

Clinical Reasoning and Clinical Judgment

THIS CHAPTER AT A GLANCE...

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Clinical Judgment
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LEARNING OUTCOMES

After completing this chapter, you should be able to:

1. Map and describe key elements of critical thinking, clinical reasoning, and clinical judgment.
2. Clarify nurses' unique role in health care, including their main responsibilities related to diagnosis and management of medical and nursing problems.
3. Address how to use critical thinking indicators and the 4-Circle CT model as tools to promote critical thinking.
4. Address the relationship among patient safety goals, nursing surveillance, nursing process, and critical thinking.
5. Describe *outcome-focused, evidence-based care* in your own words.
6. Explain the differences among clinical, functional, and quality-of-life outcomes.
7. Discuss the roles of ethics codes, standards, guidelines, and laws in making decisions.
8. Compare and contrast the *diagnose and treat* and the *predict, prevent, manage, promote approaches*.
9. Clarify the purpose of each phase of the nursing process.
10. Make decisions about your scope of nursing practice.
11. Apply the "four steps" and "five rights" to delegate effectively.
12. Decide where you stand on the continuum of novice to expert.
13. Address how electronic health records and health information technology affect thinking.
14. Identify at least three things you can begin to do immediately to improve your clinical reasoning and critical thinking skills.

KEY CONCEPTS

Goals of nursing, outcomes of nursing, novice thinking, expert thinking, competency, evidence-based practice, quality improvement, teamwork, collaboration, patient- and family-centered care, safety, empowerment, patients' rights and privacy, population-based care, human responses, health information technology, meaningful use, context, practice scope, qualifications, surveillance, predictive care, delegation, teamwork, collaboration, disease and disability management. See also previous chapters.

NURSES: THE GLUE AND CONSCIENCE OF HEALTH CARE

Consider the words of a parent of an acutely ill child:

Compassion is no substitute for competence. In superficial, short-term encounters, a smiling face and a gentle hand impress. In the long term, it's competence that you value. You find that kindness is a relatively abundant commodity. It's confidence, borne of knowing, that's too often in short supply. Does this mean I found myself disinterested in compassion? Not at all. But I also found it didn't count for much unless it was bundled with competence.¹

When you choose to be a nurse, you become part of a profession that's often called “the glue and conscience” of health care. Nurses are “the glue” because they hold care systems together. In many cases, nurses are the only regular, qualified health care providers consistently available. Through their organizations, nurses are the conscience of health care.²

In Gallup polls, health care consumers consistently rank nurses as being the number-one most-trusted professionals.³ Working on the front line in complex settings—hospitals, specialized centers, home care, long-term care, schools, and communities—nurses spend more time with patients than any other professional. They promote health, monitor and manage acute and chronic problems, and teach patients and families to do the same.

Your ability to think critically and develop sound clinical reasoning and judgment affects the lives of many. You need to be prepared for a job that's much more than a caring presence. You need to know how to manage resources, prevent complications, and promote physical and mental well-being in diverse patients with complex issues.

This chapter helps you gain the knowledge, insight, and skills needed to develop competent clinical reasoning and clinical judgment. Chapter 6 will allow you to practice clinical reasoning skills by having you work with case scenarios that are based on real experiences.

GOALS AND OUTCOMES OF NURSING

To better understand nurses' thinking, let's consider the question “What are the major goals and outcomes of nursing?”

Goals of Nursing

Nurses aim to achieve the following goals in a safe, efficient, and humanistic way:

1. To prevent illness, injury, disability, and complications (and teach people to do the same).
2. To help people—whether they're ill, injured, disabled, or well—to have an optimum quality of life (the best possible function, independence, and sense of well-being).
3. To continually improve patient outcomes, care delivery practices, and nurses' ability to be effective and satisfied in their jobs.

Outcomes of Nursing

Broadly speaking, the following shows the major outcomes that demonstrate the benefits of nursing care.

After receiving individualized, evidence-based care, health care consumers will demonstrate improved physical, mental, and spiritual health, as evidenced by the following:

- Absence of (or reduction in) signs, symptoms, and risk factors of illness, disability, or injury
- Use of behavior strategies and behaviors that evidence shows promote health, function, and quality of life
- Documentation of individualized, evidence-based, state-of-the-art care that focuses on best practices

What Are the Implications?

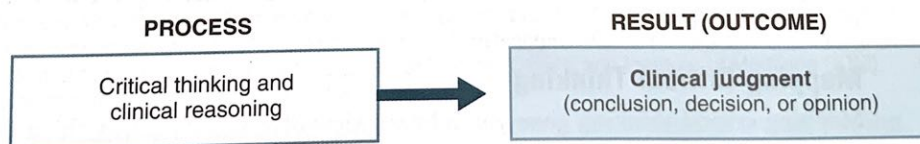
There are three main implications of the goals and outcomes of nursing:

1. Because the conclusions and decisions we as nurses make affect people's lives, our thinking must be guided by sound reasoning—precise, disciplined thinking that promotes accurate data collection that's as complete and in-depth as the situation warrants.
2. Nursing's ultimate goal is for people to be able to manage their *own* health care to the best of their ability, so we must stay focused on patient perceptions, needs, desires, and capabilities.
3. Because nursing is committed to achieving high-quality outcomes in a cost-effective, timely way, we must constantly seek to improve both our own ability to give nursing care and the overall quality and efficiency of health care delivery. We must work to find answers to questions like "How can we achieve better outcomes?" "How can we improve satisfaction with our services?" "How can we contain costs, yet maintain high standards?" and "How can we ensure competent nursing practice and retain good nurses?"

CRITICAL THINKING, CLINICAL REASONING, AND CLINICAL JUDGMENT

Let's review some important points made in the previous chapters:

1. Nurses tend to use the terms *critical thinking*, *clinical reasoning*, and *clinical judgment* interchangeably. Critical thinking is an "umbrella term" that includes clinical reasoning, clinical judgment, and reasoning outside of the clinical setting (e.g., reasoning in your personal life or during classroom or testing experiences).
2. Critical thinking and clinical reasoning are thinking *processes*; clinical judgment is the *result* of the thinking (the opinions you form or decisions you make).



3. All critical thinking depends on the accuracy and quality of communication—mutual exchange of information. Communication problems are major causes of mistakes and adverse outcomes such as falls and care omissions.⁴
4. Critical thinking (and clinical reasoning and clinical judgment) in nursing:
 - **Is guided by standards, policies, ethics codes, and laws** (individual state practice acts and state boards of nursing).
 - **Is based on principles of nursing process, problem-solving, and the scientific method** (requires forming opinions and making decisions based on evidence).

- **Focuses on safety and quality**, constantly reflecting, re-evaluating, self-correcting, and striving to improve.
 - **Carefully identifies the key problems, issues, and risks involved**, including patients, families, and key stakeholders in decision-making early in the process. (Stakeholders are the people who will be most affected [patients and families] or from whom requirements will be drawn (e.g., caregivers, insurance companies, third-party payers, health care organizations.)
 - **Applies logic, intuition, and creativity** and is grounded in specific knowledge, skills, and experience.
 - **Is driven by patient, family, and community needs**, as well as nurses' needs to give competent efficient care (e.g., streamlining charting to free nurses for patient care).
 - **Calls for strategies that make the most of human potential** and compensates for problems created by human nature (e.g., finding ways to prevent errors, using technology, and overcoming the powerful influence of personal views).
5. You begin to learn critical thinking skills in school, but you develop them on the job with strong teachers, dialogue, and clinical experience. Using a common reference or tool as a “talking point” to promote ongoing dialogue about what’s going well and what needs to be improved is essential. Standard tests are helpful in testing knowledge—an important part of critical thinking. They also may test some critical thinking skills. Based on a recent study, critical thinking instrument use has not met success in nursing.⁵
 6. Ensuring patient and caregiver safety and welfare must be the top priority in all thinking in nursing. Before you perform nursing actions or give medications, ask yourself, “Do I know why this particular action, treatment, or medication is indicated for this particular patient?”
 7. You’re accountable for determining the limits of your own knowledge. You’re also accountable for ensuring that patients, families, and caregivers you supervise have the knowledge they need to proceed with care safely and effectively.

Critical Thinking and Evidence-Based Strategies

Let’s examine the relationship between critical thinking and evidence-based strategies.

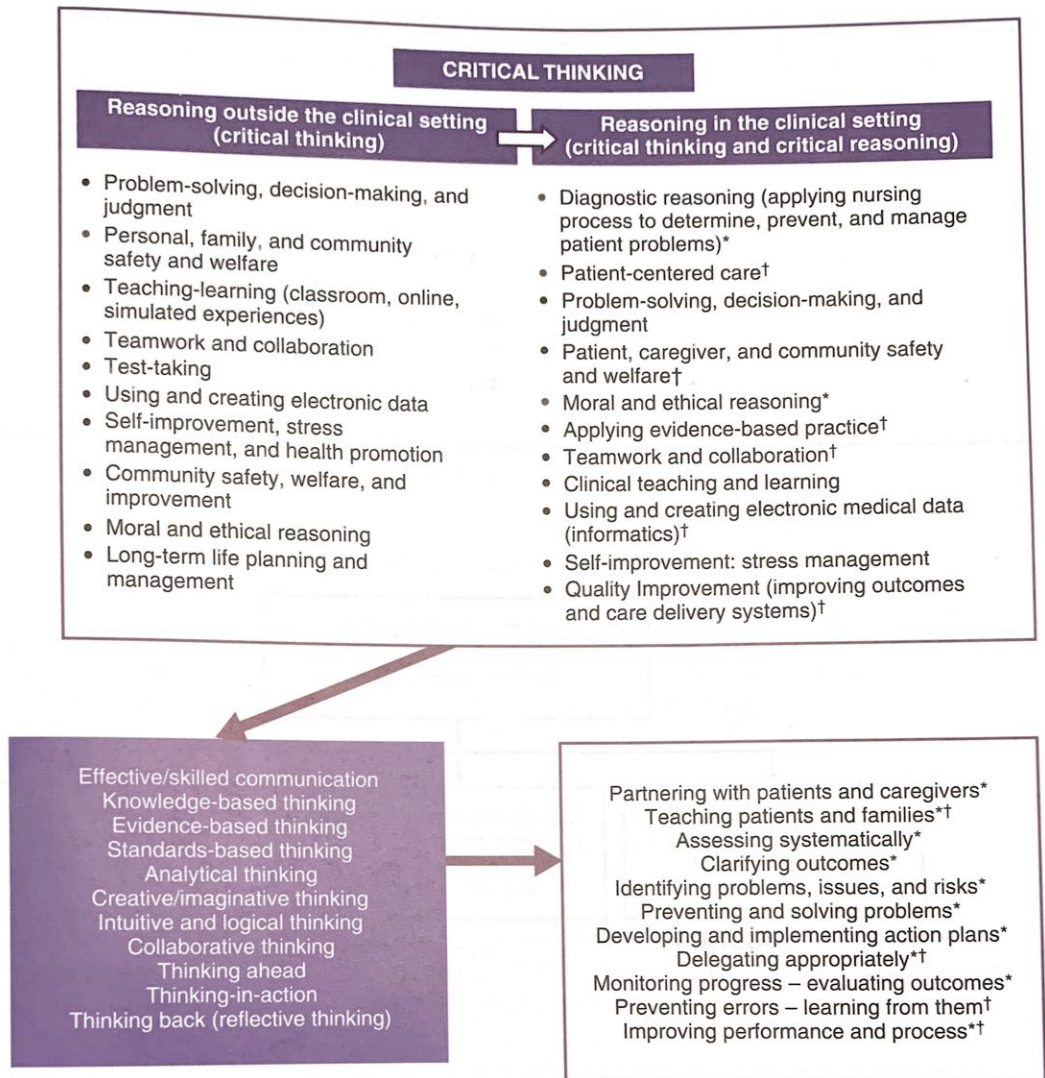
If you substitute the word *important* for *critical*, critical thinking is “important thinking.” Furthermore, critical thinking is *important thinking that evidence suggests must be done at specific points in care to achieve specific outcomes*. For example, there’s important thinking that must happen at each point in the nursing process (during Assessment, Diagnosis, Planning, Implementation, and Evaluation). Usually, the “important thinking that must be done” is addressed by using the term “strategies”: What strategies does the evidence suggest we need to think about using in this situation?

Mapping Critical Thinking

Mapping critical thinking gives you a broad view of what critical thinking in nursing entails. Study Figure 4-1, which maps the relationships among key aspects of critical thinking. Also study Box 4-1, which gives interesting conclusions made by author Christine Tanner after analyzing almost 200 articles.

Improving Practice and Performance

To many nurses, critical thinking simply means good problem-solving. Although problem-solving skills are required, you need a broader view of critical thinking to succeed in today’s competitive health care setting. If you don’t have a sincere desire to improve—to find ways to broaden your knowledge and skills and to make current practices more efficient and effective—you aren’t



*Required by American Nurses Association Standards (2010) *Nursing scope and standards of performance and standards of clinical practice*. Washington, DC: American Nurses Publishing.
 †Relates to Quality and Safety Education for Nurses (QSEN) and Institute of Medicine (IOM) competencies. (www.qsen.org and www.iom.edu).

FIGURE 4-1 Map showing relationships among key aspects of critical thinking.

thinking critically. As you can see in Figure 4-2, critical thinking requires a commitment to look for the best way, based on the most current research and practice findings (e.g., the best way to manage pain in a specific person or for a specific health problem).

CRITICAL THINKING INDICATORS AND THE 4-CIRCLE MODEL

Being familiar with critical thinking indicators (CTIs)—short descriptions of behaviors that demonstrate the knowledge, characteristics, and skills that promote critical thinking in the

BOX 4-1 Tanner's Conclusions on Clinical Judgment

After reviewing almost 200 studies, author Christine Tanner came to the following conclusions:

1. Clinical judgments are more influenced by what nurses bring to the situation than by the objective data about the situation at hand.
2. Sound clinical judgment rests to some degree on knowing the patient and his or her typical pattern of responses, as well as an engagement with the patient and his or her concerns.
3. Clinical judgments are influenced by the context in which the situation occurs and the culture of the nursing care unit.
4. Nurses use a variety of reasoning patterns alone or in combination.
5. Reflection on practice is often triggered by a breakdown in clinical judgment and is critical for development of clinical reasoning.

Source: Data from Tanner C: Thinking like a nurse: A research-based model of clinical judgment in nursing, *J Nurs Educ* 45(6): 204, 2006.

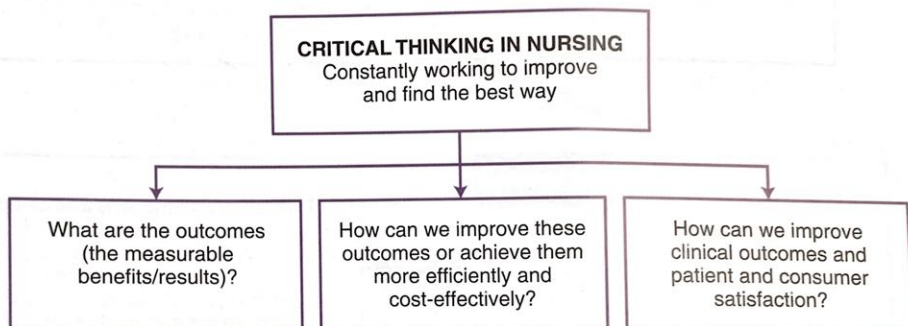


FIGURE 4-2 Critical thinking: Constantly working to improve.

clinical setting—is central to developing critical thinking. If you're not familiar with CTIs, review pages 9, 45 and 46 which address personal CTIs, knowledge CTIs, and intellectual CTIs. Keep in mind that no one is perfect or able to demonstrate all of the behaviors perfectly all the time. If you use the CTIs as a checklist, you can compare yourself with the listed indicators and decide what you do well and what needs improving. You also can use the CTIs to jog your mind about what you have to do to think critically when you're in a new or complex situation. For example, when you know that a key intellectual CTI is *assessing systematically and comprehensively*, it's likely that one of your first thoughts will be, "I need to figure out a way to assess this patient in a systematic, comprehensive way."

The 4-Circle CT model (page 15) also helps you assess and improve your ability to think critically. Asking questions like "What parts of the circles do I need to work on most?" helps you prioritize what knowledge and experience you need to gain. Don't be ashamed of inexperience. You'll get there. Tell your supervisor, preceptor, or educator when you identify skills you need to work on. It not only helps *you*, it helps *them* to prioritize your learning needs and make assignments that help you broaden your skills and keep patients safe.

NOVICE VERSUS EXPERT THINKING

Consider the following scenario.

SCENARIO NOVICE VERSUS EXPERT THINKING

A car hits a young man riding his bicycle in the park. Thrown 60 feet, he lies motionless. Within minutes, two park rangers arrive. They put on latex gloves and begin to assess his injuries. An ambulance pulls up and one ranger yells, "We'll need intubation equipment!" A woman, out for a walk, looks on from a distance. A second woman, riding a bicycle, comes upon the scene. Here's how the conversation goes:

First woman: "This is terrible. I wish the ambulance had gotten here sooner."

Second woman: "Oh?"

First woman: "Yes. He was thrown at least 50 feet. If the ambulance had arrived sooner, they could have done more. I can't believe these two rangers didn't start resuscitation right away. They waited for this ambulance . . . they should have been breathing for him."

Second woman: "These rangers look like they know what they're doing. They would have started resuscitation if he needed it. This young man has been thrown so far, I'm sure they're concerned about spinal cord injuries. If they tilt his head back to start respirations, they risk severing his spinal cord—they don't want to do that unless it's absolutely necessary."

This scenario is a true story. I was the second woman, on the bicycle. As I talked more with the first woman, I learned she was a student nurse. She thanked me for pointing out something she hadn't thought about. After it was all over, I realized our conversation demonstrated a common difference between expert and novice thinking: The student nurse felt a need to act immediately. As an experienced nurse, I knew the importance of *assessing before acting*.

We're all novices at one time or another. We all know what it's like to be new at something and watch an experienced professional and wonder, "Will I ever know this much?" And almost always, with time and commitment, we soon find ourselves helping someone else who looks at us and thinks, "Will I ever know this much?"

Decide where you stand in relation to novice or expert thinking by studying Box 4-2, which describes the stages novices go through to become experts. Then study Table 4-1, which compares novice and expert thinking. If you're a novice, determine some things you can do to improve your thinking. If you're an expert, decide how you can help a novice.

BOX 4-2 How Novices Become Experts

According to researcher Patricia Benner, nurses go through the following stages of knowledge and expertise acquisition:

- Novices:** Beginners who lack experience in specific situations (e.g., a new graduate with no experience in nursing or an experienced psychiatric nurse who is beginning to work in obstetric nursing)
- Advanced beginners:** Those with marginally acceptable performance based on a foundation of experience with real situations (e.g., a nurse who is in the first year of employment or the first year of a new clinical specialty)
- Competent:** Those with 2 or 3 years of experience in similar situations (e.g., a nurse who has practiced emergency and intensive care nursing for 2 or 3 years)
- Proficient:** Those with broad experience that allows meaning to be understood in terms of the big picture rather than isolated observations (e.g., a nurse who is in charge of making patient assignments)
- Expert:** Those with extensive experiences that enable an intuitive grasp of situations and problems (e.g., an experienced nurse who serves as charge nurse, preceptor, or member of a committee)

Data from Benner, P. (2001). *From novice to expert*. Upper Saddle River, NJ: Prentice Hall.

TABLE 4-1 Novice Versus Expert Thinking

Novice Nurses	Expert Nurses
<ul style="list-style-type: none"> • Knowledge is organized as separate facts. Rely heavily on resources (e.g., texts, notes, preceptors). Lack knowledge gained from experience (e.g., listening to breath sounds). • Focus so much on actions that they tend to forget to assess before acting • Need clear-cut rules • Hampered by unawareness of resources • Hindered by the brain-drains of anxiety and lack of self-confidence • Have limited knowledge of suspected problems; therefore they question and collect data more superficially • Rely on step-by-step procedures. Tend to focus more on procedures than on the patient response to the procedure. • Become uncomfortable if patient needs preclude performing procedures exactly as they were learned • Follow standards and policies by rote • Learn more readily when matched with a supportive, knowledgeable preceptor or mentor 	<ul style="list-style-type: none"> • Knowledge is organized and structured, making recall of information easier. Have a lot of experiential knowledge (e.g., what abnormal breath sounds are like, what subtle changes look like). • Assess and think things through before acting • Know when to bend the rules • Aware of resources and how to use them • Self-confident, less anxious, and more focused • Have a better idea of suspected problems, allowing them to question more deeply and collect more relevant and in-depth data • Know when it's safe to skip steps or do two steps together. Are able to focus on both the parts (the procedures) and the whole (the patient response). • Comfortable with rethinking procedure if patient needs necessitate modification of the procedure • Analyze standards and policies, looking for ways to improve them • Are challenged by novices' questions, clarifying their own thinking when teaching novices

Source: Copyright © 2014. <http://www.AlfaroTeachSmart.com>

PAYING ATTENTION TO CONTEXT

A colleague of mine says, "I know my students are thinking critically when I ask them questions and they respond 'It depends.'" Critical thinking changes depending on context (circumstances). One size doesn't fit all. What works in one situation may not work in another. For example, think about the difference between working in pediatrics versus working with adults. Growth and development issues and differences in anatomy and physiology affect many aspects of care. Realize that you may be an expert nurse, but if the circumstances change and you're unfamiliar with giving care under those circumstances, you are more like a novice. Sometimes, you may be familiar with the care but unfamiliar with the patients. Don't be afraid to say, "I'm unfamiliar with dealing with these circumstances and need help."

GUIDING PRINCIPLE

Patients are individuals who may have similar problems but different attitudes, beliefs, and responses. Each person and each situation has its own "unique story." Look for differences in patient responses or changes in circumstances—for example, cultural, developmental, physical, or emotional differences—and adjust care as needed.

It seems like health care is changing as quickly as you can say the word *computer*. Pardon the word play, but computers and health care technology are one of the main reasons for rapid change. From diagnostic technology to information management and decision support, computers are at the core of many changes in health care. This section describes major changes that affect how you think and work today.

Increased Nursing Responsibilities

The roles of licensed practical nurses, registered nurses, and advanced practice nurses (APNs) continue to expand. Knowing your qualifications and scope of practice (addressed later in this chapter) is key.

Institute of Medicine Competencies

The 2000s brought a wake-up call for health care consumers and providers. We experienced terrorism, hurricanes, disasters, and new diseases that threatened large populations on unprecedented scales. Institute of Medicine (IOM) studies revealed that because of reliance on outmoded systems, there were many safety and quality problems in health care.⁶⁻⁸ The IOM concluded that poorly designed systems set staff up to fail—regardless of how hard they tried. Four underlying reasons for inadequate care were cited⁶⁻⁸: (1) Growing complexity of medical science and technology, (2) increased number of people with chronic conditions, (3) poorly organized health care delivery systems, and (4) lack of use of informatics (the use of computers to facilitate the acquisition, storage, retrieval, and use of information). As a result, the IOM developed core competencies stating that all health care providers must be able to provide patient-centered care, work in interdisciplinary teams, employ evidence-based practice, apply quality improvement methods, and use informatics.

Quality and Safety Education for Nurses

Nurse educators responded to the IOM competencies by developing the Quality and Safety Education for Nurses (QSEN) project. The QSEN goal is to prepare future nurses to gain the knowledge, skills, and attitudes needed to continuously improve the quality and safety of the health care system.⁹ QSEN clarifies what the IOM competencies mean to nursing in the following ways⁹:

- **Patient-centered care:** Recognize patients or their designees must be the source of control. Make them full partners in giving compassionate and coordinated care based on respect for their preferences, values, and needs.
- **Teamwork and collaboration:** Function effectively within nursing and interprofessional teams, fostering open communication, mutual respect, and shared decision-making to achieve high-quality patient care.
- **Evidence-based practice (EBP):** Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
- **Quality improvement (QI):** Use data to monitor the outcomes of care processes, and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems.
- **Safety:** Minimize risk for harm to patients and providers through both system effectiveness and individual performance.

If all this sounds familiar to you, it may be because we've already addressed many of these issues. Content related to IOM and QSEN competencies is integrated throughout this book.

For example, patient-centered care is stressed throughout. EBP and QI are addressed in the next chapter; teamwork and collaboration skills are the focus of Chapter 7.

National Practice Safety Goals Implemented

Recognizing that safety must be top priority, new standards based on national practice safety goals (NPSGs) are implemented in virtually all health care organizations.¹⁰ Acknowledging that improvements happen when mistakes are reported—rather than hidden—regulations implementing the 2015 *Patient Safety and Quality Improvement Act* (PSQIA) began in 2009.¹¹ This act establishes a voluntary reporting system to increase the data available to assess and resolve patient safety and quality issues. To encourage the reporting and analysis of medical errors, PSQIA provides federal privilege and confidentiality protections for error reporting and patient safety information (called Patient Safety Work Product).¹²

Patients' Rights and Privacy Laws

Patients' rights and privacy are guaranteed by federal and state laws.¹³ For example, patients have the right to have copies of their medical records, and to keep them private, as stated in *Health Insurance Portability and Accountability Act* (HIPAA) privacy laws. Other rights are upheld by health care standards. For example, patients have the right to have communication and cultural needs met. Most health care organizations have a patients' bill of rights that addresses specific rights (see Appendix E).

Patient-Centered and Family-Centered Care

Acknowledging that emotional, social, and developmental support are central to allocating resources and achieving outcomes efficiently, organizations work to develop a culture of patient-centered and family-centered care. Patients and families are viewed as key members of the health care team. This approach aims to shape policies, programs, facilities, and staff day-to-day interactions to focus on greater patient and family satisfaction.¹⁴

Population-Based Care: Meeting Diverse Needs

We recognize that nurses must meet the needs of diverse patient populations (e.g., patients of certain cultures, age groups, languages, or sexual orientation). The Joint Commission—the main accrediting body for health care organizations—has set standards for population-based care. You can download a road map to meeting these standards entitled *Advancing Effective Communication, Cultural Competence and Patient- and Family-Centered Care: A Road Map for Hospitals* from http://www.jointcommission.org/Advancing_Effective_Communication/.

Empowering Patients: Nurses as Stewards for Safe Passage

Two important shifts in thinking empower patients and families to manage their own care:

- Move from “I know what’s best for you.” to “I want to empower you to make your own decisions.”
- Change “I’m here to take care of you.” to “I’m here to make sure you know how to take care of yourself when I’m not here.”

Much like a ship’s steward—who has the job of protecting passengers on a journey—your job as a nurse is to protect patients and help them navigate safely through the health care system. As a steward, you hold *patients' lives* in your hands, but *they* should be “at the helm,” directing where they want to go. Box 4-3 (*Speak Up* initiatives) gives an example of how we encourage patients to stay involved in their care and speak up when they have concerns. You’ll get more strategies in Developing Empowered Partnerships, Skill 7.3, in Chapter 7.

BOX 4-3 Improve Safety: Urge Your Patients to Speak Up

Encourage patients to become involved, informed participants on the health care team. The following simple steps are based on research that shows that patients who take part in health care decisions have improved outcomes.

- **Speak up** if you have questions or concerns, and if you don't understand, ask again. It's your body, and you have a right to know.
- **Pay attention** to the care you are receiving. Make sure you're getting the right treatments and medications by the right health care professionals. Don't assume anything.
- **Educate yourself** about your diagnosis, the medical tests you are undergoing, and your treatment plan.
- **Ask a trusted family member or friend** to be your advocate.
- **Know your medications** and why you take them. Medication errors are the most common health care errors.
- **Use** a hospital, clinic, surgery center, or other type of health care organization that has undergone a rigorous on-site evaluation against established state-of-the-art quality and safety standards, such as that provided by The Joint Commission.
- **Participate in all decisions** about your treatment. You are the center of the health care team.

Courtesy The Joint Commission.

Health Information Technology and Electronic Health Records

Critical thinking and clinical reasoning depend on having ready access to accurate, organized, complete patient information. Federal initiatives push for “meaningful use” of informatics—the use of health information technologies (HIT) to facilitate the acquisition, storage, retrieval, and use of key data by all health care professionals.¹⁵ To streamline care delivery and improve outcomes, these initiatives aim to facilitate the flow of shared health information among patients and their care providers.

In most cases today, you use electronic or printed standard tools that influence your thinking. Standard evidence-based tools are essential to collecting complete information, communicating care, improving decision-making, promoting efficiency, preventing mistakes, and keeping everyone “on the same page.” However, we’re still in the early stages of streamlining electronic health records (EHRs), and HIT products are only as good as the designers make them. We have to help “the humans” use them with active, critical minds. As with all complex systems, we’ll continue to experience growing pains. For example, some educators tell me that electronic charting sometimes gets in the way of thinking—the staff seems more involved with what computers tell them than what patients tell them. As another example, each year, the Emergency Care Research Institute puts together a list of the top 10 medical technology hazards to patient safety (<http://www.ecri.org>).

To improve electronic systems, nurses—now extensions of humans—must be involved in planning, development, and testing them. Be a critical thinker and an active voice in improving systems. If something about your EHR seems error-prone or time-consuming (e.g., having to chart the same data in more than one place), tell your manager, educator, or clinical documentation specialist.

GUIDING PRINCIPLE

EHRs and decision-support tools aim to promote critical thinking, but they do not think for you. Keep an open active mind, look for flaws, and decide how the computer's information applies to your patients' individual circumstances, *right now*. You—not the computer—work in real time.

Standard, interdisciplinary tools such as critical pathways (tools that outline care management for particular problems, such as postoperative care of knee surgery) and algorithms (tools that describe a sequence of steps to take under specific circumstances, such as how to proceed

when a patient arrives in the emergency department complaining of chest pain) are the norm. You can find up-to-date examples of critical pathways and algorithms on the Internet by searching these terms.

When you use well-designed, evidence-based tools and HIT, two things happen that promote critical thinking: (1) As you use the same tools over and over again in various situations, your brain creates a mental file of what's most important (e.g., what data must be collected and what to assess *first*). (2) The documentation associated with the tool gives you and the rest of the team a record you can reflect on to identify patterns and pick up omissions. But remember, tools, HIT, and EHR must be designed for specific purposes—one size doesn't fit all.

Standard Tools Prevent Miscommunication

To prevent miscommunication among caregivers, safety standards stress the need for standard communication tools. For example, the Situation, Background, Assessment, Recommendation (SBAR) tool (Box 4-4) is often used for change-of-shift reports (hand-offs) and for reporting problems to physicians.

GUIDING PRINCIPLE

To prevent communication errors, use "Read Back" and "Repeat Back" rules.¹⁰ When you receive verbal orders or lab values, write them down and read them back to check for accuracy. When you give lab results or important communications to others, ask, "Can you repeat that back to me to be sure we're on the same page?"

BOX 4-4 Example SBAR Communication Tool

SBAR is pronounced *S-BAR* and stands for situation, background, assessment, recommendation. First used by the military to promote effective communication between caregivers, SBAR forms vary, depending on purpose and setting. **Have patient records handy and be sure you can readily communicate all of the following information.**

- S SITUATION:** Briefly state the issue or problem: What it is, when it happened (or how it started), and how severe it is. Give the signs and symptoms that make you concerned.
- B BACKGROUND:** Give the date of admission and current medical diagnoses. Determine the pertinent medical history, and give a brief synopsis of the treatment to date (e.g., medications, oxygen use, nasogastric tube, IV lines, code status).
- A ASSESSMENT:** Give most recent vital signs and any changes in the following:
- Mental status, neurological signs
 - GI status (nausea, vomiting, diarrhea, distention)
 - Respirations
 - Urine output
 - Pulse, skin color
 - Bleeding, drainage
 - Comfort, pain
 - Other: _____
- R RECOMMENDATION:** State what you think should be done. For example:
- Come see the patient now.
 - Get a consultation.
 - Get additional studies (e.g., CXR, ABG, EKG, CBC, other).
 - Transfer the patient to ICU.
 - How frequently do you want vital signs?
 - If there's no improvement, by when do you want us to call you?

Time-Outs Promote Group Thinking

In today's fast-paced clinical setting, many professionals are involved in giving care to one patient—there are many “cooks stirring the pot.” We must ensure that “the right ingredients” go into the “pot” (the patient) at the right time. We need everyone's eyes, ears, and brains to prevent mistakes. Time-outs, in which the entire team stops to become focused and on the same plan of care are used to prevent errors. There are two kinds of time-outs. One is routine, such as at the beginning of surgeries, when patients' identities and surgical procedures are double- and triple-checked. The other type of time-out is spontaneous. If at any time *any* team member—nurse, nursing aid, respiratory therapist (RT), or physician—recognizes an actual or potential risk for harm to the patient, he or she is responsible for calling a time-out and pointing out the concern (the rest of the team is accountable for listening and deciding how to address it).

Health Care Reform

The *Patient Protection and Affordable Care Act* brings many changes. Among them are the emergence of accountable care organizations that aim to reduce fragmented care and provide seamless, high-quality, patient-centered care for Medicare beneficiaries. To reduce costs and increase quality and safety, issues like nurse-patient ratios and the advantageous use of APNs are studied. To get up-to-date extensive information on how health care reform affects nursing, enter “health care reform” into the search field of the American Nurses Association (ANA) website (<http://www.nursingworld.org>).

Box 4-5 summarizes additional trends that affect nurses' thinking.

BOX 4-5 Additional Trends Affecting Nurses' Thinking

- **New threats emerge.** Emergence of resistant bacteria such as methicillin-resistant *Staphylococcus aureus* (MRSA) points out the need for meticulous hand hygiene and management of invasive treatments and open wounds. International travel brings threats of pandemics (epidemics over a wide geographic area and affecting a large part of the population). Terrorism, including bioterrorism, is a constant threat, requiring new levels of preparedness and responsiveness.
- **Many people live longer with illnesses and disabilities.** An alarming number of people with obesity and diabetes are major health care concerns, because these problems contribute to many other health problems.
- **New diagnostic imaging and treatment modalities** such as vaccine use, stem cell use, and genetic manipulation emerge.
- **Ethical dilemmas grow.** Ethical issues (e.g., end-of-life care, assisted suicide, fertility issues, cloning, stem cell research) require in-depth thinking that's clearly grounded in ethical principles (see Chapter 5).
- **Technology moves into homes.** Nurses must be able to give “high-tech” care in homes and must have excellent assessment and interpersonal skills. Being flexible, resourceful, and practical in homes is key.
- **Case management**—the use of collaborative approaches to ensure that the best available resources are used to reach outcomes efficiently—promotes quality. This approach is grounded in prevention and early intervention. Today all nurses are expected to be “case managers,” closely monitoring progress toward outcomes to detect variances in care. (A variance in care is when a patient isn't progressing toward outcomes in the expected time frame—for example, if someone has surgery and is expected to get out of bed on the first day after surgery but is unable to do so, it's considered a variance in care, which requires further evaluation.)
- **Healthy People 2020 initiatives** guide organizations, businesses, and communities to come together to achieve two major goals: (1) to help people of all ages improve life expectancy and quality of life and (2) to eliminate health disparities among different segments of the population (see <http://www.healthypeople.gov/>).
- **Holistic and alternative therapies**—for example, diet, exercise, acupuncture, and stress reduction through meditation and aromatherapy—are recognized as key strategies for triggering the body's natural healing powers.

PREDICT, PREVENT, MANAGE, PROMOTE

Care has shifted from a *diagnose and treat* (DT) approach, which implies that we wait for evidence of problems to start treatment, to a predictive model: *predict, prevent, manage, and promote* (PPMP).¹⁶

PPMP is a proactive approach that aims to predict and manage risk factors *before* problems arise. PPMP is based on evidence. Thanks to research, we now can predict when people are at risk for certain problems and, if needed, begin an aggressive prevention plan. Sometimes *prevention* requires *treatment* (called *prophylaxis*).

We have evidence-based recommendations for vaccines. For example, with whooping cough (pertussis), to protect the most vulnerable (infants and children), it's recommended that not only children get vaccinated but also their parents, grandparents, and other caregivers.

More examples of evidence-based recommendations are:

- To prevent venous thromboembolism (VTE), the use of pulsating antiemboli stockings is standard during and after many surgeries. Because VTE has potentially fatal complications, including pulmonary embolism, VTE prevention is a major health care concern.
- For those with significant exposure to the human immunodeficiency virus (HIV), treatment begins immediately, before there's evidence of the virus in the blood.

Four Key Strategies

The PPMP approach requires you to do four main things:

1. **Predict common problems and complications, and then develop a plan to monitor and prevent them.** For example, if you're caring for someone who has just arrived in the emergency department with a heart problem, you:
 - Involve the patient in detecting and preventing complications (e.g., tell him to let you know if he has any new symptoms).
 - Begin nursing surveillance (the close observation of patients at risk for complications). Monitor for early signs and symptoms that indicate increasing problems (e.g., irregular pulse, fluid in the lungs, ankle swelling, and chest discomfort).
 - Be sure that you're prepared to manage complications (e.g., have a fully prepared emergency cart nearby, and know how to use it).
2. **Focus on risk management.** Screen for the presence of risk factors, and identify ways to eliminate or manage them. For example, suppose that you make a home visit to assess an infant. As part of the assessment, you look for risks to the infant's safety (check where the baby sleeps, and find out if the parents are aware of possible infant hazards). If you identify risks to the baby's safety, you're responsible for making a plan to correct the situation. Failing to make a plan may be considered negligence.
3. **Use technology to reduce errors and improve accuracy and efficiency.** Ask, "What technology can we use to monitor this patient and prevent complications?" For example, for years, to ensure proper placement of central venous lines, we obtained chest x-rays after insertion to be sure the lines were in the vein, not in the chest cavity. Now we know the importance of preventing this complication by using real-time ultrasound *as the line is inserted*.
4. **Encourage behaviors that promote health, optimum function, independence, and sense of well-being.** For example, explain to patients with asthma that a walking or exercise program is key to promoting optimum lung function, encourage all smokers to stop, and stress the need for checking with the primary care provider for recommended health screening (e.g., such colonoscopy after age 50).

For more on risk management, health screening, and health promotion: Go to *Healthy People 2020* Initiatives (<http://www.healthypeople.gov>); the Harvard Center For Risk Analysis (<http://www.hcra.harvard.edu/>); Centers for Disease Control and Prevention

(<http://www.cdc.gov/>); and U.S. Preventive Services Task Force (<http://www.uspreventiveservicestaskforce.org>).

The PPMP approach—predict, prevent, manage, promote—prevents complications, saves lives, prioritizes care, improves satisfaction, and contains costs. The following scenario shows the importance of risk management and being proactive when promoting health and managing health problems.

SCENARIO PROMOTE EXERCISE TOLERANCE: PREDICT, PREVENT, AND MANAGE DEHYDRATION

Living in Florida, where we have heat, humidity, and a lot of elderly people, I learned the need to prevent and manage dehydration firsthand. Many health care providers tell people to walk to gain strength. Sometimes these instructions backfire, and people faint in the heat. If you or someone else is going to exercise, improve performance by pacing yourself and ensuring adequate hydration. Teach people about risk factors (obesity, alcohol or caffeine use, use of some medications like diuretics, and being very young or old will put you at risk). Teach the signs of heatstroke (i.e., weakness, nausea, vomiting, chills, confusion, disorientation, hallucinations). Stress the importance of improving ability to exercise by drinking water *before* exercising (so they start out well hydrated), wearing loose-fitting clothes, avoiding the hotter parts of the day, avoiding tea or caffeine (they act as diuretics), and replacing fluids during exercise (water is best; with extreme sweating, consider that there's electrolyte loss, and Gatorade may help). If you suspect heatstroke, manage it by cooling down the person immediately (place the person near an air conditioner, or place damp towels all over the body, especially to the temples and wrists, where blood vessels are near the skin). If the person can tolerate liquids, offer cool drinks. If the person becomes dazed, confused, or has stopped sweating, head to the emergency department because dehydration is severe, requiring immediate medical management.

Point of Care Testing Fine-Tunes Care

Another example of applying the proactive PPMP model is point-of-care testing—testing done during the course of nursing care. Point-of-care testing is a key part of managing some health problems. For example, with acute brain injuries, nurses perform highly skilled neurological assessments at least every hour. These assessments help identify subtle changes that are then used to guide how the patient is managed on an hour-by-hour basis. Diabetes management is another example. Nurses manage diabetic regimens in skilled care settings and also teach patients how to manage their diabetes based on their own real-time blood-glucose monitoring.

Rapid Response Teams and Code H (Help)

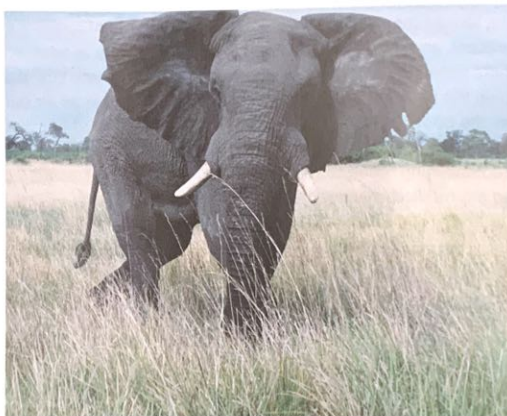
Rapid response teams (RRT) and Code H (help) are great examples of using the whole team's brain power to ensure early intervention. The complexity of care today makes it difficult for nurses to balance their patient load. If a nurse is worried that someone's condition is deteriorating, he or she calls the RRT to do an assessment. The RRT usually is staffed by nurse managers, house physicians, RTs, critical care nurses, and pharmacists. Code H was developed after 18-month-old Josie King died when her family was unable to get her the attention they felt she needed.¹⁷ With Code H, patients, families, and visitors can trigger levels of rapid response. For example, patients and visitors can call a code number, which goes directly to hospital operators. The operators are trained to ask questions according to an algorithm. Callers who report something important, such as bleeding or chest pain, are routed immediately to the RRT. If the call is about problems like delays in getting pain medications, lack of communication, or some issue that doesn't require the RRT, the operator triggers a Code H. In this case, only the nurse manager responds (within minutes of the call). Even if the Code H turns out to be something very mild,

families feel reassured to know that they will be heard. Using RRT and Code H saves lives and improves job satisfaction because nurses get help when they need it.

Disease and Disability Management

Disease and disability management—care that focuses on keeping people with chronic diseases and disabilities healthy—is an important part of the PPMP approach. We now *manage* chronic conditions over time, rather than waiting for episodes of relapse or crisis. For example, with asthma, we don't just keep *treating* asthma attacks. We *manage* the asthma by monitoring individual with asthma *when healthy*, fine-tuning medications and inhalers to keep them symptom-free. In this way, we ensure that they receive the most current, effective drugs with the least side effects.

We can expect nursing roles related to disease and disability management to grow. Studies find that using team-based, nurse-led care models significantly improves the condition and quality of life of patients with multiple chronic illnesses. Patients receiving this type of care achieve better control of chronic conditions such as depression, heart disease, and diabetes compared with those given standard care in a primary care setting.¹⁸



What does this elephant have to do with clinical judgment and the PPMP model? When we were in Africa, this elephant gave us a menacing look. As our guide quickly put the jeep into reverse, someone asked, "Do they teach you how to use that gun on the dashboard?" The guide replied, "Yes. But, even more important—they teach us how not to get in the position that we need it." Be proactive. Predict and prevent complications. Be ready to manage unavoidable complications. Promote health through patient teaching.

OUTCOME-FOCUSED, EVIDENCE-BASED CARE

From professional and economic perspectives, the care we give must focus on outcomes and be driven by the best available evidence. We must be able to answer questions like:

- Exactly what does the patient, family, client, or group need to achieve?
- Have the best-qualified professionals decided what, realistically—based on circumstances—can be achieved?
- Have the key stakeholders been included in decision-making?
- What evidence indicates that the outcomes are likely to be achieved in this particular situation?

EBP is discussed in depth in the next chapter. For now, just remember that it's important to evaluate the strength of the evidence that supports your plan of care. Determining Patient-Centered (Client-Centered) Outcomes, Skill 6.14, in Chapter 6 gives detailed information on how to determine outcomes.

Clinical, Functional, and Other Outcomes

Determining overall care quality requires you to examine outcomes from *several* perspectives. Study the following types of outcomes listed in the context of how they apply to a surgical repair of a fractured hip. Think about the importance of considering all the outcomes to determine overall care quality.

- **Clinical outcomes:** To what degree are the patient's health problems resolved? For example, is the hip healed?
- **Functional outcomes:** To what degree is the patient able to function independently, physically, cognitively, and socially? For example, is the person able to do required daily activities without help? Are there problems with cognitive function?
- **Symptom severity and quality-of-life outcomes:** To what degree is the patient free of symptoms and able to do desired, as well as required, activities? For example, is there any hip pain and is the person able to meet physical work requirements and do favorite activities?
- **Risk reduction outcomes:** To what degree is the patient able to demonstrate ways to reduce health risks? For example, is he able to explain ways of improving safety, such as using a cane when fatigued? Does he keep his home free from hazards that may cause falls?
- **Protective factor outcomes:** To what degree does the patients' environment protect them from deteriorating health? For example, when bedridden, are bedrails up as needed and skin care protocols followed?
- **Therapeutic alliance outcomes:** To what degree does the patient express a positive relationship between himself and health care professionals? For example, when asked, does he state that he feels free to ask questions?
- **Satisfaction outcomes:** To what degree do the patient and family express satisfaction with care given? For example, when asked, do they state that they had competent, efficient treatment? Were services convenient?
- **Use of services outcomes:** To what degree were appropriate nursing services used? For example, was a case manager used, if needed?

GUIDING PRINCIPLE

Outcome-focused thinking means more than "fixing the problems." It means fixing the problems in ways that you get the *best results*, from cost, time, and patient satisfaction perspectives.

Dynamic Relationship of Problems and Outcomes

There's a close, dynamic relationship between problems and outcomes. Sometimes you'll find yourself focusing on *problems* and sometimes on *outcomes*, depending on the situation. Think about the following examples:

- You're working with a patient on a respirator, and the desired outcome is that the patient has *adequate ventilation*. You see that the patient seems to be struggling for air. You check the tubing and see a lot of water from condensation. You empty the water. If the patient is still struggling, you continue to look for other problems that might be interfering with *adequate ventilation*. For example, you assess breath sounds and help the patient to get in a position to cough and clear mucus. You continue looking for problems until you reach your desired outcome.

- You're working with a group with many complex issues. Instead of getting bogged down in the problems, you say, "It's going to take us forever if we stay mired in long-standing, complicated issues. Let's focus on *results*, rather than *problems*. Let's decide together the major things we want to achieve and then get agreement on what we need to do to achieve them." As you can see, to engage in critical thinking, you need to focus on both the problems and the outcomes. Together, they serve as a compass that promotes sound reasoning that's tailored to each unique patient situation.

CRITICAL THINKING EXERCISES 4.1

Example responses are in Appendix A.

- Fill in the blanks in a to f by choosing from the following words: responses, actions, decisions, legal, satisfaction, outcomes, nature, potential, strategies, omissions, falls, mutual, result, processes, outside, umbrella, priority, top, welfare, caregiver, patient.
 - Ensuring _____ and _____ safety and _____ must be _____ in all nursing thinking.
 - Critical thinking is an _____ term that includes clinical reasoning, clinical judgment, and reasoning _____ of the clinical setting.
 - Critical thinking and clinical reasoning are thinking _____. Clinical judgment is the _____ of the thinking (the opinions you form or decisions you make).
 - Critical thinking depends on the accuracy and _____ exchange of information. Communication problems are major causes of mistakes and adverse outcomes such as _____ and care _____.
 - Critical thinking calls for _____ that make the most of human _____ and compensate for problems created by human _____ (e.g., finding ways to prevent errors, using technology, and overcoming the powerful influence of personal views).
 - Critical thinking means more than fixing problems—it means fixing them in a way that gets the best _____ from a cost, time, and patient _____ perspective.
- Study Box 4-3 (page 85), and decide how you would handle a drug addict who insists that he or she must have more medication.
- How do standards, policies, ethics codes, and laws (individual state practice acts and state boards of nursing) relate to critical thinking?
- Using your own words and giving examples or drawing a map, explain how you use the PPMP approach to health care delivery.
- Decide "what's wrong with the picture" in the following scenario.

SCENARIO WHAT'S WRONG WITH THIS PICTURE?

Mr. Duncan, an elderly man with diabetes, is seen at home every other day by a nurse, who checks a healing incision. Mr. Duncan has been looking for an assistive device that he can attach to the toilet to help him get up and down. When he asks the visiting nurse if she knows where he can find such a device, the nurse replies, "I'm sorry. I know what you mean, but I don't know where you get them."

THINK, PAIR, SHARE

With a partner, in a group, or in a journal entry:

- Discuss where you stand in relation to novice versus expert thinking (see Table 4-1, page 82, and Box 4-2, page 81).

2. Address the impact of effective communication and cultural competence as described in *Advancing Effective Communication, Cultural Competence and Patient- and Family-Centered Care: A Road Map for Hospitals* (http://www.jointcommission.org/Advancing_Effective_Communication/).
3. Examine how the core concepts of patient-centered and family-centered care posted at <http://www.ipfcc.org/faq.html> affect patient outcomes and affect nursing care.
4. Think about people you know who are living with chronic diseases or disabilities. How does the PPMP model apply to keeping them healthy? Share their struggles and successes and the factors that help or hinder their ability to stay as well as possible.
5. Practice using “Read and Repeat Back” rules and the SBAR tool (Box 4-4, page 86) with one another.
6. After reading *Reducing Medical Mistakes, Talking with Your Clinician, Getting Medical Tests, Planning for Surgery, Getting a Prescription, and Build Your Question List* posted at <http://www.ahrq.gov/questionsaretheanswer/>, discuss ways to encourage patients to be proactive and involved in their care.
7. Decide where you stand in relation to learning outcomes 1 to 8 at the beginning of this chapter (page 75).
8. Drawing from your experience, discuss your thoughts on the following *Critical Moments* and *Other Perspectives*.

CRITICAL MOMENTS

Zero Tolerance for Bullying and Disrespect

A key part of having a healthy workplace—the foundation for critical thinking—is having “zero tolerance” for bullying and lateral violence. Lateral violence can be a variety of behaviors—from thoughtless acts to purposeful, intentional acts meant to harm, intimidate, or humiliate others. These types of behaviors create a hostile work environment. In its extreme form, lateral violence is bullying—a conscious, deliberate, hostile act intended to harm, demean, and induce fear. Adopting a zero tolerance helps prevent major issues before they happen.

OTHER PERSPECTIVES

Your Most Important Tool

Improving thinking helps you develop the most important tool you have in your toolbox: yourself. This means being clear about who you are as a person, and how your attitudes, assumptions, frames of reference, and tendencies to stereotype affect problem-solving—how your personal choices and behaviors affect communication and interpersonal relationships. You also need very specific ways of looking at what CT [critical thinking] is in context of each particular clinical setting. Too many leaders have the “amorphous blob” concept of CT and just wish people would think better. Then they decree that it’s up to the managers and educators to fix the nurses!!

—Ruth Hansten, RN, PhD, FACHE (personal communication)

NURSING PROCESS: THE HEART OF CLINICAL REASONING

As evidence-based approaches continue to evolve, you can expect that the nursing process won’t be the **only** tool you will learn to promote critical thinking. Learning several models improves your ability to think critically for two reasons: (1) Each model brings new insights, and (2) some models work better in one context than another.

Although you may use more than one model to promote clinical reasoning, the nursing process is the *first* tool you need to learn, for the following reasons¹⁹:

1. American Nurses Association and virtually all specialty organization standards stress that the nursing process—assess, diagnose, plan, implement, evaluate—guides nursing care.
2. The nursing process is a building block for other models and safe practice.
3. Health care documentation systems are based on the “assess, diagnose, plan, implement, evaluate” approach.
4. The nursing process framework is “in synch” with the clinical reasoning models that other health care professionals use: We can talk about problem-solving and prevention in a common way.
5. The NCLEX[®], testing services, and clinical certification exams are based on nursing process.

GUIDING PRINCIPLE

Nursing process principles form the basis for virtually all care models and for nursing documentation. When something goes wrong or there's a clinical reasoning issue, one of the first things that's examined is whether assessments, diagnoses, outcomes, interventions, and evaluations have been recorded.

Chapter 6, *Practicing Clinical Reasoning Skills: Applying the Nursing Process*, gives opportunities to practice applying nursing process. For now, review Box 4-6, which summarizes the purpose and process of each nursing process step. Keep in mind that it's important to remember the *purpose* of each phase and that the phases are *interrelated*. What happens in one phase affects the others.

BOX 4-6 Nursing Process Summary

The nursing process phases are interrelated and dynamic, not linear. ALWAYS begin with *Assessment*—never skip this step. An example of how the nursing process is dynamic is that if you get to *Diagnosis* or *Outcome Identification* and the problems still aren't clear, go back to check whether your assessment data are factual and complete.

Assessment

Purpose: Collect and record data to provide the information needed to:

- Predict, prevent, detect, manage, and resolve problems, issues, and risks.
- Clarify expected outcomes—observable desired results and benefits—of care.
- Identify individualized interventions to achieve outcomes, promote health, and achieve optimum function and independence.

Diagnosis/Outcome Identification

Purpose: Analyze patient data to (1) clarify realistic expected outcomes (benefits of care), and (2) identify the problems, risks, or issues that must be managed to achieve the outcomes. *Diagnosis and outcome identification* often happen almost simultaneously (a “chicken or egg” situation) with thinking going back and forth between questions like “What are the major problems, issues, and risks?” “What does the patient want to achieve?” “What, realistically, must be achieved?” During this phase, in addition to clarifying outcomes, you:

- Identify signs and symptoms that may indicate the need for referral to a more qualified professional (report these immediately).
- Rule in and rule out suspected problems.
- Decide what problems, issues, and risks must be managed to achieve the outcomes.
- Determine the patient's resources, strengths, and use of healthy behaviors.

Continued

BOX 4-6 Nursing Process Summary—cont'd

- Recognize health states that are satisfactory but could be improved.
- Reflect on thinking to determine whether (1) patient participation in the process has been at an optimum level; (2) data are accurate and complete; (3) assumptions have been identified and thinking tailored to individual patient and circumstances; (4) conclusions are based on facts (evidence) rather than guesswork; and (5) alternative conclusions, ideas, and solutions were considered. **Reflecting on thinking applies to all the phases, but is placed here because it requires analysis, which is the focus of this phase.**

Planning

Purpose: Ensure that there's a complete, recorded, outcome-focused plan that's tailored to the individual patient and circumstances. The plan should be designed to do the following:

- Specify short-term and long-term outcomes.
- Monitor and manage priority problems, issues, and risks.
- Promote optimum comfort, function, independence, and health.
- Coordinate care and include patients as partners in decision-making and care.
- Identify what interventions must be managed by registered nurses and what may be delegated to other licensed and unlicensed workers.
- Achieve the desired outcomes safely, efficiently, and cost-effectively.
- Include teaching to help patients make informed decisions and become independent.
- Provide a record that can be used to monitor progress and communicate care.

Implementation

Purpose: Put the plan into action.

- Assess the patient to determine whether interventions are still appropriate and patient is ready.
- Prioritize, delegate, and coordinate care as indicated, including patients and other caregivers as partners in decision-making and care.
- Prepare the environment and equipment for safety, comfort, and convenience.
- Perform interventions, and then reassess to determine initial responses.
- Make immediate changes as needed; update the recorded plan if required.
- Record patient data and responses to monitor progress and communicate care.

Evaluation

Purpose: Determine where the patient stands in relation to desired outcomes; consider how the process can be improved.

- Assess patient status to determine whether expected outcomes have been met and what factors promoted or inhibited the success of the plan.
- Plan for ongoing assessment, improvement, and patient independence.
- Discharge the patient, or modify the plan as indicated.

Source: Alfaro-LeFevre, R. (2015). Nursing process summary handout. Retrieved from <http://www.AlfaroTeachSmart.com>

Proactive, Dynamic, and Outcome-Focused

Today we stress that the nursing process must be proactive and focused on outcomes, risk management, and health promotion—as well as dealing with problems. In the clinical setting, the nursing process is dynamic, unlike how it's described in books or classrooms. If you jump around in books or classrooms trying to explain how things happen in real life, you confuse people—you have to present content in a logical, step-by-step way. In *real life*, the nursing process is fluid and changing. You apply principles of nursing process, but move back and forth within various phases, as in the following scenario.

SCENARIO DYNAMIC THINKING AT THE BEDSIDE

Bob, a medical-surgical nurse, walks into a room. A picture flashes in his mind—his brain assesses the room in an instant. The picture he sees is bed linens in disarray, trash on the floor, and someone who is restless and has a distressed look. Bob's mind jumps to phase 2 of the nursing process, (diagnosis), thinking, *there's a problem here*. Automatically, he goes back to basics—phase 1, assessment,—and assesses closely to find out exactly what's going on. He may start thinking, "Something bad is happening here, and I need to get help," or he may simply intervene with a lot of little things, which resolves the *overall problem*. Either way, he is so busy *doing* that he's unaware that his brain is assessing, correlating, and forming opinions as he goes along. In this scenario, Bob is experienced and comfortable in his role. If Bob were a novice, his thinking would be slower—hampered by lack of experience and lack of confidence. He would see a picture of the room, but he'd miss key details. He may also lose brainpower from dealing with his doubts about his own capabilities.

GUIDING PRINCIPLE

Experts use the nursing process in dynamic ways because they quickly assess situations and correlate information in their heads. They know what steps can be safely skipped, combined, or delayed. They also know when situations warrant a rigorous, comprehensive, step-by-step approach. If you're inexperienced, you need to follow the steps more rigidly, carefully reflecting on each step. You take risks when you skip or delay steps.

Collecting Versus Analyzing Data

Realize that *collecting and recording information* isn't the same as *analyzing* it. After you *record* the data, you have to do a lot of *analysis* to clarify priority problems and risks. Patients rarely have just *one* problem. They usually have several problems that contribute to one another, requiring you to decide which problems must be dealt with *first*.

Recognizing the need to analyze and reflect on patient information is especially important with the use of computers to store data. Don't just dump information into the computer. Find a way to analyze and reflect on it.

Interplay of Intuition and Logic

Let's examine the question: What roles do intuition (knowing without evidence) and logic (rational thinking based on evidence) play in clinical judgment?

Most agree that intuition—an important part of thinking—is often seen in experts, as a result of years of experience and in-depth knowledge of patients. However, there's a concern that encouraging the use of intuition sends the message that it's okay to act on gut feelings without evidence, which is *risky*. To clarify the use of intuition and logic in clinical judgment, it's important to answer two questions:

1. Is the rapid thinking that goes on in experts' heads simply the use of intuition—what many describe as "knowing in your gut"?
2. If you can't explain your thinking, does it mean that you're thinking intuitively?

To the outsider, many experts' actions seem to be based on intuition alone. But, rapid thinking is usually the result of "thinking in pictures"—like watching a video—and using intuition and logic *together*. There's a dynamic interplay between intuition and logic. Experts make leaps in thinking with intuitive hunches, then almost at the same time draw on logic and past experience to make well-reasoned conclusions.

Experts who juggle several priorities at once often have trouble explaining their thinking at the very moment it's happening. But, if it's really important—for example, if decisions are later challenged in court—they can readily reconstruct the logic of their thinking (and if they can't, they're in trouble).

Clinical reasoning requires using your whole brain—both the intuitive-right and logical-left sides. Use intuitive hunches as guides to search for evidence. Use logic to formulate and double-check your thinking, ensuring that your conclusions are based on the best available facts. In important situations, be careful about acting on intuition alone. Ask questions like “Does this make logical sense?” “How do I know I'm right?” “Could this situation actually be counterintuitive?” and “What could go wrong if I act on intuition alone?”

GUIDING PRINCIPLE

Intuitive thinking is fostered by two things: (1) In-depth knowledge and experience related to the clinical situations at hand and (2) deep understanding of the patient's normal patterns, circumstances, needs, and desires.

Thinking Things Through

In today's fast-paced world, we must remember the importance of thinking things through and not jumping to conclusions. In fact, this has become such a problem that there's a phrase to describe it: “Ready, fire, aim” (instead of “ready, aim, fire”). This phrase refers to what happens with poor assessment and planning. Critical thinking means not jumping to conclusions or acting on impulse. Time constraints today sometimes push you to make diagnoses before you have all the data. Because of the risks of jumping to conclusions and influencing others to do the same, if you aren't *sure* of the diagnoses or problems, be prudent and say something like “there seems to be issues with (whatever), but there's not enough information to completely understand what's going on.” *Issues* are problems that are still muddy and not clearly defined.

In *Evaluating and Correcting Thinking (Self-Regulating)*, Skill 6.16, in Chapter 6, there's a summary of questions to apply the nursing process to determine whether the depth and breadth of your thinking are sufficient.

What About Creativity and Innovation?

Einstein said, “Problems cannot be solved by the same level of thinking that created them.” Creativity and innovation play key roles in critical thinking, and we all need to learn how to promote them, in both schools and the workplace. We need to know how to transform creativity (a new idea) into innovation (a useful approach that evidence shows improves results).²⁰

To keep patients safe, use *principle-centered* creativity. When you have a creative idea, determine what principles support or negate it. For example, one nurse tried to warm blood before administering it by putting it in the microwave. This is dangerous creativity. Identifying the principles of what happens to protein in the microwave would have stopped this. Figure 4-3 shows an example of principle-centered creativity.

To save time and avoid “reinventing the wheel,” ask questions like, “Is this idea (or way) really better or is it just different?” “What does the research say about this idea? Is this idea useful to *end users*?”

Don't be happy with the status quo. Think outside the box. Ask questions like “Are there new evidence-based approaches we should be using?” “Is there something creative we can do?” “How can technology help?” “Who might be willing to give their time?” and “How can we involve patients and families to get better results?”



FIGURE 4-3 The nurse in this cartoon applied the principle of “moths fly toward the light” to help this patient with a moth in his ear.

Is the Care Plan Dead?

As we continue to use standard plans and EHRs, some nurses wonder, “Is the care plan dead?” The answer is that the care plan is alive and well—it’s just changed. Standards mandate that patients have an individualized recorded plan of care that demonstrates that specific needs and problems are being addressed.

You may not find the care plan all in one place. Rather, parts of the plan may be addressed in different places of the health record (e.g., the nursing assessment may be in one place, routine interventions may be covered in critical paths, an individual plan covered in another, and so on).

Why Learn Care Planning When We Use Computers?

Just as using a calculator doesn’t replace having mathematical and problem-solving principles “in your head,” using HIT and EHR doesn’t replace the need to have basic principles of nursing process and care planning in your head. You need a deep understanding of these principles to apply them to your daily work at the bedside, to discuss patient care with others, and to determine whether the plan of care is sufficiently documented. The memory-jog EASE can help you remember the major care plan components.

Major Care Plan Components

Expected outcomes

Actual/potential problems that must be addressed to reach overall outcomes

Specific interventions designed to achieve the outcomes

Evaluation statements (charting/progress notes)

GUIDING PRINCIPLE

Just as understanding basic mathematical principles gives you the foundation for reasoning through numerical issues, gaining a deep understanding of nursing process and care planning principles is crucial to clinical reasoning. Students learn care planning in a step-by-step way, completing detailed maps and papers. These assignments promote deep personal learning, by forcing learners to “think out loud,” explain their reasoning, identify relationships, and apply *principles*.

EXPANDED ROLES: GREATER ACCOUNTABILITY

Nurses now have greater accountability for various aspects of diagnosis and care management. We have moved from “nurses diagnose and treat only nursing diagnoses” to “nurses diagnose and manage various issues and problems, depending on their knowledge, expertise, and qualifications.” For example, APNs diagnose or manage problems that used to be managed only by physicians (e.g., stable hypertension and common infections).

As nursing responsibilities for all aspects of care grow, you need to have a strong sense of what nurses *do* in relation to managing medical and nursing problems. Think about the following quotes:

*Your doctor’s job is to diagnose your medical problem and prescribe the necessary treatment. My job, as your nurse, is to monitor your body’s response to treatment, help prevent complications before they begin, keep you comfortable, and help you be as independent as possible.*²¹

—Phyllis G. Cooper, MN, RN

*The public needs to know that nurses—regular, ordinary bedside nurses, not just nurse practitioners or advanced practice nurses—are constantly participating in the act of medical diagnosis, prescription, and treatment and thus make a real difference in medical outcomes. Nurses can help the public understand that nursing is a package of medical, technical, caring, nursing know-how—that nurses save lives, prevent suffering, and save money. If nurses wear not only their hearts, but also their brains on their sleeves, perhaps the public . . . will finally understand what nurses know and do.*²²

—Journalist Susan Gordon

The following ICU blog also gives insight into the complexity of nursing today.

Last night I took care of a man who was hypoxic and needed oxygen via mask. Most people tolerate masks fine, but there are a few that just can’t handle having something on their face. He was one of those few. Even though the nasal prongs were doing the trick, the pulmonologist wanted us to use a mask because “he will probably take a turn for the worse eventually.” (Side rant: This is the same pulmonologist who, upon walking onto the unit, said, “Geena, when you have a critically ill patient, wouldn’t it be at the forefront of your mind to have the chart available?” I replied, “Dr. B, the very fact that I have a critically ill patient who is hypoxemic and trying to climb out of bed actually explains why I don’t have the faintest idea where the chart is.”) Anyway, owing to other circumstances, I didn’t immediately connect that the patient became severely agitated when we applied the oxygen mask. I had to give him an antipsychotic shot and spent as much time as I could at his bedside to avoid having to restrain his arms (which I correctly assumed would make him worse and wouldn’t work anyway. . . when another nurse watching him for me went ahead and restrained him, he just bent over and put his face to his hand to take the mask off). I tried to chat with him about other things to help take his mind off the bothersome mask, and he finally stopped struggling against

the restraints and lay back on the pillow. After a few moments, he looked at me and asked, "How long have you been working here?"

"Three years," I replied.

"Before that, did you get your bachelor's, or your master's . . . ?" Before I could answer him, he finished, "IN TORTURE???"

I'm sure it's not good nursing etiquette, but I laughed quite hard at that—which made him laugh. I eventually decided that the amount of energy he was exerting to remove the mask far outweighed the benefits of it, so I switched him to the nasal prongs again. After a few minutes of low oxygen saturation (O_2 sats) readings, he calmed down considerably and actually drifted off to sleep. His O_2 sats came up perfectly, and the rest of the night was fabulous.*

UNIQUE NURSING ROLE

As a nurse, you deal with many aspects of managing health problems. However, there's one thing that's considered to be nurses' unique role: Identifying and managing issues to related *human responses* (how health problems influence each person's sense of well-being and ability to function independently as a bio-psychosocial human being).²³ For example, suppose that you're caring for Mrs. Hernandez, who has the medical problem of congestive heart failure. Her *response* to the heart problem is *activity intolerance*. As a nurse, you're accountable for monitoring and managing the nursing problem of *activity intolerance*. But you must assess the status of the *cardiac problem* before dealing with the *activity intolerance*. If her vital signs are *unstable*, you're accountable for notifying the physician or APN before dealing with the *activity intolerance*. As you can see, there's a close relationship between medical problems and human responses. Your role is to focus on both the problems and the human responses.

Boxes 4-7, 4-8, and 4-9 show common nursing problems and potential complications of medical problems and treatment.

BOX 4-7 Common Priority Nursing Problems in Acute Care*

- Risk for infection or infection transmission
- Airway and breathing problems
- Impaired swallowing—risk for aspiration
- Safety risks—fall risks
- Impaired circulation
- Altered mental status—confusion
- Impaired communication
- Pain, nausea, discomfort
- Anxiety, mental stress
- Risk for violence or self-harm
- Poor oral hygiene†
- Risk for pressure ulcer or impaired skin integrity
- Immobility
- Activity intolerance
- Self-care deficits (feeding, bathing, dressing, toileting, activities of daily living)
- Altered nutrition
- Altered bowel elimination
- Altered urinary elimination
- Constipation
- Diarrhea
- Dehydration
- Insomnia—sleep deficits
- Patient education (safety and infection risks, illness, disability management, immobility hazards, health promotion, risk management)
- Medication and other treatment management problems
- Smoking cessation, weight management
- Spiritual distress

*Partial list.

†Linked with incidence of pneumonia.

*Source: Modified with permission from <http://www.codeblog.com>.

Angina/Myocardial Infarction

Dysrhythmias
Congestive heart failure/pulmonary edema
Shock (cardiogenic, hypovolemic)
Infarction, infarction extension
Thrombi/emboli formation (pulmonary emboli, stroke)
Hypoxemia
Electrolyte imbalance
Acid-base imbalance
Pericarditis
Cardiac tamponade
Cardiac arrest
See also Kidney Disease

Lung Diseases (e.g., Asthma, Chronic Obstructive Pulmonary Disease)

Hypoxemia
Acid-base and electrolyte imbalance
Respiratory failure
Infection
See also Pneumonia and Angina/Myocardial Infarction

Pneumonia

Respiratory failure
Dehydration
Sepsis/septic shock
Pulmonary embolus
Pulmonary hypertension
See also Angina/Myocardial Infarction

Diabetes

Hypoglycemia (diabetic shock)
Hyperglycemia (diabetic coma)
Compromised circulation—pressure and leg ulcers
Delayed wound healing
Hypertension
Eye problems (retinal hemorrhage)
Infection
Dehydration
See also Angina/Myocardial Infarction and Kidney Failure

Hypertension

Stroke (cerebrovascular accident)
Transient ischemic attacks
Hypertensive crisis
See also Angina/Myocardial Infarction and Kidney Failure

Kidney Disease

Congestive heart failure
Kidney failure

Edema
Hyperkalemia
Electrolyte/acid-base imbalance
Anemia
See also Hypertension and Urinary Tract Infection

Urinary Tract Infection

Septic shock
Kidney failure

HIV and Immunosuppression

Opportunistic infections (e.g., tuberculosis, herpes, intestinal organisms)
Severe diarrhea
See also Lung Diseases and Pneumonia

Fractures

Bleeding (internal or external)
Bone fragment displacement
Edema/pressure points
Compromised circulation
Nerve compression
Compartment syndrome
Thrombus/embolus formation
Infection

Head Trauma

Respiratory depression
Airway occlusion
Aspiration
Bleeding (internal or external)
Shock
Brain swelling
Increased intracranial pressure
Seizures, coma
Hyperthermia/hypothermia
Infection

Other Trauma

See Anesthesia/Surgical Invasive Procedures in Box 4-9.

Depression/Psychiatric Disorders

Reality distortion
Dehydration, malnutrition
Suicide
Violence (against self or others)
Self-protection problems
Trauma, death
Medication side effects

BOX 4-9 Complications of Treatments and Procedures**Anesthesia: Surgical Procedures**

Respiratory depression
 Airway management problems
 Aspiration
 Atelectasis, pneumonia
 Bleeding (internal or external)
 Hypovolemia/shock
 Infection/septic shock
 Fluid/electrolyte imbalance
 Thrombus/embolus
 Paralytic ileus
 Urinary retention
 Incision complications (infection, poor healing, dehiscence/evisceration)
 See also Angina/Myocardial Infarction (Box 4-8).

Cardiac Catheterization: Invasive Monitoring

Bleeding (internal or at insertion site)
 Hemopneumothorax
 Thrombus/embolus formation
 Stroke
 Infection/sepsis
 See also Angina/Myocardial Infarction (Box 4-8).

Chest Tubes: Thoracentesis

Bleeding (internal or at insertion site)
 Hemopneumothorax
 Atelectasis
 Chest tube malfunction/blockage
 Infection/sepsis

Foley Catheter

Infection/sepsis
 Catheter malfunction/blockage
 Bladder spasms

Intravenous Therapy

Bleeding (internal or at insertion site)
 Air embolus
 Phlebitis/thrombophlebitis
 Infiltration/extravasation/tissue necrosis
 Fluid overload
 Infection/sepsis

Medications

Adverse reactions (allergic response, exaggerated response, side effects)
 Drug interactions
 Overdose/toxicity

Nasogastric Suction

Electrolyte imbalance
 Tube malfunction/blockage
 Aspiration
 Bleeding

Paracentesis

Bleeding (internal or at insertion site)
 Paralytic ileus
 Infection/sepsis

Skeletal Traction/Casts

See Fractures (Box 4-8)

Source: Copyright 2015. R. Alfaro-LeFevre. <http://www.AlfaroTeachSmart.com>

NURSING SURVEILLANCE: MONITORING CLOSELY

Another key nursing role is nursing surveillance—closely monitoring patients to detect signs and symptoms that may indicate the onset of complications. Unless you're an APN, you're not qualified to diagnose and treat medical diagnoses independently. But, you *are* accountable for the following aspects of care:

- **Detecting and reporting signs and symptoms** that may suggest a medical diagnosis or complication (e.g., notify the physician if a patient has fever, productive cough, fatigue, and malaise—all symptoms of *pneumonia*).
- **Managing treatment according to standards and plans of care** (e.g., with *pneumonia*, monitor lung sounds, oxygen administration, IV management, and vital signs).
- **Preventing complications** by recognizing patients at risk, monitoring closely, and implementing preventive actions (e.g., elderly postoperative patients are at risk for *pneumonia*—a key priority is to monitor respiratory and hydration status and help them cough and breathe deeply).
- **Managing human responses to health problems** (e.g., humans often respond to having pneumonia by experiencing fatigue, lack of appetite, dehydration, and difficulty clearing mucus).

- **Managing problems with independence** (e.g., if the person with pneumonia lives alone, he or she is likely to need assistance with shopping and preparing meals).
- **Managing emotional and physical discomfort**, through both prescribed and holistic strategies (e.g., managing pain medications, using therapeutic communication, and repositioning patients).
- **Promoting optimum health, sense of well-being, and quality of life:** Nurses promote health by teaching about healthy behaviors.
- **Monitoring treatment and medication regimens for adverse reactions**, as well as individualizing the regimens within prescribed parameters. Nurses are very involved in ensuring that overall regimens are as safe, effective, cost-effective, and convenient as possible, considering the age, culture, religion, roles, occupation, and lifestyles of those involved. For example, with *pneumonia*, ask whether prescribed antibiotics are the best available, considering cost, convenience, and results.

GUIDING PRINCIPLE

Nurses play key roles in monitoring for complications related to medication and treatment regimens. Medication reconciliation—checking to ensure that the patient’s medication orders are up-to-date and complete—is the first step to reducing complications.

Use **TACIT** to remember the key things you must monitor when caring for patients on various medication and treatment regimens:

Therapeutic effect—Is there a therapeutic effect?

Allergic or adverse reactions—Are there allergic or adverse reaction signs?

Contraindications—Are there contraindications to giving this drug?

Interactions?—Are there possible drug interactions?

Toxicity or overdose—Are there signs of toxicity or overdose?

Activating the Chain of Command

When a patient’s status indicates the need for more qualified help, you are responsible for *activating the chain of command*. Activating the chain of command means following communication policies and *staying with the problem* until the appropriate qualified professional has responded. Think about the following example: You give medication for incision pain, but the patient has no relief. You try repositioning and other holistic measures, but the person still has no relief. You leave two messages for the doctor to call you about this problem. One hour later, you haven’t heard from the doctor, and the patient is still in distress. You are accountable for activating the chain of command and notifying your supervisor about this problem and finding out what to do next.

GUIDING PRINCIPLE

Using sound clinical judgment means drawing valid conclusions and acting appropriately based on those conclusions (e.g., monitoring closely, initiating treatment, or contacting a more experienced professional to activate the chain of command).

Monitoring for Dangerous Situations

While preventing errors is addressed in detail in *Preventing and Dealing with Mistakes Constructively*, Skill 7.8, Chapter 7, this section addresses the need to monitor for dangerous situations as part of nursing surveillance. Front-line nurses play an important part in identifying, interrupting, and correcting mistakes. Think about the following strategies that research shows nurses use to prevent and correct mistakes.

Strategies to Identify, Interrupt, and Correct Errors

The following strategies will help you identify and manage errors:²⁴

- **Error identification strategies:** Knowing the patient, knowing the “players,” knowing the plan of care, surveillance, knowing policy/procedure, double-checking, using systematic processes, and questioning.
- **Error interruption strategies:** Offering help, clarifying, and verbally interrupting
- **Error correction strategies:** Persevering, being physically present, reviewing or confirming the plan of care, offering options, referencing standards or experts, and involving another nurse or physician.

Figure 4-4 shows how nursing surveillance for dangerous situations and safety nets promote early intervention and keep patients safe.

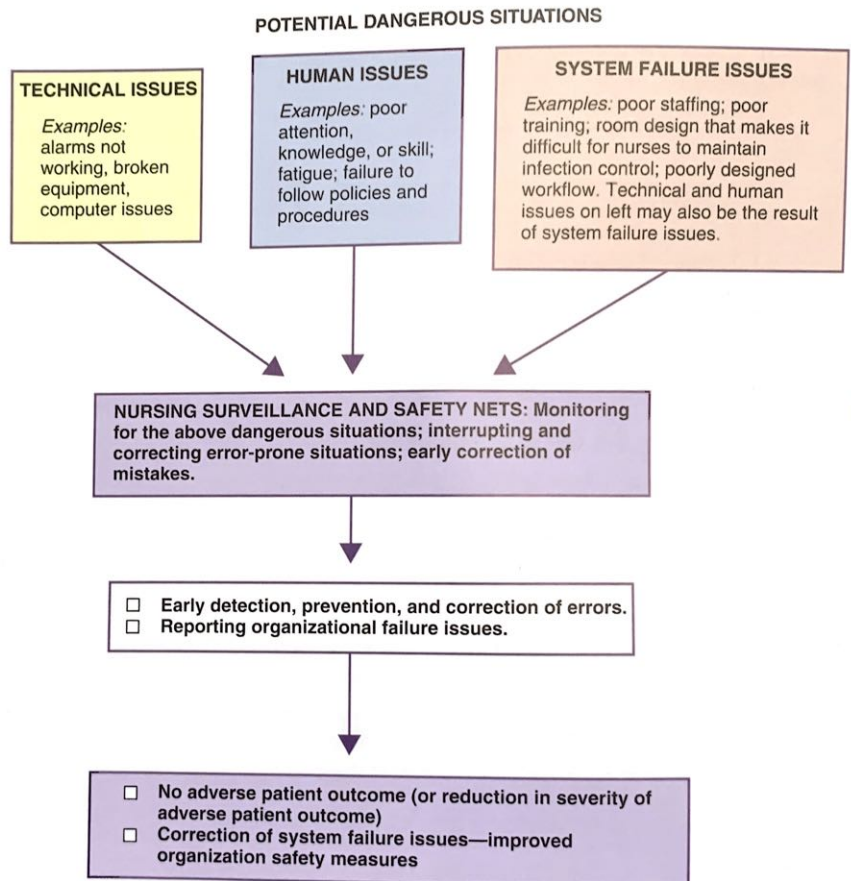


FIGURE 4-4 Nursing surveillance and safety nets. Monitoring for dangerous situations. (Source: © 2015, R. Alfaro-LeFevre. <http://www.AlfaroTeachSmart.com>. Recommended: Henneman, E., Gawlinski, A, Blank, F, Henneman, P. L., Jordan, D., & McKenzie, J. B. (2010). Strategies used by critical care nurses to identify, interrupt, and correct medical errors. *American Journal of Critical Care*, 19, 500–559.)

Failure to Rescue

Let's finish this section on surveillance by addressing an issue identified by researchers Clarke and Aiken at the University of Pennsylvania: Failure to Rescue.^{25,26} Failure to Rescue is a clinician's inability to save a hospitalized patient's life when he or she experiences a complication (a condition not present on admission).²⁶ This research, and subsequent work by others, has significantly improved our ability to identify and correct issues related to nursing surveillance.

Next is a summary of what you must know about common problems and complications to be proactive and provide competent nursing surveillance.

What You Must Know About Common Health Problems

- What are the signs, symptoms, and risk factors of each problem or complication?
- What is the related pathophysiology?
- What are the common issues with independence and quality of life related to these problems?
- How do you monitor for the status or onset of each problem?
- What interventions are commonly used to prevent and manage each problem?
- What are the common complications of each problem?
- Who is ultimately accountable for developing and recording a plan to monitor, prevent, and manage each problem? (Accountability changes, depending on setting and complexity of the problem.)
- How do you find out what your responsibilities are in relation to each problem?

DEVELOPING CLINICAL JUDGMENT

Developing clinical judgment is one of the most important and challenging aspects of becoming a nurse. It's important because people's lives depend on it. It's challenging because thinking in the clinical setting is often fraught with more anxiety and risks than other situations.

Clinical judgment entails things like knowing how to recognize when a patient's status is changing and what to do about it. For beginners, this is particularly hard because it requires you to recall facts, put them together into a meaningful whole, and apply the information to a clinical situation that may be fluid and changing. For example, you note that someone is pale and sweaty and has a rapid pulse. To use good clinical judgment, you must be able to *recall* that these are symptoms of shock and that an immediate priority is to take a complete set of vital signs to further evaluate the patient's condition.

Legal Implications of Diagnosis

As nursing responsibilities grow, it's important to realize that the terms *diagnose* and *diagnosis* have legal implications. They imply that there's a specific problem that requires management by a *qualified professional*. If you make a diagnosis, it means that you accept accountability for accurately naming and managing it. If you treat a problem or allow a problem to persist without ensuring that the *definitive diagnosis—the most specific, correct diagnosis—has been made*, you may cause harm and be accused of negligence. For example, if you deal with *chronic constipation* without determining whether it has had adequate medical evaluation, you may be missing a *major symptom of colon or ovarian cancer (constipation)*.

GUIDING PRINCIPLE

To keep patients safe, remember the legal implications of diagnosis. When you treat signs and symptoms or start people on diet or exercise routines, always ask: "Have these signs and symptoms been evaluated by a primary care provider (e.g., medical doctor or APN)?" "Does this diet or exercise routine need approval?" Let the caution, "See your doctor first" resound in your head.

Practice Scope and Clinical Decision-Making

With nursing roles changing, how do you know when you are the one who is allowed—who is accountable—for diagnosing and managing specific problems? How do you determine your scope of practice? This question is especially difficult for beginners.

Scope of nursing practice varies from state to state and one setting to another, depending on (1) laws outlined in your state nursing practice act; (2) rules and regulations defined by your state board of nursing (SBN), which is in charge of enforcing the state laws and specifying what nurses may and may not do; and (3) professional standards, policies, procedures, competencies, and job descriptions. Figure 4-5 shows the questions you need to answer to make decisions about your scope of nursing practice.

Decision-Making and Standards and Guideline

Critical thinking and clinical reasoning are guided by professional standards. Think about the following descriptions of *standards*.²⁷

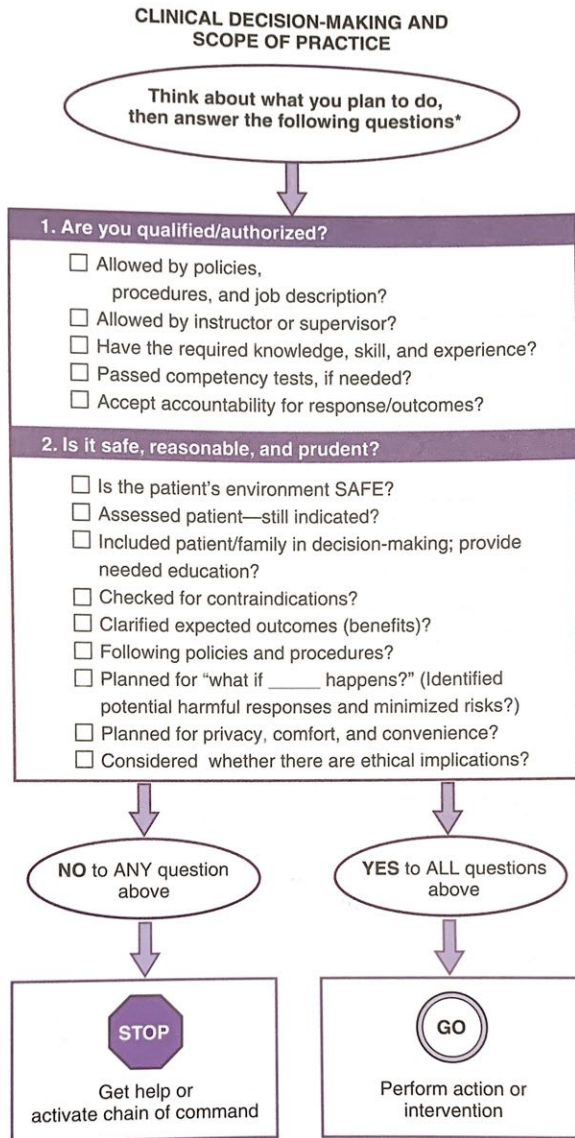
- Authoritative statements by which the nursing profession describes the responsibilities for which its practitioners are accountable.
- Reflect the values and priorities of the profession, and provide direction for professional nursing practice and a framework for the evaluation of this practice.
- Define the nursing profession's accountability to the public and the outcomes for which registered nurses are responsible.

National practice standards give broad standards that address how nurses are expected to plan and give care. ANA practice standards—which delineate use of the nursing process to plan and give care—apply to all nursing care. Each specialty organization (e.g., American Association of Critical Care Nurses, Association of Rehabilitation Nurses) develops its own unique standards. The Joint Commission sets many standards for health care organizations. These standards are often tailored to each organization. Each health care organization usually develops standards to guide decision-making in specific situations (e.g., standards of care, policies, protocols, procedures, care plans, critical paths).

When determining care management, there are three main questions to answer related to standards:

1. Has this facility developed specific standards, guidelines, or policies for the care of this specific situation? For example, if you're caring for someone with a mastectomy, ask, "Has this facility developed guidelines or pathways for someone undergoing a mastectomy?"
2. Are there national or local EBP guidelines relating to this particular problem?
3. To what degree do these standards and guidelines apply to my patient's particular situation?

While practice standards and guidelines are key tools that help you make care decisions, you don't follow them blindly. Decide whether they are appropriate by carefully comparing your patient's situation with the information in the guidelines. For example, suppose that you're looking after an elderly man after prostate surgery, and the critical path for this problem states that on the first postoperative day, the patient gets out of bed twice. On the first postoperative day, you assess the man and find he has chest pain. This finding is significant enough for you to question whether he should indeed get out of bed. Could this man be suffering a complication such as myocardial infarction or pulmonary embolus? In this case, it's your responsibility to report the symptoms and keep the man in bed until a physician or more qualified nurse evaluates him.



*Scope of practice varies from state to state depending on state practice acts and state Boards of Nursing (SBN) rules and regulations.

FIGURE 4-5 Clinical decision-making. (Source: © 2015, R. Alfaro-LeFevre. <http://www.AlfaroTeachSmart.com>.)

Delegating Safely and Effectively

With so much to do and so few to do it, delegating safely and effectively is a crucial nursing skill. Delegation—authorizing someone to perform a selected task in a selected situation, while retaining accountability for results—is an important part of managing time and resources.^{27,28} It's also important for passing the NCLEX[®] exam because it tests knowledge of delegation principles. When you delegate tasks, you're accountable for decisions made, actions taken, and patient responses during the course of that delegation.

Delegating effectively—a skill that's developed over time with experience—takes significant critical thinking and judgment. It requires you to understand both patients' needs and workers' needs and capabilities.

GUIDING PRINCIPLE

You are accountable for the outcomes of your decision to delegate. When you delegate tasks, teach and supervise as needed. Follow up after tasks are done by assessing patient responses yourself. This does two things: (1) you have firsthand knowledge of how the patient responded to care, and (2) when workers know that you check results directly with the patient, they're more likely to do a good job.

The following section summarizes when it's safe to delegate, the four steps of delegation, and the five “rights” of delegation.^{29,30}

When Is It Safe to Delegate?

Delegate when:

- The patient is stable.
- The task is within the worker's job description and capabilities.
- You're able to do the teaching and supervision the worker needs.
- You've planned how to monitor patient results yourself.

Don't delegate when:

- Complex assessment, thinking, and judgment are required.
- The outcome of the task is unpredictable.
- There's increased risk for harm (e.g., arterial puncture can cause more severe complications than venous puncture).
- Problem-solving and creativity are required.

Four Steps of Delegation

1. **Assess and Plan:** Consider the patient, the task, and worker competencies to make a plan for what tasks you will assign to whom.
2. **Communicate:** Give clear, concise, complete directions about what must be done, how it must be done, what needs reporting, and when to touch base with you (verify that worker understands directions).
3. **Ensure Surveillance and Supervision:** Monitor the patient and worker performance as frequently as needed based on the above.
4. **Evaluate and Give Feedback:** Evaluate the effectiveness of the delegation by assessing patient response yourself. Decide whether you need to make changes in the patient's plan of care or how the worker is completing the task. Evaluate the worker's performance, and give teaching and feedback as needed (this helps the worker improve skills and ultimately frees you for other important work).

Five “Rights” of Delegation

Delegate: (1) the *right task*, (2) in the *right situation*, (3) to the *right worker*, (4) with the *right direction and communication*, and (5) the *right teaching, supervision, and evaluation*.

TEN STRATEGIES FOR DEVELOPING CLINICAL JUDGMENT

Developing clinical judgment comes with *clinical experience*. It requires a commitment to study common health problems, seek out clinical experiences, and come prepared to the clinical setting. The following strategies help you plan ahead and make the most of clinical learning opportunities.

1. **Keep references—texts, handheld devices, pocket guides, and personal “cheat sheets”—handy, and be sure that you:**
 - **Learn terminology and concepts.** If you encounter words like *embolus*, *thrombus*, or *phlebitis* and you don't know what they mean, look them up as you encounter them, so that they become part of your long-term memory. Learning terms *in context* helps your brain to store information in related groups, rather than as isolated facts.
 - **Become familiar with normal findings** (e.g., normal lab values, assessment findings, disease progression, growth and development) before being concerned with abnormal findings. Once you know what's normal, you'll readily recognize when you encounter information that's **outside the norm** (abnormal).
 - **Ask why?** Find out why normal and abnormal findings occur (e.g., “Why is there edema in heart failure, yet none when the heart is functioning normally?”).
 - **Learn problem-specific facts.** You need to know how problems usually present themselves (their signs and symptoms), what usually causes them, and how they're managed. The following box gives questions you need to answer to be prepared for going to the clinical setting.
2. **Apply principles of the nursing process.** For example, assess before acting, anticipate, and change approaches as needed. Make judgments based on evidence rather than guesswork.

Questions to Answer Before Going to the Clinical Area

- What common problems are seen in this particular setting?
- What are the signs and symptoms of these problems?
- What risk factors do I know or suspect patients in this setting have?
- What do I assess to determine the status of these signs, symptoms, and risk factors?
- What are the usual causes of these problems?
- What do I assess to determine the status of the causes of the problems?
- How do these problems usually progress, and how are they managed?
- How can these problems be prevented?
- What are the signs and symptoms of potential complications of these problems, and how will I monitor for them?
- How can I be prepared to manage potential complications?
- What medications and treatments are likely to be used, and why?
- What medication-related or treatment-related problems might I encounter, how will I monitor to detect them, and how are they usually managed?
- What population-based factors (e.g., age group, lifestyle, culture, beliefs, language needs) might have bearing on health practices related to these health problems?
- What are the key things people need to know to manage these problems independently, and what will I do to ensure that this knowledge is gained?

GUIDING PRINCIPLE

Always consider your direct assessment of the patient to be the primary source of information (e.g., if someone tells you a patient has pain, assess the pain *yourself* before giving a medication). **Always ask yourself whether your patient's signs and symptoms could be related to medical problems, medication problems, or possible allergies.** Use the memory-jog "MMA" to remember "medication problems, medical problems, allergies."

- Because assessment tools vary from organization to organization, ask your preceptor, teacher, or manager whether there are printed or electronic standard tools to guide thinking and documentation in various situations. Be sure to ask for *comprehensive assessment tools* and *focused assessment tools*. Comprehensive tools are usually used for patient admissions. Focus assessment tools are usually used to monitor specific problems.
 - Be sure you understand the reasoning behind the tools you use. Finding out *why* you collect each piece of data on the tool helps you learn what's *relevant* to each situation.
 - Don't just record the data. Reflect on what you recorded, looking for patterns and omissions.
 - Realize that the tool you use affects how you think about the data. For example, Box 4-10 shows *Gordon's Functional Health Patterns*, a framework that's often used to organize data to identify problems with *human functioning*. Figure 4-6 shows the *Body Systems* approach to collecting data, which helps identify medical problems. Realize that using both ways of organizing data—*Functional Health Patterns* and *Body Systems*—helps you to identify nursing problems (e.g., human responses or problems with independence and well-being) and signs and symptoms of medical issues that should be reported to the primary care provider.
3. **Learn to think ahead, think-in-action, and think back** (reflect on your thinking).
 4. **Follow policies, procedures, and standards of care carefully, with a good understanding of the reasons behind them.** Policies, procedures, and standards of care are designed to help you use good judgment, but you must know the *reasons behind them* to know when and how they apply.
 5. **Determine a system that helps you make decisions about what must be done now and what can wait until later** (see Setting Priorities, Skill 6.13, in Chapter 6).

BOX 4-10 Gordon's Functional Health Patterns

1. **Health perception–health management pattern:** Perception of health and well-being; knowledge of and adherence to health promotion regimens
2. **Nutritional-metabolic pattern:** Usual food and fluid intake; height, weight, age
3. **Elimination pattern:** Usual bowel and bladder elimination patterns
4. **Activity-exercise pattern:** Usual activity and exercise tolerance
5. **Sleep-rest pattern:** Usual hours' sleep and rest.
6. **Cognitive-perception pattern:** Ability to use all senses to perceive environment; usual way of perceiving environment
7. **Self-perception or self-concept pattern:** Perception of capabilities and self-worth
8. **Role-relationship pattern:** Usual responsibilities and ways of relating to others
9. **Sexuality-reproductive pattern:** Knowledge and perception of sex and reproduction
10. **Coping-stress tolerance pattern:** Ability to manage and tolerate stress
11. **Value-belief pattern:** Values, beliefs, and goals in life; spiritual practices

Source: Summarized from Gordon, M. (2015). *Manual of nursing diagnosis* (13th ed.). Sudbury, MA: Jones & Bartlett.

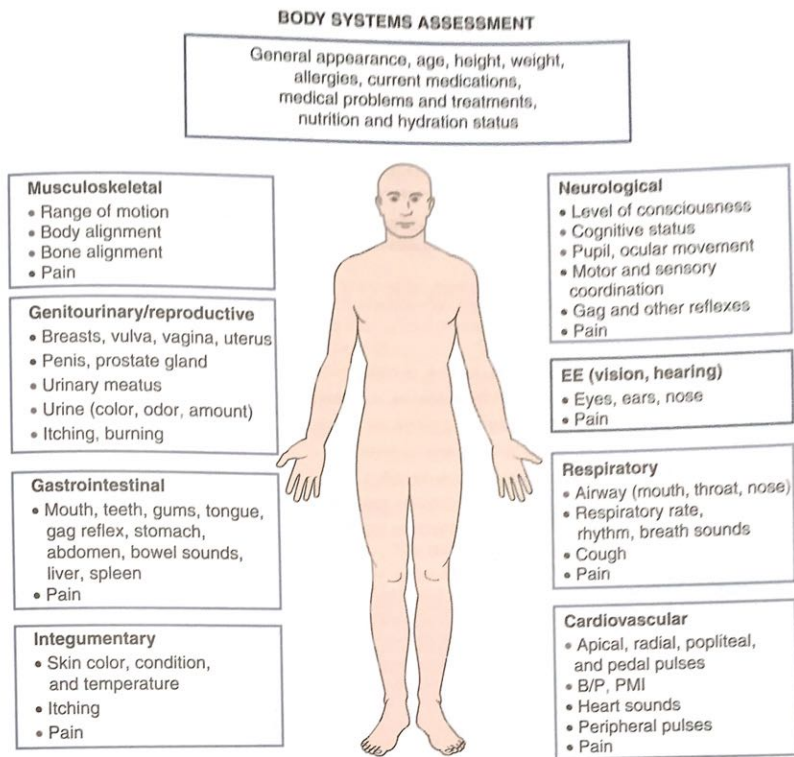
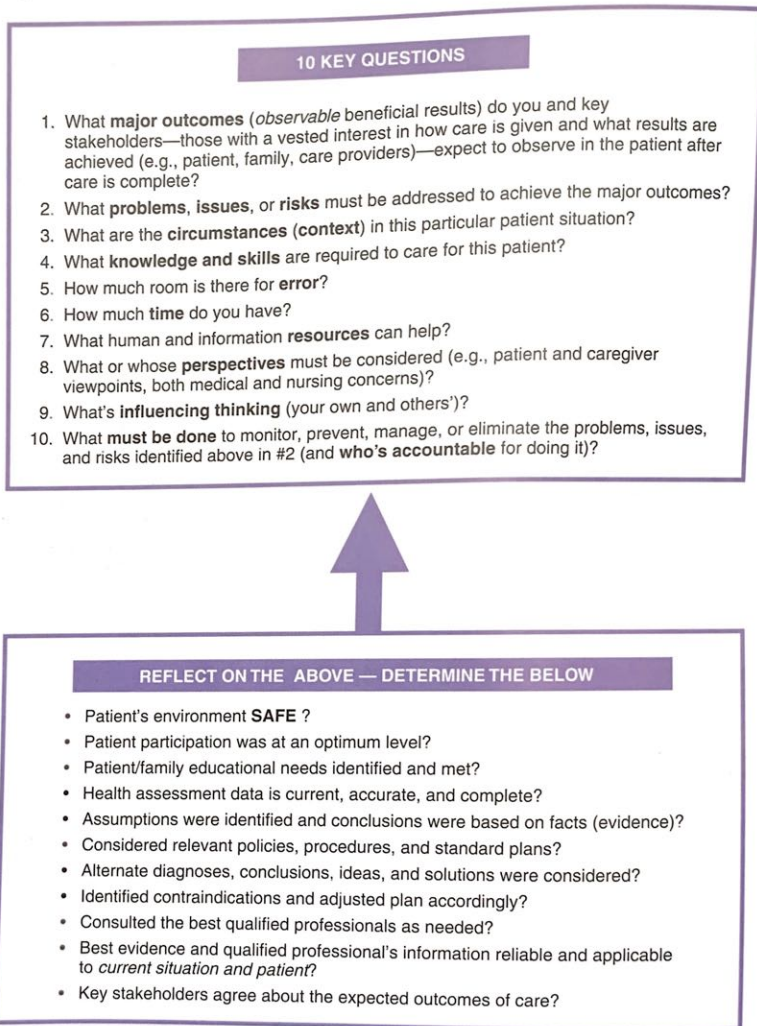


FIGURE 4-6 Body systems assessment. To prioritize, go clockwise, starting at “12 o’clock.”

6. **Never perform actions if you don’t know why they’re indicated, why they work** (the rationale), and what the risks for harm are in the context of the current patient situation.
7. **When in doubt, activate the chain of command—get help from a qualified professional.** Your patients’ right to timely care takes precedence over your need to learn independently. Other professionals can help you decide whether you have time to look up your concerns in a reference. Also learn from your peers’ experiences. Collaborating with classmates is a win-win situation: Asking questions like “What did you look for in that patient?” “How did you know?” and “What was the biggest thing you learned?” helps your classmates clarify their knowledge and helps you learn from being involved in real situations. However, don’t use names or talk about patients in public places where others might overhear (e.g., cafeteria, elevators)—you may be violating HIPAA privacy laws.
8. **Seek out simulated, observational, and real experiences.** Become familiar with the technology you’ll use (e.g., IV pumps, computers, heart monitors) and the types of problems you’ll encounter before you go to the clinical setting.
9. **Remember the importance of caring.** Patients describe caring as *vigilance* (attentiveness, highly skilled practice, basic care, nurturing, and going the extra mile); *mutuality* (building relationships among nurses, patients, and families); and *healing* (lifesaving behaviors and freeing the patient from anxiety and concerns).

10. When planning time for nursing care, consider the **time required** for (a) direct care interventions (things you do directly for or with the patient, such as helping someone walk), and (b) indirect care interventions (things you do away from the patient, such as consulting with the pharmacist or analyzing lab study results).

Figure 4-7 shows the relationship of 10 key questions and the reflection you need to do to develop sound clinical judgment.



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FIGURE 4-7 Reflecting on 10 key questions to make sound clinical judgment.

CHARTING THAT SHOWS CRITICAL THINKING

Let's end this chapter with a few words of caution: Whether you use paper or electronic charting, be sure your charting shows critical thinking. Your charting is used by others to make patient care decisions. It also reflects whether you're a critical thinker. If your supervisor or instructor reads your charts and sees nothing but rote repetition of what the person ahead of you charted, a flag goes up that says, "This person never seems to have an original thought." Follow policies and procedures for charting carefully, because they are designed to communicate important aspects of care, keep patients safe, and meet legal and third-party payer requirements. You may use a system of flowcharts and check marks, but always ask yourself whether there is something *different* today that you should add.

Make sure your charting reflects use of the nursing process and a strong focus on the following:

1. **Assessment:** What you assessed in the patient
2. **Conclusion:** What you concluded about your patient—state the facts to support your conclusions
3. **Interventions and Evaluation:** What you did, and how the patient responded (remember: assess, intervene, reassess)
4. **Safety Measures:** Anything you did to correct or prevent adverse responses

Example: Rates incision pain at 7. Dressing clean and dry. Vital signs normal. Appears stable. Pain med given. Bedrails raised. Call bell given and told to call for help if needed. Reassessed 30 min later and rates pain at 2.

GUIDING PRINCIPLE

Timely charting improves accuracy and helps you to pick up patient problems and recognize things you forgot to do. Chart as soon as you can. If you can't get to the chart or computer right away, jot important data down on a personal worksheet. *Think* about what you record. When using computers, don't just dump data in—find ways to *reflect* on your charting and patient care (using printouts or summary screens).

CRITICAL THINKING EXERCISES 4.2

Example responses are in Appendix A.

1. **Fill in the blanks in a to h by choosing from the following words:** actions, decisions, outcomes, qualifications, accountability, head, nursing, innovation, incomplete, same, knowledge, experience, reflecting, records, legal.
 - a. Analyzing and _____ on your patient assessment and related health _____ is key to clinical reasoning.
 - b. Intuition is often seen in experts, as a result of years of _____ and in-depth _____ of patients.
 - c. _____ or inaccurate data may cause you to jump to conclusions and influence others to do the _____.
 - d. Principle-centered creativity and _____ play key roles in critical thinking.
 - e. Using electronic charting and decision-support systems doesn't replace the need to have _____ process and care planning principles in your _____.
 - f. Depending on knowledge, expertise, and _____, nurses have increased _____ for diagnosing and managing various problems.
 - g. The terms *diagnose* and *diagnosis* have _____ implications.

- h. When you delegate tasks, you're accountable for _____ made, _____ taken, and patient _____ during the course of that delegation.
2. Considering the differences in novice and expert thinking, respond to a, b, and c:
 - a. Compare how your brain thinks when encountering familiar situations with what happens when you encounter unfamiliar situations. For example, think of the difference between what you see and understand the minute you walk into your own home, compared to what it's like when you are a first-time visitor in someone's home.
 - b. Think about the following analogy: When you go to a new clinical setting or have a patient for the first time, it's like watching a movie for the first time. Each time you see the same movie over and over, you understand it better and see new things. The same thing happens when you are familiar with patients, staff, and routines in a particular clinical setting.
 - c. What are some things you can do to increase your ability to function in unfamiliar situations?
 3. Using the clinical decision-making guide (Figure 4-5, page 107), decide whether you're allowed to irrigate a nasogastric tube in the clinical setting where you are currently working.
 4. An important part of developing clinical judgment is being willing to focus on wants and needs of patients and families. How would you interpret the statements made by the following off-going nurse?

On-coming nurse: "How is the family doing?"

Off-going nurse: "They seem to be fine. They don't say much, but they're sticking to visiting hours and have been here 15 minutes this morning and 15 minutes this afternoon."
 5. How do you use the memory jogs MMA and EASE?
 6. Imagine that you have a postoperative patient whose blood pressure is alarmingly high. You call the doctor twice, but there is no response. How will you know what to do to activate the chain of command?
 7. Suppose your neighbor asks you whether it's okay to give aspirin to her normally healthy 5-year-old who is alert, but woke up with a fever of 100° F, orally. What would you do?

THINK, PAIR, SHARE

With a partner, in a group, or in a journal entry:

1. Discuss the following in relation to the ICU blog (page 99).
 - a. Risks of applying restraints
 - b. Independent thinking on the part of the nurse
 - c. The value of the human relationship between the nurse and the patient
 - d. The many things that influence hypoxia
2. Take the stress scale test at <http://www.teachhealth.com>. Identify the stressful things in your life. How are you handling them? What healthy behaviors might help?
3. Discuss the emerging lessons on medication reconciliation posted at <http://healthit.ahrq.gov/ahrq-funded-projects/emerging-lessons/medication-reconciliation>.
4. Check to be sure you're familiar with your state practice act, which delineates what actions you can have the legal authority to perform: Read Protect Yourself: Know your state practice act at <http://ce.nurse.com> (search CE548).
5. Discuss the challenges of delegating effectively as addressed in this chapter.
6. Address some of the issues discussed in The Impact of Documentation in Nursing on Quality Care posted at <http://www.nursetogether.com/documentation-impact-on-quality-of-care->
7. Shared governance—an innovative leadership approach that gives nurses control over their practice and influence over areas previously controlled only by managers—improves patient

- outcomes and nurses' job satisfaction. Discuss some of the resources posted at the Forum for Shared Governance website (<http://sharedgovernance.org/>).
8. Decide where you stand in relation to achieving the outcomes at the beginning of this chapter (page 75).
 9. Based on your personal experiences, discuss the implications of the following *Critical Moments* and *Other Perspectives* in this chapter.

CRITICAL MOMENTS

Reflection Improves Clinical Reasoning

Learning how to reflect on your thinking in an objective, honest way is a powerful way to improve clinical reasoning. When you deconstruct your thinking—reflect on it and break it down into what was going on in your head at certain points in time—you can identify “pieces of thinking” that you’re doing well and “pieces” you need to correct (lessons learned). You also can identify system things that need correcting. For example, one nurse deconstructed her thinking like this:

I came to work very tired because I had been up with a sick child. We were very busy and I was handling several priorities. The computer froze again and I had to deal with that. I totally know our protocols and time frames for this problem, but I simply couldn't get the patient to x-ray within the one-hour time frame. I probably should have gotten help. The thing that bothers me the most though, is that I made some assumptions that I shouldn't have. We all make assumptions, but I'll assess more carefully next time, even when it seems to be a straightforward problem.

Computers Believe What You Tell Them

Have you heard anyone say, “You have to tell the computer that . . . ? While we have some safeguards in place that prevent you from entering incorrect information, don’t let your brain slip into neutral simply because you’re entering data into a computer. Keep an active mind and consider both the data and the patient’s circumstances.

Standard Tools Improve Human Performance

To grasp the importance of helping our brains remember by using computers and standard tools, answer this question: The next time you’re on an airplane, do you want the pilot to rely on his or her memory to check that “all systems are go”? Do you want him to use his own tool? Or, do you want him to use a tool designed by the Federal Aviation Administration? Consider this in relation to thinking in the clinical setting.

Elderly and Chronically Ill: Don't Assume

When dealing with elderly and chronically ill clients, be especially careful of the human tendency to make assumptions. The complexity of their health status often hides problems that might otherwise be quite obvious. For example, we had a 70-year-old man with chronic back pain. He complained of increasing pain for weeks before someone said, “Maybe it’s not his back. Has anyone checked his kidneys?” Only then were kidney stones diagnosed. Getting results requires you to examine alternative explanations, problems, or solutions. The more alternative solutions, explanations, and problems you consider, the more likely it is that you’re thinking critically.

“No Pain, No Gain” Can Damage

While the “No pain, no gain” rule may be true during physical therapy, it can backfire on you. For example, I started lifting weights to strengthen my arm muscles. I began to have shoulder pain and told myself to “work through the pain.” The result was a damaged shoulder joint. Never work through pain (or allow a patient to do it) without checking with a doctor or physical therapist.

Critical Pathways: Not Like Oz

Critical pathways, protocols, and other standard plans aren’t meant to be like the yellow brick road in the land of Oz, which allowed Dorothy to find the wizard without much thought. Use critical pathways as maps, carefully considering how they apply to your particular patient or situation. Think about this analogy: Imagine you’re driving down the road, and you come to a temporary roadblock. Even though the map says you have to go straight, you clearly have to figure out another way. Whether talking about care maps or road maps, you are the one who has to “assess the actual road conditions, change speed, and make detours” as needed. When using standard plans, don’t be a task-oriented thinker. Think about the difference between the following approaches.

Task-Oriented Thinking: “I have a critical path for this patient’s problem. This will be easy and straightforward because I already know what the problems are going to be.”

Critical Thinking: “I’m familiar with the critical path for my patient’s problem. I wonder how he’s doing in relation to the predicted care on the path.”

OTHER PERSPECTIVES

What Good Nursing Looks Like

When my father almost died, he had a seamless hospital experience, marked by a world-class nursing staff that was ranked as Magnet by the American Nurses Credentialing Center. Throughout a long weekend the nurses kept my family involved with Dad’s progress through flexible visiting hours, countless phone calls, and e-mails—even in the middle of the night. And my family of lawyers, physicians, and nurses can be fussy.

—Robert Hess, RN, PhD, FAAN (personal communication)

Critical Thinking: A Sixth Sense?

Critical thinking is a “sixth sense” that’s developed over time from an accumulation of years of knowledge and experience—both personal and what you’ve learned from others. When you do a job for years, you learn what to look for and what to do. In almost a split second, you evaluate what you see, correlate it with what you’ve learned, and take appropriate action.

—Doris Alfaro, SRN, class of 1944, Chesterfield Royal Hospital

How to Keep Patients Safe

There is something to be said for reporting system issues and organizational failure. This includes alarms not working, broken equipment, incompetent colleagues (knowledge or skill deficit). I think individual accountability by the nurse is also key. . . what are YOU, the staff nurse, doing to keep the patient safe? What about monitoring the patient? Keeping patients safe involves always following standard procedures (keeping the alarms on, washing those hands, and other infection control activities) and identifying patient needs accurately and doing something about them (implementing falls precautions or measures to prevent pressure ulcers).

—Nancy Konzelmann, MS, RN-BC, CPHQ (personal communication)

Delegating: Let Go of Guilt and Micromanagement

As a novice delegator, I was often unable to let go of tasks. Therefore, I micromanaged, duplicated duties, and did not plan ahead. In this new leadership role I lacked the skills necessary to effectively guide patient care, accomplish goals, and lead staff. One of my first struggles as a delegator was a terrible sense of guilt I felt when it came to delegating to CNAs. I identified with the difficulty of their job, feared being disliked, and was very insecure. This caused me to take back delegated tasks and undermine my own leadership capabilities.³¹

Dealing with Families and Privacy Laws

Maintaining patient privacy is important. But, sometimes patients' families need information before it's officially released. In this case, I use my judgment and say something like, "Because of privacy laws, I can't tell you what's going on with your family member. I can tell you what typically happens in situations like this is, but I can't be sure that this is what will happen now."

—Matthew Riley (personal communication)

Decision-Making: A Learned Skill

Nurses aren't born good decision-makers. They develop their skills through constant reflection on their practice. One thing you can do to develop your skills is to ask yourself, What could happen next? or What if _____ happens? Thinking ahead helps you consider solutions in advance. This "what if" mentality is a characteristic of expert decision-makers.

—Bernie Garrett, PhD, RN (personal communication)

Overheard in the Emergency Department

"Why do you think you passed out?" "Because when I woke up I was on the floor."

KEY POINTS/SUMMARY

- Developing your clinical reasoning and clinical judgment skills requires you to develop skills to manage resources, prevent complications, and promote physical and mental well-being in diverse patients with complex issues; you must be a caring presence, giving humanistic care that focuses on patients' and families' unique needs.
- Nursing's major goals are to promote health and prevent illness, injury, disability, and complications (and teach people to do the same).
- Nurses use the terms *critical thinking*, *clinical reasoning*, and *clinical judgment* interchangeably. Critical thinking is an "umbrella term" that includes clinical reasoning, clinical judgment, and reasoning outside of the clinical setting.
- Critical thinking and clinical reasoning are thinking *processes*; clinical judgment is the *result* of the thinking (the opinions you form or decisions you make).
- Clinical judgment—especially challenging for beginners—entails things like knowing how to recognize when a patient's status is changing and what to do about it.
- Problem-solving skills are crucial to critical thinking—but critical thinking requires more than problem-solving. It requires creativity, risk management skills, and constantly striving to improve.
- You begin to learn critical thinking in school, but you develop it on the job with strong educators, clinical experience, and dialogue about lessons learned. Preceptors must be academically and experientially qualified to facilitate development of critical thinking skills Using a common tool or reference as a "talking point" to promote ongoing dialogue about what's going well and what needs to be improved is key.
- You're accountable for determining the limits of your own knowledge. You're also accountable for

- ensuring that patients, families, and caregivers you supervise have the knowledge they need to proceed with care safely and effectively.
- Critical thinking—important thinking that needs to happen at specific points in care delivery—requires a commitment to look for the best way, based on the most current research and practice findings (e.g., the best way to manage pain).
 - Being familiar with CTIs—short descriptions of behaviors that demonstrate the knowledge, characteristics, and skills that promote critical thinking in the clinical setting—is central to developing critical thinking.
 - The 4-Circle CT Model (page 15) also helps you assess and improve your ability to think critically.
 - Experts think in dynamic ways; novices think more methodically and step by step.
 - Paying attention to context (circumstances) is a major part of clinical reasoning (e.g., growth and development issues and differences in anatomy and physiology affect many aspects of care).
 - Quality and Safety Education for Nurses (QSEN) competencies address the need for nurses to be an integral part of patient-centered care, teamwork, collaboration, EBP, quality improvement, and safety
 - The concept of *stewardship* stresses that your job is to protect patients and *empower them* to navigate safely through the health care system.
 - Care has shifted to a predictive model: the *predict, prevent, manage, and promote* (PPMP) approach. You predict complications, prevent them through early intervention, and promote optimum health and well-being.
 - Point-of-care testing, rapid response teams, and Code H are central to giving proactive care and reducing incidents of failure to rescue.
 - To engage in critical thinking, focus on both the problems and outcomes. Together, they serve as a compass that promotes sound reasoning that's tailored to each unique patient situation.
 - While you may use more than one clinical reasoning model to the nursing process, the foundation for clinical reasoning is the *first* tool you need to learn to succeed in the clinical setting and to think your way through the NCLEX®.
 - Nursing process phase (assess, diagnose, plan, implement, and evaluate) are dynamic, rather than linear.
 - Analyzing and reflecting on your patient assessment and related health records is critical to clinical reasoning.
 - Intuition is often seen in experts, as a result of years of experience and in-depth knowledge of patients.
 - Because of the risks of jumping to conclusions and influencing others to do the same, if you aren't *sure* of the diagnoses or problems, say something like “there seems to be issues with (whatever), but there's not enough information to completely understand what's going on.” *Issues* are problems that are still muddy and not clearly defined.
 - Principle-centered creativity and innovation play key roles in critical thinking.
 - You may not find the care plan all in one place. Rather, parts of the plan may be addressed in different places of the health record.
 - Just as using a calculator doesn't replace having mathematical and problem-solving principles “in your head,” using HIT and EHR doesn't replace the need to have principles of nursing process and care planning in your head.
 - Depending on their knowledge, expertise, and qualifications, nurses have greater accountability for diagnosing and managing various problems.
 - The terms *diagnose* and *diagnosis* have legal implications. They imply that there's a specific problem that requires management by a *qualified professional*. If you treat a problem or allow a problem to persist without ensuring that the *definitive diagnosis—the most specific, correct diagnosis—has been made*, you may cause harm and be accused of negligence.
 - Nurses' unique role is identifying and managing issues to *human responses* (how health problems influence each person's sense of well-being and ability to function independently as a biopsychosocial human being).
 - Scope of nursing practice varies from state to state and from one setting to another depending on (1) laws outlined in your state nursing practice act; (2) rules and regulations defined by your state board of nursing, which is in charge of

enforcing the state laws and specifying what nurses may and may not do; and (3) professional standards, policies, procedures, competencies, and job descriptions.

- Critical thinking is guided by national, local, and facility standards. Always ask, “Am I following the standard of care for this situation?” and, “To what degree do standards and guidelines apply to this particular situation?”
- From professional, safety, and economic perspectives, the care we give must be driven by the best available evidence.
- Nursing surveillance—closely monitoring patients to detect signs and symptoms that may indicate the onset of complications—plays a key part in critical thinking.
- Using sound clinical judgment means *drawing valid conclusions* and *acting appropriately* on those conclusions (e.g., monitor closely, begin independent treatment, or activate the chain of command).
- Delegation—authorizing someone to perform a selected task in a selected situation, while retaining accountability for results—is tested on the NCLEX[®] and central to managing time and

resources. Be sure you know when it’s safe to delegate, the four steps of delegation, and the five “rights” of delegation.

- *Ready, fire, aim* is a phrase that describes the risks of working in today’s fast-paced world—critical thinking means not jumping to conclusions or acting on impulse.
- Use intuitive hunches to search for evidence. Use logic to formulate and double-check your thinking.
- Developing clinical judgment comes with *clinical experience*. It requires a commitment to study common health problems, seek out clinical experiences, and come prepared to the clinical setting.
- Thinking ahead, thinking-in-action, and thinking back (reflecting on thinking) are important parts of using sound clinical judgment.
- Your charting reflects your thinking. Follow charting policies carefully and apply nursing process principles. Be sure the record shows what you assessed, what you concluded, what you did, and how the patient responded (remember: assess, intervene, reassess). Also chart anything you did to correct or prevent adverse responses.
- Scan this chapter to review the illustrations and Guiding Principles throughout.

REFERENCES

1. Beckman, D. (1993). Andrew’s not-so-excellent adventure. *Healthcare Forum Journal*, May/June, 90–96.
2. Florence Nightingale International Foundation (Web page). Retrieved from <http://www.fnif.org/support.htm>.
3. Riffkin, R. (2014). Americans rate nurses highest on honesty, ethical standards. Retrieved from <http://www.gallup.com/poll/180260/americans-rate-nurses-highest-honesty-ethical-standards.aspx>.
4. Vital Smarts (2005). Silence kills: The Seven Crucial Conversations[®] for healthcare. Retrieved from <http://www.silencekills.com/Download.aspx>.
5. Zuriguel Pérez, E., Lluçh Canut, M. T., Falcó Pequeroles, A., Puig Loblet, M., Morino Arroyo, C., & Roldán Merino, J. (2014, May 12). Critical thinking in nursing: Scoping review of the literature. *International Journal of Nursing Practice*. <http://dx.doi.org/10.1111/ijn.12347>.
6. Institute of Medicine (2000). *To err is human: Building a safer health system*. Washington, DC: National Academies Press.
7. Institute of Medicine (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academies Press.
8. Institute of Medicine (2004). *Keeping patients safe: Transforming the work environment of nurses*. Washington, DC: National Academies Press.
9. Quality and Safety Education for Nurses (QSEN) goal statement. Retrieved from <http://www.QSEN.org>.
10. The Joint Commission (2014). 2014 and 2015 National patient safety goals. Retrieved from <http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/>.
11. *Patient Safety and Quality Improvement Act of 2005*. Retrieved from <http://archive.ahrq.gov/news/newsroom/press-releases/2008/psact.html>.
12. Understanding patient safety confidentiality. Retrieved from <http://www.hhs.gov/ocr/privacy/psa/understanding/index.html>.
13. Understanding health information privacy. Retrieved from <http://www.hhs.gov/ocr/privacy/hipaa/understanding/>.