To: **Telehealth Nurses Using Pediatric Telehealth Triage Guidelines: After-Hours**

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Re: **2024 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 2024 pediatric clinical content.

New Pediatric Guidelines

The 2024 version contains 364 guidelines. The 2024 update contains 10 new guidelines and 354 updated guidelines.

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

- Allergy Shot Reaction
- Dead Animal Exposure
- E-Cigarette (Vaping) Nicotine - Symptoms or Questions
- Groin Injury
- Groin Pain or Swelling
- Leech Bite
- Medication Injection – Local Reactions
- Oxygen Therapy Questions
- Sickle Cell Disease – Acute Pain Episodes
- Smoking Tobacco – Symptoms or Questions

Title Changes to Existing Pediatric Guidelines

There are 4 existing guidelines that we made minor changes to the title:

2024 Title	2023 Title
Central Line or IV Not Running Normally	IV Not Running or Running Slowly
Central Line or IV Related Symptoms	IV Site or Other Symptoms
Eyelid - Swelling	Eye - Swelling
Seizure – Afebrile or Epilepsy	Seizure Without Fever

New References

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

New Search (Key) Words

- Every year, new search words are added to existing guidelines based upon repeated search testing.
- *Pediatric Specialty Clinics:* This year, we have added a unique search word for each specific specialty clinic. These unique search words link to the AH guidelines that those specialty clinics are most likely to use.
- If you are uncertain which guideline 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 Guideline Available" guideline without first trying at least two search words.

Indexes for Pediatric Guidelines

There are 4 general indexes for the guidelines. In addition, there is also a Behavioral Health index that specifically lists pediatric behavioral/mental health guidelines. There is also an Infant (Baby) Index that lists topics for the first year of life. New this year, is a Specialty Clinic Index that lists the guidelines most commonly used by 23 specialty clinics in a children's hospital setting.

Indexes are available at www.cleartriage.com/support/indexes. Reviewing them may help you improve your guideline selection skills.

- Alphabetical Index
- Anatomical Index
- Behavioral Health Index (40 topics)
- Infant (Baby) Index (39 topics)
- Specialty Clinic Index

Pediatric Care Advice (PCA) Handouts

- PCAs are handouts that cover the Care Advice that callers need to know about specific symptoms or common diseases.
- They are written at a 6th grade or lower health literacy level.
- Most triage guidelines have one or more matching PCA (s).
- They are completely compatible with the advice in the triage guidelines.
- 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.
- The existing PCA handouts have been updated for 2024 to match changes in the After Hours guidelines. These will be released soon.
- The 2024 PCA update will also include over 50 new topics.

Universal Changes

Fever during first 12 weeks of life:
Triage question was reworded and is now:

[1] Age < 12 weeks AND [2] fever 100.4 F (38.0 C) or higher by any route (Note: Preference is to confirm with rectal temperature)

Retractions
Triage question regarding retractions was expanded to include suprasternal retractions in all the respiratory guidelines. This is a reminder that any retractions should go to the ED. Here is an example:

Retractions - skin between the ribs is pulling in (sinking in) with each breath (includes suprasternal retractions)

Homemade Cough Medicine Care Advice

We have removed corn syrup and warm fluids from the recommendations for cough treatment in infants under 1 year. Our recommendation is to keep the baby well hydrated with breastmilk or formula and to use warm mist for hard coughing.

Dosage Tables (changed for the 2022 release)

As a reminder, we made the long-acting antihistamine drug dosage tables (Cetirizine, Loratadine, Fexofenadine) inactive in 2022. Reason: Pharmaceutical companies continue to change their product concentrations and dosing intervals, making these tables difficult to keep current. **Our recommendation**: Tell callers to follow the package dosage instructions. They are based on age and drug concentration. Let us know if this causes any problems for your call center.

Guideline Specific Changes

Asthma
We have changed the asthma *severity scale* to better align with the NAEPP standards:

- MILD asthma symptoms - Green Zone (doing well): No breathing problems, no retractions, speaks normally, normal work and play, sleeps well at night. Note: may have intermittent cough or intermittent mild wheezing. Peak flow > 80% of best.

- MODERATE asthma symptoms - Yellow Zone (getting worse): Some breathing problems, wheezing, tight chest, mild retractions, frequent cough. Peak Flow 50-80% of best.

- SEVERE asthma symptoms - Red Zone (medical alert): Lots of breathing problems, SOB at rest, speaking is difficult, severe retractions, OR loud wheezing. Note: if very severe, may have minimal wheezing because of decreased air movement. Peak Flow < 50% of best.

Bluish Skin and Breathing Difficulty
Added Background Information for detecting cyanosis in dark-skinned children:

Cyanosis in Dark-Skinned Patients
• Central and peripheral cyanosis can be more difficult to detect in dark-skinned patients.
• The lips, mucous membranes, tongue, and gums can be easier areas to identify cyanosis than the face.
• You can also examine eyelids and nailbeds for cyanosis.

Breastfeeding - Mother's Breast Symptoms
Revised *Care advice* for blocked milk ducts to meet current recommended standards of care for mastitis:

Blocked Milk Ducts (tender lump in the breast):
• Clogged milk ducts can cause localized, hard areas, swelling, or tenderness in your breast.
• Treatment goal: open up the blocked milk ducts
• Breastfeed your baby on demand from both breasts. Avoid the use of pacifiers.
• Avoid overfeeding or over-pumping from the affected breast.
• For pain relief, you can use ice or a cold compress to the area for 10 minutes at a time. Reason: Reduce swelling and inflammation. You can repeat this up to every 30 minutes.
• While feeding or pumping, lightly stroke the skin of your breast upwards with your fingers. Move your hand towards the armpit or collar bone area. Caution: Avoid any deep or firm tissue massage of the area. See the La Leche League website (https://www.llli.org) for more information on blocked ducts and a video for how to perform breast lymphatic massage.

• Try different breastfeeding positions which may drain the affected area (ducts) better.
• Note: If your lactation specialist has recommended a different treatment plan than above, follow their advice.

Central Line or IV guidelines
Major changes. Please review the redline versions for details.

COVID-19
Revised the *care advice* to reflect the current 2024 CDC recommendations for isolation if symptomatic and positive:

Isolation For Children with Positive COVID-19 Test AND With Symptoms:
• COVID-19 infections are very contagious. Home isolation is needed to protect other people.
• If symptoms are present, stay home from school and work.
• How long: at least 24 hours after symptoms are getting better overall AND the fever is gone and not using fever-reducing medication. (CDC March 2024)
• For the next 5 days, try to avoid any contact with people at high risk for complications. That includes children less than 2 years, the elderly, and people with chronic diseases (CDC).
• Cover mouth when coughing and nose when sneezing.
• Wash hands often.
• Face masks: If you go out, consider the use of face masks for children 2 years of age and older.

Cough
Added *care advice* regarding albuterol if parent has inhaler at home and wants to use it:

Albuterol inhaler previously prescribed for Cough
- Triager Tip: Discuss only if caller brings up
- Patient has previously been prescribed albuterol for cough.
- Caller would like to use it for current cough.
- Tell caller: it is safe to give albuterol. Use it only as directed.
- It may or may not help your child's cough.
- If you find it helpful, call your doctor during office hours. Ask them about continued use.
- If it is not helpful after using it for one day, stop giving it.

Croup
Revised *Care Advice* for stridor based on a recent article documenting the benefit of cold air. Here is a link to this article: Outdoor Cold Air Versus Room Temperature Exposure for Croup Symptoms: A Randomized Controlled Trial | Pediatrics | American Academy of Pediatrics (aap.org)
Based on this, cold air exposure for stridor was underscored as equivalent to warm mist if available:

- If the weather is cold, stand by an open window or take your child outside for a few minutes.
- If the weather is not cold, stand near an open freezer or refrigerator.

Earache
Major changes made in an effort to prevent over-referral to the Emergency Department on weekends. Please review the redline version for details. Many patients now can safety be given a less urgent disposition:

- Earache with fever or ear discharge will continue to be seen within 24 hours.
- Disposition for earache with mild pain, no fever and no discharge was changed to the See within 3 Days.

Eye with Pus
Major changes made to prevent over prescribing of antibiotic eyedrops. Please review the redline version for details. The criteria for bacterial conjunctivitis has been tightened up as follows:

Bacterial Conjunctivitis criteria: lots of pus
This clinical diagnosis requires the presence of all 3 of the following physical findings:
1] lots of pus in the eye
2] after it is wiped away, the pus keeps recurring throughout the day
3] eyelids are always stuck (matted) shut with lots of pus after any sleep.

Viral or Irritant Conjunctivitis criteria: no pus or small amount after sleep
1] usually, only redness (pinkness) of both sclera and no pus.
2] a little pus or mucus in the corner of the eye is also common after sleep. It could also be from dust or another irritant that got in the eye.
3] crusting or pus on the eyelashes or lid margins is sometimes seen with viral URIs, but only after sleep.

Fever Before 3 Months Old
Major changes made to prevent unnecessary ED referrals. Please review the redline version for details.

Nurses will be checking back with callers who have a one-time elevation with an axillary temperature below 100.4. Use this new *triage question*:

- Axillary (armpit) fever > 99 F (37.2 C) BUT [2] < 100.4 F (38.0 C) (Exception: age > 8 weeks or 2 months) AND [3] baby acts normal (Note: Preference is to confirm with rectal temperature.)

New *care advice for this triage question* is to recheck with serial axillary temperatures if caller refuses to take a rectal temperature:

Repeated Axillary Temperatures if Baby is Well-appearing:

- You've told me your baby is acting normally but has an axillary temperature of 99.0 F (37.2 C).
- Your baby may or may not have a true fever.
- Take a rectal temperature.
- The rectal temperature will allow us to determine if you can stay home or need to go to the ED.
- If this isn't possible, take armpit temperatures every 15-20 minutes over the next 1 hour.
- If the temperatures remain less than 99.0 F (37.2 C) and your baby remains well, you can stay home.
- If the temperatures remain 99.0 F (37.2 C) or higher with any of the repeated measurements, you need to go to the ED.

Fever – 3 Months and Older

- *Major triage* changes. Several existing *triage questions* changed to help prevent ED over-referral. Please review the redline version for details. Some examples:

See Within 24 Hours

[1] Fever present > 5 days AND [2] without other symptoms (no cold, cough, diarrhea, etc.)

[1] Age 3 months - 2 years (24 months) AND [2] fever present > 48 hours AND [3] without other symptoms (no cold, cough, diarrhea, etc.) (Exception: MMR or Varicella vaccine in last 4 weeks)

See PCP Within 3 Days

[1] Age 2 years or older AND [2] fever present > 3 days (72 hours) AND [3] without other symptoms (no cold, cough, diarrhea, etc.) AND [3] appears well when fever improves

Jellyfish Sting

Major changes made based on a review of this topic by an expert: Jeffrey Bernstein MD, Emergency Medicine Physician and Medical Toxicologist, Medical Director, Florida Poison Information Center. Please review the redline version for details.

Care advice now includes immersion in hot water to inactivate venom and treat pain.

Medication Question Call
Added *Background Information* regarding OTC dosing in Obese Children:

Obese Children: OTC Medication Dosing Questions
• Weight based dosing in obese children can lead to unnecessarily high dosing.
• In this scenario, dosing should be based on ideal body weight (IBW) rather than actual body weight. However, this is not practical for the triage nurse to calculate.
• Recommendation: In obese children, use age-based dosing provided on the package instructions (or on-line if unavailable). These dosing estimates are based on ideal body weight for age and are safe and effective.
• Reality: this is an important issue, but rarely needs to be addressed in telehealth triaging.

Poisoning
Added *triage questions* regarding heavy metal contamination of foods. Reason: Poison centers have the most up-to-date information and expertise to manage and follow-up with these calls. Examples:

Call Poison Center Now
Lead ingestion suspected (e.g., contaminated food, lead paint, fishing weights)
Other heavy metal exposure (e.g., arsenic, cadmium)

Rash Guidelines
Added *Background Information* for assessing rashes in dark-skinned children:

Rashes in Dark-Skinned Patients
• Rashes can be more difficult to detect in dark-skinned patients, especially flat (macular) rashes.
• The appearance of rashes can vary based on skin color. For example, a rash can appear red on patients with lighter skin. In patients with darker skin, the same rash can appear darker brown or even purple. Light pink rashes may not be detectable in dark-skinned patients.
• Raised (papular) or scaly rashes are much easier to detect in dark-skinned patients. Examples are hives, eczema, chickenpox.
• Summary: When triaging skin rashes, it is important to consider variations related to the patient's skin color, especially as caregivers describe their child's rashes. Trust what the caller reports has changed on their child's skin. They know what it normally looks like.

Tick Bite
Added Care Advice and Background Information regarding Alpha-gal Syndrome.

Thrush
Removed the use of anti-fungal cream in the *care advice* for breast-feeding moms with sore nipples. Mothers should continue to call their OB or PCP within 24 hours to seek an accurate diagnosis and appropriate treatment.

Tonsil-Adenoid Surgery Follow-up
Major changes following expert reviews by pediatric ENT specialists. Please review the redline version for details. Examples:

- Added *triage questions* and *care advice* regarding post-procedure nosebleeds.
- Added *care advice* to use honey to treat pain.

Evidence-Based Guidelines and Updates

Yearly changes in these pediatric telephone triage and advice guidelines 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), Baylor Scott & White Health (Texas), Children's Hospital Colorado, Children's Hospital of Philadelphia, Cincinnati Children's, Cleveland Clinic, Cook Children's Hospital (Texas), Children's Mercy (Missouri), Denver Health, Evergreen Health Care (Washington), FoneMed, Johns Hopkins All Children's Hospital (Florida), Marshfield Clinic (Wisconsin), Mayo Clinic, Saskatchewan Health Authority (Canada), St. Louis Children's Hospital/BJC, Sitel (Canada); Triage 4 Pediatrics (Texas) and Triage Logic. Their contributions to our annual update process are immeasurable.
- Reviews and recommendations from the following software vendors: ClearTriage and LVM Systems
- Observations and questions from users, such as you. Your feedback is always appreciated and continues to improve the quality of these guidelines.

The guidelines have undergone changes based upon review of the above-mentioned resources. Triage nurses are encouraged to review targeted guidelines using this self-study guide. We hope this summary of changes will help your transition and implementation of the 2024 pediatric guidelines.