Telephone Triage
Best Practice and Systems for Telehealth Nursing

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LEARNING OUTCOME AND OBJECTIVES: Upon completion of the course, you will have increased your knowledge of telephone triage nursing. Specific objectives include:

- Define "telephone triage" and its related terminology.

- Discuss the components of a high-quality telephone triage system.

- Summarize the essential aspects of good 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 and charting specific to telephone triage care.

- Discuss patient disposition and the use of telephone triage guidelines.

- Summarize common risk management issues in telephone triage practice.

WHAT IS TELEPHONE TRIAGE?

Telephone triage is a complex process by which trained clinicians identify a patient's problem, estimate the level of urgency, and render advice to the patient over the phone (Huibers et al., 2011). Telephone triage, however, does **not** involve making diagnoses—nursing or medical—by phone (Lephrohon & Patel, 1995; Perrin & Goodman, 1978).

Telephone triage is focused on assessment and disposition. The clinician's disposition, also known as a referral, is defined as a directive to the patient about the time, place, and reason for further evaluation and/or treatment. Safety in telephone triage requires that referrals 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.

Telephone triage is a subspecialty practiced by licensed medical professionals (most frequently nurses) and occurring within a range of practice settings, including emergency departments, general practice, primary care, pediatric practice, and managed care environments. The American Academy of Ambulatory Care Nurses (AAACN, 2011) and Emergency Nurses Association (ENA, 2015) consider nurses to be the most qualified clinicians to safely perform telephone triage. Similarly, most state boards of nursing support using a professional nurse as a medical decision-maker.

Nursing telephone triage has become an integral mode of delivering healthcare services, especially during off-hours, on a national and international level (Huibers et al., 2011).

Terminology

Naming conventions and titles for telephone triage services are confusing and sometimes misleading. Terminology for the field has included *telephone triage*, *teletriage*, *telepractice*, *telenursing*, *telephone advice*, and *telehealth*. Titles for telephone triage practitioners have included 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."

Telehealth has now taken on its own meaning and is commonly used as an umbrella term describing the delivery of healthcare services through electronic modes including the telephone, telemonitoring, etc. (Nagel et al., 2013).

Telephone medicine, performed by physicians, is defined as the "telephonic medical diagnosis of patients' problems" (Reisman & Brown, 2005). Historically, it lacks a system (guidelines, training, standards). Telephone medicine is an informal process, and some physicians do not document such calls (Wheeler et al., 2015).

Telephone triage (as practiced by nurses) is more developed than telephone medicine. However, telephone triage still lacks universal standardization, regulation, and the professional recognition of other nursing subspecialties.

GLOSSARY

Appropriate
> Suitable or proper in the circumstance

Computerized decision support systems (CDSS)
> Expert software systems that remind experienced decision-makers of information to consider that he or she once knew but may have forgotten

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Computerized decision-making systems (CDMS)
> Expert software systems that allow an unqualified person to make a decision that is beyond his or her level of clinical training and experience

Complete system
> A complete telephone triage system made up of qualified staff, medically approved guidelines, electronic medical records (or audiotape or paper documents), 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 (also known as a referral), 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
> Related to professional negligence and is committed by a professional. In effect, professionals are held to a higher standard than nonprofessionals.

Negligence
> Failure to provide due care to a patient

Referral (see also "disposition")

- **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

Root cause of error
> The initiating cause of error; may include failures of assessment and communication as well as human error (Joint Commission, 2012)

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

Source: 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 say that, while still an emerging subspecialty, telephone triage is part of the continuity 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, and customarily manage such calls.

Likewise, 911 medical dispatchers operate medically developed guidelines and coach callers in first-aid treatment, CPR, and the Heimlich maneuver until paramedics arrive (Clawson & Democoeur, 2003).

Telephone triage services are designed to reduce delays in care, to improve continuity of care, and to facilitate access to 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

Currently, formal telephone triage is practiced in a variety of settings. Research has found that the majority of nurses practice in one of the following major settings (AAACN, 2011):

- Office and group practices
- Clinical call centers

Less-frequent practice settings include military facilities, HMOs (health maintenance organizations), and clinics such as student health centers.

MEDICAL OFFICES

While HMOs were the first to recognize telephone triage as a separate nursing subspecialty in the 1970s, primary care is the most common setting for telephone triage today. Traditionally, telephone triage performed by physicians' office staffs has been informal and devoid of standards, training programs, or guidelines. This may be due to physicians' failure to appreciate the importance of formal telephone triage and their failure to develop their own systems (and office systems) accordingly over the intervening decades.

In addition to telephone triage (i.e., symptom-based calls), services offered by telephone within a primary care office may involve reporting negative test results, transcribing refill requests, taking messages, making nonurgent follow-up or annual physical appointments, responding to insurance and administrative questions, and scheduling classes for patients—many of which may be safely handled by nonclinicians.

Telephone triage nurses should not be expected to serve as the "dumping ground" for all calls that come to offices. Management needs to develop formal, written policies for nurses practicing in this specialty:

- Written job descriptions
- Training in how to deflect inappropriate requests while maintaining collegial working relationships
- Detailed policies for task delegation

CLINICAL CALL CENTERS

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 typically utilize computerized decision support systems (CDSS) or electronic guidelines and have access to patient demographic information via an electronic medical record (EMR) on which to rely. Typically, demographic information includes

patient medical history, medications, allergies, and recent procedures. The EMR software program creates a "paper trail," enabling managers to track and trend calls, and generates statistics on call volume, types of calls, and individual staff workflow and dispositions.

However, while CDSS are ostensibly intended to make the process safer, the presence of CDSS and EMR do not guarantee safety or even user compliance (Wachter, 2015). Research shows that some nurses fail to use these tools as directed (Greatbatch, 2005). In addition, 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 (Baumeister & Tierney, 2012; Stewart et al., 2012; Reinhardt, 2010; Wheeler et al., 2015).

HOSPITAL EMERGENCY DEPARTMENTS

The emergency department (ED) is a setting where there has been an unmet need for formalized telephone triage for decades. Historically, patients have called emergency departments regarding a range of worrisome symptoms, and they deserve a systematic, comprehensive response. Patients often call the ED after-hours, usually due to a lack of access. During the after-hours period—typically from 5 p.m. to 9 a.m. and for 24 hours a day on Saturday, Sunday, and holidays—patients have nowhere to go when they have worrisome symptoms.

It is the position of the Emergency Nurses Association that emergency nurses do **not** give advice or clinical management recommendations over the telephone. However, ENA supports clinical call centers staffed by RNs with specialized education, utilizing approved policies and documentation, and participating in quality improvement programs for safe and quality patient care. ENA suggests that additional research examine whether clinical call centers improve the use of available health services (ENA, 2015).

Although current practice in EDs is to transfer poisoning calls from the general public to Poison Control, ED staff do not typically provide telephone triage (or outsource these calls to clinical call centers). Patients still need access to appointments or telephone consultation after-hours because some are unable to leave work to come in during office hours.

Telephone Triage Utilization Patterns

Over the last three decades, researchers have identified predictable call patterns, peak call periods, and high-utilizing caller populations (e.g., by gender or age), as well as common health complaints. Generally speaking, the who, when, and why of patients' calls has not varied greatly.

HIGH-UTILITIZING POPULATIONS

Not surprisingly, frequent callers are often related to high-risk age groups: infants and children, the frail elderly (Dahlgren et al., 2017), 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.

PATIENTS WITH CHRONIC ILLNESSES

Growing trends in telephone triage and telehealth are efforts to reduce hospitalizations by providing services for those with chronic illness and disabilities who call for advice more frequently. Patients with coronary heart disease, chronic obstructive pulmonary disease, kidney failure, hypertension, heart failure, diabetes mellitus, asthma, cancer, and other chronic ailments require more support but do not necessarily need appointments.

These trends have contributed to the development of specialized telehealth services known as disease management, specifically intended to manage patient populations with chronic illness by phone. For example, companies use telephone support and telemonitoring to monitor and care for patients with diabetes (So & Chung, 2017).

COMMON COMPLAINTS

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

- Upper respiratory infections
- Fever
- Gastrointestinal problems
- Viral infections
- Minor trauma
- Back pain
- Anxiety
- Otitis
- Urinary infections

In pediatric practice settings, calls are typically about respiratory problems, fever, gastrointestinal problems, skin and infectious diseases, and trauma.

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

CALL VOLUME AND TIMING

In primary care and office settings, the peak calling time falls between 10 a.m. and noon, with the majority of calls occurring Monday through Friday. Typical weekday office hours lead to a pattern of heavy call volume on Monday mornings, Friday afternoons, and any day preceding or following a holiday or three-day weekend.

Patients may call late in the afternoon when they become aware of their own symptoms after the demands of work are finished. When calling about their children, parents may notice that their children are not well when they are reunited with them after work late in the day.

It is reasonable to assume that clinical call center call volume and timing patterns are similar, with the understanding that clinical call centers operate 24/7/365, making them more accessible by phone and possibly avoiding high-volume peak times.

"AFTER-HOURS" ISSUES

In all ambulatory care settings, after-hours is a period of time when both on-site access is severely restricted and little or no formal telephone triage service is typically available. In fact, the after-hours timeframe is twice as long as office hours—office hours (weekdays from 9 a.m. to 5 p.m.) constitute 2,080 hours/year, whereas after-hours (evenings, weekends, and holidays) constitute 4,296 hours/year.

In a review of literature from the past decade, researchers discovered that half of all after-hours calls in a family practice occur on weekends (Blank et al., 2012; Huibers et al., 2011, in Wheeler et al., 2015). After-hours, the lack of access to on-site appointments is compounded by lack of formal telephone triage systems (with the exception of 24/7/365 clinical call centers).

Typically, physicians take calls during the after-hours period, contracting with answering services to take the initial call. Because physicians have no formal system for telephone triage, it may contribute to after-hours as a high-risk period. In addition, during after-hours, the lack of access to appointments further negatively impacts the safety and effective practice of telephone triage by leaving nurses with nowhere to send patients after-hours except to the ED.

A growing trend is for practices and institutions to extend their office hours—offering evening hours during weekdays as well as Saturday hours—thus alleviating this lack of access.

COMPONENTS OF A HIGH-QUALITY 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
- Guidelines (protocols)
- Documentation forms
- Standards

Researchers have not yet determined which 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.

Telephone triage guidelines based on the nursing process and related research, with built-in fail-safe systems, offers the best decision-making 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.

The Telephone Triage Nurse

Telephone triage services are commonly performed by specially trained, licensed registered nurses (RNs). Ideally, telenurses should have a minimum of three to five years of decision-making experience at the bedside.

BASIC QUALIFICATIONS

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

Minimum job requirements include:

- 3+ years of clinical experience
- Excellent written and verbal communication skills
- Knowledge of basic pathophysiology
- Knowledge of basic and current pharmacology
- Ability to make decisions independently
- Ability to problem solve
- Cultural sensitivity

Personal characteristics of a successful telenurse 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

Skilled telephone triage clinicians demonstrate five core competencies, similar to those described by the Accreditation Council for Graduate Medical Education (2016) as essential for any clinician practicing in the emergency department. Within each core competency, the telenurse demonstrates additional skills and abilities.

Interpersonal and communication skills

- Intradepartmental relations, teamwork, and collaboration

- Patient and family experience of care

- Communication

- Complaint management

- Conflict management

- Crisis management

- Cultural sensitivity and diversity awareness

- Negotiation

Practice-based learning and improvement

- Evidence-based practice

- Pattern recognition

- Contextual reasoning

Knowledge translation (the activities involved in moving research into practice**)**

- Performance evaluation, clinical audit

- Patient safety and medical errors

- Practice guidelines

- Education

- Principles of quality improvement

Professionalism

- Patient advocacy

- Ethical principles

- Medical ethics

- Electronic communications/social media

- Time management/organizational skills

- Work/life balance (well-being, fatigue and impairment, work dysphoria/burnout)

Systems-based practice

- Nursing process

- Clinical decision support

- Clinical informatics

- Electronic health records

- Health information integration

- Patient triage and classification

- Policies and procedures

- Compliance and reporting requirements

- Confidentiality and HIPAA

- Patient informed consent, compliance, and refusal of care

- Emergency Medical Treatment and Active Labor Act

- Risk management

(Adapted from ACGME, 2016, in Wheeler, 2017)

Training

A training program should address the most needed topics: pathophysiology, medications, and decision-making. Physicians, preceptors, and pharmacists might provide this training over weeks or months, using a combination of online self-study, off-site conferences, and in-house instruction. The approach must focus on nursing process, error avoidance, and assessment of unseen patients. Research shows that a form of frequent testing known as retrieval practice, using case studies, is most effective (Agarwal, 2017; Paul, 2015; Winner A, 2013).

Formal standardized training is often the weak link in telephone triage systems. While the American Academy of Ambulatory Care Nurses offers a conference, on-site training, and several telephone triage courses, training is typically on-the-job and not formal or standardized.

Physicians rarely receive more than a few hours of training in telephone medicine, if that. Nurses typically receive at least on-the-job training by another staff member. Some facilities provide formal in-house training, have preceptor programs, or use online training.

SAMPLE TRAINING PROGRAM

Day 1: Pathophysiology, Assessment and Triage of Symptoms

- Pathophysiology for telehealth (must be telehealth-based, i.e., nonvisual)
- Presentation and assessment challenges
- Pattern recognition and estimating symptom urgency

Day 2: Medications and Toxicology

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

Day 3: Safety and Timely Access (Lecture and Practicum)

- Risk management in telehealth: malpractice
- Medical emergencies
- Psychological emergencies

Day 4: Safety and Timely Access (Lecture and Practicum)

- High-risk patient populations: pediatrics, frail elderly, women of childbearing years
- Sepsis review and update
- Adult and geriatric health
- Pediatric and adolescent health

- Women's health

- Disease management

- Patient education essentials

Day 5: Safety and Timely Access (Lecture and Practicum)

- Community health and cultural sensitivity

- Communications

- Stress management and self-care

- Strategies to avoid decision fatigue, burnout

Management Training

- Managers: standards and system development and maintenance

- Continual quality assurance

- Regulations: Joint Commission, IOM, Interstate Practice, etc.

- Right training: mentoring/preceptoring

- Training programs addressing specifics of decision-making, critical thinking

- Ongoing in-service education

Source: Groszkruger, 2014.

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 function: 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) 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 (Benner, 1984, 2013). Clinical skills include performing thorough assessments, pattern recognition, and interpreting patients' responses. User-friendly guidelines support this process.

Crisis intervention function: Nowhere else is the instant grasp of rapidly changing situations more vital than in crisis intervention by phone. Because some rural communities lack resources such as 911, suicide prevention, or rape crisis hotline systems, telenurses may be inadvertently cast in the role of first responder as they field calls regarding imminent births, trauma, suicide, and ingestions.

Coaching and teaching 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.

TELEHEALTH AND "PRESENCE"

Telehealth nursing delivers care in a nontraditional manner—with no physical connection between the nurse and the patient. Tuxbury (2013) studied the way in which both nurses and patients experience "presence" within their interaction during telehealth encounters. Presence is described as a special connection that benefits both nurse and patient. In this study, presence was reported as an authentic, therapeutic connection between the telenurse and the patient during their call or series of calls to address the patient's health concern.

Telehealth interventions are thought to result in positive results such as decreasing healthcare costs and increasing access to care. However, the use of telehealth has changed the pattern of nurse-patient proximity, which may alter the patient's therapeutic experience of nursing presence.

Telephone Triage Process

Generally speaking, telephone triage nurses utilize a modified version of the nursing process (i.e. assessment, guideline selection [intervention], working diagnosis, and evaluation).

- 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, the guideline, and patients as their proxy to self-evaluate.

- The diagnosis process consists of formulating a provisional/working diagnosis, or impression.

- The plan or intervention is based on the selected guideline's disposition, and advice is provisional.

- Evaluation is carried out when the nurse provides patient instruction in self-evaluation and follow-up instructions from the guideline.

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. The benefit of the guideline is degraded in the absence of an adequate preliminary assessment.

It is essential to start the assessment process by asking questions, aided by a checklist (Gawande, 2009). 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 "wrong train syndrome" 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 myocardial infarction may present as one key symptom (like chest pain); or a few generalized or "soft" 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 telenurse to determine what constitutes a match.

The nurse documents the impression using the patient's own words (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: DISPOSITION AND ADVICE (PLANNING AND INTERVENTION)

Planning/intervention 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 employing the guideline disposition and directives.

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

- **Disposition** requires that the nurse advise the patient when and where to go for treatment in addition to why the patient must come as advised, i.e., that the symptoms appear emergent, urgent, acute, or nonacute.

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

GUIDELINES VERSUS PROFESSIONAL JUDGMENT

Confusion and controversy revolve around what ultimately determines the correct disposition—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 (2013).

While established guidelines are an important factor of 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 decision-making because guidelines alone cannot guarantee safe practice (Wheeler, 2017; Rutenberg & Greenberg, 2012).

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.

STEP 4: PATIENT SELF-EVALUATION INSTRUCTIONS (EVALUATION)

In telephone triage, evaluations that would normally be performed by the nurse in face-to-face encounters must be carried out by the patient (as instructed by the nurse). 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 changed 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.

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 are almost guaranteed to dishearten and frustrate patients and make them withdraw. Research also shows that patients are less likely to bring lawsuits against clinicians that they like and trust (Gladwell, 2007).

Successful communication requires a sender, a message, a mechanism, and a receiver. For the message to be complete, information usually has to 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.

At the bedside, speech, smell, touch, sight, and emotional cues paint a rich 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.

Thus, because the "signal" is weak, barriers that in person are not very formidable can become nearly insurmountable on the telephone. 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 root cause of error, and it may lead to increased legal liability and patient harm (Joint Commission, 2012).

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

Based on this author's experience as an expert witness on more than 30 telephone triage malpractice legal cases, many errors occur due to failure to speak directly with the patient. 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, some older callers, or poor historians. This strategy will improve the quality of information collected, foster trust and compliance, and can expedite the call.

Allow Enough Time

When it comes to "talk time" in telephone triage, there are no shortcuts. Adequate time enhances decision-making and critical thinking. Current standards show that an average timeframe for a telephone interaction is 8 to 10 minutes or more, depending on the type of call and caller (Rutenberg & Greenberg, 2012).

A landmark study compared performances of pediatric nurse practitioners with pediatricians (Perrin & Goodman, 1978). The authors discovered that pediatric nurse practitioners were judged to be warmer and more open to questions, left callers feeling more satisfied, and spent significantly more time per call than physicians (RNs, 5 to 7 minutes; MDs, 3 to 5 minutes).

Adequate communications require 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 interaction and lack of emotional support, will fail to follow the advice.

Use Lay Language

It is important to use concise lay language. A statement like "My diagnosis is that a 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" (also called plain English) is communication patients can understand the first time they read or hear it. Written material in plain language:

- Is written at the 5th- to 8th-grade literacy level

- Is consistently and logically organized

- Uses active voice

- Uses short sentences

- Uses common, everyday words

Plain language is defined by results. It is easy for clinicians to read to patients, and for patients to immediately understand and use (PLAIN, 2015).

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. Asking leading questions—a flawed technique often related to being time-driven—often yields 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.

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 elders, 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 wife placed a call to the nurse triage line for 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 seasonal flu.

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." 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.

REAL-WORLD DECISION-MAKING

In telephone triage, nurses must repeatedly 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—a high-stakes activity. 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 diagnoses.

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

Experience and Decision-Making

In 1995, Vimla Patel, an expert in medical decision-making, and colleagues first described the importance of decision-making expertise in telephone triage. Patel crystallized the difficulties of the work, describing it as "decision-making under conditions of uncertainty and urgency," and comparing it to that of air traffic controllers, fire captains, and anesthesiologists.

Patel studied ED nurses' decision-making in "real world" situations, when performing telephone triage of a researcher posing as a caller with chest pain. Nurse-participants had two to ten or more years nursing experience. They did not use protocols but relied on their clinical judgment, experience, and critical-thinking skills. Among other findings, Patel's group discovered:

- A direct correlation exists between experience and decision-making accuracy; nurses with experience of 10 years or more ("experts") had increased decision accuracy.

- Nurses use a contextual approach to decision-making rather than the analytic approach reflected in physicians' diagnostic reasoning.

These findings can and should inform protocol development, training, and hiring of staff.

Experts' Advice on Decision-Making

Researchers emphasize the role of intuition in decision-making. They maintain that **intuition** can be developed and offer a variety of suggestions. 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.

Gladwell (2007) states that good decision-making relies on a **balance of conscious and instinctive thinking**. Reducing complex problems to their simplest elements aids in decision-making. He warns that too much information can paralyze the unconscious. In other words, remember to keep it simple.

Alfaro-Le Fevre (2009) recommends **improving critical-thinking skills** by avoiding behaviors such as stereotyping others, resisting change, and seeking conformity. In addition, she suggests reducing barriers to intuition: anxiety, stress, fatigue, lack of time (Altman et al., 2014), feeling judged, and environmental distractions.

Baumeister and Tierney (2012) suggest instituting **shorter shifts** to reduce "decision fatigue." They also suggest "fueling the brain" with protein snacks that help keep the blood sugar at an optimum and stable level.

Heuristics, or Rules of Thumb

Many experts recommend using heuristics, or "rules of thumb," as practical decision-making tools. A rule of thumb is defined as a "general principle regarded as roughly correct but not intended to be scientifically accurate" (Merriam-Webster, 2017). 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.

Medical researchers have explored how skilled workers develop mental short cuts/heuristics, finding that rules of thumb are useful and even necessary to guide decisions under conditions of urgency and uncertainty (André et al., 2002; Baumeister & Tierney, 2012).

A study of groups of ICU nurses, firefighters, and others who make decisions under pressure found that those professionals do not logically and systematically compare all available options. In real life, that methodology is too slow. Instead, they quickly size up situations and act, drawing on experience and intuition. Rules of thumb often underlie their expertise and intuition (Baumeister & Tierney, 2012). Likewise, both EMDs and nurses employ these mental shortcuts to simplify relevant information and lessen required mental strain (Clawson & Democoeur, 2003; Wheeler, 2017).

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" (Clawson & Democoeur, 2003). (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 MI or 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)
(Wheeler, 2009, 2017)

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

Beware placing too much faith in the patient's own perception of the problem, otherwise known as the "nondiagnostic diagnosis". 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 two-year-old toddler, describing symptoms of 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."

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 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.

- In infants under 3 months with fever of 38 °C or 100.4 °F, see 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 physically abuse their children at some time.

- All sudden confusion in children is considered emergent.

- Always elicit an immunization history; lack of or inadequate immunizations place a child at risk. 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.

- Depressed teenagers are at risk for suicide.
  (Wheeler, 2009, 2017)

Geriatric age-based rules include:

- The older the patient, the greater the risk of hypo- or hyperthermia.

- Assess all sick elderly 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, widower, retired or jobless.

- Incontinence in the elderly may be related to urinary tract infection.

- Developmentally disabled populations typically age prematurely.
  (Wheeler, 2009, 2017)

SYMPTOM-BASED RULES

General symptom-based rules include:

- All severe pain should be seen within 8 hours or less.

- All first-time seizures must be seen.

- All rashes are 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 more vague 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 (Clawson & Democoeur, 2003).

- Symptoms should improve after 24 to 48 hours on antibiotics.

- Rectal temperature of 100 °F in an infant of 3 months or less must be seen immediately.

- Extremes of outside temperature often trigger medical symptoms (Clawson & Democoeur, 2003).
  (Wheeler, 2009, 2017)

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 (Clawson & Democoeur, 2003).

- Any chest pain in a high-risk caller should be treated as MI until proven otherwise.

- Beware atypical or novel presentations.

- MI in women, diabetics, and older adults may present as vague, silent, or atypical symptoms.

- Patients over 70 years typically do not experience chest pain.

- Some minority and low-literacy callers may fail to recognize acute symptoms, report fewer symptoms, or attribute them to other causes, due to a variety of reasons (cultural, health literacy and financial) (US DHHS, 2010; ACOG 2011).

- All chest trauma is considered urgent until proven differently.
  (Wheeler, 2009, 2017)

CASE

A 45-year-old woman called with a chief complaint of "cold" symptoms. Unbeknownst to the nurses, the patient was actually concerned about shortness of breath and chest tightness. The patient failed to relate this information to the nurse in the hope that it was "just a cold." As the nurse performed a symptom history, 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, weighed, and even ignored 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 salient; key symptoms may be salient; and other more general and nonspecific symptoms may be given less weight.

Some information is irrelevant and must at times be consciously ignored in order to come to 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 the "wrong sex." With common sexually transmitted infection symptoms, nurses might stereotype the patient as "too old" or "too young" to have an active sex life.

- **"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 on-site.

- **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, i.e., inadequate pain medication in the case of uncontrolled post-op pain. A patient who is "on an antibiotic" should not lull the nurse into thinking that it is effective (as with MRSA).

- **Denial, downplaying, explaining away**. For example, the first symptom of an MI is denial.

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

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 to 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)

- **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)
  (Adapted from Plous, 1993)

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 received a call from a mother regarding her 25-year-old daughter, who was complaining of severe chest pain. When the clinician advised the mother to bring her daughter to the emergency department immediately, the mother stated she needed an ambulance instead. Aware of the need to avoid stereotyping, the nurse called the paramedics even though she "knew" it was not a life-threatening cardiac symptom because of the patient's age. The diagnosis was, in fact, myocardial infarct.

Discussion

Stereotyping a patient, optimism bias, and second-guessing patients are all dangerous practices, especially in an emergency. Nurses have been faulted for "you're not sick until I say you are" syndrome. When a caller says it is an emergency, the burden of proof is not his (Clawson & Democoeur, 2003). This clinician correctly heeded the patient's distress even though she wanted to minimize the symptoms.

ASSESSMENT

The telephone triage process often begins with a rapid assessment to determine and prioritize how urgently the patient should be seen. Expert nurses quickly build the clinical scenario through gathering (or noting on the EMR) key chunks of information: the patient's age, gender, chief complaint, literacy or language level, emotional state (determined via the words, tone, pacing of voice), and previous medical history.

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. Whereas in the case of chest pain, the nurse may quickly elicit key data and make a decision, 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 on-site:

- Alcohol/substance abuse

- Chronic disease

- Dehydration

- Domestic violence

- Emotional problems

- Exposure (toxins, new medication, adverse drug reaction)

- Infection

- Possible pregnancy

- Possible early sepsis symptoms

- Smoker

- Suicide/emotional distress

- Trauma

Source: Wheeler, 2017.

The history-taking process begins by verifying the patient's contact information (address and phone number). The nurse should remind 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 here by the mnemonic *SAVED. SAVED* stands for **s**evere, strange or suspicious symptoms; **a**ge; **v**eracity; **e**motional state; and **d**ebilitation and distance. These are "red flag" symptoms and populations that should raise suspicions and that all clinicians should remain aware of.

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 the older adult or young children.

Three descriptive methods can help establish acuity:

Compare current symptoms to normal activities of daily living (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 to 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
- Urine output less than one scantily wet diaper per eight hours
- 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, or blinding 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

The "big six"—head, abdomen, chest, respiratory, dizziness, and flu symptoms—are regarded as suspicious. They always require thorough investigation for two reasons: 1) many of these symptoms have been found to be serious when subsequently evaluated in the ED; and 2) they may represent potentially serious conditions such as ectopic pregnancy, myocardial infarction, or appendicitis—conditions that often end in malpractice lawsuits due to underdiagnosis.

Suspicious symptoms also apply to situations where the nurse has a "gut feeling" or a hunch 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.

S = SEVERE/STRANGE/SUSPICIOUS SYMPTOMS (INCLUDING SEPSIS)
• Severe pain, bleeding, trauma, diarrhea, vomiting, rash, etc.
• In older adults, severe diarrhea or dehydration
• Novel, atypical, unusual presentations (worst, new, sudden, unexpected, recurrent, silent)
• "Big six" (head, chest, respiratory, abdominal, "flu," dizziness); often missed/delayed diagnosis of stroke, myocardial infarction, pulmonary embolus, appendicitis, ectopic pregnancy
Sources: Wheeler, 1993, 2009, 2017.

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 "routine" 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)
• Developmentally disabled (typically age prematurely)
Sources: Wheeler, 1993, 2009, 2017.

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 7, poor historians, extremely young or very inexperienced mothers, 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 "to 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 on-site 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. 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.

V = VERACITY (IMPAIRED COMMUNICATION)

- Second- or third-party calls
- Child under the age of 8
- Extremely young or very inexperienced mother

- Low literacy
- Language barrier (best practice is to use a certified medical interpreter to translate rather than a family member)
- In older adults:
  - Suspected adverse drug reaction/substance abuse/overmedication by caregiver ("chemical restraints")
  - Incoherent or slurred speech in patient/caregiver
  - Caregiver unfamiliar with patient

Sources: Wheeler, 1993, 2009, 2017.

EMOTIONAL STATUS

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, 2003).

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.

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, 2005, 2017).

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.

E = EMOTIONAL STRESS OR DISTRESS
- Multiple calls, anxiety   - Hysteria or denial   - Inappropriate affect in caretaker   - Emotional distress

- Parent or caretaker with history of abuse (e.g., physical, sexual, financial, emotional), psychiatric problems, or substance abuse

Sources: Wheeler, 1993, 2009, 2017.

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 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.

Medically complex patients are defined as those with comorbidity of several medical conditions that significantly compromise the ability to function (IOM, 2010). 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, drug abuse, or multiple surgeries. Homeless and mentally ill (including PTSD) 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 of 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.

D = DEBILITATION AND DISTANCE

- Chronic illnesses (asthma, depression, diabetes, cancer, cardiac symptoms, CHF, 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

Sources: Wheeler, 1993, 2009, 2017.

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 in 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:

- **S**evere symptoms (chest pain, soft cardiac signs)
- **A**ge and gender (65-year-old male)
- **V**eracity (second-party call)
- **E**motional distress (worried wife)
- **D**ebilitation (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 heart of the problem. Information can be collected in any order that seems appropriate to the patient and the situation.

By the same token, 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 start the triage process with assessment questions and the documentation form. The rationale is to quickly sketch an outline of the problem.

Do not select a protocol too quickly. 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, when consulting with the pediatrician on call, was therefore unable to provide the doctor with a complete picture of the infant's illness.

The nurse gave the mother routine advice for fever control. On the orders of the pediatrician (who was acting on the nurse's incomplete information), the nurse directed her 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 hypo perfusion 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.

SCHOLAR and *RAMP*: Problem and Patient Histories

Researchers 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 *RAMP* lists key information about the patient history. While other well-known nursing mnemonic such as *PQRST* or *SOAP* may work well for face-to-face assessment, more detail is needed in telephone triage interactions.

USING *SCHOLAR* FOR ELICITING PROBLEM HISTORY

S	Symptoms and associated symptoms	• Is it an isolated symptom or 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., RUQ, LLQ, etc.)	• Localized? • Generalized? • Radiation?
A	Aggravating factors	• What activity, foods, position, etc., make it worse?
R	Relieving factors	• What activity, foods, home treatment, position, etc., make it better?
Sources: Wheeler, 1993, 2009, 2017.		

USING *RAMP* FOR ELICITING PATIENT HISTORY

R	Recent	• Injury • Infection • Illness • Invasive (post-procedure, postoperative, postpartum) • Implant • International travel • Immunocompromised (chemotherapy, HIV/AIDS, nephrotic syndrome, splenectomy, steroid therapy, transplant) • Ingestion (accidental or intentional ingestion/exposure, adverse drug reaction, new medication, drug-disease/drug-drug/drug-food interaction)
A	Allergies	• Exposure to foods, chemicals, drugs, insect bites, cosmetics, or other substance (new or existing)?
M	Medications	• Current or new over-the-counter, prescription, birth control, or recreational drugs
P	Pregnancy/ breastfeeding	• For all women 12 to 50 years of age, is there any possibility of pregnancy or unprotected intercourse?
Sources: Wheeler, 1993, 2009, 2017.		

ADLs: Poor Historians, Children, and Disabled

Sometimes, symptom presentations are vague, ill-structured, or nearly absent, as may be the case with children, some older adults, and poor historians. Gathering adequate information is made more difficult because the patient is preverbal or a poor historian. In these cases, *SCHOLAR* and *RAMP* may be unworkable. Instead, the tool of choice is activities of daily living (ADLs), assessed to elicit and compare the patient's current state with their baseline state.

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 surprisingly concrete picture of the patient when other data are sketchy.

USING ADLs FOR BASELINE COMPARISON	
Intake	Fluids, food
Output	Urine, emesis, BM, diaphoresis (quantity and quality)
Sleeping	Too much, too little
Activity level	Compared to normal activity levels or routines
Mood	Marked change (any)
Color	Pale, red, blue, grey, ashen
Skin	Turgor; lips/tongue
Sources: Wheeler, 1993, 2009, 2017.	

For newborns, infants, older adults, aphasic, 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	
A	Any extreme behavior (irritability, inactivity, disengagement, inconsolable crying)
D	Difficult to awaken or keep awake
E	Expression (decreased)
M	Movement (little or no spontaneous or movement on own)
E	Eye contact/focus decreased
R	Recognition of caregiver/parent (decreased)
I	Interactivity (decreased)
T	Talking (decreased)
Sources: Wheeler, 1993, 2009, 2017.	

Pain Assessment

Pain—a common presenting symptom—usually 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 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 *SAVED*, *RAMP*, and *SEPSIS*.

(See also "Pediatric Sepsis and Dehydration Guidelines" below.)

USING *SEPSIS*	
S	Shivering, fever, or feeling very cold
E	Extreme pain or general discomfort
P	Pale or discolored skin
S	Sleepy, difficult to rouse, confused
I	"I feel like I might die"
S	Shortness of breath
Source: 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 along side 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.
>
> Sources: Wheeler, 2009, 2017.

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 should be 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. Each has certain advantages and risks.

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 charting 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 should always be included. If they are not, the clinician may appear to not have asked "rule-out" questions and may appear negligent. It is more burdensome and time-consuming to chart by inclusion, but it presents a more comprehensive picture of what happened during the call.

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

Because clinicians may fail to adhere to polices or have very strong positions on the appropriateness (or lack thereof) of the documentation method in use or proposed, ensuring compliance must include:

- Education, at time of hire, annually as part of competency evaluation, and when indicated by evidence of slipping compliance

- Management support

- Working individually and objectively with resistant staff to gain cooperation

Documentation Formats

Paper documentation forms and electronic medical records (EMRs) support the nursing process, maintain standards for continuity, provide informed consent, enhance quality assurance, and reduce human error. Forms can also augment nurses' memories and offer proof of advice given, thereby increasing defensibility in the event of litigation. In combination, guidelines and electronic medical records have a role in documentation as well by expediting the collection and recording of information.

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. They then follow up with *SCHOLAR* questions. Likewise, *RAMP* questions may easily be built into the EMR. It is critical to document the patient's age, 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.

Charting Essentials

Charting 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 such as pads per hour, diapers per hour, numbers of diarrhea or vomiting episodes.

2. Use time frames (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.

5. Document guideline deviations/overrides/modifications.

Detailed, concrete charting demonstrates the clinician's efforts and supports the disposition and advice. Effective charting 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.

EFFECTIVE VS. INEFFECTIVE CHARTING	
Effective	**Ineffective**
Concise: "c/o abd. pain x 3 days. Denies N/V/D."	Long-winded: "Patient states she has had severe abdominal pain for 3 days. She denies any nausea, vomiting or diarrhea."
Detailed: "8 loose, watery, green stools x 16 hours."	Vague: "Diarrhea."
Detailed: "On PCN 500 mg. QID x 48 hours."	Vague: "Taking antibiotics."
Specific: "Worst headache I've ever had, splitting, throbbing."	General: "Severe headache."
Concrete: "Voice is high pitched, speech rapid. Called 3 x in 2 hours."	Subjective: "Seems anxious."

SAMPLE TELEPHONE TRIAGE DOCUMENTATION FORM	
Name	☐ Adult ☐ Pediatric
Date Time　　　　AM PM	Age DOB Sex　M　F
Phone	Caller Relation to Patient
Hx Prematurity? Y N	Weight Temp　　　(Oral AX Rect) BP
Immuniz up-to-date? Y N (N=Needs appointment)	
Chief Complaint	
Key symptom history (use SCHOLAR, ADL, A DEMERIT, SEPSIS checklists)	
Home Tx Administered? Y N	
Last menstrual period Pregnant? Y N Breastfeeding? Y N	
Allergies? Y N	
Chronic illness?	
Emotional state?	
Medications? Y N	
Recent injury? Y N	
Recent illness? Y N	
Recent ingestion? Y N	
Impression	
Guideline title or number	
Guideline modifications	
Advised to be seen within 　　　Mins　　　Hrs	Appointment Date Time
Mode of transport	
Precautions stated? Y N	Patient agreement to plan? Y N
RN signature/title	
Time call ended　　　　AM　PM	
Source: Wheeler, 2009. Used with permission.	

> **DOCUMENTATION AND "DEFENSIBILITY"**
>
> Telephone triage clinicians increase their defensibility through careful documentation—written and/or audiotape transcriptions (per institutional policy)—that correlates with established guidelines. For example, statements such as "abdominal pain, previous Hx ectopic pregnancy" or "nosebleed, severe, unresponsive to home Tx 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, respectively.
>
> 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 wrote 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, 2013).

After consulting a guideline, nurses can formulate a provisional or working diagnosis, also called an "impression." Use the patient's chief complaint in his or her 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"; "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 (fall back) 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, 2017)

SAMPLE UNIVERSAL GUIDELINE	
Acuity Level with Assessment Questions	**Disposition/Advice**
Emergent Symptoms	911 or ED in 0 minutes to 1 hour
- Trauma (major): blunt, MVA, fall >15 ft? - Loss of consciousness? - Shock or impending shock? - OB crisis or impending birth? - Severe respiratory distress? - Patient presents danger to self/others? - Caregiver presents danger to patient? - Disorientation, sudden confusion, or marked behavior change? - Decompensation or threat of decompensation of vital functions of neurological, respiration, circulation, excretion, mobility or sensory organs? - Child: Severe toxicity symptoms? (see Pediatric Toxicity Guideline) - Child: Severe dehydration symptoms? (see Pediatric Dehydration Guideline) - Does RN feel symptoms are severe, extreme, or urgent?	
Urgent Symptoms	ED/UCC/Office in 1 to 8 hours
- Trauma (all) and suspicious history? (possible abuse) *(Come to ED now)* - Child: Toxic, very ill? (see Pediatric Toxicity Guideline) *(Come to ED now)* - Child: Severe to moderate dehydration (see Pediatric Dehydration Guideline) *(Come to ED now)* - Child: Age <3 months and fever >38 ºC or 100.4 ºF *(Bring child to ED now)* - All ages: Fever >40 ºC or 104 ºF - Severe pain?	

- Severe, suspicious, or sudden onset of symptoms (pain, bleeding or unusual symptoms, new, unexpected, changing rapidly, awakened patient from sleep, worsening)?
- Acute infection symptoms (fever/chills, joint pain, fatigue, "flu" symptoms, lack of appetite)?
- Infectious process requiring antibiotics? (> risk of infection)
- Failure to improve on antibiotics x 24–48 hours? (> risk of infection)
- Moderate symptoms and history of recent surgery? (possible post-op complications)
- Does RN feel symptoms are urgent or require appointment today?

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 w/ or w/o 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?

Source: Wheeler, 2009. Used with permission.

DECISION-MAKING VERSUS 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. Typically, 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 also deterministic and designed as decision trees of yes/no questions that lead to a differential diagnosis. Based on black-and-white thinking, or "binary code," the design assumes that patient responses are accurate, verifiable, and sufficient in quantity and quality to come to an accurate conclusion. However, such tools can break down in the "real world" of telephone triage, where information is limited and may not be accurate.

> **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 the elderly and debilitated 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.

SAMPLE PEDIATRIC DEHYDRATION GUIDELINE (BIRTH–6 YEARS)	
Acuity Level with Assessment Questions	**Disposition/Advice**
Emergent Symptoms (severe dehydration)	911 or ED in 0 minutes to 1 hour

- Appears: Extremely quiet, inactive, weak, or very difficult to arouse, delirious?
- Skin: Cold, mottled/blue color; turgor - tenting (when pinched briefly and released, skin remains "tented")?
- Mucous membranes: Extremely dry, parched lips/tongue, difficulty swallowing?
- Fontanelle: Sunken?
- Eyes: Sunken, no tears?
- Respirations: Mouth breathing, very fast?

- Intake: Unable to hold down fluids for 4–8 hours, scanty amount?
- Output: No urine or wet diaper x 8 hours, scanty amount?
- BM: Marked increase in number of watery stools?
- Emesis: Prolonged or severe vomiting?
- Does RN feel symptoms are severe, extreme, or urgent?

Urgent Symptoms (moderate dehydration)	ED/UCC/Office in 1 to 8 hours

- Appears: Inactive/drowsy, weak, dizzy, irritable when aroused?
- Skin: Pale color; turgor/decreased firmness?
- Mucous membranes: Very dry lips and tongue?
- Eyes/tears: Decreased tearing, sunken eyes ruled out?
- Respirations: 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?

Acute/nonacute Symptoms (mild dehydration)	ED/UCC/Office in 8+ hours and home treatment

- Appears: Fussy, decreased energy, irritable?
- Skin: Pale color; turgor - no tenting?
- Mucous membranes: Moist to slightly dry lips and tongue?
- Eyes/tears: Moist, decreased to normal tearing?
- Respirations: Moderately fast to normal?
- Intake: Able to hold down small amounts of fluids x 8 hours?
- Output: Normal or slight decrease in urine?
- BM: Infrequent watery stools, small amount?
- Emesis: Few episodes of vomiting, small to moderate amount?

Source: Wheeler, 2009. Used with permission.

SAMPLE PEDIATRIC TOXICITY GUIDELINE (BIRTH–6 YEARS)	
Acuity Level with Assessment Questions	**Disposition/Advice**
Emergent Symptoms (severe toxicity)	911 or ED in 0 minutes to 1 hour
- Looks extremely sick, "sickest ever seen"? - Expressed in either extreme: - Extremely irritable, crying inconsolably, unable to be comforted? - Extremely quiet, not moving, extremely withdrawn/difficult to engage, not interested in people/caregiver/toys or TV? - Skin color: Changed from normal, pale, blue, red, blue, etc.? - Respirations: Marked change, increased or decreased? - Intake: Refuses to eat and/or drink, breastfeed? - Output: Urine extremely changed, marked decrease? - Bowel/emesis: Prolonged, severe vomiting or diarrhea? - 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?	
Source: Wheeler, 2009. 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 what is a safe, prudent, and reasonable disposition. The following four tiers are adapted from definitions and descriptions used by the American Board of Emergency Medicine (ABEM, 2016).

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 in 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 (i.e. cabs, Uber, Lyft, etc.) if there is no readily available car or if relatives 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, the reason being that the nurse cannot see the patient and interactions are fraught with uncertainty. 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. Time frames 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). However, nurses must never downgrade (e.g., urgent to nonacute) without a physician consultation. If the patient is noncompliant, the nurse should seek advice from the physician advisor.

Improper Use of Guidelines

A common pitfall occurs 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 through 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. What is required is a balance between nursing judgment and the use of the guideline.

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 to 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 he or she 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 supporting 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 that 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 ANA (2005) and AAACN (2011) 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 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 advice 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" (Tennenhouse, 1991, in Wheeler, 1993).

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 need to 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

Two specific risk management issues—delay and denial of care—can haunt every decision made. That is because nurses provide access to appointments and referral to the ED (Wheeler, 1993, 2017).

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

While research is scanty, some common telephone triage challenges have been identified. The discipline is still not as safe and effective as it could be. For example:

- 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. Conversely, some clinicians resist using software as intended, instead developing "workaround approaches" whose safety and effectiveness are untested (Greatbatch, 2005).

- 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 breathtaking growth. Still, there is a lack of consensus about everything from guideline design and the scope of practice to terminology. There are still 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 program, 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.

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TEST

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1. Telephone triage requires assessing and estimating the urgency of a patient's symptoms and determining:

      a. The appropriate medical treatment.

      b. The appropriate disposition.

      c. A patient's hospital acuity level.

      d. A patient's nursing diagnosis.

2. "Appropriate referrals" are defined as:

      a. Timely and safe.

      b. Safe but not cost effective.

      c. The right match of plan to prevent error.

      d. Detailed routines to solve a problem.

3. Which groups of patients typically are the highest utilizers of telephone triage?

      a. Men over age 35, women over age 45, and children

      b. Infants, the frail elderly, and women of childbearing age

      c. Children, adolescent females, and older adults

      d. Adolescents, men over age 50, and postpartum women

4. Which is **not** considered a minimum qualification for a telephone triage nurse?

      a. 10+ years of clinical experience

      b. Knowledge of current pharmacology

      c. Ability to solve problems

      d. Cultural sensitivity

5. Which is an example of a practice-based learning and improvement core competency required of skilled telenurses?

      a. Cultural sensitivity

      b. Work/life balance

      c. Complaint management

      d. Contextual reasoning

6. Which expert function does **not** apply to telephone triage?

> a. Crisis intervention
>
> b. Listening or "presencing"
>
> c. Forming a medical diagnosis
>
> d. Monitoring home treatment interventions

7. The first step of the telephone triage process is:

> a. Selecting a guideline.
>
> b. Formulating an impression.
>
> c. Performing a preliminary assessment.
>
> d. Analyzing patient data.

8. An example of an open-ended question is:

> a. "How are you feeling?"
>
> 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. Experts advise which strategy to enhance effective decision-making?

> a. Working shorter shifts to avoid decision fatigue
>
> b. Ignoring one's emotional cues or "gut feelings"
>
> c. Working rapidly, considering every possible detail of the problem
>
> d. Following algorithms and organizational procedures with strict adherence

10. Rules of thumb represent a problem-solving method that is:

> a. Precise.
>
> b. Scientific.
>
> c. Theoretical.
>
> d. Experience-based.

11. A clinician who readily concurs with the patient's own interpretation of symptoms without gathering more detail is making a:

> a. Nondiagnostic diagnosis.
>
> b. Medical diagnosis.
>
> c. Nursing diagnosis.
>
> d. Differential diagnosis.

12. Which is **not** an example of cognitive bias?

    a. Selective searching for evidence

    b. Jumping to conclusions

    c. Suspecting the worst

    d. Focusing more on recent information

13. Which mnemonic is used to assess for high-risk patients and symptoms?

    a. A DEMERIT

    b. RAMP

    c. SOAP

    d. SAVED

14. The "big six" symptoms—head, abdomen, chest, respiratory, dizziness, and flu-like symptoms—require thorough investigation because they are:

    a. All possible indicators of stroke.

    b. Associated with serious, underdiagnosed conditions.

    c. The most difficult and time-consuming problems to evaluate.

    d. The most common presenting medical issues.

15. When conducting telephone triage to assess a patient's symptoms, the nurse may resort to comparing current and baseline activities of daily living (ADLs) when the:

    a. Patient is a non-English speaker.

    b. Patient is unable to respond directly.

    c. Patient is a poor historian.

    d. Patient's symptoms do not fit the protocols.

16. Which is **not** recommended when deciding to implement documentation by inclusion?

    a. Consulting appropriate nursing practice standards

    b. Discussing the matter with in-house counsel

    c. Developing and presenting training on written policies and procedures

    d. Linking compliance to incentive rewards

17. A father of a toddler calls because he is concerned about his son's loose stools. Which documentation **best** illustrates use of effective charting to describe the problem? Father states:

    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."

18. The telephone triage nurse uses the universal guideline when:

      a. Patient symptoms are typical and well defined.

      b. Patient symptoms do not match any other guideline.

      c. Patients are non-English speakers.

      d. Patients need information about a previously diagnosed condition.

19. According to the tiered approach to disposition described in this course, a patient with "acute" symptoms should be seen:

      a. Immediately.

      b. Within 1 to 8 hours.

      c. Within 8 to 24 hours.

      d. After 24 hours.

20. Becoming used to one type of guideline and having difficulty adjusting to a new type of guideline is referred to as:

      a. An "out of guideline" experience.

      b. Over-reliance on a guideline.

      c. Selecting the wrong guideline.

      d. "Guideline bias."

21. A safe standard for delegation includes assigning nonclinical staff to:

      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.

Telephone Triage for Obstetrics and Gynecology. Vicki E. Long MSN… 3.9 out of 5 stars 11. I am a new triage nurse for a large clinic and wanted to make sure my pt evaluations on the phone were very thorough. I have 8 years experience in critical care and found it difficult as a triage nurse to try to remember all pertinent questions to narrow down a problem. This Book is an excellent resource to do this and I can find the section I need by quickly looking at the index first.