

KEY POINTS

- Critical thinking is a learned ability
- Critical thinking proficiency requires mastery of certain key skills
- Teaching these critical thinking skills to novice triagers should start in orientation
- Sharpening critical thinking skills requires practice and is a lifelong journey

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Critical Thinking in Telehealth Triage

Although using decision-support tools is the standard of care in telehealth nurse triage, their use does not guarantee nurses will reach correct dispositions consistently. Critical thinking is essential to making accurate decisions regarding the appropriate level of care for patients on the telephone. In order to think critically, you must master certain skills. If you practice these skills consistently, you will improve your ability to think critically. This newsletter focuses on key skills that promote critical thinking for telehealth nurse triagers and their application to triage practice.

Gather Adequate Factual Data

Critical thinking builds on the premise that decisions are made based on complete and factual information. Inadequate data and faulty reasoning may lead to inaccurate assumptions. Jumping to conclusions without enough information is the #1 error in critical thinking. Ask a brief health history. It is essential to know about chronic disease or complex illness prior to protocol and disposition selection. Do a complete assessment on all triage calls. Make sure you obtain enough objective facts (usually 5 or 6) to form an accurate clinical picture of the patient. Let your assessment lead you to the correct protocol. Avoid the temptation to make early decisions before adequate assessment and triage with the protocol. Use open-ended questions. Avoid leading questions (“You aren’t having trouble breathing, right?”) or answering for the caller. This implies you already know the answer and makes it harder for the caller to disagree.

Follow a Systematic Call Process

Collecting facts in an organized manner also helps to ensure you have complete information before making decisions. By using a systematic call process, the possibility that you miss essential information is reduced. Use search words to choose the right protocol. Scan the See More Appropriate Protocol prompts to assist in the selection of the appropriate protocol. Adhere to the protocol and ask the triage questions in sequential order before reaching a disposition decision. Do not give care advice before completing the assessment or triage.



Validate Information for Reliability

Decisions rely on your ability to listen and accurately interpret what the caller is telling you. Let the caller tell their story briefly without interrupting. Check to make sure the information is credible and correct before making a decision. Ask for clarification if something doesn't seem right. If you don't, you may base your decision on invalid information. Ask for objective clinical data that validates or refutes the subjective description. A photo or short video clip may help provide symptom clarity. Talk to the patient (not a third party) whenever possible. If practical, listen to young children over the phone with breathing symptoms to assess for respiratory distress. At the end of the assessment, summarize the factual information for the caller. This helps to verify that you've heard correctly and have a complete accurate picture of the caller's concerns. When the symptoms don't make sense, clarify with the caller if you might be missing information. This is especially important for 1) repeat callers concerned about persisting symptoms or 2) anxious callers with non-urgent symptoms who can't be reassured.

Put the Facts Together Into a “Big Picture”

Grouping symptoms together in order to see relationships is an important step in pattern (and disease) recognition. By looking at the total picture the evidence represents, you establish a well-rounded view of the problem at hand. Recognize patterns that the combination of symptoms could represent (such as dehydration or appendicitis). Do not



focus on symptoms in isolation of each other, but what they might represent all together. How do they impact the patient and what level of care do they require? Are they normal, abnormal or somewhere in between (in the “gray zone”)? A good knowledge base of theory and experience is required to do this. Prioritize the symptoms and focus on the most serious one first. Ask additional questions to help clarify a potential pattern of illness. Use the rule-out statements within the protocols to help you do this. If unsure, consult a nurse colleague or a physician (or advanced provider). If you really don't think the problem is serious but not sure, give some care advice and call the patient back to see if the patient has improved.

Filter out Irrelevant Information

Separate out the relevant factual information needed for your disposition decision process. Let go of the irrelevant data that you can safely “ignore”. Focus first on the information pertinent to the caller's most serious symptoms. At times, this does require sorting through a caller's report of complex medical histories, multi-symptoms and/or a talkative caller's barrage of information. This can be extremely challenging for new nurses and sometimes for proficient triagers. It is a learned skill. With practice, it does become easier as protocol familiarity, pattern recognition and call control become more developed.



Maintain Awareness of Bias

Personal feelings, opinions or beliefs can influence one's thought process and ability to make sound decisions. Over the phone, there are two sets of potential biases present: yours and the caller's. While you have limited influence over the caller's prejudgment, critical thinkers ought to be aware of their own. Stay open-minded and objective in order to make sound decisions. "Belief preservation" is one form of bias and is the tendency to use factual data to preserve our own opinions rather than guide them. We may: 1) seek evidence that supports what we believe and 2) ignore or "not hear" evidence that goes against it. We may stick with our initial inclination (even if just based on one fact) in the face of overwhelming evidence to the contrary.

In triage, cognitive bias and belief preservation can manifest itself in the following ways:

- **Wellness Bias:** Literature reports a "wellness bias" that can influence triage decisions, especially in pediatrics. It is described as a failure to elicit more information about a serious symptom, explaining it away or discounting it because of the belief that children are inherently healthy (could also apply to healthy young or middle-age adults). Even healthy people can have serious illness!
- **Patient Just Seen Bias:** If the patient was just seen in a health care setting, it is easy to assume they must be stable and fine now. However, the nurse needs to carefully and objectively assess the symptoms to rule out complications, disease progression and/or potential misdiagnosis.
- **Illness Bias:** Based on the personal experience of the RN with a certain clinical diagnosis or presentation, the RN has a heightened sensitivity that colors their perception to objectively assess. For example, a nurse had viral meningitis and was hospitalized as a child. Every time she triages a "headache" call, she thinks of her own experience and sends in all of these patients urgently regardless of illness severity. Clinical experience is just one component of the thinking process and needs to be tempered with careful analysis of the facts.
- **Protocol Shopping for Non-urgent Complaints:** The triager makes a disposition decision early on in the call based on their beliefs, then sorts through several protocols to find one that justifies that decision. Obviously, triage with the correct protocol should be done before non-emergent disposition decisions are made.

Draw Valid Conclusions



Deductive reasoning is the ability to draw logical and accurate conclusions after analyzing the facts (or evidence). This is a crucial skill in accurate decision making. Drawing conclusions based solely on one piece of information can lead to critical thinking errors. The more factual information you have that supports what you "think" is going on, the more likely you are to be correct. Follow the facts all the way to a logical conclusion. Confirm if your "hunches" are correct by asking for additional information. If unsure or if symptoms fall into "a gray zone", establish a plan



that includes follow-up with the caller or consulting with additional resources to make a decision. Look for symptom explanations or multiple causes (e.g., medication side effects). Triage protocols cannot cover every possible clinical scenario. Think beyond the protocols by being alert to atypical or subtle presentations of serious illness, aka “sounds weird to the triager”. If it doesn’t feel or sound right, it’s probably not.

Evaluate and Adjust Your Thinking

In triage, nurses need to be open to revising their disposition and/or assessment of the patient based on any important new information from the caller. It is essential that you can reconsider and adjust your thinking based on any new information that surfaces. A new fact can commonly present at the end of a call with the words, “Oh, by the way...” (Yes, the dreaded OBTW statement!). The nurse is reluctant to ask more questions since a disposition decision has been already been made. However, if the additional information being offered could be relevant or alter the call disposition, it is important to address it with the caller. Avoid late OBTW surprises by asking, “Anything else related to today’s concerns that’s not normal?” before triaging with the protocol. Try not to be over-confident in decision-making by considering “What if I’m wrong?” Make sure there is a safety net and clear plan established with the caller. Give the protocol “Call Back If” indicators and individualized instructions on how to recognize a worsening condition. This important safety step helps protect both the nurse and the patient in case of disease progression or if pertinent information was not discussed during the call.

In summary, critical thinking (CT) is a learned ability. Proficiency requires practice. Mastering the above skills and practicing them consistently on every call will improve your CT. Critiquing your thinking process and evaluating your decisions after calls will also help improve your CT ability. Educators, preceptors and leaders should model and teach these skills that promote sound critical reasoning and judgment. Incorporate CT skill training into your orientation program for new triagers. So, start practicing and evaluating your CT skills on your triage calls today to optimize your disposition decision making and patient outcomes!



References

- Alfaro-LeFevre, R. Critical Thinking, Clinical Reasoning, and Clinical Judgment: A Practical Approach. 7th Edition. Elsevier, 2019.
- Belman S, Murphy J, Steiner JF, Kempe A. Consistency of triage decision by call center nurses. *Ambul Pediatr.* 2002 Sep-Oct;2(5):396-400.
- VanGelder T. Teaching critical thinking: Some lessons from cognitive science. *College Teaching.* 2005 Dec 53(1):41-46.
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