After-Hours Telephone Triage Guidelines User's Guide 2019

Contents

Schmitt-Thompson Clinical Content (STCC)

Introduction

- The Schmitt (pediatric) and Thompson (adult) telephone triage guidelines are decision-support tools for telephone care providers (TCPs).
- They assist the TCP through the data collection, triage, decision-making, disposition selection and advice-giving processes.
- Most telephone triagers are registered nurses with special advanced training.
- The use of guidelines by nurses who work in medical call centers is recommended by the American Academy of Pediatrics, the American Accreditation Health Care Commission, and other risk management groups.
- In most states, the Nurse Practice Act requires that nurses use standardized guidelines if they are providing telephone triage and giving advice. Reason: Giving any medical advice to callers is legally deemed as medical practice. The supervising physician is responsible for all medical advice given, no matter who gives it. Using guidelines ensures the nurse is functioning within the nursing scope of practice.

Benefits of Telephone Triage Guidelines

There are many benefits of using telephone triage guidelines, including the following:

Provide standarized approach to telephone triage	•Improve consistency of the home care advice offered by telephone nurses •Provide a consensus tool for physicians across a healthcare system regarding how telephone care will be delivered
Reduce telephone errors and legal liabilty	•Prevent omission of important questions •Provide a focus for review of nurse performance •Allow physicians to safely delegate calls to nurses
Improve efficiency	•Keep the assessment process thorough and logical •Simplify training and education of staff •Allow documentation by exception

Number of Guidelines

- Currently there are 333 active pediatric guidelines (see Appendix A), including 32 pediatric behavioral health guidelines (see Appendix U).
- Currently there are a total of 356 active adult guidelines (see Appendix B), including 71 adult women's health guidelines (see Appendix C) and 22 adult behavioral health guidelines (see Appendix V)
- This set of telephone triage guidelines covers over 99.9% of medical calls.
- New guidelines are added each year to address emerging infectious diseases and call center needs.

Structure of Guidelines

The pediatric and adult guidelines have identical organization and structure. Each set of guidelines include the following 11 components which are described further in the sections below:

1. Title (Topic Name)
2. Search Words
3. Definition
4. Initial Assessment Questions (IAQs)
5. Background Information
6. First Aid
7. See More Appropriate Guidelines (SMAG) Questions
8. Triage Questions
9. Care Advice
10. References
11. Citations

Title (Topic Name)

- The adult and pediatric guidelines nearly always have identical titles. This makes it easier for the triager to transition between guideline sets.
- Most guidelines are symptom-based guidelines (e.g., Cough, Vomiting).
- Disease-based guidelines are also included (see Table 1).

Table 1: Examples of Disease Based Topics

Disease-Based Topic	Examples
Chronic Disease previously diagnosed by a health care provider	• Asthma • Diabetes - High Blood Sugar
Common acute diseases that could reliably be diagnosed by most adults	• Athlete's Foot • Head Lice
Pregnancy and Postpartum Conditions (Adult)	• Pregnancy – Morning Sickness • Postpartum – Vaginal Bleeding and Lochia
Follow-up Call guidelines for managing calls regarding recently diagnosed acute diseases	• Sinus Infection Follow-Up Call • Urinary Tract Infection Follow-Up Call

Search Words

- Search words are carefully selected for each guideline.
- These search words help the nurse triager find the most appropriate guidelines available to use for that specific symptom or concern.
- Based on the results of search word testing, new search words are added each year.
- Search words that bring up unrelated guidelines are also deleted each year.

Definition

- This section defines the symptoms that need to be present before using this guideline.
- Some symptoms are straightforward (e.g., Headache).
- Other symptoms require clarification (e.g., Constipation).
- For disease-based topics, diagnostic criteria for that disease are listed. The disease-based guidelines should only be used if the caller's description of symptoms matches the symptoms listed in the definition section for that disease.

Example of Diagnostic Criteria for Disease-based Guideline: Pediatric Athlete's Foot

Use this guideline only if the patient has symptoms that match Athlete's Foot

SYMPTOMS OF ATHLETE'S FOOT INCLUDE:

* Red, scaly, cracked rash between the toes
* The rash itches and burns
* With itching, the rash becomes raw and weepy
* Often involves the insteps of the feet
* Unpleasant foot odor
* Mainly in adolescents. Prior to age 10, it's usually something else.

Initial Assessment Questions (IAQ)

- Initial assessment questions (IAQs) are questions that help the triager elicit an accurate picture of the illness or injury.
- Questions about severity and duration of the symptoms are always included.
- All the IAQs are specific and relevant to the topic covered in the guideline.
- These questions are mainly used as memory prompts during the call. Asking all the IAQs, however, is not required.
- The IAQs are especially helpful when training new staff. They are also helpful for the experienced triager when an unfamiliar, less frequently used guideline is used.

Background Information (BI)

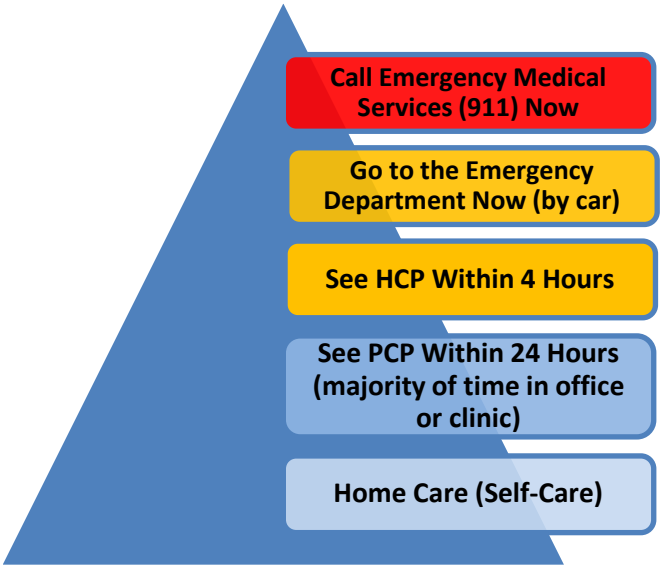
- This section includes additional clinical information to help nurses improve their clinical reasoning (critical thinking skills) and fine tune their assessment skills.
- **Causes** are included for symptom-based guidelines.
- **Complications** are included for disease-based guidelines.
- **Reasons** behind any triage or treatments that are controversial are also discussed.
- When call centers ask the authors questions, we respond directly. If it is a frequent question, we also add the response to the background information.

First Aid

- This section allows the triager to quickly find first-aid instructions for any patient who has a life-threatening or serious emergency.
- First aid minimizes injury and damage before the patient is transported to the emergency department (ED) or office.
- Examples are giving an epinephrine injection for a probable anaphylactic reaction and applying cold water to a new burn.

Disposition Categories or Levels of Care

- The main objective of telephone triage is to sort patients into appropriate dispositions (triage categories) based on acuity or severity of the illness.
- They range from emergent care to home care.
- The disposition categories are the keystone of a telephone triage and advice systems.
- The diagram below depicts the five Main Disposition Options in order of urgency.



- The guidelines contain many other dispositions that are needed for less common clinical scenarios. Examples are referrals to dentists, other local agencies such as poison centers, suicide hotlines, and social services for possible abuse situations.
- The adult guidelines are supported by 35 dispositions (see Appendix D). These are usually numbered as care advice 40 through 67 (see Appendix E).
- The pediatric guidelines are supported by 28 dispositions (see Appendix D—excluding the 2 Labor and Delivery dispositions and 5 hospice dispositions that support the adult population). These are usually numbered as care advice 50 through 72 (see Appendix E).

See More Appropriate Guideline (SMAG) Questions

- The purpose of a SMAG question is to prompt the triage nurse to consider a more appropriate guideline that best addresses the caller's chief complaint.
- For symptom-based guidelines, the SMAG may redirect the triager to a more specific disease-based guideline. For example, the triager may initially select the Rash or Redness–Widespread guideline. If Swimmer's Itch is suspected (rash is consistent with the clinical presentation of Swimmer's Itch), a SMAG would prompt the triager go to the Swimmer's Itch guideline.
- For disease-based guidelines, if the diagnostic criteria are not met, the triage nurse is redirected to the appropriate symptom guideline (e.g., from Ringworm to Rash or Redness–Localized).
- The SMAG questions are especially helpful to new nurses. Using the most appropriate guideline helps assure that the triager selects the most appropriate disposition and targeted care advice.
- The SMAG section is found towards the beginning of the triage question section, but always after the 911 triage questions.

Examples of SMAG Questions from Guideline: Leg Pain - Adult

Followed an injury to leg
Go to Guideline: Leg Injury (Adult)

Leg swelling is main symptom
Go to Guideline: Leg Swelling and Edema (Adult)

Back pain radiating into leg(s)
Go to Guideline: Back Pain (Adult)

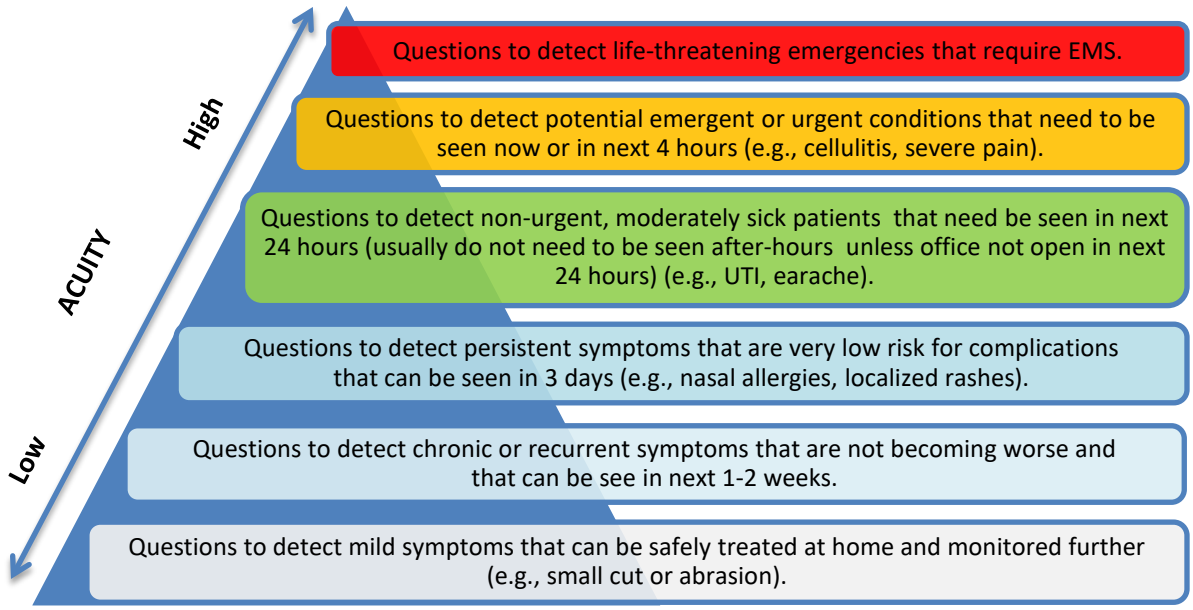
Knee pain is the main symptom
Go to Guideline: Knee Pain (Adult)

Ankle pain is the main symptom
Go to Guideline: Ankle Pain (Adult)

Pregnant
Go to Guideline: Pregnancy - Leg Pain (Adult)

Triage Questions

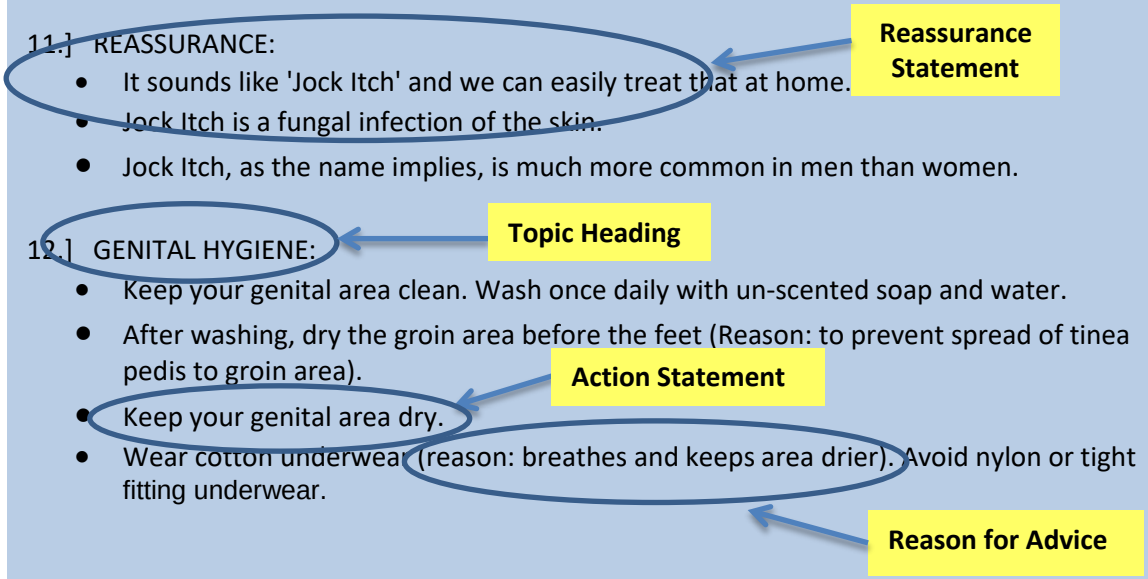
- The triage questions are grouped within dispositions and are sequenced from highest to lowest acuity (from most serious to least serious diagnoses or complications) as outlined in diagram below.



Care Advice

- This section contains specific ("targeted") care advice for each triage question.
- This ensures that the care advice is relevant to the precise set of symptoms and disposition of the caller. It reduces triage nurses' need to scan lists and to select appropriate care advice.
- This also leads to more accurate documentation of what care advice was actually given.
- All of the care advice is written in lay person's language.
- The treatment advice is written in an **action statement** format. It's also written directly for the caller. Therefore, the triager can use it as a script.
- The care advice often starts with a **reassurance statement**. Reassurance may be just as helpful to the caller as specific treatment advice.
- Each piece of care advice is preceded by a **topic heading** (e.g., Fever Medicine, Cleanse the Wound). These headings help you efficiently scan care advice (CA) items and jog your memory.
- The **reason** for giving that advice is also often included.
- Care advice is purposefully abbreviated for patients who are referred in immediately and may only include first aid or pain control.
- Limited interim care advice is offered for patients who will be seen by appointment the next day or later. The patients will receive the rest of the care advice after they are evaluated in a medical setting.

Example of Care Advice from Guideline: Jock Itch – Adult



References

- The clinical content in these guidelines is as evidenced-based as possible.
- New medical research is reviewed, incorporated into the guidelines, and added to the reference list on a yearly basis.
- New clinical practice guidelines, regulations, or recommendations from national organizations are always included.

Citations

- This last section lists the following:
  - ✓ Author of the guidelines
  - ✓ Latest revision date
  - ✓ Copyright notice

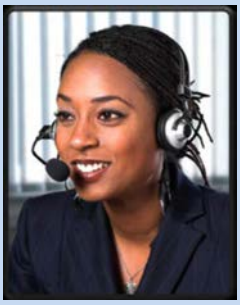
Structure of a Telephone Triage Encounter

Overview

When a call comes into a medical call center, the telephone triager typically goes through the following call process while managing the call. Each step in the call process will be discussed in further detail.

1. Introduce self to caller
2. Collect (or confirm) brief demographic information
3. Obtain brief health history
4. Document a brief description of the patient's illness
5. Identify the chief complaint and most serious symptom
6. Select the correct guideline
7. Triage – ask the triage questions
8. Select an appropriate disposition category
9. Provide care advice (telephone advice)
10. Verify understanding – use Teach-Back method
11. Give call-back instructions
12. Practice risk management in every step of call process

Remember to Smile!



Callers easily can hear the smile in your voice even when they cannot see it.

Introduce Self to Caller

- The call begins with a greeting, during which you introduce yourself.
- Apologize for any delays or excessive hold time if necessary.
- The greeting ends with an invitation to the caller to describe his/her problem or symptoms.
- Many call centers have a specific scripted approach to this first part of the encounter. Your greeting might contain the following scripted elements (see Table 2):

Table 2: Triage Call Introduction

Introduction Element	Examples of Scripted Responses
Greeting	*"Good Morning."* *"Thank you for calling …"*
Introduction	*"This is Donna."*
Title	*"I am a nurse at the __Call Center."* *"I am the nurse covering for Dr. ___."*
Apology if indicated	*"I apologize for the wait."*
Query	*"How can I help you this morning?"*

Collect or Confirm Demographic Information

- Collect minimal demographic information such as name, age, gender, and phone number.
- In pediatrics, the name and relationship of the caller is also obtained.
- In some call centers, support staff (or non-clinical personnel) elicit and enter this information before the call is transferred to the telephone triage nurses. In other call centers, the triage nurse takes calls directly.
- If the call is about an emergency, the call should be taken by the first available nurse. For these calls, triage and first aid should be completed before collecting demographic information.
- Demographics can quickly be confirmed or edited for previous (repeat) callers when using an electronic system.

Obtain a Brief Health History

- Briefly ask about chronic health problems, medications, and recent visits/hospitalizations.
- This part of the assessment should be focused primarily on issues that will likely affect the call outcome (disposition).
- When the symptoms presented are very serious or life-threatening, this step is eliminated or very brief.
- Document these within the patient's health history.

Document a Brief Description of the Patient's Illness

- The description of the patient should give the reader of the call report an accurate mental picture of the patient's illness or injury.
- The description should also justify the use of the specific guideline.
- Use the Initial Assessment Questions (IAQs) to help elicit this picture.
- The IAQs will help you better define the severity and duration of the patient's condition.
- Asking the IAQs is optional (in contrast to asking triage questions, which is mandatory).

Identify the Chief Complaint or Main Symptom

- Encourage the caller to describe the patient's main symptom. Use an open-ended question such as, *"Tell me more about your sore throat."* Follow-up with more direct questions as needed to clarify and to elicit specific information (e.g., pain rating).
- Prompt the caller to describe other symptoms that are present today.
- Practice active listening.
- Briefly assess the severity of all symptoms before honing in on the most serious symptom. (Exception: an emergent or life-threatening symptom is present).
- Set a goal of learning the patient's most serious symptom by 1 minute or sooner.
- The initial assessment of the caller's concerns can be a time-consuming part of the call process. Therefore, it is beneficial to choose a guideline as soon as possible. Once in a specific guideline, the triager can control call flow and become more focused and efficient.

Assessing Physical Findings and Symptom Severity

- One of the challenges of telephone triage is the inability to examine the patient. However, you can still listen for clues and "look through the caller's eyes" and "feel using the caller's hands."

Example: Triage Assessment of Breathing Difficulty in a Child

To determine the severity of breathing difficulty in a child, the nurse can:

- ✓ Ask about presence of cyanosis and retractions.
- ✓ Ask the parent to bring the child to the phone and then listen for wheezing, stridor, grunting, and tachypnea.
- ✓ Ask the parent to count respirations per minute if needed.
- ✓ Ask about the child's level of activity and ability to talk and converse.
- ✓ If the child has asthma, ask about Peak Flow Readings.

The triage nurse can then determine the degree of respiratory distress:

MILD: No SOB at rest, mild SOB with walking, speaks normally in sentences, can lay down, no retractions, wheezing audible with stethoscope (**Green Zone:** PEFR 80-100%)

MODERATE: SOB at rest, speaks in phrases, prefers to sit (can't lay down flat), mild retractions, audible wheezing (**Yellow Zone:** PEFR 50-80%)

SEVERE: severe SOB at rest, speaks in single words (struggling to breathe), severe retractions, usually loud wheezing or sometimes minimal wheezing because of decreased air movement (**Red Zone:** PEFR < 50%)

- You always need to be cautious when interpreting physical findings obtained over the phone. Callers are not always accurate or reliable with their description of symptoms (e.g., rashes, swelling). The caller's ability to obtain accurate vital signs is also variable.
- However, by asking the right questions you can usually collect enough information from the caller to obtain an overall assessment that helps you determine severity of the patient's illness or injury.
- In addition, a number of guidelines contain severity scales that help the triager identify physical findings associated with varying levels of symptom severity (e.g., pain, vomiting, diarrhea)
- Examples of adult and pediatric physical findings associated with varying levels of dehydration severity are outlined in Table 3.

Table 3: Symptom Severity Scale		
Symptom	**Adult**	**Pediatric**
Dehydration	**MILD DEHYDRATION** * Urine Production: slightly decreased * Mucous Membranes: normal * Heart rate < 100 beats / minute * Slightly thirsty. * Capillary Refill: < 2 sec * Treatment: can usually treat at home **MODERATE DEHYDRATION** * Urine Production: minimal or absent * Mucous Membranes: dry inside of mouth * Heart rate 100-130 beats / minute * Thirsty, lightheaded when standing * Capillary Refill: > 2 sec * Treatment: must be seen; Go to ED NOW (or PCP Triage) **SEVERE DEHYDRATION** * Urine Production: none > 12 hours * Mucous Membranes: very dry inside of mouth * Heart rate > 130 beats / minute * Very thirsty, very weak and lightheaded; fainting may occur * Capillary Refill: > 2-4 sec * Treatment: must be seen immediately; Go to ED NOW or CALL EMS 911 NOW	**MILD DEHYDRATION:** 3-5% weight loss * Urine Production: slightly decreased * Mucous Membranes: normal * Tears: present * Anterior Fontanelle: normal * Mental Status: normal * Capillary Refill: < 2 sec * Treatment: can usually treat with ORS at home **MODERATE DEHYDRATION**: 5-10% weight loss * Urine Production: none for > 8 hrs. for infants, > 12 hrs. for older children * Mucous Membranes: dry inside of mouth * Tears: decreased * Anterior Fontanelle: normal to sunken * Mental Status: irritable * Capillary Refill: > 2 sec * Treatment: must be seen **SEVERE DEHYDRATION**: > 10% weight loss * Urine Production: very decreased or absent * Mucous Membranes: very dry inside of mouth * Tears: absent, sunken eyes * Anterior Fontanelle: sunken * Mental Status: very irritable to lethargic * Capillary Refill: > 2-4 sec * Treatment: must be seen. If signs of shock, activate EMS (911) **SIGNS OF SHOCK** * Extremities (esp. hands and feet) are bluish or gray * Extremities are cold * Child too weak to stand or very dizzy when tries to stand * Child is difficult to awaken or unresponsive * Pulse is rapid and weak * Capillary refill > 4 seconds

Select the Correct Guideline

- Once you have identified the main problem or symptom, enter a search word describing the caller's chief complaint to bring up appropriate guidelines. The search may bring up several guidelines to consider. The keyword search system has become very selective and should meet your needs.
- Many of the guidelines start with a section called "See More Appropriate Guideline." These SMAG statements prompt you to rethink the patient's needs. The SMAG statements might direct you to a better guideline that provides more specific triage advice than the guideline you are currently using. You don't need to ask all the SMAG's. Quickly scan them.
- If the patient has multiple symptoms, always select the most serious symptom. If none of the symptoms are serious, select the one with the highest likelihood of needing to be seen (e.g., earache instead of cough, cold or fever).
- If uncertain where to start, ask the caller, "Which symptom are you most concerned about?"
- EXCEPTION: If the caller's answer is "fever" and this fever is present with other symptoms, go to their second concern. Fever is covered in all guidelines where fever could be an accompanying symptom.
- Several guidelines are designed to help you locate the most appropriate guideline. For example: Injury - Multiple Sites - Guideline Selection or STDs (STIs) - Guideline Selection.
- For 5 to 10% of calls, you will need to use 2 guidelines (e.g., Rash and Diarrhea)

Tips for Improving Your Guideline Selection Skills

TIP 1: To improve your efficiency, periodically review the Anatomical Table of Contents (Appendix H and I) to better understand all of the topic options available within each body area.

TIP 2: If selecting the appropriate guideline is difficult for you, ask your supervisor or mentor for help. Using the wrong guideline can cause serious triage errors.

Triage – Ask the Triage Questions

- Triage is sorting patients into levels of severity of their medical symptoms and then into appropriate levels of referral and care (i.e., dispositions).
- Ask the triage assessment questions in the sequence presented in the guideline. You will be asking the highest acuity questions first. This prevents a potential delay of care to a patient who needs to be seen immediately.
- If an answer is negative, proceed to the next question.
- Since the triage assessment questions in the guideline are organized under disposition categories, a positive response will give you the appropriate disposition (level of care) for your patient.

- Once in the call, you do NOT need to ask the triage questions you've already determined the answer to in the assessment. You just need to ask the questions you don't know or aren't sure about.
- Within a disposition level, it is acceptable for the nurse to select any of the triage questions and mark it YES. The nurse may "scan" the list of triage questions for the one that seems most appropriate to the caller's presenting complaint. The nurse does not need to ask the questions within any single disposition category sequentially. However, the nurse ***does*** need to know the answers to all the questions in that disposition category before moving onto the next disposition level.
- Our telephone protocols provide "targeted" care advice. This means the care advice is specific to a given triage question. Thus, selecting the most appropriate triage question is best.
- We arrange higher-volume or higher-acuity triage questions at the top of each disposition level grouping.

Select an Appropriate Disposition

- Stop asking questions as soon as you elicit a positive answer (presence of an indicator for being seen). The remaining questions (the complete history) can be asked in the office or ED by the examining physician. Avoid duplication of effort.
- Select the disposition associated with that level of question (e.g., ED Now, See in 24 Hours).
- When using two unrelated guidelines for a patient, you may end up with two different dispositions. Give the caller the higher acuity disposition of the two.
- These guidelines attempt to place patients who can be safely treated at home into the Home Care/Self Care category. This helps prevent unnecessary visits.

Upgrading the Disposition

- The telephone nurse or caller can elect to move patients to a more urgent disposition if warranted.
- This is known has "upgrading" the disposition and is medically "safe care."
- This may be done by the nurse when she is concerned about a patient but that patient doesn't necessarily meet criteria to be seen.
- Callers may also want to be seen even when the nurse doesn't think they need to be seen.

Downgrading the Disposition

- "Downgrading" a patient to home care or a less urgent disposition than recommended in the guideline should not be done.
- Doing so may have medical-legal consequences.
- Instead, the nurse should discuss such cases with or refer these calls to the primary care physician.
- Make sure you know and follow your call center policy regarding downgrading dispositions.

Provide Care Advice (Telephone Advice)

Ask About Home Care Measures Already Tried at Home

- Before giving advice, ask the caller, "What treatment have you tried so far?" "How is that working?" (You may already know this if patient offered this information earlier in call.)
- If the caller's treatment is appropriate and effective, compliment the caller and do not change it.
- If the treatment is incomplete or not working, supplement it from the guideline.
- Your goal is to help callers feel competent in their ability to handle common conditions and problems on their own.

Select Appropriate Care Advice

- Targeted care advice (CA) statements are available for every triage question. When the triage question is positive, you should review the CA statements associated with that statement.
- Make sure the caller has a pen and paper handy to write down instructions. This is especially important if detailed care advice or medication dosages are given.
- Even with targeted care advice, the nurse should select the most appropriate 2-3 pieces of care advice for the caller. The nurse should not feel compelled to give all the targeted care advice.
- Complete care advice is displayed for patients with a Home Care disposition, but consider it a "menu" from which the nurse delivers "a la carte."
- Some callers may benefit from 3-6 pieces of information; others may only need 1 or 2 pieces. The triage nurse should select care advice as determined by the caller's needs.
- Try to limit your advice to 3 instructions and try to keep your comments brief (2 or 3 sentences per instruction). Reason: to improve caller's memory of imparted information.

When LESS is Better: Limit Care Advice for Patients Referred In for Evaluation

- The sooner a patient is referred in (higher dispositions), the less care advice that is needed.
- Brief care advice is offered for patients who are referred in now. However, it may only include first aid or pain control. This is purposefully done for two reasons:
  - ✓ Doing so helps avoid any delays to accessing care.
  - ✓ Patient will get the targeted care advice in the ER, UCC, or office.
- Limited interim care advice is offered for patients who will be seen by appointment the next day or later.

Verify Understanding – Use Teach Back Method

- After providing your care advice, allow patient an opportunity to fill in any missing pieces by asking, "What other questions do you have about what we just discussed?"
- Teach Back Method: Use the "Teach-Back" method to verify patient understanding, especially if more detailed care advice is given. Also, consider emailing detailed care advice or if the call is lengthy.
- When using the Teach Back method, the triager asks the patient to repeat back the care advice instructions using their own words.
- This allows the triager to verify if the patient understands the instructions correctly, and to correct any misunderstandings.
- Chunk and Check: If the care advice is lengthy, you can break up the information in "chunks." Use the Teach Back method after each chunk of information to check patient understanding.

Why Use Teach Back?

Studies have shown that approximately 40 to 80% of information given to patients during medical visits is forgotten immediately.

Example of Teach Back Method:

"I just covered a lot of information. Let's review what I just went over with you. I want to make sure I explained everything clearly. Can you tell me in your own words the 3 things you should do to treat your child's diaper rash?"

Give Call-Back Instructions

- End each telephone encounter with call-back instructions.
- "Call Back If" statements are included at the bottom of each Care Advice section.
- Covering every worst case scenario is impossible and will unduly alarm the caller.
- At the very least, the triager should instruct the caller to call back "if the patient becomes worse." Make sure the caller knows how to recognize a worsening condition.
- General indications for calling back should also include "if the symptom persists for more than ___ days."

Example of Call-Back Instructions from Guideline: Sore Throat – Pediatric

Call Back If:

- Sore throat is the main symptom and lasts over 48 hours
- Sore throat with a cold lasts over 5 days
- Fever lasts over 3 days
- Your child becomes worse

Practice Risk Management Strategies to Prevent Adverse Outcomes

- During the call, the triager should always adhere to the risk management strategies outlined in Table 4 below. These strategies will help prevent adverse outcomes.
- The patient's safety and well-being should always be the highest priority.
- Refer to Appendix S (Risk Management Checklist for Call Centers) for a checklist to use preventively to help protect your call center from substandard care and adverse outcomes.

Table 4: Key Strategies to Prevent Adverse Outcomes During a Telephone Triage Encounter

1	**When in Doubt, Triage**	• Sometimes callers are seeking some brief health information and do not want to be triaged. When in doubt, perform a complete triage and document the call completely. • If the caller/patient has symptoms and declines triage, this should be documented.
2	**Recognize and Respond Quickly to Life-Threatening Symptoms**	• If the patient's condition sounds life-threatening or unstable, follow the 911 policy established by your call center. • This may involve transferring the call to 911, having the caller hang up and call 911, or calling 911 for the patient. • A good exercise to improve your ability to recognize life-threatening or serious disease is to read the EMS 911 section of each guideline.
3	**Recognize Weakness as a Serious Symptom in Adults and Children**	• If the patient sounds very sick or weak to you as the triager, have the patient come in immediately even if none of the other triage assessment questions are positive. • A patient who has become confused or too weak to stand needs immediate evaluation. This patient may require EMS 911 activation. • To recognize lethargic or toxic children, always ask about the child's current activity level. Ask, "What is he doing right now?" If not active now, ask "How does he look?" If sleeping at the time of the call, ask: "How was he acting before he went to sleep?"
4	**When in Doubt, See the Patient**	• Prevent delayed visits of seriously ill patients by taking a proactive and cautious triage stance. • When in doubt, see the patient or make arrangements for the patient to be seen. • If the problem could be serious, see the patient immediately.

5	**Do NOT Diagnose**	• A nurse triager should not make a diagnosis over the phone. • It may be appropriate in certain circumstances for a physician to provide a possible/probable diagnosis over the phone.
6	**Use Caution When Assessing Patient's Self-Diagnosis**	• If a caller calls about a diagnosis (e.g., chickenpox or influenza), do not accept the caller's diagnosis unless it meets the criteria listed in the definition at the beginning of the guideline.
7	**Do Not Downgrade a Disposition**	• The triager should not override the guideline disposition to a lower disposition (called a downgrade). Instead the triager should discuss with or refer such calls to the primary care physician. • The triager may override the guideline disposition to suggest the patient goes to a higher level disposition (called an upgrade).
8	**Strive for Alignment with Caller's Requests**	• After reviewing care advice, ask the caller, "Do you feel comfortable with the plan?" If the caller does not, schedule a call back in 1 hour or arrange for the patient to be seen. • Always strive for "alignment" with the caller. If the caller insists on being seen, always accommodate that request. From a risk management standpoint, it is challenging to defend a bad patient outcome when the caller and/or patient insisted on being seen and the triager adamantly disagreed. • Remember, telephone triage is a point of entry into the health care system. Do not use triage as a method of limiting access. Instead use it as a method of improving access to primary care.
9	**Give Call- Back Instructions**	• Encourage all callers to call back if the condition worsens. Callers should be given specific reasons to call back. • At the least, the triager should instruct the caller to call back if "the patient becomes worse."
10	**Three Calls = A Visit**	• Three calls equal a visit. If a patient calls seeking advice about the same problem 3 times, arrange for the patient to be seen. • In fact, if the caller phones in twice in 12 hours about the same or a worsening condition, the triager needs to be concerned and should consider referring patient in to be seen. • In these situations, usually the caller was not reassured by the information provided over the phone or the patient is actually sicker than described. • An exception to this rule is a patient calling in a second time to confirm a drug dosage.

Frequently Asked Questions (FAQ) about Using STCC in a Medical Call Center

- This section includes questions the triage guideline authors frequently receive from call centers.
- The questions are organized into six main categories (see Table 5 below).

Table 5: Frequently Asked Questions Received from Call Centers

Call Center Employees and Training Questions

Roles of Staff Members (Clinical/Non-Clinical)

Q: Telephone Care Providers (TCPs): Who is qualified to provide telephone triage?

- Physicians, physician assistants, and nurse practitioners usually have the skills necessary for providing telephone assessments.
- Registered nurses usually require additional specialized training to become TCPs.
- The standard of care for registered nurses is that they follow written guidelines when providing telephone care.
- Medical assistants and licensed practical nurses (LPNs) do not have the skills to provide telephone care, even when using guidelines.

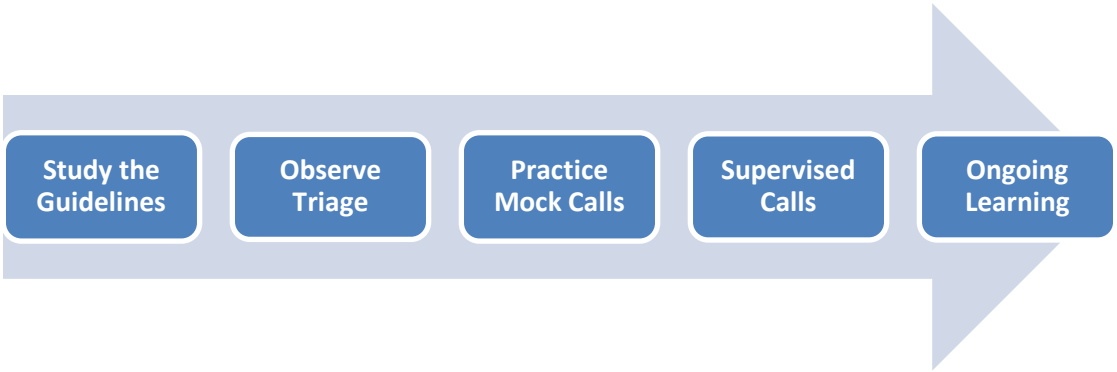
Q: Non-Clinical Staff: Is there a role for non-nurses in a triage call center?

- It is more cost-effective to use non-clinical staff to front-end incoming calls.
- Clerical staff can collect demographics from callers.
- Calls can then be placed in a call queue and returned (or answered if placed on hold) as telephone care providers (TCPs) become available.

Telephone Provider (TCP) Training

Q: What are the basics of telephone care provider (TCP) training?

- We recommend a structured orientation to telephone triage that includes the following five main steps or stages of training:



- In each step, there are specific activities that help promote learning (Table 6).

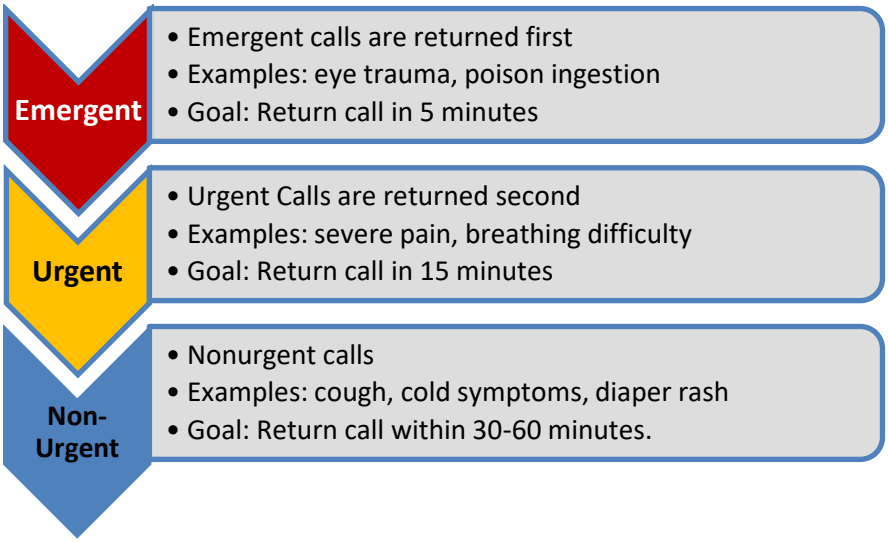
Table 6: Telephone Triage Training Basics	
Step	**Description**
Step 1: Study the Guidelines	• A good place to start is to study this STCC User's Guide. • Next, study one guideline in depth (e.g., Colds). Read through and become acquainted with the different parts of the guideline. • Study the top 20 pediatric and top 20 adult guidelines (see Appendix F and G). Knowledge of these guidelines will prepare you for the most common telephone triage complaints. These top 20 guidelines account for > 70% of all calls. • Finally, review the anatomical version of the table of contents (see Appendix H and I). This review will help you appreciate the topics available within each body part (e.g., respiratory or abdomen).
Step 2: Observe Calls	• After studying the above guidelines, observe an experienced nurse or physician managing phone calls for a minimum of 16 hours. While observing, you should learn how to: ✓ Select the correct guideline. ✓ Recognize serious symptoms (e.g., stridor in a child or an acute neurological deficit in an adult). ✓ Use the triage assessment questions and reach a disposition that is appropriate. ✓ Give reassurance for high-frequency, safe symptoms (e.g., yellow sputum).
Step 3: Mock Calls	• Before taking calls from patients, it is a good idea for you to practice doing some "mock" triage calls with your mentor. Your mentor can pretend to be the patient. • This allows you to become familiar with the triage steps and to receive feedback on your performance. • It also allows you to practice communication strategies such as active listening and use of open-ended and non-leading questions.
Step 4: Supervised Calls	• Finally, you should take calls with an experienced nurse or physician observing. • This should be done for a minimum of 24 hours.
Step 5: Ongoing Learning	• Learning about telephone triage and advice is an ongoing process. Whenever you have an unusual call, ask your mentor or supervisor for assistance. Your goal is to provide safe and effective medical advice to your callers. • The guidelines are designed to be a catalyst for continuing self-education. ✓ Pay attention to the reason given for each triage question. The reason indicates the most common diseases that can cause that indicator/symptom. Understanding the reasoning behind the triage questions helps you become a better triager and increases your job satisfaction. ✓ The **Background Information** in the guidelines also contains information that can enhance your knowledge and triage skills. • Take time to review all new guidelines and annual guideline updates.

Call Center Operations Questions

Prioritizing Calls

Q: How should a call center prioritize incoming calls?

- Triage call centers can either take calls directly and place callers on hold OR operate in a call-back mode.
- Many medical call centers operate in a call-back mode. Reasons include:
  - ✓ Incoming call volume can fluctuate greatly and is not always predictable.
  - ✓ Answering all calls "live" is expensive.
- To avoid a delayed response to an emergent call, calls should be screened and prioritized before being placed in a call queue.
- Potential life-threatening symptoms should be addressed immediately (e.g., transferred to triage nurse immediately without delay). Examples are severe breathing difficulty, unresponsiveness, and possible anaphylaxis.
- Other symptom-based calls generally fall into three urgency categories:



- The call center charge nurse should scan incoming messages for unusual symptoms that need a higher priority. These types of calls require an expedited return call or transfer to the next available nurse.
- Prioritizing calls checklists are available for pediatric calls (see Appendix J and K) and adult calls (see Appendix L and M).

After-Hours Telephone Triage Guidelines
User's Guide

Handling Life-Threatening Emergencies

Q: How should a call center manage 911 (EMS) calls?

- For life-threatening emergencies, follow the 911 policy established by your call center. This may involve one or more of the following:

- **Transfer the call to 911**
- **Have the caller hang up and call 911**
- **Call 911 yourself for ambulance dispatch to patient's home.**

- Do not delay care by giving lengthy care advice. Tell the caller to immediately call Emergency Medical Services (EMS) or 911 (or as directed by your call center 911 policy). EXCEPTION: If brief advice could be lifesaving (e.g., abdominal thrusts for choking), take 15 seconds to instruct the caller before contacting EMS.
- Reason to involve 911 quickly: EMS can dispatch a rescue squad while a dispatcher helps the caller with pre-arrival instructions (first aid) by telephone, pending arrival of the rescue squad.
- Indications for EMS (911): The patient has a life-threatening condition that may require resuscitation during transport. Examples are severe choking, anaphylaxis, severe respiratory distress, and coma.
- If patient is calling 911 and is alone, call the caller back in 5 minutes to be certain they have called 911.
- EXCEPTIONS: For a suicidal or drug-intoxicated patient, stay on the line with the caller. Have someone else in your call center call 911 to dispatch a rescue squad. Provide support to the caller until help arrives.

Use of After-Hour Guidelines during Office Hours

Q: Can a call center use the After-Hours guidelines when managing office-hours calls?

- After-Hours Guidelines can be used for office-hours calls.
- The main change that needs to be made is to the triage section.
- The after-hours dispositions need to be converted to office-hours dispositions (see Table 7).
- The following template should help you do that. It can be posted at work stations.
- Many physicians and nurses can transpose the dispositions in their head.

Table 7: Conversions for After-Hours and Office-Hours Dispositions	
After-Hours Disposition	**Converted Office-Hours Disposition**
911	911 (same)
Go to ED Now	Go to ED Now (same)
Go to ED Now (or PCP Triage)	Go to ED Now (or to Office with PCP Approval)
See HCP Within 4 hours	See in Office Now
See Within 24 Hours	See in Office Today
See within 3 Days	See in 3 Days (same)
See within 2 Weeks	See within 2 weeks (same)
Home Care/Self Care	Home Care/Self Care (same)

Second Level Triage

Q: What is second level (PCP) Triage?

- Second Level Triage Definition: The PCP or medical group elects to re-triage any patient who will be sent to the ED within 1 to 4 hours based upon nurse triage using the guidelines. The triage nurse transfers these calls to the on-call provider.
- Exception: The Go to ED Now (without PCP triage) disposition. These calls should not be transferred to the on-call provider. These calls are about conditions where there is a PCP consensus (unpublished research) that re-triage is unnecessary (e.g., obvious lacerations that need sutures).

Q: What is the value of second level triage?

- Second level triage has been studied and found to reduce ED referrals from 20% to 10% (study done in a pediatric call center).
- Reasons second level triage is effective: The on-call provider has better knowledge of the patient's medical problems and the family's ability to care for the patient.
- Also, the PCP is better able to reassure the caller, call in a prescription, or promise to see the patient the next morning.

Q: How is second level triage implemented?

- Ideally, all groups provide second level triage until 10 pm at night. It's good for patients and for preventing unnecessary ED visits. There are two dispositions where second level triage can be implemented (see Table 8). Note that second level triage is optional. Hence, there are two scripts for call centers to use for each of these dispositions.

Table 8: Second Level Triage Dispositions and Associated Scripts	
Disposition	**Script**
GO TO ED NOW (or PCP triage)	IF NO PCP TRIAGE: The patient needs to be seen within the next hour. Go to the ED/UCC at ___ Hospital. Leave as soon as you can. IF PCP TRIAGE REQUIRED: The patient may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. If you haven't heard from the provider within 30 minutes, go directly to the ED/UCC .
SEE HCP WITHIN 4 HOURS (or PCP triage)	IF NO PCP TRIAGE: The patient needs to be seen. Go to (ED/UCC or office if it will be open) within the next 3 or 4 hours. Go sooner if the patient becomes worse. IF PCP TRIAGE REQUIRED: The patient may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page them now. If you haven't heard from the on-call provider within 30 minutes, call again.

Urgent Home Treatment with Follow-Up Calls

Q: How do other call centers handle these follow-up calls?

Authors' Intended Use: We ideally envisioned this particular disposition statement being used in the following way:

- The nurse originally triages through the guideline and comes up with a disposition, "Urgent Home Treatment with Follow-Up Call." The reason for this disposition is that the patient might qualify for a more delayed disposition if you can effectively manage the patient at home—but you need more information or need the caller to try some things at home right now.
- The call is stored depending on software options. For example, the call might be stored within a follow-up queue, or the nurse may schedule a follow-up call or make a note to call the patient back.
- The call is kept open. This allows for documentation to be added, the call to be re-triaged on the callback, and a final disposition to be added.
- The nurse calls the patient back and completes triage.
- The Urgent Home Treatment is NOT a final legal recommended disposition. It requires some kind of follow-up--either by patient or nurse (preferably by nurse).

Software Considerations: Software and call center features that can support this process must be considered.

- Can the nurses place a call into a follow-up queue to call them back later? The record remains open in this case to adjust documentation.
- Is there the ability to be flexible when a call closes? Can a 1-hour time frame be picked? Or can closing be triggered by another function other than ending the call? This allows the nurse to be able to re-triage and change dispositions on the follow-up call.
- Is there the ability to re-triage with the same guideline on a follow-up call and pick another disposition on an open call?

Q: What are our options for handling follow-up calls?

Options for Call Centers Who Want to Do Follow-up Calls:

- The call process for these follow-up calls that are recommended within the guidelines are generally determined by call center policy and supported with software functionality.
- Call centers can do all of the following aspects of these calls a little differently:
  - ✓ Follow-up Call initiator: Does the nurse call the patient back or does the patient callback?
  - ✓ Call process: Do you do a new second call or do you keep the first call open and readjust the disposition on the call back?
  - ✓ Documentation: Do you completely reassess or do you just add an addendum to the original assessment about what's changed?
- In general, these calls do require re-assessment and re-triage, but how the nurse does that and what is documented in the second call is covered by a policy. Some call centers have the nurses completely re-assess. Some have them only chart what's changed. Other call centers have nurses refer to the first call for the assessment that hasn't changed or have the nurse add an addendum. So, documentation of the follow-up call can be done several different ways.
- If the patient becomes worse within the specified time frame; they are previously instructed to go to ED (as stated in the care advice).
- The above items are decided at the call center level.

Options for Call Centers That Do Not Do Call Backs or Want Calls Closed After Ending:

- OPTION 1: Patient calls back within specified time frame. These calls are moved up in priority and hopefully routed to same nurse who took the first call. The nurse completes a new 2nd call from knowledge of first encounter.
- OPTION 2: Nurse calls back and creates a second call. The nurse can copy and paste documentation from the first call into the second call. The nurse re-triages and ends up with a final disposition.
- OPTION 3: Nurse calls back with a call in follow-up queue or just noted manually. The nurse adds a note to the original closed call (first call) as to final disposition and what she told the caller to do. This option is not ideal in triage medico-legal world.
- OPTION 4: Call centers can customize and take out Urgent Home Treatment Disposition statements from triage and replace with a ***Go to ED Now*** Disposition.

Providing OTC and Prescription Medication Advice

Q: How should a call center manage the various nurse practice act restrictions related to medication advice when taking calls from multiple states?

Legal Ramifications:

- Many call centers cover calls from different states.
- What nurses can and can't do in a state is governed by each state's nurse practice act.
- State Nurse Practice acts very widely from state to state with regards to medications. Nurses' role in refilling medications, using medication protocols/standing orders, and recommending OTC medications is restricted to various degrees.
- In some states, the practice acts haven't quite caught up to how telehealth nursing is being practiced.
- This is a legal issue that depends on the interpretations (which can vary) of the state nursing practice act by nursing board members, your own call center management, and your legal department's recommendation.
- Since this is a risk management issue, you should seek the advice of whoever provides legal counsel for your program.
- It does depend on interpretation and what level of risk you/they are willing to take.
- Currently, we are not aware of any legal precedent being set in this manner or the law being challenged with a legal case in regards to a nurse recommending OTC medications.

Authors' Stance - MD Standing Orders for OTC Meds:

- Our own stance on this is because nurse telephone triage falls under the medical scope of practice, the medical director in the call center (or supervising physician in an office setting) is responsible for all triage and advice given.
- That means the Medical Director signs off and reviews all protocols/guidelines by which that care is provided.
- This includes guideline advice about OTC meds and dosing information per the drug dosing tables.
- Therefore, the argument could be made that the nurses are functioning with a standing order from the MD by recommending OTC meds/doses already pre-approved and ordered by the physician.
- Also, the individual PCPs should have signed a contract with your call center that should (or can) include prior authorization for approval for recommending those medications as a standing order within the protocols or guidelines.

Authors' Stance - OTC Medicines:

- A lay person can buy a medication, guess at dosage and/or follow the package for dosing with **no** medical advice at all. They can also give the drug independently without consulting anyone in the medical profession.
- Therefore, we believe a nurse (who has been educated about healthcare and medication) should certainly be able to provide a safe recommendation based upon MD pre-approved dosage tables and protocols.
- This seems like a very safe practice and prevents harm.

Authors' Recommendations - Prescription Medicines:

- As far as prescriptions go, this is more stringently governed.
- This does depend on the state's Nurse Practice Act as to whether or not the nurses can call in prescription refills, new prescriptions, etc.
- You may want to consult with your legal department about this if you take calls for a number of states. You could theoretically make the argument that the nurses are following MD pre-approved standard orders for new prescription medication as above by following a protocol/guideline.
- PCP's should have signed a contract with your call center that also can include prior authorization for those new prescriptions by guideline (standing orders).
- However, the states are more rigid in terms of prescriptions than OTC medications. The state practice acts vary greatly in what the nurses can and can't do.

Option for Prescription Medicines Versus Patient Call or See PCP:

- There is also an option within the guidelines to just have the patient seen or call the office during office hours if you don't have standing orders for prescription medicines pre-approved.
- This may be an easy/safe alternative if your program covers multiple states where this is an issue.

Triage Guideline Questions

STCC - Type of Decision-Making Tool

Q: Are the triage decision-making tools guidelines, protocols, or algorithms?

Guideline/Protocol:

- The terms **guideline and protocol** are often used interchangeably. For example, one online definition defines a clinical guideline as a "*best practices protocol for managing a particular condition, which includes a treatment plan founded on evidence-based strategies and consensus statements by peers in the field.*"

- Another definition of a clinical practice **guideline** that still stands the test of time (IOM, 1990) includes: "*systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances*."
- The Schmitt-Thompson clinical content conforms to these definitions of a clinical guideline/ protocol.

The Schmitt-Thompson clinical content is a decision-support tool that:

- ✓ Was developed systematically through a survey of the relevant medical literature.
- ✓ Incorporates evidenced-based information when available.
- ✓ Is reviewed by an expert panel of nurses and physicians.
- ✓ Is updated annually based upon changes in the medical literature, feedback from triage nurses, physicians and call center medical directors, input from the Schmitt-Thompson expert reviewer panels, and results from ongoing analysis of outcome and quality assurance information.

Algorithm:

- One can define an **algorithm** as a logical sequence of steps for solving a problem that can be translated and loaded into a computer software program.
- The Schmitt-Thompson clinical content meets this definition of an algorithm. The Schmitt-Thompson clinical content is stored in a highly structured relational database and organized algorithmically.

PURPOSE: Regardless of whether one describes the Schmitt-Thompson clinical content (STCC) as telephone triage guidelines, protocol, or as an algorithm, their purpose is to:

- **Facilitate a safe telephone triage process** and sort patients to the most appropriate level of medical care (disposition) based upon the acuity and severity of their symptoms (triaging the right patient to the right place at the right time).
- **Provide decision-support** to telephone triage nurses. The purpose of the guidelines is to guide the triage nurse's decision-making process. The triage nurse uses the triage guidelines, along with critical thinking and clinical judgment, to determine the best recommendation for the patient.
- **Deliver best practice care** and advice based on expert consensus and evidence-based research.
- **Reduce variability in triage practice** and provide a standardized basis for referral and patient education.
- **Promote efficient use of resources.**
- **Serve as a framework for quality assurance** audits and quality improvement.
- **Provide a reference for ongoing nurse education** both during and after triage calls.

STCC - Supporting Evidence

Q: Are the STCC guidelines evidenced-based?

Yearly changes in the guidelines are based upon the following resources and evidence:

- American Academy of Pediatrics (AAP) new clinical practice guidelines and policy statements (including the AAP Red Book)
- American College of Emergency Physicians (ACEP) new clinical policies and guidelines
- American College of Obstetricians and Gynecologists (ACOG) new clinical policies and guidelines
- American Academy of Family Physicians (AAFP) new clinical policies and guidelines
- Centers for Disease Control and Prevention (CDC) new guidelines or recommendations
- Food and Drug Administration (FDA) new regulations and advisories
- Cochrane Library of evidence-based medicine: new and updated reviews
- New Clinical Guidelines from other national organizations (e.g., AHA, ADA)
- Research findings reported in medical literature over the year
- Expert reviews of and recommendations for all specialty guidelines by specialists in that field
- Consensus-based recommendations from expert panels (medical advisory boards, etc.) of practicing physicians

STCC - Review Process

Q: How are the STCC guidelines reviewed?

- These guidelines have been reviewed by numerous experts in this field.
- See the list of pediatric guideline reviewers (Appendix O) and adult guideline reviewers (Appendix P).

STCC - Guideline Research

Q: Have the STCC guidelines been researched?

- These guidelines have over 10 published research studies in peer-reviewed journals. See the attached annotated bibliography (Appendix N and W).
- These studies have documented:
  - ✓ High caller compliance with recommendations for ED referral and Home Care dispositions
  - ✓ High caller satisfaction of over 95%
  - ✓ High efficacy with 90% appropriate ED referral rates
  - ✓ High PCP satisfaction
  - ✓ Substantial cost-savings in recent study of caller prior intent (70% of ED self-referrals were unnecessary following nurse triage).
  - ✓ Very safe care (rare under-referrals of 1: 600 calls).

STCC - Review/Implementation of Annual Updates

Q: What is the best way to review and implement the updated guidelines each year?

- The guidelines are updated each year.
- Most call centers have their medical director review the yearly changes before approval.
- The review process can be labor-intensive if one reviews every single change. To expedite this process, it's recommended that medical directors only review the **MAJOR** changes in existing guidelines and the **new guidelines**.

New Guidelines	•Newly released triage guideine
Major Redline Revisions	•Addition or deletion of triage assessment question •Any movement of a triage question to a different disposition level •Substantive care advice changes •Substantive background information changes •Substantive definition changes
Minor Revisions	•Addition/deletion of references •Re-ordering of triage assessment questions within same disposition level •Minor wording changes throughout •Spelling, grammar, punctuation •Any Search Word change •Any Initial Assessment Question change

- Reviewing all the **MINOR** changes is a time-consuming process and doesn't serve much purpose.
- Another briefer way to do this review is to target the guidelines that the author mentions in the annual "letter to the users" explaining the major changes.
- Some call centers install the updated guidelines and use them while the internal review is ongoing. They trust that the updates have already been cross-checked by both authors and other experts in the field.

Customization of Guidelines

Q: What are the Pros and Cons of customizing triage guidelines for a call center?

Some call centers make custom changes to the standard triage guidelines. The pros and cons of making custom changes should be carefully considered when making these changes (see Table 8).

Table 8: Customizing Guidelines - Pros and Cons	
Pros – Reasons to Customize	**Cons – Reasons Not to Customize**
• Health care practice standards and health care resources can vary by location. Respecting this variation, local call centers have the right to make minor modifications to the Schmitt-Thompson Clinical Content (STCC) to reflect local healthcare practices and resources. • **Local Practice Standards**. Clinicians in a healthcare network may have developed a consensus standard and identified certain fever thresholds for pregnancy or neonatal fever that require immediate physician evaluation. The drug of choice for treating eye infections has no national consensus and some call center advisory boards may select a different one for the clients they serve. • **Local Resources**. Variation in the availability of health care resources may be a more significant factor than healthcare practice standards. For example, in some rural areas, urgent care centers are rare. In other areas, urgent cares are open 7 days a week with some providing diagnostic testing that rivals small emergency departments (ultrasound). • Approximately 10-20% of medical call centers make modifications to the Schmitt-Thompson Telephone Triage guidelines. At the majority of call centers these modifications are modest, limited to a few protocols, and approved by the Medical Director or a Medical Advisory Board.	• Increasingly, national standards should be the guiding factor in clinical decision- making and medical care. • The STCC telephone triage guidelines are internally consistent. It is important for clinical care and nursing ease of use to maintain this consistency. A change in one guideline can often make that guideline inconsistent with other guidelines. It also may make the pediatric and adult triage or care advice different when they don't need to be. • The STCC telephone triage guidelines have been extensively reviewed by experts from the STCC Pediatric and Adult Review Panels. • The content of the STCC telephone triage guidelines reflects years of feedback from call centers across the United States and Canada. This feedback process is ongoing and input from medical call center managers and medical directors is actively welcomed by Dr. Schmitt and Dr. Thompson. • New telephone triage guidelines are reviewed and tested before release. Updates of existing guidelines reflect important and at times critical changes in the medical literature. Updates incorporate the results of call reviews and quality improvement projects. • The Schmitt-Thompson Telephone Triage Protocols are updated annually. The logistics of synchronizing your customizations with the annual updates increases exponentially with the number of customizations you have made. Mistakes can be made in the process. Call centers also report that this manual synchronization process delays implementation of the annual update.

Here are our recommendations if your call center decides to make modifications to the Schmitt-Thompson telephone triage guidelines:

- Avoid making customizations for individual physicians or individual physician practices. Instead, research, discuss, and implement customizations so that they are applied to all calls at your call center. This approach to customizations will require active and involved leadership from your call center Medical Director or Medical Advisory Board.
- Utilize policies and procedures. Look for ways to handle changes through your call center's policies and procedures rather than through changes to the guidelines.
- Limit minor changes. Minor changes suggest low clinical significance. The ratio of the benefit of such changes to the challenges of annual guideline synchronization is low.
- Submit your ideas for major changes to the authors. Drs. Schmitt and Thompson welcome input from their call center partners. Managers and Medical Directors can submit recommendations and rationale for content improvement via email. Drs. Schmitt and Thompson will review the recommendation, research best practice, obtain input from the STCC Review Panel members if needed, and then respond to you. If they agree with your recommendation, they will add your changes to the clinical content. This time-tested approach leads to ongoing-yearly improvements in the content that benefits all call centers.

Safety of Disease-Based Guidelines

Q: Is it safe to use disease-based guidelines?

- A premise of disease-based guidelines is that if a lay person can reliably make a diagnosis (e.g., an ingrown toenail), then the TCP is more than qualified to make that same diagnosis.
- As a general rule, most of the guidelines are symptom-based and neither the caller nor the triage nurse makes diagnoses. However, there are exceptions such as diseases that the average lay person can easily recognize (athlete's foot, head lice, or the common cold).
- Callers may have had other family members diagnosed with the same disease (e.g., chickenpox or influenza) or have friends or neighbors who suggest the diagnosis to them. For these, a disease-based guideline may be indicated.
- The safeguard in all the disease-based (diagnosis-based) guidelines is that they start with a section called Disease Definition. The caller's description of the patient's symptoms must match the listed diagnostic criteria before this guideline's triage and advice are implemented. The TCP should rigorously adhere to the definition.
- There are several advantages of using a disease-based guideline including:
  - ✓ The triage questions and care advice are more specific and targeted.
  - ✓ The call encounter is faster and more productive.
- The See More Appropriate Guideline section prevents nurses from overusing disease-based guidelines, and these should be carefully considered by the TCP. If the diagnostic criteria are not met, the triage nurse is redirected to the appropriate symptom guideline (e.g., from Hives to Rash or Redness-Widespread).

Authors' Rationale for Splitting Guidelines

Q: Why are there so many guidelines?

- "Splitting" refers to a guideline development philosophy of splitting topic areas into discrete triage guidelines that address specific patient complaints rather than having longer all-purpose guidelines.
- Complaint-specific guidelines are shorter, allowing the nurse to triage a patient with fewer questions and in less time. This is important because the cost per call is directly related to the length of the call.
- Splitting also permits more targeted and relevant care advice. Using eye symptoms as an example, rather than having one general eye symptom guideline, there are multiple eye symptom guidelines available (e.g., Eye - Allergy, Eye Injury, Vision Loss or Change, etc.)

Authors' Rationale for Multiple Home Care Statements

Q: Why are there multiple home care statements?

- The guidelines are written so that the nurse will have targeted care advice for a specific clinical question. In this way, only specific care advice directly related to the clinical situation is displayed. This results in a more efficient and faster triage call process.
- Some call centers have suggested combining all home care advice into one all-inclusive home care statement. There a number of reasons we do ***not*** do this, including:
    - ✓ Call times are longer if the triager gives all the care advice. This results in more call center inefficiency and less productivity.
    - ✓ Caller tunes out from advice overload resulting in caller dissatisfaction and inability to retain the most important information.
    - ✓ Nurses cannot find the specific care advice they need quickly if they have to sort through and select from all the care advice on the screen. This leads to user dissatisfaction.
    - ✓ Doing so can result in care advice displayed on the screen that may not be applicable to the majority of calls.

Authors' Rationale for "ALSO" Home Care Statements

Q: Why are there "ALSO" statements within the Home Care deposition level that don't include main symptom care advice?

- The "ALSO" questions in the guidelines were meant to be additional care advice to the primary home care statement. For example in the pediatric Cold guideline, there is a primary statement: "Colds with no complications." This is followed by several ALSO statements:
    - ✓ ALSO, blood-tinged nasal discharge is present
    - ✓ ALSO, mild cough is present
    - ✓ ALSO, air travel with colds, questions about

- We intended the nurses to check two questions in the home care disposition if they need the "ALSO" additional care advice. This does NOT imply they do triage for a second time to get to the additional statement. We assume the nurse is looking at all the home care statements grouped together. We are aware that not all software platforms support checking two statements or viewing the whole guideline at one time (instead relying on one question at a time).
- However, we encourage software platforms to allow the nurse to check more than one statement (in Home Care level only). This allows the nurse to view only the applicable care advice for the call.
- We have separated these homecare statements out for a couple reasons:
  - ✓ To include all the care advice for all the conditions is unnecessary. For example, in the pediatric Colds protocol, getting on a plane or having blood-tinged nasal discharge will not apply to the majority of calls. The additional care advice only applies for a small percentage of children with colds and those callers who call with those specific conditions. The majority of children with colds do not need this extra advice.
  - ✓ To put all the care advice for example #1 under Home Care for all colds, would make the care advice extremely long and difficult to weed through for nurses. In addition, the more care advice on the screen, the more the nurses feel obligated to give it all. Doing so would result in longer call times and less call center efficiency and productivity.
- Software vendors hopefully will support looking at the whole guideline (or all questions within a disposition level) as well as checking two statements in the Home Care disposition for reasons above.

Purpose of Rule Out/Reason Statements

Q: Why are "Rule-Out" and "Reason" statements provided?

- The ***Rule-Out (R/O***) statements adjacent to a triage assessment question list the most likely conditions or diagnoses that could cause this symptom.
- The ***Reason*** statements provide the specific indications for a disposition.

Examples of R/O & Reason Statements from Guideline: Cough – Acute Productive - Adult

Coughing up rusty-colored (reddish-brown) or blood--tinged sputum
R/O*: pneumonia*

Continuous (nonstop) coughing
Reason*: may need codeine or asthma medication*

- Rule-outs and Reasons are intended for the triager, ***not*** for the caller. The rationale statements allow the triager to:
  - ✓ Understand the medical thinking and reasons behind each question.
  - ✓ If unsure of patient's status, more easily create other questions to pursue relevant diagnoses.
  - ✓ More easily memorize the questions (understanding increases recall).
  - ✓ Increase triager job satisfaction and improve judgment.
- These rationale statements also allow physician reviewers to more easily critique the indications for seeing patients.

CAUTION to Triage Nurses:
Do Not Share Possible Diagnoses with Callers

- Be careful not to overstep your practice boundaries. Nurse triage aims to sort the symptoms by acuity and assign the appropriate level of care. Generally, diagnoses should not be made without seeing the patient and performing a physical examination.
- It is fine for you to think diagnostically or consider differential diagnosis. However, you shouldn't share these provisional diagnosis (e.g., suspected appendicitis) with the caller.
- **What if the caller asks you what he or she might have?**
  Tell the caller, "*It's impossible to diagnose most conditions over the telephone. However, from what you've told me, you (or your child) need to be seen for a complete evaluation today."*
- **What if the patient raises a diagnostic possibility such as appendicitis and you agree with it?**
  Tell the patient, *"It is one possibility. That's why you (or your child) need to be evaluated now."*
- Only as a last resort should you use scare tactics (i.e., telling potential diagnoses) to motivate a patient to comply with a 911 or ED Now recommendation.

Triage Call Processing Questions

Selection of Guidelines Based on Patient's Age

Q: When should the triager use the pediatric verses adult guidelines for different age groups?

Use the following guide (Table 9) for selecting the correct set of guidelines to use.

Table 9: Guideline Selection Based on Patient's Age	
Use the Pediatric Guidelines for:	**Use the Adult Guidelines for:**
• Newborn: First month of life • Infant: Birth to 12 months • Child: 1-5 years • Older child: 5-12 years (school age) • Teen: 12-18 years • Young Adult: 18-21 years (use either set)	• Young Adult: 18-21 years (use either set) • Adult: 21-120 years • College Student: 16-21 years • Pregnancy: 12-60 years • Postpartum: 12-60 years
Pediatric-Only Call Center (No Adult Guidelines) • Pediatrics covers birth to 23 years • Note: Pediatric guidelines can be used over age 21 for healthy younger adults	**Adult-Only Call Center (No Pediatric Guidelines)** • Adults: 16-120 years • Pregnancy: 12-60 years • Postpartum: 12-60 years • Note: Adult guidelines can be used for teens

Go to ED Now (or PCP triage) Dispositions

Q: How should the triager interpret the disposition "Go to ED Now (or PCP triage)"? Can the patient be seen in the PCP office, or does the patient need to be seen in the ED at a hospital?

- For after-hours, the "Go to ED Now (or PCP triage)" disposition means either sending patients into the ED or UCC within the next hour OR putting the call back to the on-call physician for second level triage (see Page 24).
- Some of your physicians want to do second level triage for their patients who would otherwise be sent to an ED based on nurse triage.
- The nurse puts the callback to involve the MD. The MD then contacts and re-triages the patient and decides on the final disposition.
- If your program doesn't have any physicians that do second level triage, the nurse sends the patient in with instructions to be in the ED or UCC within the next hour (or at least have left for the ED/UCC).
- For daytime triage during office hours, the after- hours disposition equates to "Go to ED Now (or to Office with PCP approval)". They could be seen at the office if the MD gives prior approval and wants to see the patient in the office. Otherwise, they should go to ED or UCC.

Referring Patients to ED Vs Urgent Care Center (UCC)

Q: With the disposition "Go to ED Now" or "Go to ED Now (or PCP Triage)," must the patient go to the ED, or can the patient be seen at an UCC?

- The decision whether a patient can go to UCC versus an ED depends on:
  - ✓ the seriousness or acuity of the patients main problem

- ✓ the differential diagnosis the nurse is concerned about
- ✓ the presence of complex chronic illness
- ✓ the knowledge of local resources (what the UCC's are capable and comfortable dealing with in that location).

- This requires some nurse judgment as to where the appropriate place is to send patient. It also depends on what is the closest facility that's appropriate for the patient acuity. For instance, a possible surgical case (e.g., appendicitis) should go to an ED and not to UCC. Serious illness/trauma, patients with chronic unstable disease, and patients who sound really sick should go to an ED.
- Patients that possibly need ultrasounds, CTs, specialty care (e.g., ophthalmology) usually need to go to an ED that has those resources.
- A patient with a simple laceration that needs sutures or Dermabond can certainly go to an UCC. So can patients that sound stable and just need an exam/possible lab work/x-ray, etc.
- The term UCC incorporates both free-standing and those near/within a hospital. Those that are within a hospital may be able to deal with a little higher acuity.
- If there's any question about the most appropriate place to have patients seen, have the nurse call ahead. The nurse can speak to the MD or charge nurse to decide whether the UCC is comfortable with a specific type of patient.

How to Address Transient Symptoms (Symptoms Now Gone)

Q: How should the triager handle triaging transient symptoms that have resolved at the time of the call? Does it matter how long in the past (minutes or hours verses days) the symptom last occurred?

- Generally, the protocols are written in the present tense, for symptoms that are occurring now.
- Nursing judgment is required for symptoms that have occurred in the past and are now resolved (or nearly so).
- It would be very difficult to write logic into the protocols that would handle every variation of symptom and onset.
- The triage nurse should take into consideration several factors (see Table 10) when triaging symptoms that occurred but are no longer present at the time of the call.

Table 10: Triaging Transient Symptoms (Now Gone) – Factors to Consider	
Symptom Acuity	• An earache that happened 3 days ago, lasted 30 minutes, and is now completely resolved is really more of a health information call (e.g., what are the causes of earache). This patient would not need to be seen. • Whereas, a 30 minute episode 3 days ago of paralysis of the left arm in a 60 year old patient with hypertension, still deserves some type of semi-urgent follow-up care and good ***Call Back If*** instructions.
When Symptom Occurred	• The longer ago the symptom occurred the less urgent the follow-up disposition. For example: ✓ a fever of 104 in an adult occurring right now is moderately concerning. ✓ the same fever having last occurred yesterday is mildly concerning. ✓ the same fever having occurred 3 weeks ago is just a health information call.
Symptom Recurrence	• In most cases, low acuity symptoms that happened only once and completely resolved merit a home care disposition. Examples of this would be an earache, toothache, knee pain, or brief abdominal pain. • The nurse also needs to consider the pattern of recurrences and how frequently they are occurring. For example, a frequent pattern of recurring transient crying in children can also indicate more serious conditions (e.g., intussusception). • If symptoms have been recurring or chronic (over weeks), then a follow-up (usually non-urgent for low-acuity symptoms) is indicated.
Other Clinical Factors	• The triager needs to also consider clinical factors. Examples include the patient's age, co-morbidities, immune status (e.g., HIV, diabetes, cancer chemotherapy), recent hospitalizations/procedures/PCP visits, pregnancy and prior calls.
Social Factors	• Social factors that should be considered are: ✓ **R**eliability ✓ **A**buse ✓ **T**ravel distance (and access to care) ✓ **E**motional • The triage nurse can **RATE** the patient by assessing these factors (see Page 47).

EXAMPLE: Transient Chest Pain

- In the particular case of chest pain, if a day had passed and the patient was completely asymptomatic, it would not make much sense to Call 911. Instead, an ED visit might be a reasonable and conservative disposition.
- If several days had passed and the patient was completely asymptomatic, a SEE IN 24 hour disposition would probably be appropriate. When in doubt, a conservative disposition stance for adult chest pain is warranted.

Other Options for Providing Care Advice

Q: What are other options for providing care advice?

- Providing complete care advice can be time-consuming. The length of the call relates directly to the cost of the call.
- Instead of providing all care advice live, the TCP can use the following strategies to expand care advice or to provide backup for forgotten care advice:
  - ✓ Care advice can be transmitted by fax, email, or smart phone applications.
  - ✓ Care advice may also be made available as pre-recorded messages.
- When using any of the above methods, it is important to check and comply with the HIPAA requirements of your organization's policies and be sure your software can support these safeguards.
- Internet Access: Medically-sound information to supplement advice given may also be available to the caller if they have access to the internet (e.g., CDC website).
- Self-triage products (e.g., symptom checkers) may also be available on hospital or outpatient clinic websites to provide additional care advice and information on when to call the physician.
- Self-triage: Pediatrics and adult self-triage/self-care information is also available for consumers who have iPhones or Android phones (Symptom MD application).

Use of Initial Assessment Questions

Q: How are the Initial Assessment Questions (IAQs) intended to be used by the authors?

- Each After-Hours telephone triage guideline has its own set of **Initial Assessment Questions** (IAQs).
- The primary purpose of the IAQ's is for training and reference (see Table 11). New call center nurses can benefit from the IAQs by using them during each call for both training and as a reference.
- Many call centers have new nurses study the top 20 calls. Reviewing and using the IAQs during mock calls is an effective way for the new nurse to begin to incorporate this important information into his or her telephone interactions.

- The IAQs can also be helpful to nurses who have completed training. The triager can use the IAQs as a reference to better organize their nursing assessment and improve efficiency.
- Some types of calls are so rare that the IAQs are beneficial to experienced call center nurses to use as a reference on an as needed basis.
- The IAQs can also serve as an educational tool to discuss rare calls at staff meetings or use in scripting mock calls for training purposes.

Table 11: Purpose of Initial Assessment Questions (IAQs)		
	Training	**Reference**
New staff	✓	✓
Staff with long call times and/or efficiency issues due to lack of an organized assessment or inability to control the call		✓
Staff who are using a guideline for the first time or have a lack of clinical experience in dealing with a certain symptom		✓

Q: Should we use them to document our assessments on every call?

- Some medical call centers require their triage nurses to use the IAQs on every call and document answers to each question. This was not our original intent, and we do not think this should be a standard for all call centers.
- There are number of disadvantages and inefficiencies to requiring nurses to use the IAQs on every call. These disadvantages and inefficiencies impact the call process and potentially increase call times and the cost per call.
- Both the guideline **Definition** section and the **See More Appropriate Guideline** prompts help the nurse quickly select and enter the correct guideline after a general nursing assessment. The IAQs are not a necessary step in selecting the correct guideline.
- The nursing assessment should precede and drive guideline selection. If the nurse is doing the majority of the assessment with the IAQs after guideline selection, this may lead to errors in selecting the correct guideline. Selecting the right guideline for the set of symptoms is crucial to reaching the correct disposition.
- If the nurse discovers she is in the wrong guideline while answering the IAQs and/or scanning the **See More Appropriate Guideline** prompts, the nurse will then need to select the correct guideline and go through another set of IAQ's. The original set of IAQ's may or may not be relevant. The result can be longer call times and an inefficient call process.
- Not all of the IAQ's are relevant to an urgent or emergent disposition. (For example, the tetanus status of the patient for significant trauma. This becomes unimportant since the tetanus status will be covered in the ED). Documentation of these facts is irrelevant to the correct disposition and is another example of inefficiency.
- A general principal of telephone triage call documentation is that the higher the level of disposition, the less documentation is needed.
- Requiring the nurses to ask all the IAQs adds time to the call. The essential questions are covered in triage, but may also be cross-covered within the IAQs. If call centers require answers

to be documented in both IAQs and triage questions, this leads to duplication of data collection and documentation.

- Nurses are required to be able to complete a basic nursing assessment independently at the bedside. Phone triage is no exception and nurses should develop this important skill. This is a critical-thinking skill that is essential to effective nurse telephone triage decision-making. Required and consistent use of IAQs may hinder the nurses' ability to think "outside the box" and encourage very concrete thinkers (e.g., "If it's not on the screen, I don't need to think about this").

Author's Stance on Using IAQs - Key Points

- Medical call centers may choose to use the IAQs on every call to augment the nursing assessment. However, the authors do not think this should be a standard policy for all medical call centers.
- The primary purpose of the IAQ's is for training, education and reference.

Triage Call Documentation Questions

Generic Nursing Assessment Questions

Q: Is there a list of generic assessment questions the triage nurse should ask before choosing the correct guideline?

The assessment piece of the triage call should drive guideline selection and should also support the positive triage question selected (disposition). In general, this is what you need to know on every call:

- The patient's main symptoms
- Onset of the symptoms
- Severity of the symptoms
- Activity level/behavior.
  - ✓ In pediatrics—*How is the child acting?*
  - ✓ In adults—*Is the patient able to perform ADLs and function normally?*
- Assessment of pain where appropriate and applicable with the symptom
  - ✓ For level of pain, adults can use the 1/10 scale.
  - ✓ For children, we generally assess behavior to interpret their level of pain.
  - ✓ In some guidelines, (e.g., abdominal pain), the pattern of pain may be clinically relevant.
- Any chronic illness/medical issue and current routine medication (i.e. the health history of the patient)

The following may also be important to assess where applicable, but these clinical parameters are generally included in triage guideline questions when relevant:

- Presence of fever when clinically pertinent to decision-making
- Hydration when clinically pertinent to the symptom (e.g., vomiting and/or diarrhea)
- For females of child-bearing age--possibility of pregnancy where clinically pertinent to decision making (e.g., LMP, sexually active, etc.)
- What have they tried already to treat the symptoms?
  Examples include pain meds, home care remedies, first aid, etc.
- If they've tried appropriate home care treatment and it's not working, this may result in higher disposition for the call.

The generic templates (see Appendix T) may also aid in developing appropriate generic assessment questions for given clinical situations.

Documenting Pertinent Negatives

Q: Don't we also need to document negative triage questions?

- Sometimes a concern is raised that only the "Yes" statement is documented, but that all the preceding "No" statements (pertinent negatives) are not charted. This is called charting by exception.
- Documenting by pertinent positives is safe and permissible because the nurse is following and adhering to a guideline.
- The guideline is key. Without it, the nurse would need to record pertinent negatives as well.
- Charting by exception has become the standard of care in medical call centers and offices.
- It keeps call processing and documentation simple and brief.

Chronic Illness, Current Medications, Allergies, and Social History

Q: How much does the triager need to document about patients medical and social history?

Active Chronic Medical Conditions:

- *Active* chronic medical conditions are important to know in most calls. Documentation of pertinent chronic illness is indicated in most calls.
- Documentation should not be a comprehensive listing of every medical and surgical problem that the patient has ever had. Instead, documentation should reflect current ongoing medical problems (the active problem list).
- The higher the acuity of the disposition, the less documentation of chronic illness will be needed. A patient who obviously requires an EMS 911 or GO TO ED NOW disposition needs a very abbreviated or no documentation of chronic illness.
- The Schmitt-Thompson guidelines contain **Initial Assessment Questions** (optional for nurses to use) that prompt the triage nurse to inquire about key chronic illnesses that are pertinent for certain complaints.

Example: Heart Rate and Heart Beat Questions – Pediatric Guideline

Initial Assessment (IA) Question:
CARDIAC HISTORY: "Does your child have any history of heart disease or heart surgery?"

- The guidelines contain **Triage Questions** that prompt the triage nurse to inquire about key chronic illnesses for certain complaints, and then the guidelines recommend a disposition.

> **Example: Puncture Wound –Adult Guideline:**
> Triage Statement:
> *[1] Diabetic AND [2] puncture wound of foot*
> *Reason: diabetic neuropathy and decreased resistance to infection*
>
> **Example: Headache – Pediatric Guideline:**
> Triage Statement:
> *[1] High-risk child (e.g. bleeding disorder. V-P shunt, CNS disease) AND [2] new headache*

- When documentation of chronic illness is indicated, the recorded information can often be very brief (e.g., *PMH – diabetes, PSH – coronary bypass surgery).*

Medications:

- It is reasonable and appropriate to document medications to the extent that they are pertinent to the presenting complaint and they affect the disposition.
- Sometimes inquiring about current medications reveals a ***Chronic Illness*** that the caller had forgotten or denied.
- Documenting every medicine that a patient takes on every call is time-consuming and not necessary.
- The higher the acuity of the disposition, the less that the medications will need to documented. A patient who requires an EMS 911 disposition rarely needs any documentation of medications. Such rare circumstances would include a life-threatening reaction to the medication (e.g., anaphylaxis) or severe hypoglycemia. In such a circumstance, documentation should not delay completion of the call.
- A patient who requires a GO TO ED NOW disposition usually doesn't need to have medications documented.
- The Schmitt-Thompson guidelines contain **Initial Assessment Questions** (optional to use) that prompt the nurse to inquire about key medications for certain complaints.

> **Example: Asthma – Pediatric Guideline**
>
> Initial Assessment (IA) Question:
>
> *MEDICATIONS (MDI or nebs): "What is your child's asthma medicine?" and "What treatments have you given so far?"*

- The guidelines contain **Triage Questions** that prompt the nurse to inquire about key medications for certain complaints, and then suggests a disposition.

> **Example: Head Trauma – Adult Guideline**
>
> Triage Statement: Disposition - GO TO ED NOW (or PCP triage)
>
> *Taking Coumadin or has known bleeding disorder (e.g. thrombocytopenia)*

- When medication documentation is appropriate, the recorded information can often be very brief (e.g., *MEDS – amoxicillin, started yesterday).* Documenting the exact dosage of a medication or dosing interval is not necessary unless:
  - ✓ The patient has a specific medication question, or
  - ✓ An adverse drug reaction (dose-related side effect or overdose) is suspected by the triage nurse or caller, or
  - ✓ The triage nurse is calling in a prescription (by physician standing order and per protocol) for a medication (e.g., antibiotic eye drops for purulent conjunctivitis, nystatin for oral thrush).

Medication Allergies:

- Medication allergies are only rarely pertinent to the presenting complaint and the triage decision-making process.
- Medication allergies should be documented in the following two circumstances:
  - ✓ Presenting complaint is rash or other suspected drug reaction.
  - ✓ Triage nurse is calling in a new prescription (by physician standing order and per protocol), calling in a refill (per call center policy and per physician standing order), or recommending an Over-the-Counter medication (per call center policy and protocol).

Social History:

- There are a number of social factors that may influence triage decision-making.
- Social history only needs to be documented if it affects the triage disposition.
- The triage nurse can use the acronym RATE to remember important social factors (see Table 10).

Table 10: Social Factors RATE the Patient

Reliability	Language barriers Confusion Intoxication Limited education Second-party callers Truthfulness
Abuse	Partner, child and elder abuse Drug and alcohol abuse
Travel Distance and Access	Distance from hospital and office Access to car or other transportation Ambulatory or bedridden
Emotional	Anxiety, fear, hysteria

Call Documentation Reports for Providers

Q: What type of information are the providers looking for in our call center triage call reports?

- Computerized triage systems capture all the data that the TCP records.
- In addition, many medical call centers record all calls, so the recording stores every detail of the telephone encounter.
- The patient's PCP usually wants a brief report of what happened. The following are the essential documentation needed beyond patient identifying information:
  - ✓ Guideline used
  - ✓ Positive triage question that led to disposition
  - ✓ Disposition reached and recommended
  - ✓ Statement that standard care advice given for that guideline
  - ✓ For any OTC drugs recommended, record dosage

Patient Refusal of a 911 or ED Now Disposition

Q: What should the triage nurse do if patient refuses to follow a 911 or ED Now recommendation?

- It is important for every call center to have a procedure/policy that covers the nurses in case of caller disagreement and caller downgrades.
- This is a risk-management issue and may have legal consequences. Therefore, it's important to have some organizational legal counsel and approval in developing these policies. Each call center's policies and procedures should give guidance for the triage nurse to follow in case of patient disagreement with the recommended disposition. This is especially important for 911 and ED Now Dispositions.
- There are many reasons why a caller might disagree with a 911 or ED recommendation. The triage nurse must diligently attempt to identify the barriers to compliance and work with the caller to remove those barriers.
- For 911 Dispositions, the triage nurse must make sure the patient understands the rationale for ambulance transport verses going to ED by car and the possible consequences (e.g., death). Explaining what can happen, and what EMS can do to save the patient's life en route to ED should be emphasized. In addition, the person may place others at risk if the patient drives by causing a serious accident (e.g., if patient loses consciousness). Additional factors such as weather, road conditions, road detours and traffic delays can make transport by car even more dangerous.
- Similarly, for ED Now dispositions, the triage nurse must make sure the patient understands the rationale for going to the ED verses an urgent care or office and consequences of delayed emergency care.
- If all of the above attempts fail and the patient still refuses, the nurse should not change the recommended disposition. In these cases, the nurse should document: a) the 911 or ED

recommendation; b) attempts to remove barriers to compliance; c) patient's understanding of potential consequences; and d) patient's plan to choose an alternative option.

- Each call center may choose to handle these calls a bit differently. For example, some call centers may offer a rapid consult with a PCP or on-call provider if the patient adamantly refuses. Rationale: some patients will comply when they have been instructed to do so by a medical provider they know and trust.
- It is important to keep in mind that a caller/patient does have a right to disagree with the triage nurse's recommendations. Demonstrating respect for the caller/patient and keeping the lines of communication open are important. Instead, the triage nurse should emphasize concern for the person and person's safety. Even when patients disagree, the goal is to have a collaborative relationship. This increases the likelihood that the patient may change his/her mind or call back if needed.
- The key is to document thoroughly and clearly exactly what was recommended and patient's decision to do something else.

Quality Improvement Questions

Quality of Telephone Triage Care - Overview

Q: How is quality of telephone triage care protected?

The primary goal of telephone triage is to provide safe, high-quality care. Key quality improvement measures will help assure your call center nurses are achieving this goal (see Table 12).

Table 12: Components of Quality Improvement System for Telephone Triage	
Monitor New Nurses Closely	• New triage nurses need regular review of call documentation reports until they become competent.
Call Audio Recording and Review	• The call audio recording should be listened to if the generated call report raises concerns.
Periodic Call Documentation Review	• Periodic review of call documentation on triage calls is the best way to check ongoing triager performance. Choose guidelines with high risk symptoms (e.g., Vomiting, Chest Pain). • Review the call for selection of the appropriate guideline, proper disposition, and accurate documentation. A more formal review can utilize a Quality Assurance (QA) checklist (see Appendix Q). • The main goals of call review are to prevent under-referrals and over-referrals. • All errors or omissions should be discussed in a constructive way with the triage nurse to facilitate their ongoing education. • Utilize the Good Call checklist (see Appendix R) to assess whether a specific call met the standard of care.

ED Under-Referrals and Over-Referrals

Q: What are the risks of under-referrals to the ED?

- **Definition:** Not referring a patient to the ED who needs medical care now.
- **Goal**: A call center should have goal of zero under-referrals.
- **Risks**: The risks of under-referrals to the ED include:
  - ✓ Delayed diagnosis and delayed treatment of serious conditions
  - ✓ Increased medical complications and adverse outcomes
  - ✓ Increased malpractice liability for triage nurses, PCP and hospital/ organization

Q: What are the risks of over-referral to the ED?

- **Definition**: Referring a patient to ED now who can safely be seen tomorrow (during office hours).
- **Goal**: Over-referral is a given. The guidelines are written to be somewhat conservative and safe. The goal should be 10% or less of total calls.
- **Risks**: Over-referrals can lead to:
  - ✓ Unnecessary ED visits
  - ✓ Stress for the patient
  - ✓ Longer wait times-inconvenience
  - ✓ Sense of medical vulnerability to the patient and caregiver
  - ✓ Unnecessary exposure to infectious disease
  - ✓ More expensive for consumer
  - ✓ Loss of time and money for the parent
  - ✓ Misuse of ED physician's expertise
  - ✓ Increased costs for medical care system

Q: What are possible ways to look for and track over-referrals and under-referrals?

Hospital Admissions Data:

- If you have access to outcome data or hospital utilization data, you can look at all hospital admissions to see if there was a triage call within the last 24 hours. This process looks for possible under-referrals.
- Review any cases that meet the 24 hour criteria. Listen to the call, and then review documentation and the admitting note from the ED.
- Determine if the call is related to the primary diagnosis in the hospital. Compare the information in the ED to the information given at the time of the call to determine if possible under-referral or if disposition was correct for the time of the call. Of note, natural progression of the disease causes many hospitalizations within 24 hours, rather than the triage nurse missing something that was present at the time of the call.
- Track and monitor under-referrals for individuals as well as for the call center.

Routine QI Audits:

- Routine QI audits can be done also to look for under-referral.
- Focus efforts on high-risk symptoms or frequently-utilized guidelines (e.g., Chest Pain, Neurological Deficits).
- QI projects should mainly look for under-referral, unless over-referral is a concerning issue. Over-referral is easy to track simply by looking at the ED/UCC referral rates month by month for your call center or for individual nurses.

Reducing ED Referrals

Q: What can call centers do to reduce nurse ED referral rates if they are high?

Monitoring for Over-Referrals:

- In general, appropriate dispositions are reflected in the nurses' correct interpretation of the triage questions, collecting and clarifying the caller's data accurately, comfort with the patient's symptoms, and knowledge base.
- Your call center QI program should be auditing calls for "appropriate" dispositions. Therefore, you can determine whether this is an individual or group issue by comparing each nurse's results to the aggregate data for the call center. You will need to take into account the shift that the RN works. Late evenings and night-time calls are usually associated with a higher level of urgency.
- Over-referrals are determined by:
  - ✓ Reviewing the call documentation.
  - ✓ Listen to the call (if call center records calls).
  - ✓ Get the patient outcome data (e.g., call the patient/family back, call the private MD back, or review ED data if available). Track this data electronically for QI purposes.
  - ✓ Make a determination whether the referral is appropriate based on the information available at the time of the call OR is an over-referral.
- For ED over-referral, you have to determine whether this is an individual or group issue. The root of the problem will drive the solutions.
  - ✓ Monitor referral rates for individual nurses. Is this a program problem or an individual nurse problem? Track it quarterly for both. Work with the nurses who are way outside the established benchmark.
  - ✓ Look at referral rates for the top utilized guidelines. Are there referral rates that seem high for the particular symptom? Do call audits on those topics with those specific triage indicators.
  - ✓ Provide group or individual education about specific triage parameters. For example: What objective signs and symptoms to you have to have to click on "Dehydration suspected" or "Sounds sick or weak to triager"?
  - ✓ Provide education about commonly over-referred symptoms. These are symptoms that callers are concerned about but that don't need to be seen in an ED. Always balance education about over-referral with under-referral. Focus on "appropriate dispositions."
  - ✓ If the nurses aren't sure initially, can they give some care advice and call the patient back? Or tell the patient to call back in the next 30-60 minutes (if call center doesn't allow call backs).

Reducing ED Referral Rates with Second Level Triage:

- The guidelines are designed to be somewhat conservative and we expect and tolerate about 10% over-referral.
- Certainly, physicians can cut the ED referral rate in half by doing 2nd level triage (see Page 24). They are able to manage patients medically by calling in scripts or approving more frequent treatment at home (e.g., every 3 hours albuterol treatments for asthmatics).
- They also have the advantage of being familiar with their patients and disease history.

Determining Appropriate Dispositions on Call Audits

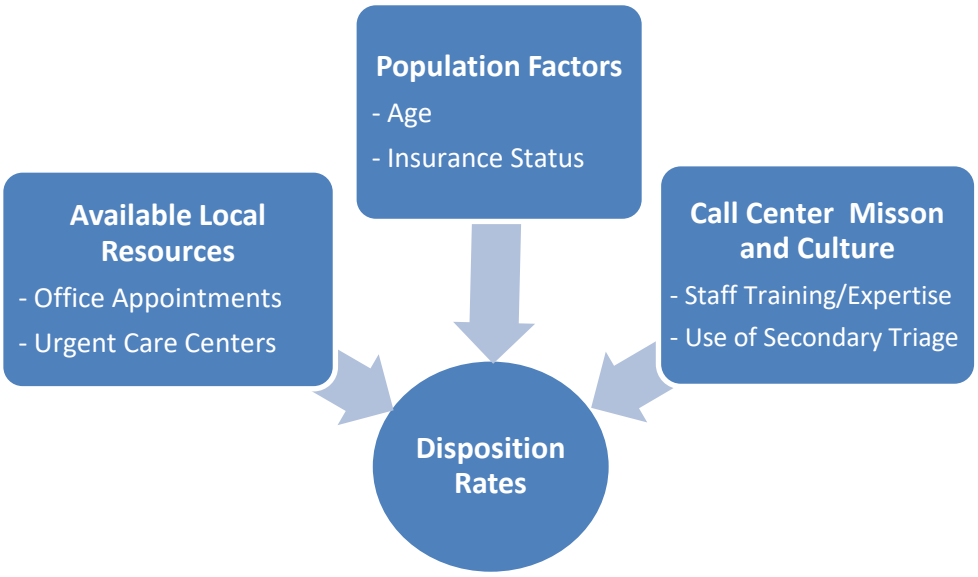
Q: When doing call audits, if the nurse chooses the "wrong" triage indicator, but ends up with the correct disposition level for the call, should this be tracked as an error by the nurse?

- We favor separating out the disposition from the triage question selection for QI. Selecting the appropriate disposition should always receive credit, and getting the correct disposition (minimizing over-referral, avoiding under-referral) is central to what we do from a patient safety standpoint.
- Drs. Thompson and Schmitt teach residents that it is more important to get the disposition (911 versus Go to ED by car versus See in office tomorrow morning) right than to have an exact diagnosis.
- For certain clinical presentations (e.g., "Chest Pain"), diagnostic-certainty is initially elusive and only becomes apparent over hours (or longer) and after diagnostic testing (e.g., angiogram). This also applies to telephone triage.
- The only sure way to prove the triage question selected is not appropriate for the call is to listen to the call (this can be time consuming). Occasionally, you will find documentation does not accurately reflect the call on audio. The nurse may give the right disposition on the audio based on clinical judgment (e.g., she knows what should happen), but selects a clinical indicator that doesn't fit with the patient's history to get the patient to the appropriate disposition.
- The correct thing from a documentation perspective is to override the guideline if "nothing fits." However, newer nurses can feel uncomfortable doing that. It's also a learning process to become comfortable interpreting the guidelines and using the triage questions as they were intended.
- If the nurse gets the right disposition on audio, but selects the wrong triage indicator, make a note of it on your call audits (or track both the appropriate triage question and correct disposition). It's not a disposition error. The most important thing from patient safety standpoint is did the nurse give the right disposition.....and a little less important on how they got there.
- If documentation errors are happening frequently (using wrong indicator, wrong guideline, any under-referrals, chronic over-referrals, etc.), it would be important for the nurse to get further call review.
- Call centers can see these results (and notes) by running reports for individual staff.
- There can be many reasons at the root of this performance issue if it is happening consistently (using wrong guidelines, inadequate knowledge base, nurse uncomfortable, etc.).

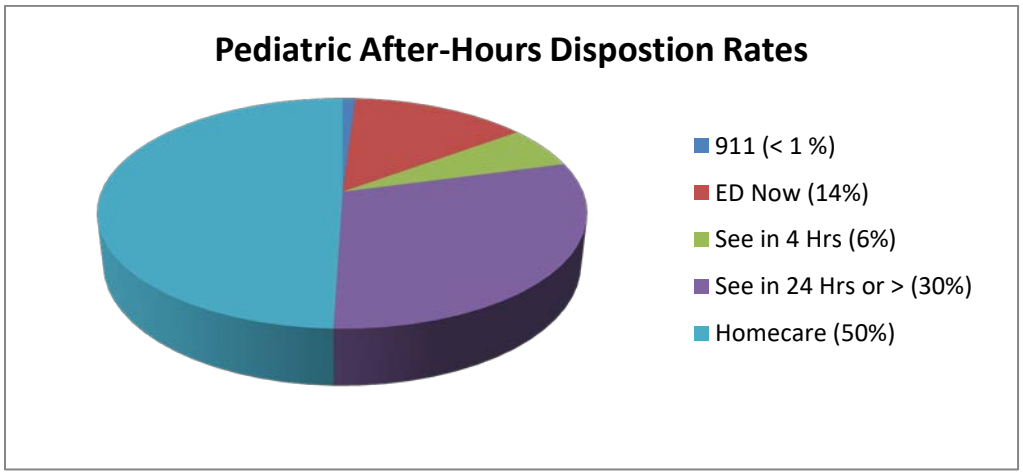
Benchmarks for After-Hours Triage Dispositions

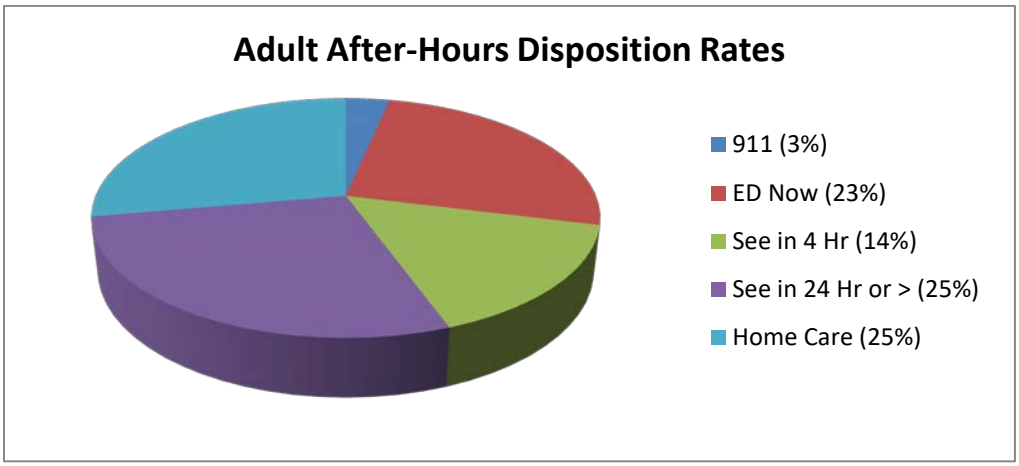
Q: Are there benchmarks a call center can use for after-hours triage disposition rates?

- There are many factors that influence the disposition rates of a given call center.
- Examples of some key factors that might influence a call center's disposition rates are shown in the diagram below.



- Consistently across call centers, adult call dispositions are associated with higher urgency and fewer homecare dispositions than pediatric calls. Most adults do not call unless they think they need to be seen.
- Many medical call center managers want to know how their center's disposition rates compare to other medical call centers' rates.
- The following (page 54) are some benchmarks for pediatric and adult calls derived from data collected internally over several years from a number of medical call centers.
- Remember: Benchmarks are not the same as established "standards" for disposition rates. Many factors can affect your call center rates.


Pediatric After-Hours Dispostion Rates
911 (< 1 %)
ED Now (14%)
See in 4 Hrs (6%)
See in 24 Hrs or > (30%)
Homecare (50%)


Adult After-Hours Disposition Rates
911 (3%)
ED Now (23%)
See in 4 Hr (14%)
See in 24 Hr or > (25%)
Home Care (25%)

Appendices for STCC After-Hours User's Guide

- Appendix A: Alphabetical Table of Contents for Pediatric Guidelines
- Appendix B: Alphabetical Table of Contents for Adult Guidelines
- Appendix C: Alphabetical Table of Contents for Women's Health Adult Guidelines
- Appendix D: After Hours Dispositions - Adult and Pediatric
- Appendix E: After Hours Triage Disposition Care Advice – Adult and Pediatric
- Appendix F: Pediatric Top 25 Guidelines – Rank–Ordered
- Appendix G: Adult Top 25 Guidelines – Rank-Ordered
- Appendix H: Anatomical Table of Contents for Pediatric Guidelines
- Appendix I: Anatomical Table of Contents for Adult Guidelines
- Appendix J: Pediatric Prioritizing Calls Checklist
- Appendix K: Pediatric Prioritizing 911 Calls Checklist for Answering Services
- Appendix L: Adult Prioritizing 911 Calls Checklist
- Appendix M: Adult Prioritizing Calls Checklist (ED or Office Now)
- Appendix N: List of Published Research Articles on STCC
- Appendix O: Pediatric Guideline Reviewers
- Appendix P: Adult Guideline Reviewers
- Appendix Q: Quality Assurance (QI) Call Checklist
- Appendix R: Good Call Checklist
- Appendix S: Risk Management Checklist
- Appendix T: Templates for Generic Assessment and Documenting the Chief Complaint
- Appendix U: Pediatric Behavioral Health Guidelines
- Appendix V: Adult Behavioral Health Guidelines
- Appendix W: Research for the Adult Telephone Triage Guidelines