Added caution to *Background Information* and to the *Definition* to rule out appendicitis. Reason: it's the number 1 missed serious diagnosis in pediatric telephone triage.

Appendicitis: How to Recognize

- Symptoms: periumbilical pain for 4-12 hours
- Then constant localized RLQ pain
- Movement: increases pain (prefers to lie still)
- Position: lies on side, hips flexed, curled up
- Walking: Refuses or walks bent over and holding lower abdomen. Walking in a guarded way is also suggestive of appendicitis.
- Jumping or hopping: pain increases
- For most of the above symptoms (such as doesn't want to move, doesn't want to walk or pain in RLQ), refer in now even if vomiting is the main symptom
- If caller brings up "appendicitis", the patient has suspected appendicitis and needs to be seen, unless the triager proves the patient has none of the above symptoms.

Back Pain

Changed *definition* to exclude back pain overlying the rib cage posteriorly and also in children with respiratory symptoms. These complaints should be triaged using the Chest Pain protocol.

Added *See More Appropriate Protocol* prompt:

Upper back pain and associated cough, pain increased with breathing, or any trouble breathing

Go to Protocol: Chest Pain (Pediatric)

Asthma Attack

- Our QI program determined that children younger than 2 are at higher risk for hospitalization. As a result, we have added a *triage question* for young children under 2 to be seen as follows:

Go to ED Now (or PCP triage)

Difficulty breathing (e.g., retractions, rapid breathing, tight wheezing) and age < 2 years old

Reason: high-risk age for hospital admission

- Also added *background information* regarding the use of NSAIDs in the pediatric population. They are generally safe to use in children with asthma. Resource: pediatric asthma specialist.

Contraception - IUD

Changed *triage questions* re: the length of time to replace the Mirena and Liletta IUDs. Mirena is now 6 years (formerly 5) and Liletta is now 6 years (formerly 4).

Constipation

Please review this protocol. Reason: major changes in triage and care advice in an attempt to reduce unnecessary referrals. Example: Many parents perceive normal straining in young infants who are learning how to relax the anal sphincter as “constipation”.

COVID-19 protocols

- Vaccine information and FAQs have been added in COVID-19 Exposure *Background Information*. (released previously June 2021)
- We have not made significant changes to these 2 protocols with this annual update.

Diarrhea

New triage question and care advice added for 1 or 2 loose stools:

Home Care

1 or 2 loose or watery stools and new onset and child acts normal

Reason: Can be normal with diet changes and not related to illness

Eye-Chemical

After consultation with Poison Center, we have determined that laundry or dish detergent alkali pod contents do not usually cause harm if the eye is promptly irrigated. They prefer to decide which patients may need to be examined. So, we added the following triage question:

Call Poison Center Now

Detergent pod contents

FIRST AID: Irrigate eye immediately before calling Poison Center.

Head Injury

Added *triage question* and edited *background information* regarding bilateral black eyes (raccoon eyes) to also include one black eye.

Black eye(s) and onset within 48 hours of head injury

Immunization Reactions

- *Triage question* added for unusual or severe systemic reaction from the COVID-19 vaccine with this release.
- Major *triage* and *care advice* changes were done with the early release of this protocol in June.
- *Triage questions* to rule out cellulitis were moved from See within 24 Hours to Call PCP within 24 hours. Reason: most of these are normal local reactions to the vaccine, not cellulitis.
- *Triage question* and *care advice* added for COVID-19 Vaccines.

- Existing *triage question* regarding the Rotovirus vaccine and intussusception rewritten:
 - Rotavirus vaccine AND vomiting **3 or more times**, bloody diarrhea or severe crying.
- Existing *care advice* for treating normal local reactions seen with most vaccines was changed to the following:
 - HEAT: For redness and pain, apply a heating pad or a warm wet washcloth to the area for up to 20 minutes. Repeat as needed. Reason: will increase blood flow to the area.
- Please read the following from *Background Information* that explains Dr. Schmitt's reasoning:

Vaccine Injection Site Redness and Pain: Advice to Apply Heat Rather than Cold

- This guideline now recommends applying warm compresses or a heating pad for local vaccine reactions. This advice applies to local reactions from all injected vaccines. Reason: The goal is to increase blood flow to the injection site. Blood brings lymphocytes and other immune helpers. Warmth may speed up the release of the vaccine into the lymphatic system, making it less concentrated at one site. Heat speeds healing of inflamed tissues.
- Boils and Cellulitis: Skin infections are examples where applying heat is standard advice.
- Sports Injuries and Ice: The advice to treat with ice or cold compresses comes from how sports injuries are generally treated. But injuries are different. Usually there is some bleeding and cold is thought to prevent the bleeding from recurring. Injuries cause muscle or other tissue damage. Cold is thought to reduce swelling of the damaged tissue. Neither of these reasons apply to vaccine injections. In addition, sports medicine specialists and athletic trainers recommend switching to heat after the first 24 to 48 hours to speed healing.
- Research: There is no study comparing the application of heat versus cold for local vaccine reactions. Facts from pathophysiology and the normal inflammatory response would support the use of heat.
- Physician Preferences: If the caller states that their PCP recommends treating with cold, the triage nurse should support the PCP's preferred advice. Also, office-based pediatricians and call center medical directors can customize the care advice in this guideline for their facility.

Consultants for Heat versus Cold for Vaccine Injection Reactions

This approach of applying heat to local vaccine reactions was reviewed and is supported by the following vaccine specialists:

- Paul Offit MD, Professor of Pediatrics, pediatric infectious disease specialist, medical director of the Vaccine Education Center at Children's Hospital of Philadelphia.

- Sean O'Leary MD, Professor of Pediatrics, pediatric infectious diseases specialist, Children's Hospital Colorado, and Vice Chair of the Committee on Infectious Diseases, American Academy of Pediatrics

Information-Only

Triage question added to deal with blood pressure concerns in a pediatric patient that has never been diagnosed with hypertension and has no symptoms.

Mouth Ulcers

Care advice added to use honey for pain relief until the family can get some liquid antacid.

Newborn Appearance

Triage question and *background information* added to address bleeding from a subgaleal hemorrhage. Reason: sometimes progresses to shock.

See HCP within 4 Hours

Swelling on head after vacuum extraction delivery and increasing in size
R/O: large subgaleal hemorrhage

Pinworms

Care advice for treating all family members was clarified:

- Treat all family members if the infected child gets pinworms a second time or other family members develop symptoms.
- An adult with pinworms usually means they got it from a child in the family. In this case, treat all family members.

Poisoning

Added *Background Information* regarding Laundry and Dishwasher Pods. If children have no symptoms, these calls can continue to go to Poison Center.

Seizure With Fever

Changed *definition* to exclude patients with epilepsy (chronic seizure disorder), even if they also have a fever with the current seizure. The nurses will use the Seizure Without Fever for all patients with known epilepsy.

Solid Foods

Background Information added to address the harmless amounts of trace metals found in some baby foods.

Substance Abuse

Care Advice regarding giving Narcan added to the appropriate 911 statements.

Triage question addressing nicotine vaping overdose added:

Go to ED Now (or PCP triage)

Nicotine overdose suspected (vomiting, stomachache, sweating, headache) and vaping

Evidence-Based Protocols and Updates

Yearly changes in these pediatric telephone triage and advice protocols are based upon the following resources and evidence:

- American Academy of Pediatrics (AAP) new clinical practice guidelines and policy statements (including updates in the AAP Red Book)
- Centers for Disease Control and Prevention (CDC) new guidelines or recommendations
- Food and Drug Administration (FDA) new regulations and advisories
- New Clinical Guidelines from other national organizations (e.g. AHA, ADA)
- Research findings reported in this year's pediatric literature
- Expert-based reviews of and recommendations for all specialty guidelines by pediatric specialists in that field. They are listed in specific guidelines after Background Information.
- Consensus-based recommendations from 2 Expert Panels of community pediatricians (based in Colorado and in St. Louis, Missouri)
- Quality improvement projects that evaluate Emergency Department Under-referral and Over-referral (from our Pediatric Call Center at Children's Hospital Colorado)
- Reviews and recommendations from the following call centers: Access Nurse 24 (Tennessee), Alberta Health Link, Canada; Arkansas Children's Hospital, Asante Health System (Oregon), Children's Hospital of Philadelphia, Cincinnati Children's, Cleveland Clinic, Cook Children's Hospital (Texas), Children's Mercy (Missouri), Evergreen Health Care (Washington), FoneMed, Johns Hopkins All Children's Hospital (Florida), Marshfield Clinic (Wisconsin), Saskatchewan Health Authority (Canada), St. Louis Children's Hospital/BJC, Sykes in Ontario, Canada; Triage 4 Pediatrics (Texas) and Triage Logic
- Reviews and recommendations from the following software vendors: ClearTriage and LVM
- Observations and questions from users, such as you. Your feedback is always appreciated and continues to improve the quality of these protocols.

The protocols have undergone changes based upon review of the above mentioned resources. Triage nurses are encouraged to review targeted protocols using this self-study guide. We hope this summary of changes will help your transition and implementation of the 2021 pediatric protocols.