Telephone Triage
Best Practice and Systems for Telehealth Nursing

COPYRIGHT © 2023, WILD IRIS MEDICAL EDUCATION, INC. ALL RIGHTS RESERVED.
By Sheila Wheeler, MS, RN; Kathryn Koehne, DNP, RN, AMB-BC, C-TNP

LEARNING OUTCOME AND OBJECTIVES: Upon completion of this course, you will have increased your knowledge of telephone triage nursing. Specific objectives to address potential knowledge gaps include:

- Define telephone triage and related terminology.
- Discuss the components of a high-quality telephone triage system.
- Summarize the essential aspects of effective communication required for telephone triage.
- Identify how telephone triage decision-making is influenced by rules of thumb, distractors, and cognitive biases.
- Describe mnemonic tools used in patient and symptom assessment.
- List the essentials of safe, effective, and appropriate documentation specific to telephone triage care.
- Discuss the use of telephone guidelines and patient disposition.
- Summarize common risk management issues in telephone triage practice.

WHAT IS TELEPHONE TRIAGE?

Telephone triage is the process by which a healthcare provider assesses presenting concerns that are relayed by a patient through a telephone encounter and determines the appropriate level of
care based on the seriousness of the situation (Haddad et al., 2019). Telephone triage, however, does **not** involve making diagnoses—nursing or medical—by phone (ANA, 2019).

The clinician’s disposition is defined as a directive to the patient about the time, place, and reason for further evaluation and/or treatment. Safety in telephone triage is paramount and requires that dispositions be appropriate and timely in order to avoid delays in care—evaluation, diagnosis, and/or treatment—and to ensure that patients are seen before symptoms escalate. The term *disposition* in telephone triage is often used interchangeably with *level of care*.

Telephone triage is an integral component of ambulatory care practiced by licensed clinical professionals (most frequently nurses) and occurring within a range of practice settings, including emergency departments, primary care, pediatric practice, specialty services, and managed care environments. The American Academy of Ambulatory Care Nurses (AAACN, 2018) identifies registered nurses to be qualified to safely perform telephone triage. Similarly, most state boards of nursing identify clinical decision-making inherent in professional nursing practice.

**Terminology**

Naming conventions and titles for telephone triage services may be confusing and sometimes misleading. Terminology for this area of care delivery has included *telephone triage, teletriage, telepractice, telenursing, telephone advice, and telehealth*. Titles for telephone triage practitioners vary by settings, as there is not a standard. Some examples include phone nurse, advice nurse, and teletriagist.

For the purposes of this course, *telephone triage* is defined as clinical management of symptom-based calls by telephone only. Most often, telephone triage services are provided by nurses.

Other key terms that are closely related to telephone triage are *telehealth, telemedicine, and telecare*. Although they are similar and often used interchangeably, their meanings are different and are defined below for clarification. It is important to note that there are not standard definitions for the following “tele-” terms.

*Telehealth* is commonly used as an umbrella term and is defined as the use of electronic information and telecommunication technologies to support long-distance clinical care by healthcare professionals, including but not limited to nurses, pharmacists, therapists, and social workers. It may involve patient health education, social support, and medication adherence as well as managing health issues and treatment for patients and caregivers (FCC, n.d.).

*Telemedicine* is a narrower term usually used by physicians and refers to the use of telecommunications technologies to support the delivery of medical, diagnostic, and treatment-related services (FCC, n.d.).
Telecare is a general term and refers to technology that includes sensors and tools that connect individuals to family members or other caregivers, health-oriented apps, digital medication reminder systems, or early-warning and detection technologies (FCC, n.d.).

**GLOSSARY**

**Appropriate**
Suitable or proper in the circumstance

**Clinical decision support system (CDSS)**
Computerized software that supports clinical decision-making processes with targeted clinical knowledge, patient information, and other health information (Sutton et al., 2020)

**Complete system**
A complete telephone triage system made up of qualified staff; clinically approved, evidence-based guidelines; electronic medical records (or audiotape or paper documents); formalized training; and standards/policies

**Disposition**
A directive from clinician to patient indicating the time, place, and reason the patient’s symptoms are to be further evaluated and/or treated, stated explicitly in order to provide for patient informed consent and avoid miscommunication

**Error**
An umbrella term that includes human error, failures of assessment, failures of communications, and under-referrals

**Malpractice**
When a patient experiences an injury, loss, or damage as a result of negligence or omission by a healthcare organization or professional (American Board of Professional Liability Attorneys, 2022)

**Negligence**
Failure to provide the care that a reasonably prudent person would provide in a similar situation (Vanderpool, 2021)

**Root cause of error**
Conditions that precede an adverse effect or near miss; the “triggering factors that started upstream of the event” (Braaten & Natrass, 2021, p. 158)

**System**
A set of detailed methods, procedures, and routines formulated to carry out a specific activity or solve a problem
System error
A failure of systems, processes, or conditions that are intended to prevent errors from occurring but instead may lead people to make mistakes; the “wrong match of plan” (system) or “failure to use any plan” (as system) to prevent error (IOM, 1999, 2011)

Timely
Coming early or at the right time; referrals at the “right time, right place, with the right person”

Vicarious liability
Liability on the part of employers, who become accountable for the negligence of an employee (Bieber, 2022)

(Wheeler et al., 2015)

Telephone Triage and Emergency Medicine

Some telephone triage standards, qualifications, and competencies mirror those of emergency medicine. Both disciplines require triage, and emergency medicine is similar in terms of approach, language, philosophy, and sometimes setting.

For example, both telephone triage nurses and emergency medicine physicians are often confronted with patients they have little information about. They must both perform rapid pattern recognition and make safe decisions about next steps based on guidelines, experience, and limited data. Both roles require anticipating the need for further resources or evaluation.

It is fair to identify telephone triage as part of the continuum of care. Phone calls often precede emergency department visits. Thus, telephone triage could be considered a form of prehospital care—albeit, not typically as urgent as that of emergency medical services.

For example, telenurses occasionally encounter crisis-level calls, such as poison ingestions, domestic abuse, rape crisis, cardiopulmonary resuscitation (CPR) coaching, or threatened suicide. However, in many communities, nonmedical personnel with specialized training staff crisis hotlines such as poison prevention, rape crisis, and suicide prevention, customarily manage such calls.

Similarly, emergency medical dispatchers receive and manage calls for medical assistance through a “systematic interrogation” of callers using protocols to evaluate injuries and illnesses established by a medical director (IAED, 2023).

Telephone triage services are designed to reduce delays in care, to improve continuity of care, and to facilitate access to appropriate care in a timely, safe way. A secondary goal is to reduce inappropriate emergency department and office visits and thereby reduce the cost of care.
Practice Settings

Telephone triage, as an inherent part of telehealth, is practiced in a variety of healthcare settings (AAACN, 2018). Some areas with a high volume of triage calls include clinical offices and group practices, clinical call centers, and emergency departments.

In the 1970s, HMOs set about formalizing telephone triage. Currently, clinical call centers are thought to represent the industry standard because they have complete systems and operate 24 hours a day, 7 days a week, 365 days a year (Wheeler et al., 2015).

Clinical call center staff members utilize computerized clinical decision support systems (CDSSs) or electronic guidelines and have access to patient demographic information via an electronic medical record (EMR). Demographic information includes patient medical history, medications, allergies, and recent procedures. The EMR software program enables managers to track and trend calls, and generates reports and statistics on call volume, types of calls, and individual staff workflow and dispositions.

However, while CDSSs are intended to make the process safer, the presence of CDSS and EMR does not guarantee safety or even user compliance (Sutton et al., 2020). Even with the most complete systems, call volume within this setting can be extremely high, creating decision fatigue, making the work stressful, and increasing the risk of malpractice (Wheeler et al., 2015).

Telephone Triage Utilization Patterns

Although there is great variation in utilization of telephone triage services across the various practice settings, there are some patterns that have emerged, as described below.

HIGH-UTILIZING POPULATIONS

Frequent callers are often related to high-risk age groups: infants and children, frail older adults, and women of childbearing age. Early and current studies show that women call twice as often as men, and calls about children under 4 years of age tend to be more frequent than calls about older children (Dahlgren et al., 2017; Raheja, 2016).

PATIENTS WITH CHRONIC CONDITIONS

Telephone triage and telehealth services may reduce hospitalizations by providing services for those with chronic and complex conditions such as coronary heart disease, chronic obstructive pulmonary disease, kidney failure, hypertension, heart failure, diabetes mellitus, asthma, and ulcerative colitis. Research has demonstrated that a telephone-based management program to support individuals living with chronic diseases may result in better outcomes and healthcare savings (Baldwin et al., 2020).
COMMON COMPLAINTS

In ambulatory care settings several predictable complaints and questions make up the bulk of calls. Most common are:

- Medication questions
- Upper-respiratory infections
- Fever
- Gastrointestinal problems (vomiting, constipation)
- Viral infections
- Minor trauma
- Rash or skin reaction
- Back pain
- Anxiety
- Otitis
- Urinary tract infections
- Postoperative symptoms and questions (Raheja, 2016)

In pediatric practice settings calls focus on respiratory problems, fever, gastrointestinal problems, immunization reactions, skin and infectious diseases, and trauma (Raheja, 2016).

These common complaints (both adult and pediatric) likely represent frequent calls to clinical call centers as well as other ambulatory care settings.

COMPONENTS OF A TELEPHONE TRIAGE SYSTEM

Quality telephone triage programs are made up of five integrated components that work together to provide safe, timely delivery of care or access to care:

- Qualified and experienced clinical staff
- Training
- Clinical practice guidelines (protocols)
- Documentation forms
- Standards

Researchers have not yet determined which clinical practice guidelines work best; however, the Institute of Medicine (2011) has set forth standards for protocols and decision support tools that
are grounded in best practices. Clinical practice guidelines “optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options” (IOM, 2011, p. 4).

Telephone triage guidelines based on the nursing process and related research offer decision support for telenurses. Along with incorporating training and guidelines, it is helpful to have the ability to record and audit calls for quality assurance and training opportunities. Patient confidentiality should be addressed by informing callers of this process.

**Telephone Triage Nurse**

Telephone triage services are performed by specially trained, licensed registered nurses. Ideally, telenurses should have a minimum of three to five years of decision-making experience in direct patient care.

**BASIC QUALIFICATIONS**

Safe practice in telephone triage depends on having adequate numbers of experienced, qualified, trained staff.

**Minimum qualifications** include:

- 3+ years of clinical experience
- Competency in nursing process
- Effective written and verbal communication skills
- Knowledge of basic pathophysiology
- Knowledge of basic and current pharmacology
- Ability to make clinical decisions autonomously
- Ability to problem solve
- Understanding of scope of practice
- Cultural sensitivity

**Personal characteristics** of telenurses include:

- Curiosity; an investigative/probing manner in eliciting information
- High tolerance for ambiguity and stress
- Resourcefulness
- Ability to take initiative
- Autonomy
• Integrity
• Self-discipline
• “Telecharisma” (a warmth and ability to connect instantly with the caller)

CORE COMPETENCIES

Core competencies are defined as “the essential minimal set of a combination of attributes, such as applied knowledge, skills, and attitudes, that enable an individual to perform a set of tasks to an appropriate standard efficiently and effectively” (Albarqouni et al., 2018, p. 2). The Association of American Medical Colleges (AAMC) and the American Academy of Ambulatory Care Nursing (AAACN) have both developed telehealth competencies.

The AAMC (2021) established a Telehealth Advisory Committee to identify the skills clinicians need to provide high-quality telehealth care. The competencies can be used to develop outcome-based cross-continuum education focused on telehealth. The competencies are organized into six domains:

1. Patient safety and appropriate use of telehealth: Clinicians will understand the timing and purpose of telehealth and demonstrate the ability to assess patient readiness, patient safety, practice readiness, and end-user readiness.

2. Access and equity in telehealth: Clinicians will understand telehealth delivery that addresses and mitigates cultural biases as well as clinician bias for or against telehealth and that accounts for physical and mental disabilities and non-health-related individual and community needs and limitations.

3. Communication via telehealth: Clinicians will effectively communicate with patients, families, caregivers, and healthcare team members using telehealth modalities.

4. Data collection and assessment via telehealth: Clinicians will obtain and manage clinical information via telehealth to ensure appropriate high-quality care.

5. Technology for telehealth: Clinicians will have basic knowledge of technology needed for the delivery of high-quality telehealth service.

6. Ethical practices and legal requirements for telehealth: Clinicians will understand practice requirements to meet the minimal standards to deliver health care via telehealth. Privacy will be maintained while minimizing risk to the clinician and patient during telehealth encounters, putting the patient’s interest first.

The AAACN Scope and Standards of Practice for Professional Telehealth Nursing (2018) contains 16 standards. The first six are “Clinical Practice Standards,” and 7 through 16 are “Professional Performance Standards.” The AAACN telehealth standards are “authoritative statements that describe the responsibilities for which telehealth nurses are accountable.”

1. Assessment
2. Nursing diagnosis
3. Outcomes identification
4. Planning
5. Implementation (care coordination/transition management, health teaching and health promotion, consultation)
6. Evaluation
7. Ethics
8. Professional development
9. Research and evidence-based practice
10. Performance improvement
11. Communication
12. Leadership
13. Collaboration
14. Professional practice evaluation
15. Resource utilization
16. Environment

**Training**

A training program should address the most needed topics: pathophysiology, medications, and decision-making.

Formal standardized training is inconsistent in telephone triage systems. While the American Association of the Colleges of Nursing (AACN) and the AAACN have both developed telehealth competencies, telehealth content remains low at both undergraduate and advanced practice levels (Eckhoff et al., 2022). Although the AAACN offers an annual conference and online training resources, training occurs on the job and is not formal or standardized. Nurses receive training from another staff member. There are some organizations that provide formal in-house training, have preceptor programs, or use online training.

Similarly, physicians receive limited or no formalized education focusing on telephone triage. In recent years, the number of medical schools offering telemedicine education has increased to nearly 90%, but the approaches vary and are not supported by data on effectiveness. Medical schools cite a lack of faculty experience in telemedicine and the lack of a “gold standard” for training as significant barriers to developing education (Bajra et al., 2022).

**SAMPLE TELETRIAGE TRAINING PROGRAM**

**Assessment and Triage of Symptoms**
● Symptom assessment for telehealth
● Presentation and assessment challenges
● Pattern recognition and estimating symptom urgency

**Medications and Toxicology**

● Pharmacology update: new medications used in primary care
● Alcohol abuse
● Clinical manifestations of exposures
● Natural toxins
● Occupational, environmental exposures
● Poisoning call management (poison center collaboration)
● Geriatrics: adverse drug reactions
● Pediatrics: ingestions
● Teens: recreational drugs, drugs of abuse

**Risk Management, Communication, and Key Components**

● Risk management in telehealth: malpractice
● Medical emergencies
● Psychological emergencies
● High-risk patient populations: pediatrics, frail older adults, women of childbearing years
● Sepsis review and update
● Adult and geriatric health
● Pediatric and adolescent health
● Women’s health
● Disease management
● Patient education essentials
● Cultural competence
● Communications
● Stress management and self-care
● Strategies to avoid decision fatigue, burnout
● Standards and system development and maintenance
Telenurse Roles and Expertise

Telenurses must demonstrate excellent skills in communication, assessment, decision-making, and metacognition (or “thinking about one’s thinking”). In addition, telepractice encompasses at least five domains of nursing expertise (helping, diagnostic, crisis intervention, coaching/teaching, and monitoring), first described by Benner (1984, 2013). Telephone triage nurses require expertise in these areas:

- **Helping role:** In telephone triage, the key functions of the helping role are creating a healing relationship through 1) attending to (listening) or “presencing” (i.e., being present), 2) maximizing patients’ control, and 3) providing comfort and connection through the voice (rather than touch).

- **Diagnostic function:** Telephone triage nurses do not make medical diagnoses. Rather, they use the steps of the nursing process (especially assessment) and nursing diagnosis to estimate symptom urgency. They can “form an impression” or a “working diagnosis.” Thus, clinicians can collect information and use context to estimate and rule out urgencies and document significant changes in the patient’s condition. Clinical skills include performing thorough assessments, pattern recognition, and interpreting patients’ responses. User-friendly guidelines support this process.

- **Crisis management function:** Nowhere else is the instant grasp of rapidly changing situations more vital than in crisis intervention by phone. To manage a call with potentially life-threatening symptoms, the telenurse will 1) assess/triage the patient’s emergency and 2) facilitate, orchestrate, and coordinate access to care as needed (Benner et al., 2011). Because some rural communities lack resources such as 911, suicide prevention, or rape crisis hotline systems, telenurses may be the first responder as they field calls regarding imminent births, trauma, suicide, and ingestions.

- **Teaching-coaching function:** Teaching and health promotion is a large part of telephone triage calls. Timing, eliciting interpretations of illness, and providing rationales for home treatment are key teaching and coaching functions. Informing patients about their rights, such as informed consent, is an act of empowerment.

- **Monitoring function:** Currently, most telenurses advise and monitor simple home treatment interventions and instruct patients in self-evaluation. In the future, technology currently used for disease management will likely make telemonitoring a standard
function of telepractice, allowing more patients to be managed and monitored at home through the use of tablets and smartphones.

VIRTUAL NURSING “PRESENCE”

Nurses must guide telehealth encounters by exploring the symptoms the patient is experiencing while taking into consideration the context in which the call is taking place (e.g., distance to care, time of day, access for an appointment). Being a good listener is also essential. Careful listening to a description and visualizing what is being communicated over the phone helps nurses perform an accurate assessment. While nurses may not be able to see the callers physically, a mental image of the patient and situation can be constructed in the nurse’s mind through clear communication and assessment skills (Wouters et al., 2020).

Optimizing interactions and effectiveness in telehealth encounters requires telepresence, or “the patient’s, caregiver’s, and clinician’s experienced realism during a telehealth encounter that is created through connection and collaboration built on trust, support, and the clinician’s skill at acting as the technology mediator when the third actor (technology) influences the patient or caregiver and clinician interaction” (Groom et al., 2021).

The Process of Telephone Triage

In the management of symptom-based calls, nurses must use the nursing process, which is the core of practice for the registered nurse to deliver holistic, patient-focused care in any setting. The five steps in the nursing process include assessment, diagnosis, outcomes identification/planning, implementation, and evaluation (ANA, n.d.).

- **Assessment**—based on the time-honored medical tradition of history and physical—is modified and limited to verbal communications. Nurses systematically ask questions using assessment tools, guidelines, and patients as their proxy to self-evaluate.
- **The diagnosis** process consists of formulating a provisional/working diagnosis, or impression.
- The nurse identifies **outcomes** based on the patient’s values and preferences; their situational environment; current evidence; and telehealth best practices.
- The nurse collaboratively develops a **plan** with the patient that is based on the nurse’s clinical judgment, the selected guideline disposition, and the caller’s preferences.
- The **implementation** of the collaborative plan is determined by the nurse and patient or caregiver.
- **Evaluation** is completed by the nurse through evaluation of progress toward the ability to implement the plan or achieve the desired outcomes.

(AAACN, 2018)
STEP 1: PRELIMINARY ASSESSMENT

Assessment is the most critical and substantive step of telephone triage, since pattern recognition is dependent on the systematic collection of data. It is a common misperception that guidelines eliminate the need for a preliminary assessment. Preliminary assessment should precede the selection of a guideline.

It is essential to start the assessment process by asking questions, aided by a specific template or checklist. Eliciting and interpreting responses facilitates pattern recognition and helps to identify high-risk patients and symptoms.

(See also “Assessment” and “Documentation” later in this course.)

Assessment, the first step of the nursing process, is critical because:

- It can provide a quick way to prioritize and establish urgency.
- It helps identify the correct specific guideline.
- It incorporates many of the same questions as specific guidelines, ultimately saving time.
- It helps to avoid misinterpreting or focusing on the incorrect symptoms or jumping to conclusions (a cognitive error), which might otherwise occur in the decision-making process by initially selecting the wrong guideline.

STEP 2: WORKING DIAGNOSIS/IMPRESSION (DIAGNOSIS) AND DOCUMENTATION

Once the nurse has elicited key information utilizing the assessment tool(s), a provisional or working diagnosis, also called an impression, can be formulated. The next step is to choose a guideline based on the principle of prioritizing.

Patients rarely present with the classic picture of any disease. Presentations vary due to age, immune response, medical history, and the timing of the call in relation to the disease process. Thus, telenurses must carefully navigate the multitude of possible presentations.

For example, a patient who is experiencing a myocardial infarction may present with one symptom (like chest pain), or a few generalized or more unique symptoms (ear pain, arm tingling, nausea, vomiting, sweating), or the classic picture (crushing chest pain accompanied by shortness of breath, nausea, vomiting, dizziness, sweating, anxiety). It is the role of the telenurse to determine what constitutes a match.

The nurse documents the impression using the patient’s own words (e.g., headache, nosebleed, vaginal bleeding) to describe the problem, then adds modifiers or qualifiers to designate the level of acuity. For example, using a pain scale of 1–10, the nurse might document as follows: “abdominal pain, 9/10, sudden onset” or “ankle pain, 4/10, trauma history.”
(See also “Selecting the Correct Guideline” later in this course.)

**STEP 3: OUTCOMES EVALUATION**

Once the assessment is complete and the working diagnosis or impression is formulated, the nurse collaborates with the patient to determine the desired outcome. Factors such as the patient’s values and preferences; spiritual, cultural, and ethical considerations; age-related implications; situational environment; current scientific evidence; and best practices may contribute to the plan.

**STEP 4: DISPOSITION AND ADVICE (PLANNING)**

Planning is determined after pattern recognition and matching. Patterns (symptom complexes) are classified according to the level of acuity, or disposition: emergent, urgent, acute, and nonacute levels. The nurse prevents, reduces, or resolves potential or identified problems by referring to the guideline disposition (level of care) and care advice.

The plan is composed of two parts: the disposition (level of care) and the advice. This step helps ensure patient informed consent.

- **Disposition (level of care)** requires that the nurse advise the patient when and where to go for treatment in addition to why the patient must go as advised, i.e., that the symptoms appear emergent, urgent, acute, or nonacute.
  - **Appropriate referral** (AR): A timely, safe disposition (“right place, right time, and right person”) that avoids a delay in care, evaluation, or treatment
  - **Over-referral** (OR): A referral deemed by some to be unnecessary at the time and place initially recommended; judged to be safe but not cost effective
  - **Under-referral** (UR): A referral to a lower level of care than required, often resulting in a delay in care and causing (or with potential to cause) patient harm; may also be a type of error that can result in a delay in care

- **Home treatment advice** often includes first aid instructions related to over-the-counter medications and common self-care strategies.

**STEP 5: IMPLEMENTATION**

In a telephone encounter, the nurse and caller do not share the same physical space, so the patient or family member takes responsibility for carrying out the interventions. When the nurse relays the plan, there is an assessment of whether the caller is able to carry out the plan. Patient education may be completed during this step to validate that there is an understanding of the advice and plan. The nurse verifies that the determined plan will be operationalized.
STEP 6: EVALUATION

Evaluation is the last step in the nursing process. In a telehealth encounter, the nurse evaluates progress toward the expected outcomes and collaborative plan of care. This is achieved prior to the conclusion of the encounter. The nurse confirms that the plan will be carried out and that the caller verifies understanding of worsening symptoms and/or changing condition.

Thus, evaluation is modified to become patient self-evaluation instructions. The nurse may also choose to monitor progress and self-care activities via follow-up calls to determine if home treatment is effective or if upgrading is needed. The nurse reviews, as appropriate, any emergent, urgent, or acute symptoms that the patient must continue to observe.

- **Follow-up instructions:** In addition to the disposition and treatment plan, it is important to always include standard follow-up instructions and a disclaimer in the instructions to the caller.
- **Patient call-back:** Telenurses always advise callers to call back if the symptoms worsen, new symptoms arise, or there are marked changes in activities of daily living because, “If your symptoms change, my advice will change.”
- **Nurse follow-up calls:** Policies should address the use of routine proactive follow-up calls, especially for high-risk callers.

(AAACN, 2018; Rutenberg & Greenberg, 2012)

GUIDELINES VS. PROFESSIONAL JUDGMENT

Confusion and controversy revolve around what ultimately determines the correct disposition (level of care)—guidelines or professional judgment? If it were true that guidelines are the bottom line, then the nurse would not really matter. Klein warns that information technology can potentially transform users from active decision makers into passive “system operators” (2003, 2010) and suggests that guidelines may actually interfere with critical thinking at times (2013).

While established guidelines are an important factor in the telephone triage system, the most critical component is the knowledge, experience, and critical-thinking skills of a well-trained nurse. Current standards of practice stress that nurses should perform critical decision-making because guidelines alone cannot guarantee safe practice (Wheeler, 2017a).

As professionals, nurses must be accountable and autonomous. Accountability requires clinicians to make conscientious use of guidelines, comprehensive assessment, documentation, standards, and quality-assurance measures. Autonomy requires clinicians to use independent judgment and occasionally override guidelines when the situation warrants it. Adhering to these principles helps defend against allegations of malpractice.
COMMUNICATION

The clinician performing telephone triage is, first and foremost, a communicator. The manner of communication is as important as what is communicated. Telephone triage requires almost instantaneous rapport between caller and clinician to facilitate effective data collection and patient compliance. Nurses must inspire, negotiate, persuade, and engender trust. “Telecharisma” is a “magical” characteristic of telenurses. From their first words of greeting to the way they listen, respond, and ask questions, charismatic nurses working in the field of telephone triage demonstrate warmth, caring, and trustworthiness.

A patient-centered approach consists of an understanding response that fosters a trusting relationship, facilitates eliciting information, and enhances patient satisfaction. How clinicians treat patients influences how patients feel about them. Hostile, abrupt, impatient, and judgmental responses may tend to dishearten and frustrate patients and make them withdraw.

Successful communication requires a sender, a message, a mechanism, and a receiver. For the message to be complete, information usually has to be bidirectional (i.e., flow in both directions). Experts have found that too little or too much information impairs critical thinking and diminishes the chances of the message being received and understood. With telephone triage, the prospect of too little information is increased due to lack of sensory input and information.

Gustafsson and Eriksson (2020) completed a systematic literature review to identify factors that indicate quality in telephone nursing. Good communication was identified as a necessity since the nurse cannot observe the caller’s reactions and nonverbal communication cues. Effective communication requires a calm environment that is free of distractions. The nurse ensures that the caller understands all aspects of the conversation and has an opportunity to ask questions and express the ability or inability to carry out the plan.

At the bedside, speech, smell, touch, sight, and emotional cues paint a picture of the patient’s condition. On the phone, communications are limited to verbal and emotional cues. The risk of miscommunication is great. Although it is possible to gain limited tactile and visual information gathered by proxy from callers, nurses receive, analyze, solve problems, and instruct without observing the patient (Mataxen & Webb, 2019).

Messages may be impaired by lack of trust or by unexplored feelings, needs, and biases. Patients’ and nurses’ beliefs, attitudes, and perceptions of symptoms become obstacles in themselves. Ineffective communication in health interactions is a common root cause of error, and it may lead to increased legal liability and patient harm (Guttman et al., 2018).

In telephone triage practice, nurses can facilitate effective communication by closely attending to and receiving messages, clarifying or asking for detail, reflecting, and paraphrasing to check accuracy. Following are several communications best practices to enhance critical thinking.
Speak Directly with the Patient

The nurse is responsible for interpreting the needs of the caller. Whenever possible, the nurse should speak directly to the person who is experiencing the symptoms. If there is a misunderstanding, the assessment could be incorrect or the advice may be incorrect or not followed (Gustafsson & Eriksson, 2020). Many pitfalls can be avoided by talking directly to the patient when possible, although this may not be feasible with children under the age of 8 years, with some older callers, due to severity of symptoms, or with poor historians. This strategy will improve the quality of information collected, foster trust and compliance, and expedite the call.

Allow Enough Time

Adequate communication requires adequate time. If callers perceive the nurse as “time driven,” offering few explanations, and making little attempt to build rapport, communications can deteriorate. Some callers, dissatisfied with a brief decision-making and shorter call length may increase the risk of poor quality of communication (Graversen et al., 2020).

A landmark study compared performances of pediatric nurse practitioners with pediatricians (Goodman & Perrin, 1978). The authors discovered that pediatric nurse practitioners spent significantly more time per call than physicians and were identified as warmer and more open to questions, leaving callers feeling more satisfied.

Use Plain Language

It is important to use concise plain language. A statement such as “It is possible that your viral syndrome is causing a flu-like syndrome. Use acetaminophen for this viral syndrome, increase fluid intake, and monitor output” is unhelpful to the caller. This might instead be stated as “From what you have told me, your child appears to have flu-like symptoms. Aspirin can be dangerous for children under 16 years of age. Use acetaminophen (such as Tylenol) instead.” Instructions should be kept to a minimum, using short, directive sentences.

Plain language is communication patients can understand the first time they read or hear it. Written material is in plain language if the individual can:

- Find what they need
- Understand what they find the first time they read or hear it
- Use what they find to meet their needs

Common techniques to reach those goals include using:

- “You” and other pronouns
- Active voice, not passive
Implement Teachback Methodology

Teachback is a method in which patients describe information they have been given, using their own words. When this approach has been used by health professionals, the following benefits have been demonstrated:

- Improved patient understanding and adherence
- Decreased call backs
- Improved patient satisfaction and outcomes

“Chunked and checked” is a teachback technique that can be employed during a telephone encounter. Instead of reading a list of interventions that the patient could implement at home, the nurse 1) breaks down the information into small segments (chunk) and 2) asks the patients to teach it back (check). This process can be followed throughout the call and not delayed until the end of the call.

For instance, the caller’s understanding of the advice, worsening symptoms, and when/where to access additional care should be confirmed through an inquiry such as, “We have gone through a lot of information, tell me what you are going to do? Are you comfortable with this plan?” (Anderson et al., 2020; AHRQ, 2020).

Use Open-Ended Questions

Open-ended questions provide for better and more reliable data gathering by encouraging the patient to perform the work of describing symptoms. Leading questions should be avoided in order to prevent obtaining faulty data.

Leading questions cloud the picture by providing the answer in the question. Such questions—“Is the pain severe?” “Are you having bloody stools?” “Are you having difficulty breathing?”—usually elicit yes or no answers. Open-ended questions—“How would you describe the pain?” “What are your stools like?” “What can you tell me about your breathing?”—eliminate yes or no responses.

In telephone triage, most data collection should be gathered with open-ended questions. Therefore, when protocols are embedded in an electronic health system, caution must be used to reduce the assessment to a series of questions within the system. A thorough assessment must be completed prior to the selection of the protocol.

When nurses use computerized decision support systems that require a yes/no response, the ability to assess accurately and apply critical thinking is limited. The rigid use of protocols has
been criticized because it requires the use of primarily closed-ended questions, which does not allow for a holistic approach and carries the risk of missing important patient information (Graversen et al., 2020).

There are several exceptions to the policy of utilizing open-ended questioning. On crisis-level calls, where decisions must be made within seconds, leading questions are appropriate: “Is the victim conscious?” “Breathing?” When an immediate disposition is imperative, open-ended questions are too time-consuming.

In calls from children, frail older adults, and poor historians, facilitative questions can be used, such as: “Is the pain better, worse, or the same as it was yesterday?” “Is the bleeding dark red or light red?” This is a compromise between open-ended and leading approaches that may still yield better data than leading questions.

**CASE**

A woman placed a call to the nurse triage line at a primary care clinic, stating that she thought her husband might have the flu because he had a high fever and was not responding to Tylenol. The nurse provided the patient an appointment that same day. The patient was seen and diagnosed with influenza.

The wife called again the next day stating that the patient had a “pounding headache and stiff neck.” He was once again given an appointment in which the physical exam was unremarkable.

Day 3, the wife called again, stating that she was concerned about her husband because “his fever was still 102.9 °F and not coming down with Tylenol.” The nurse asked a series of questions, and when asked if her husband had a stiff neck, the wife stated “no” and offered no new information.

The nurse, sensing that perhaps the situation was more urgent (this being the third call from the patient’s wife for the same problem), asked to speak directly to the patient. When the nurse spoke with the patient directly, the patient related a history of continuing severe neck pain, headache, and fever, prompting the nurse to instruct the patient to go to the ED immediately to be further evaluated. The patient was subsequently evaluated in the ED and diagnosed with meningitis.

**Discussion**

In this case, because the nurse spoke directly to the patient, a clearer picture of the clinical situation emerged. The nurse recognized the red flag of repeat phone calls for the same problem. This case was further complicated by the fact that his primary care physician had also evaluated the patient, and this may have given the nurse a false sense of security (an example of a “red herring”).
If the nurse had failed to speak directly to and assess the patient, the disposition may have simply been for monitoring and self-treatment of the patient’s assumed flu-like symptoms. The patient may have further deteriorated, resulting in a significant neurological event.

DECISION-MAKING

In telephone triage, nurses must make decisions in a matter of minutes based on limited information. Information may be partial or inaccurate, and circumstances may involve life-and-death decisions. One of the pitfalls of telephone triage is time pressure, which can lead nurses to perform cursory assessments and jump to conclusions, resulting in suboptimal outcomes.

Decision-making is made more complex by sensory deprivation, conflicting goals (such as call quotas vs. quality interactions), “noise” (irrelevant data, long-winded histories), interruptions, and multitasking (thinking, listening, talking, questioning, reading, writing, synthesizing information, pattern recognition). The nurse must focus on the meaningful bits of information (salient information), recognize patterns, estimate symptom urgency, and formulate an impression or working diagnosis.

How do clinicians make decisions under such conditions of uncertainty and urgency? How does decision-making on the phone differ from critical thinking at the bedside?

Experience and Decision-Making

Certain qualities and skills have been studied and found to be essential for nurses working in the field of telephone triage. Nurses with more years of clinical experience have more confidence in making decisions regarding patient assessment and disposition. Clinical judgment, experience, and use of critical-thinking skills all contribute to decision-making accuracy when working with patients in the practice of telephone triage. For this reason, nurses who enter this field most often need to have at least three years of nursing experience or more to be candidates for telephone triage nursing positions (Manetti, 2018).

Nurses often use intuition based on this previous experience to help guide decision-making. Klein (2003, 2010) advises learning to detect problems through emotional cues—a “gut feeling” when something is not right. He recommends developing an active stance, so that if something does not make sense, it acts as an alarm that is not to be dismissed. He also suggests becoming conscious of organizational barriers such as rigid procedures or institutionalized inertia. Finally, he suggests reframing the situation and consulting with colleagues to review with fresh eyes.

Good decision-making relies on this sort of balance of conscious and instinctive thinking. Reducing complex problems to their simplest elements aids in decision-making. It is also essential for nurses to continuously improve critical-thinking skills by avoiding behaviors such as stereotyping others, resisting change, and seeking conformity (Manetti, 2018).
Heuristics, or Rules of Thumb

Many experts recommend using heuristics, or “rules of thumb,” as practical decision-making tools. Rules of thumb are defined as “general principles regarded as roughly correct but not intended to be scientifically accurate” (Merriam-Webster, 2023b). They are considered easily applied procedures for approximation—an educated guess, intuitive judgment, or common sense. Rules of thumb may be used to expedite decision-making, guide decisions, and reduce error.

Examples of several types of rules are described below. Many of these rules of thumb represent expert nurses’ collective “pearls of wisdom” in telephone triage. They can be used by novice practitioners to improve their decision-making proficiency and efficiency. These examples are only a partial list.

CARDINAL RULES

Cardinal rules include associated strategies to avoid root causes of error (i.e., errors of communication, assessment, continuity of care, informed consent, human error). Following are example of cardinal rules with the types of errors they are intended to avoid:

- Always err on the side of caution; when in doubt, bring the patient in sooner rather than later. (Continuity)
- “When in doubt, send ’em out.” (Continuity)
- Always speak directly to the patient; if “too sick to talk,” bring them in. (Assessment, communication)
- Always obtain the age of the patient. (Assessment)
- All frequent calls (within hours or days) are a red flag. Always ask how many calls the patient has made regarding this problem. (Communication, continuity)
- Treatment delayed is treatment denied. (Continuity)
- Trust but verify. Always update, correct, and confirm the back-story (patient history). (Assessment, communication)
- Always remain suspicious of the “nondiagnostic diagnosis” (patient’s self-diagnosis). (Assessment, communication)
- Always remain suspicious of the previous diagnosis (at recent ED or office visit); it may be wrong or complications may have arisen. (Assessment, communication)
- Always remain on the line with callers in crisis. (Continuity)
- Always treat flu-like symptoms with suspicion. (Assessment)
- Beware the middle-of-the-night call; it may be a red flag. (Assessment, communication)
- Speed does not equal competence; avoid premature closure. (Continuity)
- Time is tissue, time is muscle (with myocardial infarction [MI] or cerebrovascular accident [CVA] symptoms). (Continuity)
To err is human, to delay is deadly. (Continuity)

Beware of “failure to improve” on current prescription (antibiotic, antipsychotic, pain medications). (Assessment, human error)

If a symptom (or symptoms) is unlike any you have experienced before, make the call, get a “reality check.” (Assessment, human error)

(Clawson & Democeur, 2020; Wheeler, 2009, 2017a)

CASE

A telenurse received a call from the mother of a 5-month-old infant who was irritable and crying a lot. Mom suspected that the infant was fussy due to hunger and requested advice about introducing solids into the diet. The nurse failed to perform a thorough assessment. She concurred with mother’s opinion and consulted the guideline about initiating solid foods. Several days later the mother brought the infant to the hospital, where the infant was diagnosed with meningitis.

Discussion

While it is important to listen carefully to the patient’s own perception of the problem, be sure to maintain clinical objectivity. Patients may stereotype symptoms, concluding that “it’s the flu” or “the same old back pain.” Resist the impulse to accept patients’ self-diagnoses; always perform an independent assessment based on newly collected data. With sick children (and all immunodeficient populations), always suspect sepsis and ask questions to rule out early signs of sepsis or dehydration.

CASE

At 10 p.m. a mother called about her 2-year-old toddler, describing symptoms of a temperature of 101 °F orally, “cold and cough,” and “breathing funny at times.” The mother denied nasal flaring, retractions, and cyanosis and stated that her child was acting fairly normal, but she was most worried about the “funny breathing.”

Discussion

The experienced pediatric nurse asked to listen to the patient breathe by having the mom hold the phone near the baby’s mouth. She immediately became concerned about the raspy character of the respirations. Recalling the cardinal rule to “err on the side of caution,” she advised the mother to take the toddler immediately to the emergency department (ED) because the symptoms were worrisome. In the ED, the child was diagnosed with pneumonia and hospitalized for treatment.

AGE-BASED RULES

Pediatric age-based rules include:

- “Kids get sicker quicker.”
Always err on the side of caution with children, especially with infants and toddlers.
Infants under 3 months with fever of 38 °C or 100.4 °F should be seen immediately.
Pediatric populations are at greater risk for hypothermia and hyperthermia; the younger the patient, the greater the risk.
Assess all sick children for possible dehydration and sepsis.
Assume any symptom of sexually transmitted infection (discharge, lesions) in a child to be sexual abuse until proven otherwise.
All parents have the potential to abuse their children at some time.
All sudden confusion in children is considered emergent.
Assume any symptom of sexually transmitted infection (discharge, lesions) in a child to be sexual abuse until proven otherwise.
All sudden confusion in children is considered emergent.
Always elicit an immunization history; lack of or inadequate immunizations place a child at risk. An appointment is required for serious delays in completing the schedule of immunizations.
Under 4 years of age: symptoms tend to be very generalized; over 4 years of age: symptoms tend to be more specific.
Depression (or any other significant behavior change) in teenagers is a risk factor for suicide. (Wheeler, 2009, 2017b)

**Geriatric** age-based rules include:

- The older the patient, the greater the risk of hypothermia or hyperthermia.
- Assess all sick older adults for possible dehydration and sepsis.
- All sudden confusion in a frail older adult is considered emergent.
- Greatest suicide risk is in White males, over 65 years of age, who are widowers, retired, or jobless.
- Incontinence in older adults may be related to urinary tract infection.
- Developmentally disabled populations typically age prematurely. (Wheeler, 2009, 2017a)

**SYMPTOM-BASED RULES**

**General** symptom-based rules include:

- All severe pain should be seen within eight hours or less.
- All first-time seizures must be seen.
- All rashes are considered contagious until proven otherwise.
- Once an ectopic (pregnancy), always an ectopic.
- Any bleeding in pregnancy is an ectopic until proven otherwise.
- Presentations may be atypical, silent, or novel/unique, especially with children and older adults.
- Remain suspicious of “flu” symptoms, which might be symptoms of MI, sepsis, or other serious conditions.
- The vaguer the symptoms, the greater the need for good data collection.
- Beware of pain that awakens the patient or prevents sleep at night.
- Beware of afebrile pelvic inflammatory disease symptoms (possible ectopic pregnancy or ovarian cyst).
- Beware of shoulder pain with or without abdominal pain in women of childbearing age (possible ectopic pregnancy).
- Epigastric pain in males over 35 years and females over 45 years is considered an MI until proven otherwise.
- Worst headache is considered a brain aneurysm or subarachnoid hemorrhage until proven otherwise.
- Symptoms should improve after 24 to 48 hours on antibiotics.
- Rectal temperature of 100 °F in an infant age 3 months or less must be seen immediately.
- Extremes of outside temperature often trigger medical symptoms. (Clawson & Democoeur, 2020; Wheeler, 2009, 2017a)

**Chest pain–related** symptom-based rules include:

- The first symptom of an MI is often denial.
- Smokers who have chest pain are more likely to die and die suddenly (within the hour) of MI.
- Chest pain in men over 35 years or women over 45 years is suspicious.
- Time is heart muscle (possible MI); patients treated within the first hour have a substantially improved outcome.
- A little chest pain may be as bad as a lot.
- Any chest pain in a high-risk caller should be treated as MI until proven otherwise.
- Beware of atypical or novel presentations (e.g., severe indigestion, pain in jaw).
- MI in women, older adults, and individuals with diabetes may present as vague, silent, or atypical symptoms.
- Patients over 70 years typically do not experience chest pain.
- All chest trauma is considered urgent until proven differently. (Clawson & Democoeur, 2020; Wheeler, 2009, 2017a)
CASE

A 45-year-old woman called with a chief complaint of “cold” symptoms. The patient was actually worried about shortness of breath and chest tightness but did not relay her concern to the nurse. The patient minimized her symptoms with the hope that it was “just a cold.” As the nurse performed the assessment, the patient reported watery eyes, runny nose, nausea, and a cough. Investigating further, the nurse elicited that the patient had been experiencing shortness of breath and chest tightness. The nurse referred her to the ED, where the patient was later diagnosed with an acute MI.

Discussion

Because the telenurse performed a thorough assessment, she prevented what some clinicians call a “near miss.” The nurse also followed the symptom-based rule of thumb for MI and chest pain.

Distractors, or “Red Herrings”

A major task in decision-making is to determine which data are relevant and which are not. Data must be collected, considered, and weighed in order to perform pattern recognition and arrive at a proper disposition. For example, key pieces of contextual information—age, gender, and previous medical history—are always relevant; key symptoms may be relevant; and other more general and nonspecific symptoms may be given less weight.

Some information is less relevant and must be considered a lesser priority in order to reach a more accurate assessment and to make safe decisions. Such data is called a “red herring” and diverts the nurse from more significant data. Red herrings can originate from many sources. Both patients and nurses may misinterpret symptoms or miscommunicate. Red herrings may cause the nurse to jump to conclusions, rely on stereotypes, or end the call prematurely.

Examples of common sources of red herrings are described below:

- **Age and gender.** With chest pain, nurses may stereotype and discount symptoms of MI because the patient is “too young” or “too healthy.” With common sexually transmitted infection symptoms, nurses might stereotype the patient as “too old” or “too young” to engage in sexual activity.

- **“Nondiagnostic diagnosis.”** A patient’s interpretation of symptoms and symptom acuity may not be accurate. For example, a patient who calls in with “the flu” may actually be experiencing symptoms of sepsis or MI.

- **Previous or recent medical diagnoses.** A patient who is immediately postoperative may call with symptoms of severe nausea and vomiting. The nurse may prematurely conclude that the symptoms are due to effects of anesthesia and fail to explore or assess the patient further for possible complications, leading to a possible delay in care. Or a patient who was “seen recently in the ED” may now be experiencing new, unrelated symptoms, which must be re-evaluated onsite.
- **Existing treatment plan appears to be incorrect or ineffective.** The nurse or patient may not recognize that new symptoms might be due to complications. Either of them might ascribe it to a failure of treatment or medication (e.g., inadequate pain medication in the case of uncontrolled post-op pain).

- **Denial, downplaying, explaining away.** For example, the first response to an MI or other life-threatening situation is denial.

- **Nonacute initial presentations.** The rule of thumb to beware of the developing disease applies particularly in cases of abdominal pain, respiratory problems, diarrhea, nausea and vomiting, fever, or marked change in activities of daily living (ADLs). For example, what starts out as vague abdominal pain with low-grade fever may quickly develop into the classic picture of appendicitis.

---

**TOP FIVE REASONS ADULTS AND INFANTS ARE SENT TO THE ED BY A TRIAGE NURSE**

Nurse triage call center research has found the following to be the top five reasons **adults** are referred to the ED:

1. Chest pain
2. Abdominal pain (female)
3. Back pain
4. Breathing difficulty
5. Postoperative complications

The top five reasons **infants** are sent to the ED include:

1. Cough
2. Fever
3. Vomiting with diarrhea
4. Wheezing
5. Head injury

(Raheja, 2016)

---

**Cognitive Biases**

Being aware of and avoiding one’s cognitive biases is another important aspect to effective decision-making. Common cognitive biases include:

- **Confirmation bias**, or selective search for evidence. Tending to gather facts that support certain conclusions while disregarding other facts that support different conclusions.
• **Premature termination of search for evidence.** Accepting the first alternative that looks like it might work (i.e., jumping to a conclusion)

• **Recency.** Placing more attention on more recent information and either ignoring or forgetting more distant information

• **Selective perception.** Actively screening out information that one does not think is important (e.g., stereotyping of patient or symptoms)

• **Inertia.** Being unwilling to change old thought patterns in the face of new circumstances

• **Wishful thinking or optimism bias.** Wanting to see things in a positive light, which can distort one’s perception and thinking (over-reassurance)

• **Wellness bias.** A belief that a person is healthy or not seriously ill

• **Anchoring and adjustment.** Allowing initial information to shape and unduly influence one’s view of subsequent information (closed-mindedness)

• **Source credibility bias.** Rejecting something if one has a bias against the person or group to which the person belongs; accepting something if one likes the person (prejudice)

• **Implicit bias.** Attitudes and beliefs about race, ethnicity, age, ability, gender, or other characteristics that operate outside a person’s conscious awareness

(Adapted from Plous, 1993; Bellman, 2002; Sabin, 2022)

### AVOIDING STEREOTYPING

Stereotyping of patients and problems is a common pitfall in telephone triage. Nurses can avoid stereotyping both patients and symptom patterns by careful and sensitive assessment and by using screening or “rule-out” questions. For instance, it is easy to stereotype a patient by age or gender. For example, with a teenage girl who complains of abdominal pain, exploring recent unprotected sexual activity and possible pregnancy should be a standard rule-out question.

### CASE

The telenurse receives a call from a mother of a 25-year-old who reports that her son had a severely itchy raised rash on his back. Her son reports a sore throat. He has experienced these symptoms before when he ingested nuts, but taking an antihistamine eliminated his symptoms.

The telenurse requests to speak directly to the son, but he declines, stating that he needs to continually clear his throat. They are requesting the correct dose for diphenhydramine. The nurse assumes the patient and his mother are familiar with his symptoms and proceeds to provide homecare advice, assuming that, since this young man is healthy, not on any other medications, and has no allergies listed in his record, this is an appropriate level of care. The son proceeds to experience an anaphylactic reaction.
Discussion
Wellness and optimism bias is a risky practice, especially when a patient is experiencing a life-threatening situation. This clinician incorrectly assumed that this patient did not have any respiratory symptoms and did not do a complete assessment, which led to a bad outcome.

ASSESSMENT

The telephone triage process often begins with a rapid assessment to determine and prioritize how urgently the patient should be seen. The telenurse identifies and prioritizes the patient’s needs though “questioning, information interpretation, symptom review, and skillful assessment of the urgency and level of care necessary to safely and effectively meet the caller’s needs” (Mataxen & Webb, 2019).

This key contextual information can quickly identify high-risk patients or problems. This process, while appearing superficial, yields valuable information and often takes as little as 60 seconds.

Using critical-thinking skills, the nurse must quickly recognize when collection of more data is appropriate. In the case of a potential life-threatening, emergency situations such as loss of consciousness, head trauma, or chest pain, the nurse may quickly elicit key data and make a decision. But a case of vague abdominal pain requires gathering larger quantities of detailed information.

Rapid assessment and prioritization is referred to as a global assessment, intended to quickly recognize an emergent situation that requires aborting the formal assessment process and directing the caller to the emergency department (see “SAVED” below). However, most calls are not emergent and require eliciting an adequate symptom and patient history.

SCREENING FOR SUSPICIOUS CONDITIONS

Screening questions are used to quickly identify or rule out these suspicious conditions that require additional evaluation onsite:

- Alcohol/substance abuse
- Chronic disease
- Dehydration
- Domestic violence
- Emotional problems
- Exposure (toxins, new medication, adverse drug reaction)
- Infection
- Possible pregnancy
- Possible early sepsis symptoms
- Smoking
- Suicide/emotional distress
- Trauma

(Wheeler, 2017a)

The history-taking process begins by verifying the patient’s contact information (address and phone number). The nurse reminds the patient that this information is important in case the call is disconnected (especially since many patients’ only or primary phone is a cell phone, which can disconnect at a critical moment).

**SAVED: Identifying High-Risk Patients and Symptoms**

Quickly identifying and prioritizing high-risk situations is a critical skill in telephone triage. Research has identified several broad categories of high-risk (red flag) patients and symptoms, signified by the mnemonic **SAVED**.

<table>
<thead>
<tr>
<th>S</th>
<th>Severe, strange, or suspicious symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Age</td>
</tr>
<tr>
<td>V</td>
<td>Veracity</td>
</tr>
<tr>
<td>E</td>
<td>Emotional state</td>
</tr>
<tr>
<td>D</td>
<td>Debilitation and distance</td>
</tr>
</tbody>
</table>

These are “red flag” symptoms and populations that should raise suspicions and of which all clinicians should remain aware (Wheeler, 2009, 2013, 2017a).

Using this broad, global approach has several advantages. It supports clinical prioritization of patients and symptoms that are at high risk as a quick “first pass” in the assessment process. It expedites data collection and decision-making and quickly establishes acuity. In general, high-risk symptoms and patients with several risk factors must be treated more conservatively (i.e., by appointment rather than advice).

**SEVERE, STRANGE, OR SUSPICIOUS SYMPTOMS**

Severe pain (9 on scale of 10), severe bleeding (spurting, bright red), or severe trauma (falls from a height over 15 feet) are all conditions that the average layperson could identify as urgent. Strange symptoms include ill-structured, vague, atypical, or unusual presentations—symptoms that astute professionals typically recognize as urgent.
Sudden, unexpected, or new symptoms; recurrent symptoms; or a marked change in the patient’s condition all qualify as suspicious or strange. Also included as strange are symptoms that are atypical, novel, or silent presentations—often present in persons with compromised immune systems, such as older adults or young children.

Three descriptive methods can help establish acuity:

- **Compare** current symptoms to normal ADLs (see also “ADLs” later in this course).
- **Quantify** symptom severity. Measure symptoms in terms of numbers, frequency, size, or duration. For example, pain described as an 8, 9, or 10 on a scale of 1–10 (10 being the worst pain ever experienced) is quantitatively severe. Other examples of severe are:
  - Vaginal bleeding of more than one pad per hour (females)
  - Urine output less than one scantily wet diaper per eight hours (infants)
  - More than six to eight large, watery stools in eight hours
  - Swelling of wrist that is twice the size of a normal wrist
- **Qualify** symptom severity. Qualitative severity refers to descriptive terms or characteristics that indicate extreme symptoms. A headache described as sudden, splitting, throbbing, blinding, or “the worst headache I’ve ever had” is considered qualitatively severe. Other examples are:
  - Crushing chest pain
  - Sudden, localized, sharp abdominal pain
  - Sudden onset, widespread, unusual rash
  - Intense itching, sudden onset
  - Severe difficulty breathing

Suspicious symptoms also apply to situations where the nurse has a “gut feeling” or an intuition about a problem. In such situations, if the nurse is uncomfortable with the guideline disposition, it is important to upgrade a problem or bring the patient in sooner.

<table>
<thead>
<tr>
<th><strong>S = SEVERE/STRANGE/SUSPICIOUS SYMPTOMS (INCLUDING SEPSIS)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Severe pain, bleeding, trauma, diarrhea, vomiting, rash, etc.</td>
</tr>
<tr>
<td>- In older adults, severe diarrhea or dehydration</td>
</tr>
<tr>
<td>- Novel, atypical, unusual presentations (worst, new, sudden, unexpected, recurrent, silent)</td>
</tr>
<tr>
<td>- “Big six” (head, chest, respiratory, abdominal, “flu,” dizziness); often missed/delayed diagnosis of stroke, myocardial infarction, pulmonary embolus, appendicitis, ectopic pregnancy</td>
</tr>
</tbody>
</table>

(Wheeler, 2009, 2013, 2017a)
AGE

Age is one of the most important pieces of data obtained. The very young, very old, and women of childbearing age are typically regarded as high-risk populations. Due to immature immune systems, premature infants and those under 3 months of age are at highest risk. The “frail elderly” (anyone over 75 years of age or suffering from multiple or chronic diseases, functional disability, or psychosocial problems) are vulnerable due to failing immune responses. The childbearing years—always a high-risk period—may extend from age 11 to 60+ years.

Age information is typically readily available in the EMR. If the EMR is unavailable, always elicit and document the age; for infants and newborns, indicate in days, weeks, or months.

Some diseases are age-related. For example, women of reproductive age have a higher incidence of ectopic pregnancy, birth control side effects, and sexually transmitted infections. Extremes of age increase vulnerability to acute illnesses. All infants under 6 months (especially newborn and premature infants) as well as frail elderly are more vulnerable to infections and risks of sepsis.

A = AGE (HIGH-RISK POPULATIONS)

- All children, especially newborns; then under 3 months; then under 6 years
- All older adults, especially frail elderly
- Men over 35, women over 45 (in relation to cardiac symptoms)
- All women of childbearing age
- Teenagers who may be depressed (in relation to risk for suicide attempts)
- Persons with intellectual and developmental disabilities (may experience accelerated aging)

(Wheeler, 2009, 2013, 2017a)

CASE

An elderly man called the primary care nurse line, insisting on speaking with his doctor. The nurse responded that the doctor was on vacation until the following week. The nurse further inquired about the reason for the patient’s call, and the man stated that he was “probably fine and just needed to have his blood pressure checked.” As the nurse explored the patient’s symptoms further with more structured assessment questions about symptoms, severity, etc., she discovered that the patient had a history of high blood pressure and heart disease. Based on the assessment, the nurse recommended an urgent disposition to the ED.

Discussion
In this case, the patient may not have recognized his symptoms as serious; indeed, he may not have experienced anything that he would even have considered a symptom. In older adults, symptoms may be subtle or even silent. Perhaps, in this patient’s mind, he was simply calling to talk to his doctor, a trusted advisor, about the fact that he had been feeling tired.
If the nurse had not explored this patient’s symptoms further but simply arranged an appointment with the doctor for the next week, a delay in care may have ensued, and the patient could have suffered further damage to his heart.

**VERACITY**

Veracity refers to the ability to describe facts of the situation accurately. In the context of telephone triage, impaired veracity refers to the compromised ability to communicate accurately. Typical populations who have obstacles to communication include children under age 8, poor historians, extremely young or very inexperienced mothers, individuals with limited health literacy, or caregivers unfamiliar with the patient.

Information relayed through second or third parties (as with calls about children) may be incomplete or erroneous. A cardinal rule of thumb is “speak directly with the patient,” but this is not always possible. Third-party calls may occur when a working parent receives a report of the child’s condition from the onsite caregiver and then phones the telenurse. In the case of language barriers, using certified medical interpreters may improve communications but will double the length of the call.

These patients will likely require an appointment because communications are impaired and potentially inaccurate. A prudent policy is to see the patient in a timely fashion rather than to attempt to evaluate symptoms by phone. However, in all cases, it is important to attempt to ascertain if any emergency exists by performing a basic “rule-out” of urgency before advising an appointment.

<table>
<thead>
<tr>
<th>V = VERACITY (IMPAIRED COMMUNICATION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Second- or third-party calls</td>
</tr>
<tr>
<td>● Child under the age of 8</td>
</tr>
<tr>
<td>● Extremely young or very inexperienced mother</td>
</tr>
<tr>
<td>● Limited health literacy</td>
</tr>
<tr>
<td>● Language barrier (best practice is to use a certified medical interpreter to translate rather than a family member)</td>
</tr>
<tr>
<td>● In older adults:</td>
</tr>
<tr>
<td>o Suspected adverse drug reaction/substance abuse/overmedication by caregiver (“chemical restraints”)</td>
</tr>
<tr>
<td>o Incoherent or slurred speech in patient/caregiver</td>
</tr>
<tr>
<td>o Caregiver unfamiliar with patient</td>
</tr>
</tbody>
</table>

(Wheeler, 2009, 2013, 2017a)
EMOTIONAL STATE

Emotional status is a major factor in assessing acuity. Research on calls to emergency medical dispatchers found that when callers were extremely emotionally distraught and individuals were 50 years of age or older, 96% of the individuals were having a cardiac arrest (Clawson & Democoeur, 2020).

Nurses can discern subtle cues through careful attention to the words, tone, and pacing of the caller’s voice. There may be hysteria or denial, inappropriate affect in the caretaker or parent, confusion, or a history of psychiatric problems or substance abuse. Anxiety is always a red flag. When possible, telenurses attempt to gauge whether emotions are a temporary reaction to the current illness or long-standing emotional patterns. Call acuity is upgraded when extreme emotional reactions are present. In other words, if the symptoms indicate home care, the patient’s or caregiver’s emotional state may require a clinic appointment or urgent care visit.

It is important to ask how often and when the patient has called in the recent past. Frequent calls in a brief period of time are an indicator of both caller anxiety and may be an indicator of symptom urgency. Frequent calls are a red flag and indicate the patient should be seen urgently. Malpractice cases often involve encounters in which multiple phone calls were ignored, causing a delay in care (Wheeler, 2016, 2017a).

Documentation should include patient hostility or legal threats, inappropriate or extremes of affect, confusion, multiple phone calls, and patient statements of emotional state, to assure that calls are placed within the proper context and not disregarded.

<table>
<thead>
<tr>
<th>E = EMOTIONAL STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Multiple calls, anxiety</td>
</tr>
<tr>
<td>• Hysteria or denial</td>
</tr>
<tr>
<td>• Inappropriate affect in caretaker</td>
</tr>
<tr>
<td>• Emotional distress</td>
</tr>
<tr>
<td>• Parent or caretaker with history of abuse (e.g., physical, sexual, financial, emotional), psychiatric problems, or substance abuse</td>
</tr>
</tbody>
</table>

(Wheeler, 2009, 2013, 2017a)

DEBILITATION AND DISTANCE

Generally, the term debilitation refers to chronic illness. Chronic illnesses may include (but are not limited to) cancer, diabetes, heart disease, hypertension, mental disorders, asthma, or chronic obstructive pulmonary disease (COPD). For the immunocompromised, debilitation may involve lack of adequate immunizations, chemotherapy, HIV, splenectomy, steroid therapy, transplants, or nephrotic syndrome. Debilitation is also related to risk of sepsis.
**D = DEBILITATION AND DISTANCE**

- Chronic illnesses (asthma, depression, diabetes, cancer, cardiac symptoms, congestive heart failure, COPD, dementia, hypertension, inflammatory bowel disease, kidney disease, liver disease, neurologic symptoms, rheumatologic disease, Sickle cell disease)
- Smoking, substance abuse
- Immunocompromised (chemotherapy, HIV/AIDS, nephritic syndrome, splenectomy, steroid therapy, transplant history)
- Developmentally disabled (typically age prematurely)
- Frail elderly (over 75 years; over 65 years with functional impairments, with physical or mental disabilities)
- Parent/caretaker calling from remote location over one hour from hospital
- Reliance on public transportation that is sporadic or nonexistent at certain hours
- In emergent situation, patient unable to reach care within one hour due to traffic or lack of available transportation

(Wheeler, 2009, 2013, 2017a)

Medically complex patients are defined as those with comorbidity of several medical conditions that significantly compromise the ability to function (IOM, 2015). Medically complex patients may require upgraded acuity. For example, “flu symptoms” might represent early sepsis symptoms in patients with HIV, cancer, hemophilia, congenital defects, alcoholism, substance use, or multiple surgeries. Homeless and mentally ill (including posttraumatic stress disorder) patients may have higher rates of chronic illness, as will those who are immunocompromised and frail elderly.

Telephone triage is “time sensitive”; time to treatment (distance) influences triage disposition and can affect continuity and result in a delay in care. A patient/caregiver calling from a remote location several hours from a hospital or patients who depend on public transportation to travel may be at risk for delays in care. Delays may be typical of rural areas but may also apply to urban settings where rush-hour gridlock may impede arrival. Upgrading by calling paramedic transport can have the advantage of bringing access to the patient, thereby reducing a delay in care.

To summarize:

- Quickly prioritize by using the high-risk categories within SAVED on the documentation form.
- Ask questions in any order, or simply let the caller tell their story at first.
- Use open-ended questions where possible.
CASE

A spouse calls regarding her husband, age 65, who has a history of hypertension and smoking. His chief complaints are nausea, sweating, pallor, dizziness, and a “pulled muscle” after lifting weights. The wife is very worried and says her husband is “too sick to talk to the nurse.”

Discussion

The nurse recognizes red flags in all five SAVED categories:

- Severe symptoms (chest pain, soft cardiac signs)
- Age and gender (65-year-old male)
- Veracity (second-party call)
- Emotional state (worried wife)
- Debilitation (chronic health risk, smoking history)

In this particular case (emergent symptoms), based on five criteria (as a form of standard), the nurse is able to determine that such a patient will require immediate transport to the nearest emergency department.

Elicit the Problem and Patient History

When a problem does not appear urgent, the telenurse performs a more detailed assessment of symptom and patient history. This begins by eliciting the patient’s primary reason for calling. A patient’s first utterances are very important, and the patient’s first few descriptions can be key to zeroing in on the problem. Information can be collected in any order that seems appropriate to the patient and the situation.

Obtaining a brief patient history creates context and an immediate sense of patient risk. It includes verifying recent injury or illness, chronic illness, current daily medications, pregnancy status, and drug allergies.

It is not necessary to let a standard data collection form dictate the order of collection. In real-world situations, people volunteer information initially. It is important to find a safe balance between listening to a patient’s explanation and communicating the need to gather information in a timely fashion. Data is recorded into the appropriate field as the patient volunteers information; any information gaps are filled in later with follow-up questions from the guideline.

Patients often present symptoms in erratic and disorganized ways. They may focus on one symptom to the exclusion of other, more important ones. An example might be the parent who is concerned about a child losing a tooth due to trauma, when the more serious problem is possible head injury. A critical step in data collection is to avoid being caught up in the patient’s perception and to initiate the triage process with assessment questions and the documentation form. The rationale is to quickly sketch an outline of the problem.
If protocols are used as part of the nurse’s process or workflow, selecting a protocol too quickly in the call can lead to inaccurate advice. The nurse should perform thorough assessments as a “first pass” to reduce the risk of jumping to conclusions. As uncomfortable as uncertainty may be, choosing a guideline prematurely may lead down the wrong path.

**CASE**

At 3 a.m. a mother called a pediatric nurse triage line regarding her 3-month-old infant, who had a fever of 103 °F. The nurse did not obtain a complete symptom history and gave the mother routine advice for fever control. The nurse then directed the mother to an ED that was in network for their insurance coverage about 45 minutes away. (The nearest ED was about 15 minutes away.) En route, the child experienced a cardiac arrest due to hypoperfusion syndrome and meningitis. Because of impaired circulation, the child’s hands and feet had to be amputated.

**Discussion**

In this case, the nurse should have performed a thorough assessment and directed the mother to bring her infant to the nearest ED.

**PROBLEM-FOCUSED Mnemonics**

Researchers (Graversen et al., 2022; Gustafsson & Eriksson, 2021) have consistently pointed out the need to collect essential information related to the problem and patient histories. The mnemonic **SCHOLAR** lists key questions to elicit data on the problem history, and the mnemonic **RAMP** lists key information about the patient history.

**USING SCHOLAR FOR ELICITING PROBLEM HISTORY**

| S | Symptoms and associated symptoms | ● Is it an isolated symptom or a complex of symptoms?  
● Course of symptoms: Is it better? Worse? The same? |
| C | Characteristics (aids in precise description) | ● Quantitative (e.g., scale from 1–10)  
● Qualitative (e.g., sharp, dull, pounding) |
| H | History of complaint | ● In the past, what was done? By whom? When? What were the results? |
| O | Onset of symptoms | ● When did they start? How long have they been present?  
● Was the onset sudden or gradual? (sudden = higher acuity) |
| L | Location of symptoms (strive for precision, e.g., right upper quadrant, left lower quadrant, etc.) | ● Localized?  
● Generalized?  
● Radiation? |
<table>
<thead>
<tr>
<th>A</th>
<th>Aggravating factors</th>
<th>● What activity, foods, positions, etc., make it worse?</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>Relieving factors</td>
<td>● What activity, foods, home treatment, positions, etc., make it better?</td>
</tr>
</tbody>
</table>

(Wheeler, 2009, 2013, 2017a)

### USING RAMP FOR ELICITING PATIENT HISTORY

<table>
<thead>
<tr>
<th>R</th>
<th>Recent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Injury</td>
</tr>
<tr>
<td></td>
<td>● Infection</td>
</tr>
<tr>
<td></td>
<td>● Illness</td>
</tr>
<tr>
<td></td>
<td>● Invasive (postprocedure, postoperative, postpartum)</td>
</tr>
<tr>
<td></td>
<td>● Implant</td>
</tr>
<tr>
<td></td>
<td>● International travel</td>
</tr>
<tr>
<td></td>
<td>● Immunocompromised (chemotherapy, HIV/AIDS, nephrotic syndrome, splenectomy, steroid therapy, transplant)</td>
</tr>
<tr>
<td></td>
<td>● Ingestion (accidental or intentional ingestion/exposure, adverse drug reaction, new medication, drug-disease/drug-drug/drug-food interaction)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>Allergies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any exposure to foods, chemicals, drugs, insect bites, cosmetics, or other substance (new or existing)?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M</th>
<th>Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current or new over-the-counter, prescription, birth control, or recreational drugs?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P</th>
<th>Pregnancy/breastfeeding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For all women 12 to 50 years of age, any possibility of pregnancy or unprotected intercourse?</td>
</tr>
</tbody>
</table>

(Wheeler, 2009, 2013, 2017a)

The mnemonic **POSHPATE** may also be used in the assessment of a symptom-based call to obtain detailed information about the problem and to determine the appropriate level of care and provide appropriate advice (Rutenberg & Greenberg, 2012).

### USING POSHPATE FOR ELICITING PROBLEM HISTORY

<table>
<thead>
<tr>
<th>P</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● What is the patient’s main problem or chief complain?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>O</th>
<th>Onset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● How long has the patient had this problem, or when did it start?</td>
</tr>
<tr>
<td></td>
<td>● Was it a gradual onset or sudden?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Allow the patient to talk freely about what they are experiencing</td>
</tr>
</tbody>
</table>
After completing the assessment using the POSHPATE approach, the nurse then delves into the possible etiologies of the problem in order to determine the nature and urgency of the problem with greater accuracy.

The mnemonic TICOSMO helps the nurse tap into their existing knowledge (Rutenberg & Greenberg, 2012).

| H  | History                              | ● Ask open-ended questions  
|----|--------------------------------------|-----------------------------  
|    | Has the patient been ill or seen a care provider recently?  
|    | Are symptoms related to recent care (e.g., new medication, treatment, procedure)?  
|    | Is the problem old, ongoing, or new?  
|    | Has the patient/family called for advice about this same problem?  
| P  | Precipitating Factors                | ● Can any particular circumstances be identified that precipitated the problem?  
|    |                                      |                              
| A  | Alleviating or Aggravating Factors   | ● What treatments has the patient tried?  
|    |                                      | ● What interventions make symptoms reduced or eliminated?  
|    |                                      | ● What actions/activities make the symptoms worse?  
| T  | Timing                               | ● Are symptoms specific to a time of day or particular day?  
|    |                                      | ● Are symptoms annual or seasonal?  
|    |                                      | ● If patient is female, are symptoms linked to a menstrual cycle?  
| E  | Etiology                             | ● What are the potential causes or contributing factors?  
|    |                                      | (Rutenberg & Greenberg, 2012)  

**USING TICOSMO FOR CLINICAL REASONING**

| T  | Trauma                               | ● Did an injury occur?  
|    |                                      | ● Any sort of trauma?  
|    |                                      | ● Work-related injury?  
| I  | Infection                            | ● Is an infection possible?  
|    |                                      | ● Fever?  
|    |                                      | ● Localized signs and symptoms of an infection?  
|    |                                      | ● Exposure?  

© 2023 WILD IRIS MEDICAL EDUCATION, INC.
Activities of Daily Living (ADLs)

Although a systematic approach in an assessment is highly effective in obtaining accurate information, there are times when the symptom presentations are vague, incoherent, or nearly absent. When this occurs, a clear picture of the current situation is difficult to discern, and determination of degree of illness or impairment may be a challenge. In these cases, inquiring about activities of daily living can be an effective approach to determine the urgency of the situation.

Determining what a typical day is for the individual who is experiencing the symptoms and then comparing to current level of activity brings clarity to the situation. Comparing current ADLs with baseline ADLs provides a mental image of how ill a patient might be now. This includes asking how the patient is functioning compared to their normal routines in the areas of eating, drinking, sleeping, playing, working, eliminating (urine output and bowel movements), general appearance, and demeanor. A second party (such as a parent or caregiver) can also evaluate this baseline state. Activities of daily living provide a concrete picture of the patient when other data are sketchy.

Questions such as the following can be adapted for all ages and involve comparing current level of activity to the patient’s baseline:
- Is the newborn sleeping/feeding as usual?
- Is the child playing?
- Has the school-age child been able to keep up with extracurricular activities (e.g., sports, dance)
- Is the teen texting?
- Has the individual been able to go to work?
- Has the older adult been able to leave their home?

### USING ADLs FOR BASELINE COMPARISON

<table>
<thead>
<tr>
<th>Intake</th>
<th>Fluids, food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>Urine, emesis, bowel movements, diaphoresis (quantity and quality)</td>
</tr>
<tr>
<td>Sleeping</td>
<td>Too much, too little</td>
</tr>
<tr>
<td>Activity level</td>
<td>Compared to normal activity levels or routines</td>
</tr>
<tr>
<td>Mood</td>
<td>Marked change (any)</td>
</tr>
<tr>
<td>Color</td>
<td>Pale, red, blue, grey, ashen</td>
</tr>
<tr>
<td>Skin</td>
<td>Turgor; lips/tongue</td>
</tr>
</tbody>
</table>


For newborns, infants, older adults, aphasics, extremely poor historians, or severely disabled patients, the mnemonic A DEMERIT can also be used to assess demeanor/mood.

### USING A DEMERIT TO ASSESS DEMEANOR/MOOD

<table>
<thead>
<tr>
<th>A</th>
<th>Any extreme behavior (irritability, inactivity, disengagement, inconsolable crying)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Difficult to awaken or keep awake</td>
</tr>
<tr>
<td>E</td>
<td>Expression (decreased)</td>
</tr>
<tr>
<td>M</td>
<td>Movement (little or no spontaneous movement on own)</td>
</tr>
<tr>
<td>E</td>
<td>Eye contact/focus decreased</td>
</tr>
<tr>
<td>R</td>
<td>Recognition of caregiver/parent (decreased)</td>
</tr>
<tr>
<td>I</td>
<td>Interactivity (decreased)</td>
</tr>
<tr>
<td>T</td>
<td>Talking (decreased)</td>
</tr>
</tbody>
</table>


### Pain Assessment

Pain—a common presenting symptom—requires patient self-assessment. The telenurse instructs patients how to use landmarks to identify the location of pain (e.g., in relation to nipples, sternum, umbilicus, and pelvic bones). The analogy of a clock is helpful to estimate the location of a foreign body in the eye, abdominal pain, or lump in the breast. Pain may be diffuse or localized. If the patient can point with one finger to the location, it may indicate localized pain (thought to be more serious), whereas if they cannot, it may indicate diffuse pain (thought to be less serious). Sudden onset of pain is thought to be more serious than gradual onset.
If patients cannot adequately relate the severity of their pain, another way to estimate pain intensity is to systematically ask about its effect on their ability to function as normal or perform ADLs. If pain is moderately impactful, it will require a same-day appointment.

**Sepsis Recognition**

With high-risk or any sick patient, the clinician remains suspicious for the often subtle symptoms of sepsis. This includes performing early sepsis recognition by taking into account contextual details that are associated with sepsis—previous (any chronic illness) and recent medical history (recent injury, infection, invasive procedure, implant, immunocompromised, international travel). This information can be combined with age and current symptoms to form a pattern of risk.

Early sepsis recognition can be made using the mnemonics SAVED, RAMP, and SEPSIS. (See also “Pediatric Sepsis and Dehydration Guidelines” below.)

<table>
<thead>
<tr>
<th>USING SEPSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>S  Shivering, fever, or feeling very cold</td>
</tr>
<tr>
<td>E  Extreme pain or general discomfort</td>
</tr>
<tr>
<td>P  Pale or discolored skin</td>
</tr>
<tr>
<td>S  Sleepy, difficult to rouse, confused</td>
</tr>
<tr>
<td>I  “I feel like I might die”</td>
</tr>
<tr>
<td>S  Shortness of breath</td>
</tr>
</tbody>
</table>

(Bradford, 2016)

**Assessing by Proxy**

Unless telehealth and biotelemetry (measuring physiologic functions from a distance by telemeter) are available, telephone triage clinicians must enlist the aid of patients to assess by proxy. Traditionally, clinicians use vision, touch, hearing, and smell to assess symptoms. In telephone triage, the patient must serve as eyes, ears, nose, and hands to the clinician, who elicits data. (Auscultation by phone—gross respirations, emotional tenor, speech patterns, background sounds—is sometimes feasible.)

Methods available to gather information by proxy include:

- A visual assessment of a possible fracture can include comparing extremities (fingers, hands, feet, ankles) for swelling, discoloration, or deformity (e.g., “How do your two wrists compare to each other?”).
- Tactile information can be elicited (e.g., “Touch the area and tell me what happens. Is there tenderness in one particular area?”).
- In the case of a possible chemical ingestion, olfactory data can be elicited (e.g., “What does the child’s breath smell like?”).
With some exceptions, patients are subject to many of the same cognitive errors as clinicians: stereotyping, inadequate data collection, erroneous self-diagnosis, over-reacting, under-reacting, and fatigue. It is important to alert patients to these possibilities (e.g., “Is there a chance that you might be underestimating your symptoms?”).

**SELF-ASSESSMENT TECHNIQUES**

To assess for a range of specific symptoms or functions, patients can be asked to follow these actions and describe the results:

- **Blanching rash**: Press area for 2 seconds.
- **Circulation**: Squeeze finger between finger and thumb for 2 seconds. Release.
- **Costochondritis pain**: Press with one finger on area of chest that hurts.
- **Dehydration**: Pinch skin over top of hand for 5 seconds and release.
- **Fetal activity**: Count the number of kicks in 30 minutes at a time when the baby is normally active.
- **Level of consciousness**: Press down firmly on nail bed with thumb.
- **Pitting edema**: Press firmly on the bony area of the ankle for 1 to 2 seconds.
- **Point tenderness**: Gently press along length of bone to locate injury.
- **Postural hypotension**: Cautiously rise from sitting to standing (perform only with another adult present).
- **Pulse**: Gently place four fingers in groove alongside of “Adam’s apple” or place finger on thumb-side of wrist. (Tell patient when to start counting; time pulse for 1 minute.)
- **Respirations**: Remove the shirt and observe chest movement, counting each time the chest rises. (Tell patient when to start counting; time respirations for 1 minute.)
- **Tenderness to touch**: Touch the area.
- **Weight-bearing ability**: Cautiously attempt to stand, then cautiously attempt to bear weight or walk on the affected limb with an adult nearby. (Wheeler, 2013, 2017a)

**DOCUMENTATION**

Clinicians often ask what constitutes sufficient documentation; the answer varies with each call. Emergent symptoms will require minimal data, whereas vague abdominal pain may require many pieces of data. Pertinent negatives are documented to demonstrate that urgent symptoms were ruled out.
Documentation by Exception and by Inclusion

When it comes to documentation at the bedside, some maintain, “If you don’t document it, it wasn’t done.” What constitutes safe, effective, and appropriate documentation is an area of considerable controversy, and there are at least two schools of thought on the issue: documentation by exception and documentation by inclusion.

Documentation by exception, the method typically used by physicians, means that questions are asked, but negative responses need not be documented. Thus, with chest pain, physicians would not document “denies sweating, shortness of breath.” This approach reduces time-consuming documentation to a minimum. The physician is not made to look negligent for anything not documented. The risks are that no one can prove that standardized questions were indeed asked or what the response was, unless the call was audiotaped.

In contrast, documentation by inclusion, typically used by nurses, requires that the nurse chart normal (pertinent) negatives as well as abnormal findings (pertinent positives). Pertinent negatives are findings that are normal and significant (e.g., “denies black or bloody stools”). If charting by inclusion, both pertinent negatives and pertinent positives are always included. If they are not, the clinician may appear not to have asked “rule-out” questions and may appear negligent. It is more burdensome and time-consuming to document by inclusion, but it presents a more comprehensive picture of what happened during the call.

In telephone triage, the issue of documenting by inclusion or exclusion is best addressed by consulting nursing standards and in-house legal counsel and developing written policies.

Documentation Formats

Electronic documentation systems include the patient’s demographic information (e.g., age, gender, ethnicity). If an organization is exclusively utilizing paper documentation, this information must be included. In recent years, an increase usage of templated documentation in both paper and electronic formats ensures standardization from nurse to nurse. Electronic documentation capability allows for “smart” tools, which can pull in pretexting to increase documentation efficiencies and reduce errors.

Most clinicians start out transcribing information volunteered by the patient as they “tell their story,” since the patient’s first utterances are often the most accurate and important. Implementing templates for mnemonics (e.g., SCHOLAR, RAMP, POSHPATE, TICOSMO) provides telenurses with structure in both the interview process and documentation. It is critical to document the emotional state, any threats of litigation, presence of a language barrier, and any extenuating circumstances (recent death in the family, loss of job, recent car accident). Documentation forms and EMRs incorporate blank spaces as well as checkboxes, and most clinicians prefer to have both formats.

Audiotaping of calls has certain advantages. Wording and voice intonation can be reproduced precisely. However, unless transcriptions are immediately accessible, unlike written records,
audiotapes cannot immediately relay information to other providers, which might compromise continuity of care.

**Documentation Essentials**

Documentation must be concise but complete, including accurate, timely observations in the patient’s own words, always using approved abbreviations and terminology.

1. Quantify where possible; avoid vague expressions. Use measurable terms (e.g., pads per hour, diapers per hour, numbers of diarrhea or vomiting episodes).
2. Use time frames (e.g., 8, 16, 24, 48 hours) when assessing symptom duration for a more comprehensive baseline picture.
3. Form a provisional, working diagnosis or impression.
4. Document advice per guideline name or number.

Detailed, concrete documentation demonstrates the clinician’s efforts and supports the disposition and advice. Effective documentation is streamlined by using explicit terms and avoiding ambiguity. The more concrete, the better. Specific adjectives (qualitative) are used to describe symptoms and the patient’s emotional tone.

<table>
<thead>
<tr>
<th>EFFECTIVE VS. INEFFECTIVE DOCUMENTATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effective</strong></td>
<td><strong>Ineffective</strong></td>
</tr>
<tr>
<td>Concise: “Abdominal pain x 3 days. Denies nausea/vomiting/diarrhea.”</td>
<td>Long-winded: “Patient states she has had severe abdominal pain for 3 days. She denies any nausea, vomiting, or diarrhea.”</td>
</tr>
<tr>
<td>Detailed: “8 loose, watery, green stools x 16 hours.”</td>
<td>Vague: “Diarrhea.”</td>
</tr>
<tr>
<td>Detailed: “On penicillin 500 mg four times/day for 48 hours.”</td>
<td>Vague: “Taking antibiotics.”</td>
</tr>
<tr>
<td>Specific: “Worst headache I’ve ever had, splitting, throbbing.”</td>
<td>General: “Severe headache.”</td>
</tr>
<tr>
<td>Concrete: “Voice is high-pitched, speech rapid. Called three times in 2 hours.”</td>
<td>Subjective: “Seems anxious.”</td>
</tr>
</tbody>
</table>

**SAMPLE TELEPHONE TRIAGE DOCUMENTATION FORM**

<table>
<thead>
<tr>
<th>Name</th>
<th>[ ] Adult</th>
<th>[ ] Pediatric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>DOB</td>
<td></td>
</tr>
<tr>
<td>AM PM</td>
<td>Sex M F</td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td>Caller Relation to Patient</td>
<td></td>
</tr>
</tbody>
</table>
## Telephone Triage

<table>
<thead>
<tr>
<th>Hx Prematurity? Y N</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Temp (Oral Axillary Rectal Other)</td>
</tr>
<tr>
<td></td>
<td>BP</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Immunizations up-to-date? Y N (N=Needs appointment)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chief complaint</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Key symptom history (use SCHOLAR, ADL, A DEMERIT, SEPSIS checklists)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Home care administered? Y N</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Last menstrual period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant? Y N</td>
</tr>
<tr>
<td>Breastfeeding? Y N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allergies? Y N</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chronic illness?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Emotional state?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Medications? Y N</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Recent injury? Y N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent illness? Y N</td>
</tr>
<tr>
<td>Recent ingestion? Y N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impression</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Guideline title or number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Guideline modifications</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Advised to be seen within: Mins Hrs</th>
<th>Appointment Date Time</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Mode of transport</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Precautions stated? Y N</th>
<th>Patient agreement to plan? Y N</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>RN signature/title</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Time call ended</th>
<th>AM PM</th>
</tr>
</thead>
</table>

(Wheeler, 2013. Used with permission.)

### DOCUMENTATION AND “DEFENSIBILITY”

Telephone triage clinicians increase their defensibility through careful documentation—written/electronic and/or audiotape transcriptions (per institutional policy)—that correlates with established guidelines. For example, statements such as “abdominal pain, previous history of ectopic pregnancy” or “nosebleed, severe, unresponsive to home treatment x 30 min” provide information that identifies a problem’s severity and that it was due to a previous medical history or a failure to respond to home treatment.

In a court of law, clinicians must be able to prove that there were no alterations, deletions, or corrections that cannot be defended as the truth and verified by the person who recorded them. Documentation may be used in court against a nurse practicing telephone triage.
SELECTING THE CORRECT GUIDELINE

Patients rarely present with the classic picture of any disease. Patients’ disease presentations vary due to immune response, medical history, age, and the timing of the call in relation to the disease process. Thus, telenurses must carefully navigate the multitude of possible presentations. A myocardial infarction may present as one key symptom (like chest pain), a few generalized symptoms (nausea, vomiting, sweating), or the full-blown, classic picture (crushing chest pain accompanied by shortness of breath, nausea, vomiting, dizziness, sweating, anxiety). It is the role of the nurse to determine what constitutes a match to a given guideline.

Once the nurse has elicited adequate information utilizing assessment tools, the next step is to select a specific guideline. One expert recommends choosing the guideline that matches the most serious-sounding symptom or the one that most likely will require an appointment (Schmitt, 2018).

After consulting a guideline, a nurse can formulate a provisional or working diagnosis (impression). Use the patient’s chief complaint in their own words (headache, nosebleed, vaginal bleeding) to describe the problem. Add modifiers or qualifiers to designate the level of acuity. For example, using a pain scale of 1–10, the nurse might document as follows: “abdominal pain, 9/10, sudden onset” or “ankle pain, 4/10, trauma history.”

Universal Guideline

Problems arise when patients present with symptoms that do not match a given guideline. This situation requires a type of “standard” or “universal” guideline. A universal guideline represents a standards-integrated tool. Encompassed in it are built-in provisions for thorough assessment, communication, patient continuity, and improved decision-making for all presenting symptoms—life-threatening to nonacute.

Symptom assessment precedes the triage process. Assessment is based on the nursing process; guidelines operationalize the symptom sorting (acuity-level selection) or triage function. When both are robust processes, it helps to reduce human cognitive error and bias through both structure and process.

A universal guideline serves several functions as a:

- Contingency (fallback) guideline, when no guideline seems to apply
- Preemptive (go-to) guideline prior to selecting a specific guideline
- Training tool for new staff to introduce broad assessment and triage rules
- Symptom sorter into several acuity levels
- Standard-integrated structure and process (i.e., a nursing process tool with built-in standards for assessment, communication, continuity, and improved decision-making) (Wheeler, 2017a)
<table>
<thead>
<tr>
<th>Acuity Level with Assessment Questions</th>
<th>Disposition/Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergent Symptoms</strong></td>
<td>911 or emergency department (ED) in 0 minutes to 1 hour</td>
</tr>
<tr>
<td>• Trauma (major): blunt, motor vehicle accident, fall &gt;15 ft?</td>
<td></td>
</tr>
<tr>
<td>• Loss of consciousness?</td>
<td></td>
</tr>
<tr>
<td>• Shock or impending shock?</td>
<td></td>
</tr>
<tr>
<td>• Obstetrics crisis or impending birth?</td>
<td></td>
</tr>
<tr>
<td>• Severe respiratory distress?</td>
<td></td>
</tr>
<tr>
<td>• Patient presents danger to self/others?</td>
<td></td>
</tr>
<tr>
<td>• Caregiver presents danger to patient?</td>
<td></td>
</tr>
<tr>
<td>• Disorientation, sudden confusion, or marked behavior change?</td>
<td></td>
</tr>
<tr>
<td>• Decompensation or threat of decompensation of vital functions of neurological system, respiration, circulation, excretion, mobility, or sensory organs?</td>
<td></td>
</tr>
<tr>
<td>• Child: Severe toxicity symptoms? (see Pediatric Toxicity Guideline)</td>
<td></td>
</tr>
<tr>
<td>• Child: Severe dehydration symptoms? (see Pediatric Dehydration Guideline)</td>
<td></td>
</tr>
<tr>
<td>• Does RN feel symptoms are severe, extreme, or urgent?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Urgent Symptoms</strong></th>
<th>ED/Urgent Care Center (UCC)/Office in 1 to 8 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Trauma (all) and suspicious history? (possible abuse) (Come to ED now)</td>
<td></td>
</tr>
<tr>
<td>• Child: Toxic, very ill? (see Pediatric Toxicity Guideline) (Come to ED now)</td>
<td></td>
</tr>
<tr>
<td>• Child: Severe to moderate dehydration (see Pediatric Dehydration Guideline) (Come to ED now)</td>
<td></td>
</tr>
<tr>
<td>• Child: Age &lt;3 months and fever &gt;38 ºC or 100.4 ºF (Bring child to ED now)</td>
<td></td>
</tr>
<tr>
<td>• All ages: Fever &gt;40 ºC or 104 ºF</td>
<td></td>
</tr>
<tr>
<td>• Severe pain?</td>
<td></td>
</tr>
<tr>
<td>• Severe, suspicious, or sudden onset of symptoms (pain, bleeding or unusual symptoms, new, unexpected, changing rapidly, awakened patient from sleep, worsening)?</td>
<td></td>
</tr>
<tr>
<td>• Acute infection symptoms (fever/chills, joint pain, fatigue, “flu” symptoms, lack of appetite)?</td>
<td></td>
</tr>
<tr>
<td>• Infectious process requiring antibiotics? (&gt; risk of infection)</td>
<td></td>
</tr>
<tr>
<td>• Failure to improve on antibiotics x 24–48 hours? (&gt; risk of infection)</td>
<td></td>
</tr>
<tr>
<td>• Moderate symptoms and history of recent surgery? (possible post-op complications)</td>
<td></td>
</tr>
<tr>
<td>• Does RN feel symptoms are urgent or require appointment today?</td>
<td></td>
</tr>
</tbody>
</table>
Acute Symptoms | ED/UCC/Office in 8 to 24 hours
---|---
- Moderate symptoms plus risk factors (age, veracity, emotional distress, debilitation, distance) (> risk) *(Possible upgrade to urgent)*
- Symptoms that are persistent, worsening, or fail to improve on home treatment x 24–48 hours (> risk) *(Possible upgrade to urgent)*
- Child: Sick infant or child? (see Pediatric Toxicity Guideline)
- Child: Mild dehydration? (see Pediatric Dehydration Guideline)
- Does RN feel symptoms are acute?

Nonacute Symptoms | Home treatment with or without appointment in 24+ hours
---|---
- Minor, self-limiting (isolated/unchanging) symptoms existing over 1 week, not becoming markedly worse?
- Home treatment items or phone not available? *(Possible upgrade)*
- Does RN feel symptoms are nonacute?

(Wheeler, 2017a. Used with permission.)

DECISION-MAKING VS. DECISION SUPPORT

**Are guidelines decision-making or decision support tools?**

Some telephone triage designers have developed decision-making tools, maintaining that nurses should generally adhere to deterministic algorithms. Others see the nurse as the true decision maker, with guidelines serving as decision support tools. Decision-making tools are designed to allow unqualified operators to make decisions that are beyond their level of training and experience, whereas decision support systems contain prompts to remind experienced decision makers of clinical information they once knew but may have forgotten.

**Decision-making tools** are designed with yes/no questions and are used to make differential diagnoses. They are not recommended for safe use in telephone triage.

**Decision support** tools, based on pattern recognition, support the telenurse to use the nursing process and pattern recognition to estimate urgency. This approach mimics the way the brain solves problems by providing general descriptions to compare with the patient presentation. (The examples presented in this course are based on a decision support approach.)

The clinician must rely on clinical experience, training, and common sense to identify urgencies, estimate symptom urgency, rule out urgency, interpret patient responses, and determine a course of appropriate action. Decision support guidelines—whether on paper or electronic—are an adjunct to the decision-making process.
Pediatric Sepsis and Dehydration Guidelines

There are two key guidelines that no pediatric telephone triage manual should be without: sepsis and dehydration. While older adults and debilitated persons are also at risk, children are especially vulnerable to these two serious conditions. Because symptoms may be subtle, generalized, or atypical, both guidelines describe alterations in key behavioral patterns related to these conditions based on the parameters outlined in activities of daily living. A good rule of thumb is: All sick children should be assessed for possible dehydration or possible toxicity (sepsis).

For example, with possible toxicity or possible sepsis, the child may exhibit extremes of behavior: extremely irritable, crying inconsolably, unable to be comforted. At the other end of the spectrum, a child who is quiet, not moving, very withdrawn, and difficult to engage presents another pattern of severe illness. Refusal to eat, drink, or breastfeed nearly always indicates patterns of extreme illness in children.

With dehydration, the nurse should elicit and be alert to the context and combined effect of conditions that can worsen dehydration. These include extreme heat or humidity, exercise, fever, nausea and vomiting, diarrhea, low or no fluid intake, as well as age, chronic disease, degree and duration of fever, patient medical history, depressed thirst response, and medications.

<table>
<thead>
<tr>
<th>SAMPLE PEDIATRIC DEHYDRATION GUIDELINE (BIRTH–6 YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acuity Level with Assessment Questions</strong></td>
</tr>
<tr>
<td><strong>Emergent Symptoms (severe dehydration)</strong></td>
</tr>
<tr>
<td>– Appears: Extremely quiet, inactive, weak, or very difficult to arouse, delirious?</td>
</tr>
<tr>
<td>– Skin: Cold, mottled/blue color; turgor/tenting (when pinched briefly and released, skin remains “tented”)?</td>
</tr>
<tr>
<td>– Mucous membranes: Extremely dry, parched lips/tongue, difficulty swallowing?</td>
</tr>
<tr>
<td>– Fontanelle: Sunken?</td>
</tr>
<tr>
<td>– Eyes: Sunken, no tears?</td>
</tr>
<tr>
<td>– Respirations: Mouth breathing, very fast?</td>
</tr>
<tr>
<td>– Intake: Unable to hold down fluids for 4–8 hours, scanty amount?</td>
</tr>
<tr>
<td>– Output: No urine or wet diaper x 8 hours, scanty amount?</td>
</tr>
<tr>
<td>– BM: Marked increase in number of watery stools?</td>
</tr>
<tr>
<td>– Emesis: Prolonged or severe vomiting?</td>
</tr>
<tr>
<td>– Does RN feel symptoms are severe, extreme, or urgent?</td>
</tr>
<tr>
<td><strong>Urgent Symptoms (moderate dehydration)</strong></td>
</tr>
<tr>
<td>– Appears: Inactive/drowsy, weak, dizzy, irritable when aroused?</td>
</tr>
<tr>
<td>– Skin: Pale color; turgor/decreased firmness?</td>
</tr>
</tbody>
</table>
• Mucous membranes: Very dry lips and tongue?
• Eyes/tears: Decreased tearing, sunken eyes ruled out?
• Respiration: Moderately fast?
• Intake: Able to hold down small amounts of fluids x 2–3 hours?
• Output: Dark yellow urine, less than normal?
• BM: Moderate increase in number of watery stools?
• Emesis: Several episodes of vomiting, large amount?
• Does RN feel symptoms are urgent?

<table>
<thead>
<tr>
<th>Acute/nonacute Symptoms (mild dehydration)</th>
<th>ED/UCC/Office in 8+ hours and home treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Appears: Fussy, decreased energy, irritable?</td>
<td></td>
</tr>
<tr>
<td>• Skin: Pale color; turgor, no tenting?</td>
<td></td>
</tr>
<tr>
<td>• Mucous membranes: Moist to slightly dry lips and tongue?</td>
<td></td>
</tr>
<tr>
<td>• Eyes/tears: Moist, decreased to normal tearing?</td>
<td></td>
</tr>
<tr>
<td>• Respiration: Moderately fast to normal?</td>
<td></td>
</tr>
<tr>
<td>• Intake: Able to hold down small amounts of fluids x 8 hours?</td>
<td></td>
</tr>
<tr>
<td>• Output: Normal or slight decrease in urine?</td>
<td></td>
</tr>
<tr>
<td>• BM: Infrequent watery stools, small amount?</td>
<td></td>
</tr>
<tr>
<td>• Emesis: Few episodes of vomiting, small to moderate amount?</td>
<td></td>
</tr>
</tbody>
</table>

(Wheeler, 2013. Used with permission.)

### SAMPLE PEDIATRIC TOXICITY GUIDELINE (BIRTH–6 YEARS)

<table>
<thead>
<tr>
<th>Acuity Level with Assessment Questions</th>
<th>Disposition/Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergent Symptoms (severe toxicity)</strong></td>
<td>911 or ED in 0 minutes to 1 hour</td>
</tr>
<tr>
<td>• Looks extremely sick, “sickest ever seen”?</td>
<td></td>
</tr>
<tr>
<td>• Expressed in either extreme:</td>
<td></td>
</tr>
<tr>
<td>• Extremely irritable, crying inconsolably, unable to be comforted?</td>
<td></td>
</tr>
<tr>
<td>• Extremely quiet, not moving, extremely withdrawn/difficult to engage, not interested in people/caregiver/toys or TV?</td>
<td></td>
</tr>
<tr>
<td>• Skin color: Changed from normal, pale, blue, red, etc.?</td>
<td></td>
</tr>
<tr>
<td>• Respiration: Marked change, increased or decreased?</td>
<td></td>
</tr>
<tr>
<td>• Intake: Refuses to eat and/or drink, breastfeed?</td>
<td></td>
</tr>
<tr>
<td>• Output: Urine extremely changed, marked decrease?</td>
<td></td>
</tr>
<tr>
<td>• Bowel/emesis: Prolonged, severe vomiting or diarrhea?</td>
<td></td>
</tr>
</tbody>
</table>
Does RN feel symptoms are severe, extreme, or urgent?

**Urgent Symptoms (moderate toxicity)** | ED/UCC/Office in 1 to 8 hours
---|---
* Appears: Very ill, moderately fussy, decreased energy, irritable?
* Skin: Pale, red, or flushed color; turgor, no tenting?
* Mucous membranes: Moist to S1, dry lips and tongue?
* Eyes/tears: Moist, decreased to normal tearing?
* Respirations: Moderately increased or decreased?
* Intake: Breastfeeds with a lot of encouragement? Will eat/drink and hold down small amounts of fluids x 8 hours?
* Output: Moderately decreased?
* BM: Infrequent watery stools, small amount?
* Emesis: Few episodes of vomiting, moderate amount?
* Does RN feel symptoms are urgent?

**Acute/nonacute Symptoms (mild toxicity)** | ED/UCC/Office in 8+ hours and home treatment
---|---
* Appears: Sick, fussy, crying off and on, comforted easily, periods of normal activity, plays briefly?
* Skin color: Normal, probably no change?
* Respirations: Slight change, increased or decreased?
* Intake: Will eat and/or drink or breastfeed normal or less than normal amount with some encouragement?
* Output: Urine slightly decreased?
* Bowel/emesis: Stool/emesis slightly increased?

(Wheeler, 2013. Used with permission.)

**DISPOSITION: A TIERED APPROACH**

Telephone triage implies a tiered approach that requires nurses to identify the symptom acuity level. The example below has several tiered categories with flexible timeframes within which the nurse determines a safe, prudent, and reasonable disposition. The following four tiers are adapted from definitions and descriptions used by the American Board of Emergency Medicine (Beeson et al., 2020).

1. **Emergent Level:** All emergent-level symptoms will require ED services. Life-threatening symptoms will always require paramedic transport to ED within minutes. Patients must be kept NPO. Remain on the line with the caller. Whenever possible,
institute a three-way conference call with both patient and EMS services, suicide prevention, rape crisis, poison center, etc., according to facility policies.

Some patients with emergent (but non-life-threatening) symptoms may be brought by car by a person who can safely drive the patient within the appropriate time frame (0 to 1 hour). When applicable, always notify labor and delivery or ED of pending arrivals of any patient coming via car.

2. **Urgent Level:** Urgent symptoms typically require evaluation within 1 to 8 hours (i.e., same-day appointment). Some patients may require evaluation within the hour and are instructed by guideline to “come in now.” Depending on the time of day and day of the week, some patients may be directed, as appropriate, to ED, urgent care, or office settings for further evaluation.

Some patients in the urgent category may also require paramedic transport due to transportation problems. Some may require other reliable, timely transport as is practical (e.g., cabs, ride-share, etc.) if there is no readily available car or if loved ones are too anxious to drive them in. When applicable, always notify labor and delivery or ED of pending arrivals of any patient coming via car.

3. **Acute Level:** Acute symptoms typically require evaluation within an 8- to 24-hour timeframe or a next day appointment. Depending on the time of day and day of the week, some patients may be directed, as appropriate, to ED, urgent care, or office settings for further evaluation. Always notify labor and delivery or ED of pending arrivals of any patient arriving via car.

4. **Nonacute Level:** Nonacute symptoms may require evaluation within a 24-plus-hour timeframe or future appointment or advice only. Depending on the time of day and day of the week (available access), these patients may also be directed to ED, urgent care, or office settings for further evaluation, as appropriate.

**UPGRADING A DISPOSITION**

“When in doubt, always err on the side of caution” is a cardinal rule in telephone triage. Telephone triage nurses must rely on their best professional judgment and use every means at their disposal to ensure that patients are treated in a timely manner. Timeframes provided in a guideline are intended as a general guide. If a nurse has doubts about the severity of symptoms and condition, safety dictates the patient come in sooner rather than later, erring on the side of caution.

Telephone triage nurses may upgrade dispositions as appropriate (e.g., from urgent to emergent, nonacute to acute). Downgrading a disposition or level of care occurs if a nurse recommends or approves of a lower level of care. Downgrading can be risky.

Examples:
1. The nurse has identified a life-threatening symptom, and the patient requests to remain at home and “wait it out.” The nurse cannot support this unsafe decision. Instead, the nurse provides the patient with compelling rationale to convince them to follow the advice. If there is still resistance, collaborating with the physician on-call is an option.

2. A patient contacts a nurse, who determines that the symptoms require an appointment within 24 hours. The patient declines an appointment and states that they will implement home care advice for 24 hours and then return a call to the nurse within 24 hours to provide an update related to progress. Although the guideline required an appointment within 24 hours, the nurse agrees that a follow-up phone call is acceptable.

In both of these situations, the patient did not follow the timeframe that was advised. There could be significant implications in the first example, and so more actions were taken to address the patient’s nonadherence. In both cases, it is necessary for the nurse to document comprehensively to ensure that the situation is reflected accurately and to demonstrate that the standard of care and due diligence was met.

Improper Use of Guidelines

A common pitfall is when nurses make improper use of guidelines. Even though guidelines may be well-designed and comprehensive, there are several ways in which the nurse can misuse them, including:

- **Failure to use a guideline.** This is obviously risky but easily occurs when the nurse finds that no guideline seems to apply to the presenting problem. It is commonly referred to as the “out of guideline” experience.

- **Selecting the wrong guideline.** Failure to collect enough information can lead to selecting the wrong guideline, which may in turn lead to an inaccurate referral and/or disposition for the patient.

- **Applying a guideline improperly.** Nurses may choose the correct guideline but fail to follow it correctly. This can be remedied by providing comprehensive user’s guide instructions and guideline competency training.

- **Over-reliance on a guideline.** When guidelines are given too significant a role, nurses may become passive, and this can lead to errors in triage. A balance between nursing judgment and the use of the guideline is required.

- **Using one guideline when there are multiple symptoms.** Although a patient may be experiencing many symptoms, the nurse chooses only one guideline. This may be done in an effort to reduce call time. Or the nurse decides what symptom is the most apparent. Or the patient may have called numerous times, and the nurse picks a guideline only for the new symptom. Whatever the case, this is risky because each guideline will result in a level of care, and unless all guidelines are used, the highest level of care may not be determined.
In addition, there is the possibility of “guideline bias.” This may occur when nurses who have become used to one type of guideline must change to a new, different type of guideline. They often have difficulty adjusting to the new design.

Telephone triage managers should also be aware of the pitfall of relying on guidelines to take the place of formal training and instruction in critical thinking, history taking, communication, assessment, and decision-making.

**Disposition Closure**

The nurse’s disposition includes ending each call with the final question, “Is anything else worrying you?” or “Do you have any additional questions?” This step may reveal that a patient has an entirely different motivation and may even open the door to a new triage process.

Documenting a closing statement helps ensure that the patient has given informed consent. In other words, they comprehend the provisional diagnosis and any proposed treatment, with the following understanding:

- This is an impression, **not** a medical diagnosis.
- The advice or home treatment is based on the impression.
- If a patient disagrees with the impression, they may have an appointment.
- If symptoms worsen or fail to respond to the home treatment, the patient agrees to call back or come in.
- The patient agrees to the plan.

A key element of documentation is to elicit and document what the patient plans to do at the end of the call. This will demonstrate that there was agreement to a certain plan of action. Further, it ensures that the patient understands what to do and under what conditions they may need to ask for further help. The chain of command may also be used; nurses should **not** be afraid to go to the next higher level.

**RISK MANAGEMENT ISSUES**

Professionals have a duty to behave prudently and reasonably. A failure to act reasonably that results in injury to another constitutes negligence. Malpractice is negligence committed by a professional in the performance of professional duties. In telephone triage, malpractice boils down to two types of error—system error and practice error. Institutions are responsible for creating and maintaining safe systems to avoid system error. Clinicians are responsible to avoid practice errors, usually failures of communication or investigation (failure to assess adequately).
Layers of Safety

System error occurs when a culture of safety is not emphasized. In the risk-prone subspecialty of telephone triage, for example, overemphasis on cost containment (reduction of inappropriate paramedic transport or ED/office visits) can erode standards of patient safety.

System error can be reduced by developing complete systems, providing “layers of safety” to the staff and patient alike. High-quality systems serve as risk management tools by acting as layers of legal protection. The more layers, the more protection. When negligence is alleged, the system will be used as evidence. The more robust and comprehensive the system, the better off an institution will be.

The following components may provide evidence that supports system safety in the field of telephone triage:

- Up-to-date policies, procedures, and standards in place at the time of the call
- Telephone triage guidelines (paper or electronic) used for the call
- Documentation, electronic medical record, or audio recording/transcript of the call
- Training program materials used to train the person who answered the call
- Job description and qualifications of the person who managed the call

The clinician performing telephone triage is first and foremost a communicator. The clinician can lessen liability exposure by communicating effectively. Documentation—an important part of the communication function—should correlate with established guidelines. One must be able to prove that there were no alterations, deletions, or corrections that cannot be defended as the truth and verified by the person who wrote them.

“Right Person, Right Task”

DELEGATION OF TASKS

In regard to telephone triage, institutions and group practices are responsible for delegation of all tasks. In some facilities and many office practices, physicians delegate a role to receptionists to take detailed messages, which are subsequently passed on to nurses. These messages may also include lists of clinical questions for nonclinical staff to ask patients. While many facilities currently allow this practice in order to cut costs by hiring fewer clinicians, it is a risky policy and can lead to system error.

There also often remains confusion over who is legally authorized to delegate certain tasks to unqualified staff. Traditionally, physicians and corporations are legally allowed to delegate tasks to nonclinicians. Organizations such as American Nurses Association (2019) and AAACN (2018) advise against such delegation. Using clerical staff in this way may be cost effective but may result in delay of care, patient harm, and malpractice lawsuits. It is legally risky for the
following reasons:

- While symptoms such as chest pain, difficulty breathing, and severe pain are obviously urgent symptoms, to date there is no clinical evidence that any special list of other key symptoms enables nonclinicians to safely “pre-triage” symptoms.
- Even for qualified clinical staff, it is challenging to gather information, perform assessments, and assess symptom urgency by phone.
- No symptom list can adequately cover the variations of presentations of urgent symptoms; for example, symptom presentation may be atypical, silent, or novel.
- Patients may misinterpret or deny symptoms, self-diagnose, and miscommunicate. They might relay erroneous information to the clerical staff. For example, some patients label symptoms as “a bad case of the flu” when they may actually represent early signs of sepsis.

A safe standard might instead include the following policies:

- A voice message system directs callers to leave messages on separate lines for:
  - Lab or X-ray results (transferred to appropriate clinician)
  - Pharmacy requests
  - Class registration
  - Nonclinical messages to physicians
  - Directions, hours
- Symptom-based calls are assessed first by clinicians and then transferred to clerical staff to set up the recommended appointment.
- Non-symptom-related, scheduling-based calls go directly to clerical staff.

It is prudent for telenurses to request a copy of their task delegation policy in writing.

MISREPRESENTATION

Receptionists and nonclinicians must also not be allowed to represent themselves as nurses or to let callers believe that they are nurses. To prevent this from happening, titles for nonclinicians should be clearly nonmedical, such as appointment clerk, scheduler, office clerk, or administrative assistant. A receptionist can state immediately to the caller to whom they are speaking by name and title, for example, “This is Shannon, the office clerk.” Ambiguous titles such as medical representative or medical assistant may mislead callers into thinking they are speaking with clinicians. This can lead to a charge of misrepresentation if no one corrects that impression. It constitutes system error.

Likewise, nurses must never hold themselves out as physicians nor let the caller believe they are talking with a physician. A telenurse can state immediately to the caller to whom they are
speaking by name and title (e.g., “This is Stacey, the triage nurse. How may I help you?”). Failure to clarify a role in this way may result in legal liabilities.

“Duty to Terrify”

Because telephone triage is a time-sensitive task, if nurses perceive that symptoms are urgent, they must give patients instructions about the seriousness of the recommended course of action. The term *duty to terrify* refers to what has been called “a duty based on the liability from an injury to the noncompliant patient who claims that his or her noncompliance was due to an inadequate understanding of the urgency of the situation” (Wheeler, 2013).

While the phrase *duty to terrify* is memorable, it may be better worded as *duty to clarify*. In other words, the clinician’s directives should be specific enough to convey the concept of urgency and to motivate the patient to comply, yet not so specific that the clinician appears to be making a diagnosis.

Clinicians must instruct patients in when, where, and why they need to be seen and further evaluated. For example, by gaining a caller’s agreement to “come to urgent care within four hours because the symptoms sound serious,” nurses have discharged the duty to clarify, thereby promoting informed consent, continuity, and compliance. Not doing so is an example of a practice error, namely, failure to communicate.

Delay and Denial of Care

**PAYMENT CONCERNS**

System error can be related to institutional efforts to contain costs by reducing inappropriate ED visits, paramedic transport, and office visits. Thus, telenurses are sometimes forced to act as gatekeepers. Telenurses’ priority, however, is to ensure patients’ timely access to emergency services rather than considering who will pay for such services. An experienced telenurse has the autonomy to act based on clinical experience and nursing knowledge.

Patients themselves may contribute to a delay in care through their own reluctance to call 911 due to anticipated charges for ambulance transportation. The nurse should always be alert to the possibility of a patient’s concerns with payment issues. This “hidden agenda” may lead the caller to minimize disclosure of symptoms in order to avoid incurring the costs associated with paramedic transport. Detailed, written policies and procedures should clearly address the access issue and the correct procedure to follow.

**ACCESS TO SPECIALISTS**

Many malpractice claims from high-risk populations (pediatrics, geriatrics, and women of childbearing age) are now related to lack of timely access to specialists. Due to cost-containment strategies, callers often need to be screened by their primary care provider prior to seeing a
specialist. This policy may dangerously delay access to the patient’s OB/GYN, pediatrician, internist, or oncologist. Bureaucratic obstacles to timely access can be subtle and are related to system error.

**CASE**

A male patient who was recently discharged from the surgical unit called his doctor’s office. He told the nurse that he “felt sicker than when he was discharged.” He asked if he could get an urgent office appointment to see his doctor instead of coming to the emergency department, stating that “he did not want another ambulance and hospital bill to worry about.”

The nurse recognized the risk associated with this patient’s own agenda of wanting to avoid potential costs associated with treatment. She properly assessed his condition and concluded that the proper disposition was for the patient to be taken by ambulance to the nearest ED, despite his preference to avoid such a scenario.

**Discussion**

In this case, the nurse was alert to an important risk-management issue. A patient’s concern over the cost of paying for care is a common situation experienced in telephone triage practice. In this situation, her disposition may have prevented the patient from suffering serious consequences due to the complications from his surgery.

**CHALLENGES TO THE FIELD OF TELEPHONE TRIAGE**

Although the area of telehealth is considered to be in the early stages of its development, the body of research specifically focused in this area of practice is growing. The following gaps demonstrate opportunities for improvement:

- Clinicians may fail to perform adequate initial assessments or to elicit an adequate patient “back story,” possibly due to inadequate training or the mistaken belief that patients are responsible for providing all needed information.
- No software system has been found to be consistently valid and reliable in providing decision support to clinicians, and some clinicians may over rely on such systems.
- Full-time telephone triage work is stressful, which can at times prove detrimental to the health and safety of practitioners as well as patients.
- Since the mid-1990s, the telephone triage industry has experienced rapid growth. Still, there is a lack of consensus about everything from guideline design and the scope of practice to terminology. There are also unaddressed research gaps, challenging the impression that this emerging field is complete.
CONCLUSION

Telephone triage is a recognized specialty in primary care and specialty practices. The telephone triage system is composed of five components: qualified staff, training programs, standards, guidelines, and documentation. Its structure and process are integrated to help reduce common errors—failures of assessment, communications, continuity, informed consent, and human error.

Critical-thinking skills and a systematic approach can remedy many potential pitfalls. These include the following practices:

- Identify what is salient and ignore what is not.
- Apply rules of thumb to make timely decisions.
- Recognize “red flags” to quickly identify high-risk problems or populations.
- Employ consistent, comprehensive assessment and data-collection strategies.
- Use the nursing process, modified for telephone triage.
- Use a documentation form with the nursing process embedded.
- Apply guidelines that support the nursing process.

Telephone triage nurses use the nursing process and professional judgment to achieve safe, timely outcomes, getting patients to the right place at the right time for the right reason.

RESOURCES

Telehealth manager’s toolkit (American Academy of Ambulatory Care Nursing)

Telehealth nursing practice (AAACN)
https://www.aaacn.org/practice-resources/telehealth/telehealth-nursing-practice

Tele-triage (HRSA)
https://telehealth.hhs.gov/providers/best-practice-guides/telehealth-for-emergency-departments/tele-triage

REFERENCES

Accreditation Council for Graduate Medical Education (ACGME). (2019). *ACGME program requirements for graduate medical education in emergency medical services.*
https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/112_EmergencyMedicalServices_2019_TCC.pdf


DISCLOSURE

Wild Iris Medical Education, Inc., provides educational activities that are free from bias. The information provided in this course is to be used for educational purposes only. It is not intended as a substitute for professional healthcare. Neither the planners of this course nor the author have conflicts of interest to disclose. (A conflict of interest exists when the planners and/or authors have financial relationship with providers of goods or services which could influence their objectivity in presenting educational content.) This course is not co-provided. Wild Iris Medical Education, Inc., has not received commercial support for this course. There is no “off-label” use of medications in this course. All doses and dose ranges are for adults, unless otherwise indicated. Trade names, when used, are intended as an example of a class of medication, not an endorsement of a specific medication or manufacturer by Wild Iris Medical Education, Inc., or ANCC. Product trade names or images, when used, are intended as an example of a class of product, not an endorsement of a specific product or manufacturer by Wild Iris Medical Education, Inc., or ANCC. Accreditation does not imply endorsement by Wild Iris Medical Education, Inc., or ANCC of any commercial products or services mentioned in conjunction with this activity.

ABOUT THIS COURSE

You must score 70% or better on the test and complete the course evaluation to earn a certificate of completion for this CE activity.

ABOUT WILD IRIS MEDICAL EDUCATION

Wild Iris Medical Education offers a simple CE process, relevant, evidence-based information, superior customer service, personal accounts, and group account services. We’ve been providing online accredited continuing education since 1998.

ACCREDITATION INFORMATION FOR WILD IRIS MEDICAL EDUCATION

© 2023 WILD IRIS MEDICAL EDUCATION, INC.
TEST

[ Take the test online at wildirismedicaleducation.com ]

1. Which action would the nurse take after assessing and estimating the urgency of a patient’s symptoms?
   a. Identify the appropriate medical treatment
   b. Determine the appropriate disposition
   c. Calculate the patient’s hospital acuity level
   d. Select the patient’s nursing diagnosis

2. Which phrase defines “appropriate disposition”?
   a. Timely and safe level of care
   b. Safe but not cost-effective
   c. Reasonable patient approach
   d. Detailed routine to solve a problem

3. For which reason are evidence-based telephone triage guidelines used?
   a. Support decision making for telenurses
   b. Provide options for patients
   c. Serve as guidance for office personnel
   d. Ensure uniform advice for physicians

4. Which statement explains the purpose of the AAACN telehealth standards?
   a. Lists requirements for a telehealth program that includes the necessities for training and documentation
   b. Provides criteria for administrative personnel that includes necessities for reimbursement of telehealth services
   c. Identifies authoritative statements for telehealth nurses that describe the accountabilities for this area of practice
   d. Recommends options for nurses that contribute to their confidence and capability in telehealth

5. Which situation is an example of a crisis intervention function of a telenurse?
   a. Providing comfort to a man calling with questions about his medicine
   b. Triage of a woman reporting symptoms associated with influenza
   c. Triage of a young woman at risk for suicide to an emergency center
   d. Monitoring home treatment interventions
6. Which step does the nurse perform first in the telephone triage process?
   a. Selecting a guideline
   b. Formulating an impression
   c. Completing a preliminary assessment
   d. Analyzing patient data

7. Which action does the nurse take when using the “chunk and check” technique during a telephone encounter?
   a. Summarizes the advice and asks the patient to select the best option
   b. Completes the triage process and determines the patient’s understanding
   c. Breaks down the information into small segments and asks the patient to teach it back
   d. Divides the triage process by urgency and ensures the patient complies with the advice

8. Which question is “open-ended”?
   a. “How would you describe your pain?”
   b. “Have you ever had a bladder infection before?”
   c. “Did the pain begin suddenly?”
   d. “Is the pain above or below your pubic bone?”

9. Which bias is the telenurse demonstrating when directing a mother to call back if a child who is “usually healthy” develops more severe symptoms?
   a. Wishful thinking or optimism bias
   b. Implicit bias
   c. Source credibility bias
   d. Wellness bias

10. For which reason should the telenurse ask a patient to compare the ability to perform activities of daily living with current status?
    a. Provides a mental image of the patient’s acuity
    b. Allows the nurses to get to know the patient better
    c. Relays information about the patient preferences
    d. Informs the nurse about the patient’s schedule

11. Which statement describes “assessment by proxy”?
    a. The telenurse serves as a liaison between the physician and the patient.
    b. The patient serves as eyes, ears, nose, and hands for the clinician.
    c. The family member remains with the patient to deliver care.
    d. The patient elicits information and care advice from the internet.
12. Which statement best illustrates effective documentation for a parent’s description of a toddler’s loose stools?
   a. “He’s never had diarrhea like this before.”
   b. “I’ve been too busy changing his diapers to count them.”
   c. “He had five large, watery green stools just in the last 2 hours.”
   d. “It seems like the that electrolyte juice just goes right through him.”

13. For which situation should the nurse use the universal guideline?
   a. Patient symptoms match those within a specific guideline.
   b. Patient symptoms do not match a specific guideline.
   c. Patient does not speak English.
   d. Patient needs information about a previously diagnosed condition.

14. According to the tiered approach to disposition described in this course, at which time should a patient with “urgent” symptoms be seen?
   a. Immediately
   b. Within 1 to 8 hours
   c. Within 8 to 24 hours
   d. After 24 hours

15. Which statement is true regarding delegating telephone triage to nonclinical staff?
   a. Perform limited telephone triage and give advice if under a nurse’s supervision.
   b. Directly receive nonclinical calls from patients requiring appointments.
   c. Triage calls with the use of a list of key symptoms.
   d. Take detailed messages for nurses by asking clinical questions.