Advanced Health Assessment *and* Diagnostic Reasoning

FOURTH EDITION

Jacqueline Rhoads
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Preface

Daily life activities place physical and emotional demands on people and expose them to a wide variety of diseases and conditions. Consequently, the healthcare provider must be prepared to diagnose and treat a variety of disorders. Health assessment is a complex process, yet many assessment texts address only the physical examination component in any real depth. We developed *Advanced Health Assessment and Diagnostic Reasoning* to include each step of health assessment, demonstrating the links between health history and physical examination and illustrating the diagnostic reasoning process. We wanted to fill in the missing piece in most basic physical examination texts—the thought process one must assume as one assesses an actual case.

Advanced health assessment involves determining existing conditions, assessing capabilities, and screening for disease or other factors predisposing a patient to illness. A thorough health history and physical examination are necessary to correctly diagnose existing conditions and detect risk for other conditions. This text provides the healthcare provider with the essential data needed to formulate a diagnosis and treatment plan.

Organization of the Text

This text provides three introductory chapters that cover general strategies for health—history taking, physical examination, and documentation. The remainder of the text consists of clinical chapters covering assessment of various system modalities (e.g., spiritual, cultural, nutrition, gastrointestinal, cardiovascular, musculoskeletal, etc.). Each system chapter includes the following sections:

Anatomy and Physiology Review
Health History
- History of Present Illness
- Past Medical History
- Family History
- Social History
- Review of Systems

Physical Examination
- Equipment Needed
- Components of the Physical Exam
- Inspection
- Palpation
- Percussion
- Auscultation

Diagnostic Reasoning

Assessment of Special Populations
- Considerations for the Pregnant Patient
- Considerations for the Neonatal Patient
- Considerations for the Pediatric Patient
- Considerations for the Geriatric Patient

Case Study Review
- Chief Complaint
- Information Gathered During the Interview

Key Features

Content in this text is presented in a way that is easy to follow and retain. It is also presented so that all the pieces of the assessment "fit together." Aspects of health history are given in a two-column format: The first column gives the type of information that the provider should obtain and the second column provides specific questions or information to note. The second column also takes matters a step further—it gives examples of which conditions the findings may indicate. Aspects of the physical examination are also given in a two-column format: action and rationale. The first (action) column gives the actions clinicians should take (with appropriate steps or strategies), and the second (rationale) column lists normal and abnormal findings and, as applicable, possible indications/diagnoses associated with those findings. To further demonstrate diagnostic reasoning, every clinical chapter contains a "Differential Diagnosis of Common Disorders" table, which summarizes significant findings in the history and physical exam and gives pertinent diagnostic tests for common disorders.

To demonstrate how various aspects of health assessment are applied, a case study is integrated into the chapter (e.g., the case patient's social history is presented with the general social history content). A case study review concludes the chapter; it recounts the patient's history and provides sample documentation of the history and physical examination. The sample documentation familiarizes students with proper and complete documentation and use of forms. The case study is complete with a final assessment finding, or diagnosis.

Every clinical chapter also includes "Assessment of Special Populations." This section highlights important information on assessing pregnant, neonatal, pediatric, and geriatric patients.

Acknowledgments

We have looked forward to this opportunity to thank the many people who have been instrumental in the development of this text.

We offer a sincere thanks to the contributors and consultants who have worked so hard to make certain that every chapter covered essential content important to every healthcare provider and student. Without their contributions, this text would not have benefited from that special uniqueness that each of them possesses. We are truly fortunate to know them and to have had them play such a critical role in this project.

We wish to thank the peer reviewers who reviewed the chapters, ensuring that the content was valid and essential. Their extensive, constructive criticism enabled us to feel confident that all aspects of advanced assessment are addressed, making the text a scholarly peer-reviewed textbook.

Publisher's Note

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Disclaimer

Care has been taken to confirm the accuracy of the information presented in this text and to describe generally accepted practices. However, the authors, editors, and publisher are not responsible for errors or omissions or for any consequences from application of the information in this book and make no warranty, express or implied, with respect to the content of the publication.

The authors, editors, and publisher have exerted every effort to ensure that the drug selection and dosage information set forth in this text is in accordance with the current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new or infrequently employed drug.

Some drugs and medical devices presented in this publication have U.S. Food and Drug Administration (FDA) clearance for limited use in restricted research settings. It is the responsibility of the healthcare provider to ascertain the FDA status of each drug or device planned for use in his or her clinical practice.

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Part 1

Strategies for Effective Health Assessment

Chapter 1

Interview and History–Taking Strategies

"In taking histories follow each line of thought, ask no leading questions. Never suggest. Give the patient's own words in the complaint."

—Sir William Osler (1849–1919) (Bean & Bean, 1968)

Functions of the Interview and Health History

Interviewing and taking health histories serve five major functions:

1. Establishing the initial bond between provider and patient (**Figure 1-1**)
2. Laying the foundation for subsequent clinical decision making
3. Providing a legal record of the subjective and objective data (**Box 1-1**) elicited during the clinical interview, which drive clinical judgments
4. Fulfilling a critical component of the documentation required for third-party payer reimbursement for clinical services
5. Serving as an essential element in the peer review process for evaluation of clinical practice, such as application of evidence-based practice and identification of desired patient outcomes

As the primary goal of this text is to help the reader develop expertise in advanced health assessment, this chapter will focus primarily on functions one and two. Legal and reimbursement requirements mandate meticulous, comprehensive, and complete documentation of all the components of care, including patient teaching and counseling provided at each provider–patient encounter. These include not only the traditional face-to-face encounters, but also other means of care, such as interaction via e-mail and telephone. Meticulous and comprehensive, however, are not necessarily synonymous with lengthy. The skilled clinician strives to record all essential clinical data concisely and to document the clinical decision making that underlies diagnostic and treatment decisions. The objectives are to provide effective communication to all caregivers, to ensure continuity of high-quality care for the patient, to minimize legal vulnerability for the provider, and to maximize reimbursement for clinical services. From a legal perspective, what is not recorded has not been done. Documentation validates performance (see Chapter 3 for further discussion of documentation).

FIGURE 1-1 The interview lays the foundation for the provider–patient relationship.

BOX 1-1 SUBJECTIVE AND OBJECTIVE DATA

Subjective data are the information that the patient or other informant provides during the health history. They reflect the patient's perception and recall of his or her current health need(s) and past health. Perception and recall are subject to many influences that make the information less quantifiable and open to multiple interpretations.

In contrast, *objective data* are measurable and verifiable, such as test results and physical examination findings.

Both types of data are subject to error, and both are critical to the caregiving process. Our perceptions filter all our experiences and significantly influence our behavior. Successful patient outcomes are dependent on successfully integrating both subjective and objective data to formulate individualized plans of care to which the patient will adhere. The health history contains predominantly subjective data. Data, such as test results or copies of past medical examinations, supplement the information that the patient provides during the interview. The combination of subjective and objective data constitutes the patient's database.

Interviewing

Establishing and Maintaining a Relationship with the Patient

Building a sound provider–patient relationship is essential to effective clinical management of patients with complex health and illness needs. Mutual trust is a critical element in the relationship. Also important is the ethical principle of autonomy, which places ultimate healthcare decision making in the hands of the patient. The ability to exercise self-determination is greatly facilitated by clinicians who actively seek to engage their patients as true partners in the caregiving process. The old adage—knowledge is power—is the key to patient empowerment. Patients must feel involved in their health care. How the clinician conducts the initial health history and subsequent data collection interviews exerts a profound influence on the nature of the provider–patient relationship. The clinician and patient form a dyad. To guide the patient's decision-making processes and to facilitate adherence to therapeutic interventions, the clinician and the patient must form an ongoing partnership built on mutual trust and respect for the patient's active role in making healthcare decisions.

Providing Culturally Competent Care

Patient populations are becoming increasingly diverse. *Healthy People 2020,* the fourth report of the U.S. Department of Health and Human Services on the health of the American people, presents compelling evidence of the relationship among ethnicity, socioeconomic status, and health. This document focuses on two overarching health initiatives:

1. Determinants of health and health disparities: "Biological, social, economic, and environmental factors—and their interrelationships—influence the ability of individuals and communities to make progress on these indicators. Addressing these determinants is key to improving population health, eliminating health disparities, and meeting the overarching goals of *Healthy People 2020*." (U.S. Department of Health and Human Services, 2014)
2. Health across life stages: "[U]sing a life stages perspective this initiative recognizes that specific risk factors and determinants of health vary across the life span. Health and disease result from the accumulation (over time) of the effects of risk factors and determinants. Intervening at specific points in the life course can help reduce risk factors and promote health. The life stages perspective addresses 1 of the 4 overarching goals of *Healthy People 2020*: 'Promote quality life, healthy development, and health behaviors across all life stages.'" (U.S. Department of Health and Human Services, 2010)

Achieving these goals will necessitate addressing the social determinants of health, making our healthcare delivery system more linguistically and culturally appropriate, and increasing the ability of practitioners to deliver culturally congruent care.

Diverse patient populations present significant challenges to both clinicians and healthcare organizations. As third-party payers and regulatory bodies increasingly look to clinical outcomes data to measure the performance of individual providers and institutions, the impact of culture on

standards of care will be profound. New and emerging patient populations represent a kaleidoscopic image of healthcare beliefs, values, and practices—"Equal care cannot be defined as the same care in a culturally diverse society because this care will not be considered equally good or appropriate by all patients" (Salimbene, 1999, p. 24).

In addition to meeting the social contract to provide high-quality health care to all patients, clinicians must develop caregiving skills that are culturally congruent, and which reflect therapeutic interventions that take into account the patient's socioeconomic status. History taking is often the first encounter between patient and provider. Cultural competence requires knowledge of the beliefs, values, and practices of the patient populations being served, as well as the willingness on the part of the provider to openly reflect on the impact that his or her attitudes, beliefs, and behaviors have on the caregiving process.

Ethnocentrism, the belief in the superiority of one's own beliefs and values, is a major barrier to establishing effective patient–provider relationships. Similarly, ignorance of a cultural group's norms may lead to a negative interpretation of well-meaning caregiver behaviors. These norms include beliefs about personal space, definitions of health, communication, and eye contact, as well as who makes healthcare decisions. Many well-intentioned caregivers breach these norms out of ignorance, thereby adversely affecting the development of patient trust and adherence to treatment interventions. For example, many Western caregivers consider direct eye contact to be indicative of a patient's forthrightness and honesty. They may interpret a patient's failure to engage and maintain eye contact as an indication that he or she may have something to hide. In many cultures, it is considered disrespectful to look directly at an authority figure.

Through the use of cross-cultural theoretical models, the application of relevant research findings, and valuing of our ethnically diverse patients, the caregiver who is committed to providing culturally competent care will come to understand each culture's worldview from an *emic,* or native, perspective (Jones, Bond, & Cason, 1998). Many excellent resources have been developed to assist clinicians in becoming more culturally competent as caregivers. Resources for providing culturally competent care are given at the end of the chapter.

Overcoming Difficulties in Provider–Patient Relationships

Some patient relationships will challenge the provider from their onset, such as initial encounters with patients who are angry or hostile. Even when a strong alliance has been established between the provider and the patient, critical events in the caregiving process and/or the influence of significant others may challenge the stability and effectiveness of the relationship. For example, Platt and Gordon (2004) refer to a phenomenon known as the Two Patient Syndrome in which a family member or significant other serves as the translator for the patient. In such a situation, the answers to the provider's questions may reflect the translator's perceptions of the patient's healthcare needs, status, and goals, rather than those of the patient, especially if the family member or significant other is also the primary caregiver for the patient. Similarly, adverse clinical phenomena such as unexpected fetal loss, chronic pain that is unresponsive to treatment, or the need to inform the patient and family of a terminal diagnosis will test the strength of the most well-established provider–patient relationship.

Recognizing and Reacting to Communication Barriers

To successfully navigate challenging situations, recognize the feelings/behaviors being manifested by the patient (e.g., sadness, fear, anxiety, anger, hostility). Recognition requires that the provider be an attentive listener and observer and that he or she take the time to reflect and process what he or she sees and hears. Recognition often begins with a perception of distance or strained communication in a relationship that has previously been characterized by warmth and a free flow of communication. When this occurs, stop the usual routine of the visit and share these perceptions with the patient. Identify the perceived behavior or effect and seek the patient's confirmation as to the accuracy of these observations. If the nature and source of the patient's behavior are still unclear, reassure the patient that you have listened to him or her but remain confused about why he or she feels the way he or she does. Ask the patient to help you better understand what he or she is experiencing. Do NOT become argumentative and defensive.

FIGURE 1-2 A healthcare provider displays empathy as a patient discusses an upsetting matter.

Acknowledge and validate the patient's feelings as appropriate through the use of statements that convey understanding and concern, such as "I can see where that would be very frightening. Do you feel any better now?" Demonstrate empathy (**Figure 1-2**). Coulehan and Block (1997) define *empathy* as "a type of understanding. It is not an emotional state of feeling sympathetic or sorry for someone . . . being empathic means listening to the total communication—words, feelings, and gestures—and letting the patient know that you are really hearing what she is saying" (p. 6). For most if not all challenges to provider–patient relationships, there is no quick fix, and attempts to implement one are usually perceived by the patient as being dismissive of her or his feelings, thereby disrupting the relationship even more. Support and understanding are essential to building and maintaining a relationship.

Touch may help convey understanding. If it is culturally appropriate and the situation warrants such an action, as in the loss of a loved one or when delivering an unfavorable prognosis, touch can be very therapeutic.

Demonstrate hope. This is particularly important in situations involving poor prognoses. Although the eventual outcome may not be altered, the patient needs to know that the provider will not withdraw because cure is not an option, will remain a consistent source of support, and will help the patient to identify and achieve the life goals that are important in his or her remaining lifespan.

Working with Resistant Patients

Patients who are resistant to therapeutic recommendations represent another challenge to provider–patient relationships. Such resistance often represents a failure of the provider to fully engage the patient as a partner in decisions about his or her health care. Cultural norms and patient ambivalence may also be major factors, as in patients who smoke. Smokers who have not experienced the negative health consequences of smoking often do not perceive themselves to be at risk, and their sociocultural environment may support continuation of this negative health behavior. The provider should continually assess the readiness of the patient to adopt or change a behavior or intervention and be ready to capitalize on any opportunity that may increase the patient's level of readiness. For example, a female smoker previously resistant to smoking cessation interventions may become very responsive if an abnormal Pap smear causes her to be sent for colposcopic examination and she learns about the relationship between smoking and cervical cancer. The grandmother who smokes and cares for her grandchild while his parents work may be resistant to quitting for her own health, but she may do so to protect the health of her grandson (e.g., prevention of recurrent ear infections).

Institutional Factors Affecting Patient–Provider Relationships

Most practitioners are employed by healthcare institutions. Many institutional factors affect patient–provider relationships. Cost containment has led to an ever-increasing emphasis on productivity. Increasing patient volume often decreases the time allotted for initial and follow-up patient visits. If the time allocated for the patient sessions is inadequate to obtain all the necessary historical data, the patient can be asked to complete a linguistically appropriate (appropriate to the patient's primary language) health history form before being seen by the provider.

Prioritization of data collection is essential and is determined by the patient's expressed reason for seeking care (chief complaint), as well as the presenting signs and symptoms. For example, although diet, exercise, and social history influence treatment decisions, past medical history and a focused review of systems take precedence in the acute phase of illness.

Taking a Health History

The health history lays the foundation for care. It guides the relative emphasis placed on each system in the physical examination and the formulation of differential diagnoses and treatment decisions. A weak foundation places the patient at risk for misdiagnosis and inadequate or erroneous treatment; it also identifies the clinician as one who does not practice within acceptable standards of care, making the clinician vulnerable to legal action.

The Health History as a Vehicle for Patient Empowerment

Having the patient participate in developing his or her health history is a powerful tool for building a partnership between patient and provider. A well-designed, culturally and linguistically appropriate health history form helps to move the patient from passive responder to active collaborator in developing the personal database that will drive future decisions about his or her care. It also begins the patient education process. The form requires the patient to complete a review of past and current health and to reflect on the potential impact of healthcare behaviors, beliefs, and values on his or her health status. Engaging a patient in this reflective process helps to give a sense of ownership over his or her healthcare data and primes receptivity to future patient education.

The ultimate goal of all health care is to maximize the health and well-being of the patient. Whether this involves health maintenance and disease prevention or the actual treatment of a medical or surgical condition, many patients will be asked to make major, sustained changes to their current behaviors in order to acquire or sustain their desired level of health. Adherence to a therapeutic regimen is influenced by multiple factors, including the patient's perception of the severity of the need or condition and the costs–benefits associated with adherence. By actively involving the patient in the development and analysis of a personal health history, the clinician lays the groundwork for active participation in identifying healthcare goals and in designing a culturally congruent plan of care. An ongoing, collaborative process supports patient autonomy, enhances adherence, and increases the likelihood of achieving desired clinical outcomes. Strategies for performing an effective interview and health history are outlined in **Box 1-2**.

BOX 1-2 INTERVIEWING AND HISTORY-TAKING POINTERS

The interview and health history lay the foundation for effective patient care. Remember the following tips when conducting the interview and health history:

- Demonstrate a professional appearance and behavior. Unkempt, overly casual or inappropriate dress, and/or unprofessional behavior do not inspire confidence.
- Provide for privacy. Health histories contain highly confidential information and should be obtained in settings that maximize the patient's privacy. Adolescents and patients who have engaged in behaviors that may be viewed as socially unacceptable may be particularly reluctant to share information. Try to conduct a portion of the adolescent's health history without the presence of a parent or guardian, especially when exploring sensitive areas such as sexuality, drug and/or alcohol use, etc.
- Provide a quiet and nondistracting environment wherever possible. Distractions include provider behaviors such as answering the telephone and pagers. Unless it is essential to your professional role, turn off cell phones and electronic pagers, and do not interrupt the flow of the patient's history by answering the telephone.
- Address the patient by the appropriate title (Mr., Mrs., Ms.), and use the pronoun preferred by the patient.
- Always introduce yourself to a new patient and identify your role. For example: "I'm Ms. Rogers, a nurse practitioner . . . ."
- Request the patient's permission to conduct the health history.
- Try to obtain historical data with the patient fully clothed. Clothing is important to a sense of personal integrity and identity. Initial appearance may also give the examiner valuable cultural and diagnostic clues.
- Position yourself at the same level as the patient to avoid establishing the provider as being dominant in the relationship (**Figure 1-3**). Similarly, respect cultural norms about personal space and eye contact.

(*Continued*)

BOX 1-2 INTERVIEWING AND HISTORY-TAKING POINTERS (*Continued*)

FIGURE 1-3 The healthcare provider positions herself at eye level with the patient, maintaining eye contact.

- Recognize potential biases that may adversely affect your ability to elicit an accurate and complete health history (e.g., ageism or gender bias).
- Observe the patient for any sensory deficits such as hearing or visual loss and adjust your interviewing techniques and positioning accordingly. When interviewing patients with hearing loss, position yourself so that the patient can see your face, and speak louder and slower.
- Prioritize information needs to maximize conservation of the patient's physical and emotional resources. Patients in pain or acute stress require special consideration.
- Know and respect the cultural norms and values of individual patients and adjust interviewing techniques accordingly. Do not impose cultural norms on the interviewee.
- If language barriers necessitate using a translator, address the questions to the patient, not the translator, and allow adequate time for the translation and response.
- Ask the patient if it is acceptable if you take *brief* notes during the interview. Explain that the health history contains critical information that will influence decisions about care and that it is important not to miss any vital piece of information; however, be judicious in note taking. Do not become so focused on recording the data that you cease to relate to the patient.
- Assure the patient that all the information that is provided will be kept confidential and used as a basis for care decisions. If the information provided by the patient will be used for other purposes, such as to obtain third-party reimbursement, the patient or parent/guardian must be asked to sign a release authorizing approval for these additional uses of privileged healthcare data.
- Use open-ended questions, whenever possible, to elicit information during the history-taking interview. Do NOT suggest symptoms or descriptors to the patient and/or informant, especially in the initial portion of obtaining the history of present illness (HPI). Ask the patient to describe the illness in his or her own words. How and what he or she focuses on gives valuable insight into the patient's perception of the relative importance of the symptoms the patient is experiencing. If additional data are needed after the patient has responded to open-ended questions, ask specific questions to obtain more detail. Avoid asking questions that suggest a particular response or that can be answered with a simple yes or no. The following is an example of *inappropriate* questioning: Would you describe your pain as sharp and stabbing or dull and achy?

- Help patients become partners in the caregiving process. Ask about their healthcare goals and expectations about their care.
- Give the patient adequate time to respond; do not create a hurried atmosphere, especially when eliciting sensitive information.
- Do not use technical terms or medical jargon. Every health history presents an opportunity for patient education. Give your explanations in language that the patient can comprehend and use.
- Be an attentive, nonjudgmental listener and an alert observer throughout the health history. Do not interrupt prematurely, and control an urge to fill every pause or silence with another question. Give the patient time to reflect on her or his answers to your questions before intervening with a prompt or a direct question. When a prompt is necessary, often a simple statement of support, such as "Please continue," will encourage a patient to reveal additional information that facilitates clinical decision making.
- Observe nonverbal behaviors throughout the interview, such as significant affective and postural changes. These often occur in areas of the health history that contain sensitive information that requires more in-depth exploration.
- Acknowledge the value of the patient's information through the use of supportive statements during and at the end of the clinical interview. A statement such as "Mr. Jones, you have provided a very clear picture of your symptoms. This will help us to make much wiser choices about what tests to order," speaks to partnership and communicates how much the clinician values and relies on the quality of the information provided by the patient. If your institution has set up mechanisms to safeguard the electronic transmission of information, you may also want to invite the patient to e-mail you any additional information pertinent to his or her care that he or she may have forgotten to mention during the health history. Follow-up telephone communication is also an option, provided similar safeguards are in place.
- Validate your perceptions when the patient has completed telling you a piece of information or expressed a particular healthcare preference. Verbally summarize your understanding of the data and ask the patient if that is an accurate portrayal of the information that she or he has provided.
- If the interview yields contradictory information, revisit earlier areas of inquiry to check for consistency of response and/or ask the patient to clarify your perceptions.
- Beware of prematurely cutting off a line of diagnostic inquiry. Although a patient's presenting symptoms may strongly suggest a particular diagnosis, failure to adequately explore alternative explanations may cause the clinician to falsely reject an important differential diagnosis.

Types of Health Histories

Health histories are of two types: comprehensive and focused.

Comprehensive Health History

A comprehensive health history should be performed on all nonemergent, new patients who will be receiving ongoing primary care from a particular provider or group of clinicians. Comprehensive health histories contain all the following elements:

- **Patient identifiers.** These include name, gender, age, ethnicity, occupation, source of referral, and date and time of the clinical encounter.
- **Reliability.** It is particularly critical to assess the reliability of the individual providing the historical data. In most instances, it will be the actual patient. However, in some clinical situations (e.g., patients with severe trauma, the very elderly, children), a person other than the patient will provide all or most of the data. It is imperative that the clinician identifies the source(s) of the data and records her or his judgment about the reliability of the information provided. For example, a clinician might record the following statement: *Reliability—patient has difficulty describing the severity and progression of his symptoms and uses contradictory terms to describe the character of the chest pain.*

  Additional factors may influence the reliability of the information presented, including language barriers and patient/informant emotions as fear and shame. The clinician should try to create a supportive, nonjudgmental interviewing environment, which will encourage full disclosure of health and social information by the patient.

- **Chief complaint (CC).** This term reflects a medical or problem-oriented focus to care. Many patients seek care for health maintenance/disease prevention reasons, for example well-child visits. A more encompassing phrase is *reason for seeking care.*
- **History of present illness (HPI).**
- **Past medical history (PMI).**
- **Family history (FH).**
- **Social history (SH).**
- **Review of systems (ROS).**

Focused Health History

A focused health history is performed in emergency situations and/or when the patient is already under the ongoing care of the clinician and presents with a specific problem-oriented complaint. Focused histories include:

- **Identifying data.**
- **Chief complaint (CC).**
- **History of present illness (HPI).**
- **Data from the patient's past medical history, family history, and social history (PFSH) that are pertinent to the chief complaint.**
- **Problem-oriented review of systems.** For example, a known adult patient complaining of substernal or epigastric pain would be asked questions related to the cardiovascular, respiratory, musculoskeletal, and gastrointestinal systems. Focusing attention on these systems would help the clinician to formulate and prioritize differential diagnoses based on the most likely origin of the patient's symptoms.

Components of the Comprehensive Health History

Chief Complaint

Use the patient's own words to describe the reason for his or her visit. Ask the patient to tell you why he or she has sought care: *"Mrs. [Mr.] Brown, what brings you to the office today?"* Record the patient's response using his or her actual words; do NOT rephrase the stated reason using medical terminology. For example:

Correct: I've had a runny nose and sore throat for 3 days.

Incorrect: Patient states that she has experienced coryza and pharyngitis × 3 days.

History of Present Illness

These data represent an amplification of the patient's reason for seeking care. The thoroughness and quality of the data in the HPI are the driving forces in determining which systems the clinician will focus on in the review of systems and subsequent physical examination. This judgment requires that the clinician think critically in analyzing the data and apply evidence-based research findings.

The goal in obtaining the HPI is to get a comprehensive description of the characteristics and progression of symptoms for which the patient seeks care. For several decades, clinicians have used the mnemonic device *PQRST* to help ensure that all the necessary data are gathered regarding the patient's presenting symptoms:

P:	*precipitating* factors (What provokes the symptom?)
Q:	*quality* (Describe the character and location of the symptoms.)
R:	*radiation* (Does the symptom radiate to other areas of the body?)
S:	*severity* (Ask the patient to quantify the symptom[s] on a scale of 0–10, with 0 being the absence of the symptom and 10 being the most intense.)
T:	*timing* (Inquire about the onset, duration, frequency, etc.)

Although PQRST is useful in accurately describing symptoms, it does not capture many of the elements of health and illness as experienced by the patient. The following mnemonic device integrates ethnocultural considerations into the data-gathering process and facilitates the provision of culturally congruent care. It also serves as a reminder to clinicians that patient outcomes determine whether an acceptable standard of care has been met. Successful outcomes are inextricably linked to care that is culturally and linguistically competent. The mnemonic device is *CLIENT OUTCOMES.*

C:	*character* of the symptoms, including intensity/severity
L:	*location,* including radiation (if present)
I:	*impact* of the symptoms/illness on the patient's activities of daily living (ADL) and quality of life
E:	*expectation* (client's) of the caregiving process
N:	*neglect* or abuse, including any signs that physical and emotional neglect or abuse plays a role in the patient's condition
T:	*timing,* including onset, duration, and frequency of symptoms
O:	*other* symptoms that occur in association with the major presenting symptom
U:	*understanding/beliefs* (client's) about the possible causation of the illness/condition
T:	*treatment* (medications and other therapies that the patient has used to try to alleviate the symptoms/condition)
C:	*complementary* alternative medicine (CAM), including a description of the patient's use of these agents or practices
O:	*options* for care that are important to the patient (e.g., advance directives)
M:	*modulating* factors, which precipitate, aggravate, or alleviate the patient's symptoms/condition
E:	*exposure* to infectious agents, toxic materials, etc.
S:	*spirituality,* including spiritual beliefs, values, and needs of the patient

Past Medical History

This section of the health history collects information about all the patient's past health and illnesses, with particular emphasis on disease processes, surgical procedures, and hospitalizations. The term is somewhat of a misnomer; although a patient may report having been diagnosed with essential hypertension 4 years ago, the condition will continue to be an active disease process requiring ongoing evaluation and treatment in the present. Thus "past" in many cases refers to the point in time at which a condition was initially diagnosed, not that it no longer affects the patient.

The information gained from this portion of the history often gives the provider important clues about the etiology or contributing factors to the patient's current healthcare need(s). Key elements of the past medical history include:

Patient's definition of health and perception of current health status	Ask the patient to fully describe her or his health.
Childhood illnesses	Record the date, treatment, and any long-term adverse sequelae, especially any that affect the patient's functional abilities (e.g., post-polio syndrome) or current health status (e.g., past history of untreated streptococcal infection, which may contribute to mitral valve disease of the heart). *Illnesses to note include measles/rubella, mumps, pertussis, chicken pox, poliomyelitis, diphtheria, rheumatic fever, scarlet fever, and smallpox.*

Major adult illnesses/ conditions	Record date of diagnosis, treatment, and whether the condition was successfully treated or requires ongoing care. Assess the impact on the patient's functional ability and quality of life. *Illnesses/conditions to note include tuberculosis; coronary artery disease, especially myocardial infarction; hypertension; dyslipidemia; diabetes mellitus (specify type); cancer; autoimmune disorders, such as lupus erythematosus; osteo- or rheumatoid arthritis; gout; substance abuse; seropositivity for HIV (HIV+); AIDS; hepatitis (specify type); obesity; and sexually transmitted diseases.*
Allergies	Note any allergies to food, beverages (e.g., sulfites in some wines), drugs (see medications, which follow), and environment. Record type and rapidity of symptomatic response to exposure, with particular attention to any respiratory symptoms. Assess the patient's knowledge of potential allergens and identify steps taken to limit exposure. Record treatment, including prescription and over-the-counter (OTC) medications and desensitization therapy. If the patient has a history of severe allergic reactions, does she or he carry medical alert data on her or his person at all times? Has the patient been prescribed an emergency treatment product such as an anaphylaxis kit or EpiPen, a prefilled, self-injectable epinephrine syringe?
Medications	Elicit and record the name, dosage, and frequency of administration of all current, and, to the extent possible, recent past prescription and nonprescription medications. Many patients do not consider vitamins, laxatives, dietary aids and supplements, herbal products, and common drugs, such as aspirin, acetaminophen, and antacids, as being nonprescription medications and will not report their usage unless specifically questioned about them. Fully describe any drug allergies and adverse reactions experienced by the patient while taking any medication. Do NOT accept the statement "I'm allergic to . . ." at face value. Ask the patient to describe what signs (e.g., hive-like rash) or symptoms (e.g., nausea) were experienced and who determined that he or she is actually "allergic" to the particular drug. It should be noted that not all adverse drug effects are detectable by the patient. For example, HMG-CoA reductase inhibitors, commonly referred to as statins, are used to treat dyslipidemia and may cause elevated levels of liver enzymes in susceptible patients. Ask if the patient has ever been told to discontinue a medication because of abnormal blood chemistries. Also, inquire and fully document any CAM, including foods and beverages, such as herbal teas that the patient consumes as a treatment. This information will help the provider to develop a culturally appropriate plan of care with the patient and will preclude prescribing medications that could produce adverse interactions or have altered efficacy.
Injuries	Record the nature of the injury; date; cause (e.g., motor vehicle accident); treatment; outcome, including any long-term sequelae, especially if they affect the patient's functional ability or ADL.
Hospitalizations	Record the reason for the hospitalization, dates, and complications, if any. Obtain the name and address of the facility to obtain the patient's medical records, if necessary. Make note of any previous surgeries.

Transfusions	Elicit and record the date, type, number of units administered, and the nature and severity of any reaction.
Immunizations	Elicit and record the date of the last immunization by type, such as diphtheria, pertussis, tetanus, polio, pneumococcal vaccine, influenza, smallpox, cholera, typhoid, anthrax, bacille Calmette-Guérin (BCG). Also, record the date of the patient's last purified protein derivative (PPD) tuberculin skin test, as well as any other skin testing, such as allergy testing. **Important:** If the type of immunization requires serial administration of the vaccine, as with immunization against hepatitis B, record the date of each administration to determine if the interval between doses adheres to the recommendations of nationally accepted clinical guidelines. Also, note any unusual reactions to previous vaccinations. Some localized redness and tenderness at an injection site is considered normal, as are minor flu-like symptoms lasting 2 to 3 days. *People that have been successfully vaccinated with BCG will have positive PPD tuberculin tests; do NOT administer a PPD test to patients who have received BCG.*
Screening exams	Record the date of the following exams, as appropriate to the patient: Pap smear, mammogram, prostate-specific antigen (PSA), digital rectal exam, cholesterol, lipid profile, blood glucose, eye exam, glaucoma testing, hearing test, PPD (if not recorded under immunizations), chest x-ray (CXR), if patient has been immunized with BCG vaccine, and dental prophylaxis.
Psychiatric/mental health	Elicit and record any conditions requiring psychological or psychiatric intervention. Briefly describe treatment interventions. If hospitalization was required, note and cross-reference it to the PMH section on hospitalizations.

When recording the past medical history, it is helpful to end this portion of the health history with a brief statement summarizing those elements of the history that continue to exert a significant influence on the patient's health, functional ability, and/or sense of well-being.

Family History

Many disease processes follow demonstrable hereditary patterns. Knowledge of the current health status or cause of death of the patient's relatives facilitates risk analysis and promotes early intervention to prevent or delay the onset of many diseases. For instance, a patient with a first-degree (mother, father, sibling) blood relative who has experienced premature onset (women younger than 65 years of age and men younger than 55 years of age) of cardiovascular disease (CVD) is at higher risk for the development of CVD than a patient with no such familial history. The family history should extend back for two generations if the patient can provide the data and should note any intermarriage between close relatives. The family history includes:

Major illnesses and health status of relatives	Ask the patient to describe the age, health status, and presence or absence of each of the conditions listed here for each blood relative. If a relative is in good health and has none of the conditions listed below, he or she can be characterized as being "alive and well" (A&W). *Conditions to be noted include cancer (specify type); hypertension; stroke; myocardial infarction; coronary artery disease (CAD)/coronary heart disease (CHD);*

	neurological conditions, such as epilepsy, Huntington's chorea, and Alzheimer's disease; diabetes mellitus (specify type); tuberculosis; kidney disease; asthma and/or other allergic disorders; arthritis (specify type); anemia (specify type); thyroid disease; and mental illness.
Genetic defects	Inquire about disorders that are genetically transmitted such as cystic fibrosis, Tay-Sachs disease, beta thalassemia, hemophilia, Huntington's disease, and polycystic kidney disease.
Deaths	Note the cause, age at time of death, and relationship of the person to the patient.
Ethnicity	Note the patient's ethnicity, as certain diseases predominate in selected ethnic groups.

In addition to recording the family history in narrative form, most clinicians find it useful to construct a pictorial representation (genogram), which facilitates rapid transmission of data from one caregiver to another (see Chapter 3 for further discussion of the genogram, along with a sample).

Social History

This portion of the health history seeks to create a living picture of the patient as a person. In many instances, the patient's beliefs and practices may not be consistent with those of the provider. Remember, the goals of obtaining the health history are to acquire information to support accurate clinical decision making and to establish a partnership/relationship with the patient that will allow for the development of a culturally appropriate plan of care that maximizes adherence. Avoid being judgmental. A condescending or disapproving manner will close communication and deny the provider current and future access to essential information. Key elements in the social history include:

Personal data	Note place of birth, birth order, description of childhood family (noting family status: intact, separated/divorced, single parent, happy, abusive, and so on), brief description of childhood and young adulthood, level of education, marital status, and description of current family unit.
Occupation	Describe current or former work; work status (full-time, part-time, retired); job training; level of responsibility, if pertinent to the management of the patient's care (such as a hypertensive patient in a high-stress position); occupational exposure to health hazards, such as excessive noise, pollution, toxic chemicals or vapors, infectious agents; and availability and use of protective clothing and equipment. As the patient responds to questions about work, try to assess the importance of his or her work to self-image.
Housing	Note type (e.g., private home, walk-up apartment); if the patient owns or rents the residence; type and adequacy of heat, cooling, humidification, refrigeration, cooking facilities; any potential hazards, such as asbestos or lead-based paint (which is found in some homes built before the 1970s); safety of the surrounding neighborhood and, if an apartment, the building itself; telephone access; pets; and single level or multiple levels in home (including information about stairs, number of flights, elevator, and other details). Additional information may be sought based on the particular needs of the patient. For example, if a patient presents with asthmatic symptoms, inquire about the type of floor covering in the home—carpeting may harbor dust mites, mold, and other allergens that can trigger asthmatic symptoms.

Safety	Assess and record data about the patient's actual or potential exposure to environmental hazards as well as her or his safety practices. Environmental considerations include the patient's perception about the safety of her or his neighborhood, work environment, and transportation. It also includes asking about safety needs that are patient specific. For example: • Does the home have smoke alarms, window guards for child protection in elevated apartments, or a carbon monoxide alarm in a home using fuel oil for heating? • If the patient has functional limitations, are assistive devices such as bathtub bars in place? Note safety practices. Practices include such behaviors as the use of seat belts and not drinking and driving.
Socioeconomic status	Note the adequacy of personal and/or family income to meet basic requirements for housing, food, and clothing. Does income allow for discretionary expenditures for recreation/travel? Does the patient/family have health coverage? (If so, note type: private, Medicare, Medicaid, and so on.) What is the extent of coverage? Does it include reimbursement for health promotional interventions and dental care? If it includes a prescription plan, is coverage limited to generic drugs or to medications chosen from a preapproved formulary? Other information, such as which diagnostic and treatment procedures (if any) require preapproval, can be determined when a specific expensive test or procedure is being considered.
Diet	Time limitations usually preclude eliciting a comprehensive diet history during the initial health history. Unless management of the patient requires immediate dietary intervention, the patient can be asked to keep a record of food and beverage intake for a typical week, not during vacation or over a holiday. Less extensive diet histories often grossly misrepresent the patient's usual dietary practices and do not facilitate effective clinical management. Ask the patient to record the date, time, type, and amount of food and beverage consumed. Important additional information to be recorded includes: • Cultural or religious practices that influence dietary practices • Specific quantities (e.g., Did the patient have a 6-ounce cup of coffee or a 16-ounce mug?) • How food was prepared (Was it broiled, fried, baked, or prepared some other way? Was it prepared at home or purchased commercially?) • Use of salt in the preparation or addition as a seasoning • Use of oil (Was oil used in preparing the food? If yes, specify type. Some oils are very high in saturated fat and trans fatty acids.) • Type of beverages consumed (Note whether they are caffeinated, alcoholic, or artificially sweetened.) If at all possible, ask the patient to return the completed diet history to your practice site before the next visit so that you may review it. If the appropriate patient privacy and confidentiality of health information safeguards are in place at your institution, you may be able to receive this information in electronic form. One more caveat: Dietary practices are influenced by many factors. Some are obvious, as with socioeconomic status. Others are more subtle, as is often the case with many elderly patients living alone. They may have the means to purchase and prepare an adequate diet, but because of loneliness may not do so. Eating is a social experience for most people, and elderly patients living alone, in particular, are at risk for nutritional deficiencies.

Exercise	Note type, intensity, duration, and frequency. Which factors influence the patient's participation or nonparticipation in regular, aerobic exercise (e.g., work, homemaking, childcare responsibilities, access to safe recreational areas, or physical limitations, such as obesity, arthritis, or angina)?
Sleep	Note the usual number of hours per 24-hour period. Does the patient engage in rotating shift work, which can alter sleep–wake patterns? Does she or he experience difficulty falling or staying asleep? Does she or he consume anything before retiring that may interfere with sleep, such as caffeinated beverages, chocolate, or diuretics? Is there any evidence of sleep apnea, such as snoring, excessive daytime sleepiness, or feeling fatigued upon awakening? Is the patient awakened from sleep by pain or by the need to void?
Sexual history	Traditionally, the sexual history has focused almost exclusively on assessing the patient's feelings about and satisfaction with his or her sexual performance. For example, it includes the number and type of partners, frequency of intercourse and other sexual practices, type and use of contraception, ability to achieve and sustain an erection, ability to achieve orgasm, and overall satisfaction. These are important questions and allow for identification of treatable conditions, such as erectile dysfunction. It is also useful to conceptualize sexuality as encompassing a broad range of expressions of intimacy and caring, such as holding, cuddling, and touching.
Drug and alcohol use	For all the substances addressed in this section, the social conditions of use often play a major role in determining amount and pattern of consumption. Knowledge of the conditions under which and with whom a patient may engage in substance abuse can help the provider to develop more effective interventions. Many patients who engage in substance abuse will abuse more than one substance. Smoking is addressed in this portion of the history because of the addictive properties of cigarettes. If a patient smokes, determine how much, how long, and under which conditions he or she smokes (e.g., all the time, only at work, in social situations). Ask who would be exposed to the patient's secondhand smoke. Smoking cessation interventions, however brief, should be carried out at every patient encounter. Inquire about past and current usage of any illicit drugs, such as amphetamines, Ecstasy, cocaine, marijuana, heroin, and steroids. Inquire about prescription drug use. Determine the amount, type, method of administration, and perceived impact on health. If drug administration is by injection, are needles shared? Inquire about alcohol intake, noting type, amount, and frequency. Does the patient drink alone? Some subpopulations may be particularly vulnerable to dependence on alcohol. Alcoholism in the elderly is a growing concern of many healthcare providers and is thought to be related to feelings of loneliness, loss, and decreasing physical and mental ability. If providers suspect alcohol abuse, they can use instruments such as the CAGE questionnaire to further assess the patient's use of alcohol.
Social support	How does the patient perceive her or his level of social support? Who/what are the patient's primary sources of support? To what extent does she or he want these individuals or entities to be involved in her or his care?
Stress and anger management	Ask the patient to identify sources of stress in his or her life and to describe strategies used to cope with stress. Inquire about the patient's anger management strategies.

Recreation and travel	Which interests or hobbies does the patient have? Does the patient participate regularly in recreational, occupational/professional, or church groups? Note any major travel within the recent past, especially if travel involved potential exposure to untreated water, raw sewage, rodent excrement, contagious disease, and/or parasites.
Cultural beliefs and practices	How do cultural beliefs and practices influence the patient's healthcare behaviors? For example, is the patient comfortable performing breast or testicular self-examination? Discuss patterns of communication about healthcare information within the family unit. Who makes healthcare decisions? If pertinent, what are the beliefs about death and dying? Does the patient utilize folk medicine and culturally based healing practices? If so, how might these be integrated into the plan of care? Will the clinician have to negotiate modification of some of these practices to achieve treatment goals?
Spirituality	What role do spiritual beliefs and practices play in the patient's life? Are they a key source of support for the patient? How can they become a component of the patient's plan of care?
Military service	Note the branch and dates of service, occupational specialty, geographic location of assignment(s), and any potential exposure to hazardous materials or conditions.

Review of Systems

The last component of the health history is the ROS, during which the clinician questions the patient about whether or not she or he has experienced symptoms that may indicate possible pathology in one or more body systems. The nature and depth of the questioning are determined by the reason for which the patient is seeking care (chief complaint), as well as the severity of the condition if she or he presents with an acute problem.

Types of Reviews of Systems

In a nonemergent primary care setting, the review of systems follows one of two forms: comprehensive or focused.

Comprehensive ROS. This type of ROS is conducted when a patient presents for general health maintenance/disease prevention care. The provider asks general questions that are designed to identify if the patient is experiencing symptoms that may suggest an actual or potential problem in one or more body systems. Questioning covers *ALL* body systems.

Before examining the key questions to be asked for each of the body systems, there are important concepts to note: *significant or pertinent positives* and *significant or pertinent negatives.* Disease states usually produce a cluster of symptoms; however, some are considered to be more indicative of a particular condition than others. For example, chest pain is strongly associated with cardiac disease, although it may also occur with gastrointestinal and musculoskeletal disorders.

The questions commonly included in a comprehensive ROS are those to which a *positive* response suggests the existence of pathology in a given system. Thus, when a patient responds that he or she has experienced the symptom about which he or she is being questioned, that is considered to be a significant *positive* response. When such a response is given during the comprehensive ROS, the clinician will then ask additional questions to better describe the characteristics of the symptom and to determine the presence or absence and description of any associated symptoms. For example, if a patient acknowledges that she or he has experienced chest pain, the clinician will probe further to obtain a full description of the pain (PQRST). The provider would ask questions about the presence or absence of radiation of the pain to the left arm, jaw, or area between the shoulder blades and about precipitating and alleviating factors (e.g., if the pain was brought on by exertion or emotional excitement/distress, if it subsided with rest).

The provider would ask the patient about the coexistence of associated symptoms, such as nausea or sweating (diaphoresis). If the patient acknowledged experiencing additional symptoms of nausea and diaphoresis during episodes of chest pain, these would be considered other significant *positives* in that they tend to confirm that the pain is of cardiac origin. In contrast, negative responses to questioning about these associated symptoms would be considered to be significant *negatives* because the absence of these symptoms decreases the likelihood that the patient's chest pain is cardiac in nature. Eliciting and recording significant positives and negatives are essential to developing sound differential diagnoses and to assessing the potential severity of the patient's symptoms.

Focused ROS. This type of ROS is conducted when a patient presents with a specific chief complaint. Questioning would be directed toward the systems most likely to be involved in producing the patient's symptoms. The patient would not be questioned about symptoms in the remaining body systems. For example, if a patient presented with a sore throat and a sensation of pain and pressure below both eyes, the clinician would ask problem-specific questions about the head and neck, including the eyes, nose, mouth and throat, sinuses, lymph glands, and respiratory system. Subsequent chapters in this text provide in-depth information about conducting a focused ROS. Therefore, only the elements of a comprehensive ROS will be presented next.

Components of a Comprehensive Review of Systems

General/ Constitutional	Ask about weight loss or gain, changes in appetite, general state of health, sense of well-being, strength, energy level, ability to conduct usual activities, exercise tolerance, night sweats, and fever.
Skin	Ask about skin changes, including rashes, itching, pigmentation, moisture or dryness, texture; changes in color, size, or shape of moles; changes in hair (growth or loss); and changes of the nails (e.g., clubbing, spooning, or ridges).
Eyes	Inquire about injury; double vision; visual acuity (near and far); sudden loss of vision; tearing (unilateral or bilateral); blind spots; pain; blurring of vision; ability to see at night, especially if the patient operates an automobile; photophobia; haloes around lights and headache (suggestive of narrow angle glaucoma); discharge; seeing spots (may indicate "floaters").
Ears	Question about pain, discharge, injury (including barotrauma associated with air travel, diving); hearing acuity; tinnitus; vertigo; balance (inner ear function); frequency and severity of ear infections (including treatment); care of ears, including wax (cerumen) removal if performed.
Nose	Ask about nosebleeds (including frequency), colds, obstruction, discharge (including color and quantity), changes in sense of smell, polyps, sneezing, and postnasal drainage.
Mouth/Throat	Inquire about dental difficulties, lesions, gingival hyperplasia and bleeding, use of dentures, adequacy of saliva flow, hoarseness, difficulty articulating words (dysarthria), frequency and severity of sore throats (including treatment), and changes in the appearance of the tongue or sense of taste. Ask about neck stiffness, pain, tenderness, masses in thyroid or other areas, and lymphadenopathy (pain or swelling of the lymph nodes).
Cardiovascular	Question about chest pain, substernal distress, palpitations, syncope, dyspnea on exertion, orthopnea, paroxysmal nocturnal dyspnea, edema, cyanosis, hypertension, heart murmurs, varicosities, phlebitis, and claudication, hemoptysis, and coldness of extremities (note severity and conditions under which this occurs).

Respiratory	Ask about pain (including location, quality, and relation to respiration), shortness of breath (SOB), dyspnea, wheezing, stridor, cough (noting time of day and, if productive, amount in tablespoons or cups per day and color of sputum), hemoptysis, respiratory infections, tuberculosis (or exposure to tuberculosis), and fever or night sweats. Note date of last CXR, if applicable.
Gastrointestinal	Inquire about appetite, dysphagia, indigestion, food idiosyncrasy, abdominal pain, heartburn, eructation, nausea, vomiting, hematemesis, jaundice, polyps, constipation, diarrhea, abnormal stools (e.g., clay-colored, tarry, bloody, greasy, foul-smelling), flatulence, hemorrhoids, and recent changes in bowel habits.
Genitourinary	Ask about urgency, frequency, dysuria, colic-like pain in flank area, suprapubic pain, facial puffiness, nocturia, hematuria, polyuria, oliguria, unusual (or change in) color of urine, stones, infections, nephritis, hernias, hesitancy, change in size and force of stream, dribbling, acute retention or incontinence (note type, e.g., stress, overflow), changes in libido, potency, genital sores, discharge, and sexually transmitted diseases. Ask male patients about the age of onset of secondary sexual characteristics, achieving and maintaining an erection, ejaculation, fertility, testicular pain or masses, and frequency and technique for performance of testicular self-exam. Ask female patients about age of onset of menses; length and regularity of menstrual cycles; date of last Pap smear; date of last menstrual cycle; dysmenorrhea, menorrhagia, or metrorrhagia; vaginal discharge, vulvar itching; postmenopausal bleeding; dyspareunia; hormone replacement or contraceptive therapy (describe fully and note any possible contraindications to same, such as a history of thrombophlebitis); type and frequency of sexual activity; number of sexual partners; infertility; number and results of pregnancies (gravida, para); complications of pregnancy, delivery, or the postpartum period (e.g., postpartum depression); and type of delivery (e.g., normal, spontaneous vaginal delivery, use of forceps, cesarean section).
Breast	Inquire about breast masses/lumps, lesions, tenderness, swelling, nipple discharge, dimpling/retraction of any area of the breast, and frequency and technique of breast self-examination (BSE). Note: Males may also develop breast cancer. They should be questioned about any discharge, masses, etc.
Musculoskeletal	Question about the experience of pain, swelling, redness, or heat of muscles or joints; bony deformity; limitation of motion; muscular weakness; atrophy; and cramps.
Neurologic	Ask about headaches, lightheadedness, convulsions, paralyses, incoordination, sensory changes (such as paresthesia, anesthesia, and hyperesthesia), changes in mentation, fainting, syncopal episodes, loss of consciousness, difficulties with memory or speech, sensory or motor disturbances, or disturbances in muscular coordination (ataxia, tremor).
Mental/Psychiatric	Ask about predominant mood; emotional problems; anxiety; depression (including suicidal ideation if appropriate); difficulty concentrating; if previous historical data suggest, assess for domestic, partner, and/or elder abuse; previous psychiatric care; unusual perceptions; and hallucinations.

Lymphatic	Inquire about local or general lymph node enlargement or tenderness or suppuration.
Hematologic	Question about anemia, abnormal bleeding or clotting tendencies, previous transfusions and reactions, and Rh incompatibility.
Endocrine	Inquire about polydipsia, polyuria, polyphagia, unexplained changes in weight; changes in skin texture or hair texture and distribution; energy level; appetite; changes in mentation; thyroid enlargement or tenderness; changes in size of head or hands; asthenia; hormone therapy; growth; secondary sexual development; and intolerance to heat or cold.

Completion of the review of systems concludes the health history. Before moving on to the physical examination, however, it is desirable to ask the patient if there are any health concerns or issues that were either not identified or not covered adequately during the history-taking process. Even if the patient declines to add anything, asking conveys a respect and valuing of the patient's role in decision making about her or his health and helps to reinforce the partnership between provider and patient.

Summary

The health history is the foundation upon which all other components of the patient's care are built. The manner and skill with which the clinician elicits the information has a major influence on the development of the provider–patient relationship and the quality of the data that will drive diagnostic and treatment decisions. The decisions and the patient's responses to treatment will be evaluated in terms of measurable outcomes, cost–benefit analysis, and patient satisfaction. Outcomes and patient satisfaction are intimately connected. The expert clinician is culturally competent and conducts all facets of care with an understanding and respect for the cultural dimensions of care. Such care creates a win–win situation: The patient achieves better clinical outcomes and is highly satisfied with his or her care, and the clinician meets institutional and third-party payer expectations that care will achieve evidence-based clinical outcomes in a cost-effective manner. Remember *C-L-I-E-N-T O-U-T-C-O-M-E-S* as you progress from novice to expert in your history-taking knowledge and skill.

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Additional Resources

Culture Clues

http://depts.washington.edu/pfes/CultureClues.htm

Culture Clues, produced by the University of Washington Medical Center's Patient and Family Education Committee, are of value to a busy clinician. These invaluable clinical tools are designed to allow a caregiver to quickly (in 3 to 5 minutes) acquire a baseline understanding of the defining characteristics, values, and beliefs of a particular cultural group, such as Korean, Latino, Albanian, Vietnamese, and hard of hearing. Additional *Culture Clues* are under development.

National Center for Cultural Competence

http://nccc.georgetown.edu

The National Center for Cultural Competence (NCCC) at Georgetown University's Center for Child and Human Development has developed instruments for both individual and institutional assessment of cultural and linguistic competency.

Chapter 2

Physical Examination Strategies

Function of the Physical Examination

The physical examination requires you to use your senses to assess the patient. You collect objective data regarding various aspects of the patient's health through sight, hearing, touch, and smell. Though strategies are discussed separately, it is important to realize that the history complements and validates the physical examination. The history and physical examination are the foundation of the treatment plan. The history obtained provides clues and guides you through the physical examination process. As the examination begins, some components of the examination process may prompt you to return to the history. Discreetly incorporating some history during the examination process facilitates the exposure of the principal, or sometimes underlying, diagnosis.

General Considerations

Interacting with the Patient

When conducting a physical examination, remember that encounters with the human body may be discomforting, embarrassing, and sometimes distressing for the patient. Your comfort level should never become so great that you forget about this often-invasive experience for each individual patient. Respect the integrity of the patient while maintaining a professional, courteous approach (as discussed in Chapter 1).

Gaining the trust and confidence of your patient is essential for obtaining an accurate history and physical examination. As you are examining the patient, the patient is simultaneously examining you (see **Figure 2-1**). The patient will note any hesitation or tone changes in your voice, how long you spend assessing certain body systems, and your facial expressions.

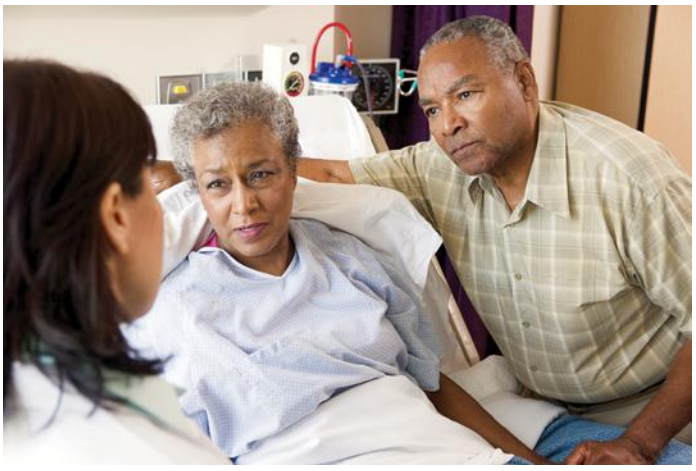

FIGURE 2-1 The patient notes the tone and demeanor of the examiner.

Determining the Scope of the Examination

Physical examinations are of two types: comprehensive and focused. As with comprehensive health histories, a comprehensive (or head-to-toe) physical examination should be performed on all nonemergent, new patients who will be receiving ongoing primary care from a particular provider or group of clinicians. Components of a comprehensive physical examination are discussed later in the text.

A focused physical examination is performed in emergency situations and/or when the patient is

already under the ongoing care of the clinician and presents with a specific problem-oriented complaint. Chapters 5 through 18 discuss focused assessments for various systemic disorders.

Assessment Techniques

Inspection

Inspection involves collecting data through sight and smell. Upon first contact with the patient, you observe mannerisms, gait, stature, and various other physical qualities. Inspection provides significant insight into underlying diseases/disorders. Knowing what to look for and what it means helps focus inspection. The systemic disorder chapters that follow give inspection points and relate them to possible diagnoses.

Palpation

Palpation involves using touch to collect data. Palpation is used to determine such characteristics as temperature, texture, tenderness or pain, and sensation. It is also used to establish information about internal characteristics, such as enlargement of the spleen. Depending on the amount of pressure applied, palpation can be characterized as light, moderate, or deep. Various aspects of your hands are used to assess different things.

Percussion

Percussion uses tapping to assess underlying structures. Percussion over a structure causes vibrations, which can be felt and heard. Percussion is used to establish such qualities as location, size, density, and reflex. Percussion may be direct or indirect. With direct percussion, use your finger or hand to strike/tap the surface of the patient's body directly. For indirect percussion, place your hand over the surface of the patient's body, and with the other hand, strike the first hand (**Figure 2-2**). Percussion sounds may be described as tympanic, hyper-resonant, resonant, dull, or flat.

Auscultation

Auscultation entails listening to body sounds (typically through a stethoscope) and is particularly important for assessing the lungs, heart, and abdomen. Direct contact with the skin is critical to adequately auscultate with a stethoscope; listening over clothing is NOT appropriate as important findings may be missed. It is critical that the provider invest in a high-quality stethoscope that has excellent sound quality and is comfortable to use. Before purchasing one, consider the following:

Eartips. It is important to use an eartip size that best fits your ears. When the eartips are in your ears, they should fit snugly, not loosely, so that the sound/acoustic performance is clear and loud. All eartips are available in small and large sizes. Poorly fitting ear tips can result in a poor seal, which can lead to missing critical sounds.

The seal. Stethoscopes rely on an airtight seal to transmit body sounds from the patient to the practitioner's ears. Loose parts in the chestpiece and loose or cracked tubing can prevent an airtight seal.

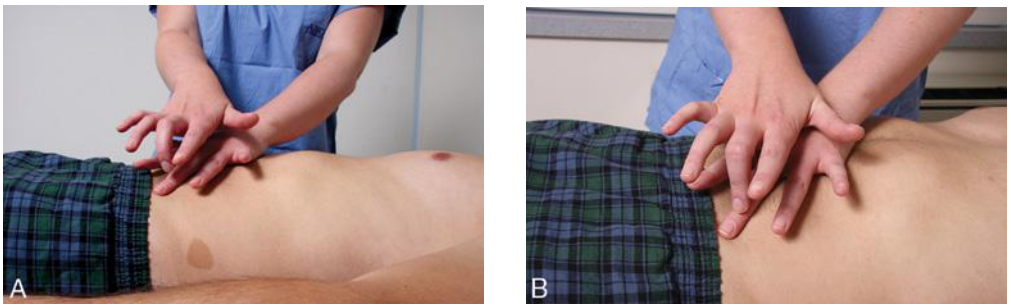

FIGURE 2-2 Indirect percussion.

The bell. When using a double-sided stethoscope, you can use either the bell or the diaphragm. Sound quality and volume depend on a quality bell.

Tubing. The tubing should retain its shape and flexibility even after being folded tightly into a pocket. Ideally, it should be made of material that does not contain materials that would irritate a patient's or provider's skin, especially those with allergies. Make sure the tubing is double lumen so sound is magnified.

Clinicians with hearing impairment may benefit from utilizing an electronic (digital) stethoscope specifically designed to enhance sound. Stethoscopes are also available for use in telemedicine or in specialty practices to enhance and record sound.

Head-to-Toe Examination

Preparing for the Examination

Gather necessary equipment (**Figure 2-3**). **Box 2-1** provides a list of equipment needed for a comprehensive examination. Before beginning the examination, instruct the patient to empty the bladder and remove as much clothing as possible and put on a gown. Remember to respect modesty (close doors, use drapes, and leave the room while the patient is dressing/undressing). Allow a third party in the room if that helps the patient feel more comfortable. Upon entering the room, wash your hands (and apply gloves, as appropriate). Make sure to tell the patient what you will be doing before you begin the examination.

Sequencing

Integration of the head-to-toe assessment requires rehearsal and repeated examinations to develop comfort and confidence. It takes time for the procedure to flow naturally. Learn to adapt to a situation and establish a routine that feels comfortable and natural to you. Develop a systematic pattern that is efficient and comfortable for the patient and that will prompt you not to omit parts of the examination.

There is no one correct way to put an examination together. The goal is to create a sequence that will flow very smoothly, accommodate the patient, and make it easier for the patient in that she

FIGURE 2-3 Basic equipment.

BOX 2-1 COMPREHENSIVE LIST OF EQUIPMENT FOR A PHYSICAL EXAMINATION

BASIC EQUIPMENT

- Cotton balls
- Cotton-tipped applicators/sticks
- Drapes
- Flashlight with transilluminator, or penlight
- Gauze squares
- Gloves
- Graves or Pederson speculum
- Gown
- Lubricant
- Marking pen
- Measuring tape
- Nasal speculum
- Odorous substances
- Ophthalmoscope
- Otoscope with pneumatic bulb
- Penlight
- Percussion hammer
- Sharp and dull testing instruments
- Sphygmomanometer
- Stethoscope with diaphragm and bell
- Taste-testing substances
- Thermometer
- Tongue blades
- Tuning forks
- Visual acuity screening charts

SUPPLIES FOR GATHERING SPECIMENS

- Culture media
- Glass slides
- KOH (potassium hydroxide)
- Occult blood testing materials
- Pap smear spatula and/or brush, fixative, and container
- Saline
- Sterile cotton-tipped applicators

or he will not have to make numerous position changes. Any approach may need to be adjusted to patient-specific conditions or disabilities.

The following is an example of a suggested approach, based on patient positioning.

General Survey

The examination begins as the patient enters the room.

- Assess appearance including age, sex, skin color, facial expressions, dress, eye contact, mood, mental alertness, and orientation.
- Note physical structure including posture, stature, size, contour, and nutritional state.
- Evaluate mobility including gait and movement when sitting and rising.
- Note speech pattern.
- Note hearing deficits or aids.

Measurements

- Measure weight.
- Measure height.
- Assess vital signs: blood pressure, pulse, respirations, and temperature.

Components of the Comprehensive Physical Examination

Patient Seated and Facing Examiner

Head and Face

- Inspect skin characteristics.
- Inspect and palpate scalp and hair for texture, distribution, quantity, masses, parasites, or lesions.
- Inspect face for appearance, expression, symmetry of structure and features, and movements.
- Ask the patient to raise his or her eyebrows, frown, smile, and open eyes against resistance. Note strength and symmetry of facial muscles (CNs V and VII).
- Evaluate sensation awareness of the forehead, cheeks, and jaw on each side of the face (CN V).
- With the patient's teeth clenched, palpate the masseter and temporal muscles.

Eyes

- Inspect the corneal light reflex for symmetry (Hirschberg test).
- Perform the cover–uncover test.
- Assess extraocular muscles for movement through the six cardinal fields of gaze.
- Assess position and alignment of the eyes.
- Inspect eyelids and eyelashes.
- Inspect lacrimal apparatus and conjunctiva.
- Inspect the sclera for color and clarity.
- Inspect pupils (pupils equal, round, reactive to light [PERRL]).
- Perform fundoscopic assessment:
  - Observe the red reflex.
  - Inspect the optic disc.
  - Inspect for retinal background hemorrhages, exudates, and lesions.

Ears

- Observe for position, size, shape, and symmetry of pinnae.
- Carefully palpate each ear separately; apply pressure to the tragus.
- Inspect the ear canal and tympanic membrane using an otoscope.
- Test hearing acuity (Weber, Rinne, and whisper tests).

Nose

- Inspect the external nose for overall shape, symmetry, and edema.
- Inspect the skin around the nose for lesions, color, and irregularities.
- Palpate the bridge and soft tissues of the nose.
- Inspect the sinus areas for edema; palpate and percuss sinuses.
- Inspect the nasal cavity.
  - Assess the nasal cavity for patency and the nasal septum for continuity.
  - Assess the turbinates for color, texture, and discharge.
  - Inspect the color of the mucous membranes.
- Test sense of smell (CN I).

Mouth and Oropharynx

- Observe movement of the mouth and lips and note any asymmetry.
- Inspect the lips for symmetry, color, edema, and lesions.
- Note odor of the patient's breath.
- Inspect the buccal mucosa and gums for color, ulcerations, lesions, or trauma.
- Observe position, color, and number of teeth.
- Inspect tongue for color and texture.
- Assess the tongue for atrophy and movement (CN XII).
- Inspect the hard and soft palates for color and appearance.
- Ask the patient to say "ah," and stroke the palatal arch with a tongue blade to observe for the presence of the gag reflex (CNs IX and X).
- Note the presence and size of tonsils and any exudate.
- Assess taste (CNs VII and IX).

Neck

- Palpate the lymph nodes in the neck area.
- Palpate carotid pulses one at a time.
- Determine the position of the trachea.
- Palpate thyroid.
- Auscultate carotid arteries and thyroid for bruits.

Upper Extremities

- Inspect the contour of the clavicles, scapulae, and shoulders.
- Palpate the sternoclavicular and acromioclavicular joints, acromion process, clavicles, and greater trochanter of the humerus.
- Test range of motion (ROM) of the shoulder and elbow.
- Assess biceps, brachioradialis, and triceps reflexes.
- Assess radial and brachial pulses.
- Inspect the hand; palpate for tenderness.
- Test ROM of the hand and wrist.

Patient Seated and Facing Away from Examiner with Back Exposed

Posterior Chest and Back

- Inspect skin for lesions.
- Note thoracic configuration.
- Palpate the spine.
- Percuss the kidneys.
- Assess the lungs:
  - Evaluate thoracic expansion.
  - Palpate for tactile fremitus.
  - Percuss the chest.
  - Determine diaphragmatic excursion.
  - Auscultate the posterior thoracic cage; note breath sounds.

Patient Seated and Facing Examiner with Chest Exposed

Anterior Chest

- Determine the shape and symmetry of the thorax.
- Assess the lungs:
  - Establish the respiratory rate and pattern.
  - Palpate for crackles and rubs.
  - Evaluate thoracic expansion.
  - Auscultate for breath sounds.
- Assess the heart:
  - Visualize the apical pulse.
  - Auscultate for heart sounds.
- Assess the breasts. Inspect the breasts with the patient assuming the following positions: arms extended over the head, pushing hands on hips, hands pushed together in front of chest, and leaning forward.
  - Inspect the breasts for size and symmetry.
  - Inspect the skin for texture and color.
  - Inspect the venous system.
  - Inspect for lesions or masses.

Patient Reclining 45 Degrees

Assist the patient to a reclining position at a 45-degree angle. Stand to the side of the patient that allows the greatest comfort.

- Inspect jugular venous pulsations.
- Measure jugular venous pressure.

Patient Supine with Chest Exposed

Assist the patient into a supine position. If the patient cannot tolerate lying flat, have him or her maintain head elevation at a 30-degree angle if possible. Uncover the chest while keeping the abdomen and lower extremities draped.

Female Breasts

Place a towel or pillow under the patient's back and ask her to raise her arms above her head.

- Inspect and palpate breast.
- Palpate the nipple.

Heart

- Palpate the precordium.
- Palpate the apical pulse.
- Percuss the borders of the heart.
- Auscultate heart sounds.

Patient Supine with Abdomen Exposed

Cover the chest with the patient's gown and expose the abdomen.

Abdomen

- Inspect the abdomen for peristalsis, asymmetry, and abdominal distention.
- Assess the abdomen's skin, observing color, scars, rashes, or lesions.
- Auscultate all four quadrants for bowel sounds.
- Auscultate for vascular sounds, bruits, venous hums, and friction rubs.
- Percuss all quadrants for dullness.
- Percuss for tympany and hyperresonance.
- Percuss the liver.
- Percuss the spleen.
- Using light, moderate, and deep palpation, palpate all quadrants.
- Perform fluid wave test.
- Palpate for rebound tenderness.
- Palpate for inspiratory arrest (Murphy's sign).
- Palpate for McBurney's sign.
- Palpate for abdominal aortic aneurysm.
- Palpate right costal margin for liver border.
- Palpate the liver.
- Palpate the kidneys.
- Palpate the spleen.

Male Genitalia

- Inspect and note the distribution of the pubic hair.
- Inspect and palpate the penis for any lesions, sores, rash, or masses.
- Inspect and palpate the urinary meatus.
- Inspect the scrotum for lesions, rashes, color changes, or edema.
- Palpate the testes.
- Assess for inguinal hernias.

Patient Supine with Legs Exposed

Arrange gown and drape so that they are covering the abdomen and pubis.

Hips

- Palpate the bony areas anteriorly.
- Test ROM.

Lower Extremities

- Inspect the knees for swelling, deformity, muscle tone, and alignment of patellae.
- Palpate the knees and test ROM.
- Inspect the ankles and feet for edema, ecchymosis of deformity.
- Palpate and test ROM of the ankles and feet.

Patient Seated Facing Examiner

Neurologic System

- Test rapid alternating movements (RAM).
- Observe for leg dystaxia using the heel-to-shin test.
- Assess exteroceptive sensation.
  - Assess the patient's ability to sense superficial pain.
  - Test temperature sensation.
- Assess proprioceptive sensation.
  - Test motion and position sense.
  - Test vibratory sense.
- Assess cortical sensation.
  - Test stereognosis.
  - Assess graphesthesia.
  - Test two-point discrimination.
  - Assess extinction.
- Test plantar and Achilles reflexes.

Patient Standing

Neurologic

- Observe patient standing, walking regularly, walking on heels, walking on tiptoes, and walking toe to heel.
- Instruct the patient to walk forward a few steps with eyes closed.
- Perform Romberg's test.
- Test for pronator drift.

Spine

- Assess posture.
- Palpate the spinal column.
- Palpate the paravertebral muscles.
- Observe ROM. Have the patient flex as if she or he were trying to touch her or his toes, extend, and move side to side.

Female Patient in Lithotomy Position

Remember to drape appropriately.

- Assess the mons pubis for general hygiene, pubic hair distribution, and condition of underlying skin.
- Inspect the vulva for lesions, edema, color, or discharge.
- Inspect the clitoris, urethral orifice, and vaginal introitus.
- Palpate the Bartholin's glands for masses, tenderness, or edema.
- Using a speculum, inspect the internal genitalia:
  - Inspect the cervix; note color and texture.
  - Inspect the cervical os.
- Perform bimanual examination:
  - Palpate the vagina.
  - Palpate the cervix.
  - Palpate the uterus, including the fundus.
  - Palpate the ovaries.
- Perform rectovaginal examination.

Physical Examination of Special Populations

Considerations for the Pregnant Patient

The examination sequence for the pregnant patient is the same as for the adult but requires a more inclusive assessment of the abdomen and pelvis. Remember, it is more difficult for a pregnant patient to assume the supine position. The preferred method is the side-lying position. Use the supine position only when necessary. Have the pregnant patient empty her bladder prior to examination. Abdominal assessment may be particularly uncomfortable for a pregnant patient because of associated urinary urgency and frequency.

Considerations for the Neonatal Patient

Newborns require special considerations in regard to physical assessment. Assessment techniques may vary related to age, wakefulness, and/or illness. With neonates, it is important to look carefully before touching. Inspecting without disturbing the baby is the key. Visual assessment provides many clues in determining the diagnosis (**Box 2-2**). Assessment sequence for newborns should be head/fontanels, extremities, abdomen, and the rest of the body. Always save invasive procedures, such as otoscopic examination, for last.

Considerations for the Pediatric Patient

Remember to consider developmental stages while performing the assessment. Children are unpredictable, so you may need to alter the sequence of the assessment to suit the moment. For example, a sleeping baby enables a good assessment of the heart, lungs, and abdomen, while a crying infant allows visualization of the oropharynx. If necessary, allow the parent to be the "examination table" for the comfort of the infant and parent (**Figure 2-4**).

To win children's cooperation, establish comfort prior to the examination. Take a few minutes to establish a relaxed environment. Give a 1-year-old child an object to hold. With a toddler, use a gentle pat, pleasing words, or interactive play. Allow children to touch the equipment used during the examination. For example, allow the child to use the stethoscope to listen to his or her parent's heart (**Figure 2-5**).

Considerations for the Geriatric Patient

The assessment sequence for older adults is the same as for the younger adult; however, there are several special considerations when examining the elderly. The elderly may have difficulty assuming certain positions (e.g., lithotomy position, knee-chest position, or lying supine), require assistance removing clothing, or may have decreased sensory capabilities. Assist the geriatric patient with position changes as needed to conserve energy or ensure safety. In addition, reaction time may be longer. Remember to maintain patience and assist in any way possible. You may have to assist the patient to the table, speak a little slower, or repeat yourself. You should obtain consent before assisting the patient, and you should ask the patient again whether or not he or she understands. The key with the elderly is to remain patient to ensure accuracy of the physical examination.

With the elderly population, it is necessary to obtain a functional assessment to determine the ability of the patient to perform day-to-day tasks (**Box 2-3**). The use of a functional assessment can determine:

- Ability of the elderly to deal with the daily demands of life
- How to shape your management plan
- Level of instruction you can provide
- Ability of the patient to comply with the management plan

BOX 2-2 VISUAL ASSESSMENT OF THE NEWBORN

Inspection of the newborn should include these key characteristics:

- Awareness, alertness, responsiveness, and playfulness
- Posture
- Flaccidity, tension, and spasticity
- Gross deformities
- Spontaneity in behavior
- Obvious and subtle interactions between parent(s) and child
- Feeding, sucking, and swallowing

FIGURE 2-4 Allowing the mother to hold the infant during examination.

FIGURE 2-5 Allaying a child's fears by letting him use a stethoscope.

BOX 2-3 FUNCTIONAL ASSESSMENT OF THE ELDERLY

Evaluate the following:

- Ability to perform basic activities of daily living (ADL), such as bathing, dressing, toileting, and feeding
- Ability to perform instrumental ADL, such as housekeeping, money management, grocery shopping, and meal preparation
- Mobility (use of cane, walker, wheelchair)
- Communication, including speech; ability to dial a phone; hearing acuity
- Safety (does the patient need assistance to get in and out of home, shower, car, etc.)
- Medication status, including regimen, acquisition, compliance, and ability to access health care
- Mental status and mood impairment

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Chapter 3

Documentation Strategies

Functions of Documentation

Documentation is a critical step in the health assessment process. The healthcare provider can perform an excellent examination; however, the documentation that accompanies determines the worth of the examination and reimbursement for services provided. The documentation of the patient–provider encounter not only provides the background necessary for follow-up with the patient, but it also serves as a legal account of the patient–provider interaction and subsequent interactions. If the documentation just indicates that the healthcare provider found "no problems," it is unclear to the next provider what areas were truly assessed and what questions were asked. For example, if a history of the respiratory system is taken but the documentation merely states "no problems," it is unclear to the next healthcare provider, or to a person performing a legal review of the chart, if the patient has been successfully queried about tuberculosis, chronic obstructive pulmonary disease, asthma, or sleep apnea. It also fails to provide sufficient data to justify the cost of any specific tests or treatments that require third-party reimbursement.

From a more practical perspective, giving a more detailed list of the items or questions reviewed with the patient also provides documentation for the provider, and it facilitates management of the patient in future encounters. Documentation can also directly benefit the patient and plays a key role in patient education as a summary of the visit (**Figure 3-1**). Once a provider has documented specifics about the past medical history, he or she does not need to repeat the same questions in future encounters. Instead, the provider is able to focus on any changes in the history since the last appointment. This facilitates continuity of care and helps the patient to feel that his or her past history is well-known and current needs are being met.

FIGURE 3-1 The healthcare provider listens to a patient's history of present illness, documenting pertinent data.

General Considerations

As a healthcare provider begins to document the history and physical examination, it is important to keep some simple strategies in mind. If a preprinted (check-off) form or electronic medical record is being used, it is appropriate to complete documentation while interviewing or examining the patient. Be sure to record vital signs as you take them and do not rely on your memory. Also remember the basic rule: If the examiner forgets to assess anything in the history or physical, he or she can come back to it later in the process, but the examiner must only record data that he or she has truly obtained. If the provider is using an open format, or a nonprinted form, it is helpful to take detailed notes while assessing the patient and then combine and transfer the notes into formal written or electronic format

as soon as possible (**Figure 3-2**). Again, if any assessment parameters have been omitted in either the history or the physical, it is appropriate to indicate "not assessed"; be sure not to fabricate any findings or data. Instead, make a note in the plan of care of additional areas that need to be covered during the next appointment. For example, if a provider forgets to assess the thyroid and the patient's chief complaint includes fatigue, then it would be appropriate to make a notation in the plan that the thyroid should be assessed and a thyroid-stimulating hormone (TSH) level drawn at the next encounter.

Although accuracy is foremost in each provider's mind when performing a history and physical examination, speed of documentation is also important. One strategy that ensures both accuracy and speed is the use of drawings. Frequently, healthcare providers use a stick figure to document pulses and deep tendon reflexes (**Figure 3-3**) and use an anatomical drawing of the body or a body part to document the size and location of skin lesions, rashes, or wounds. In many institutions both the stick figures and anatomical drawings of the body are already on the preprinted forms, whereas in other institutions, the provider must draw each item. The goal is to provide the best "picture" of the patient's condition, either in written format or with a drawing, to serve as a comparison for future assessments.

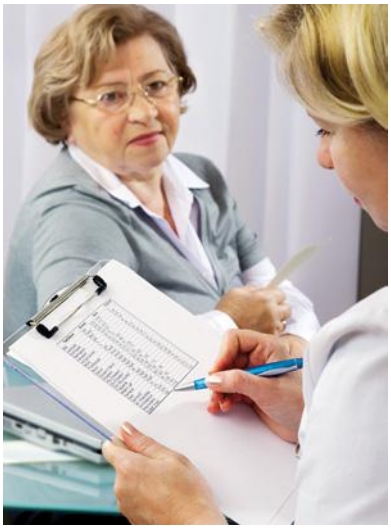
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FIGURE 3-2 The healthcare provider takes brief notes during the interview.

Although many methods of documentation are now available, such as direct computer written reports, each new method provides potentially new concerns. Since 2003, increasingly stringent federal guidelines, called the Health Insurance Portability and Accountability Act (HIPAA), have been implemented to restrict the sharing of patient information, either directly or indirectly. Although data can easily be recorded directly into an institution's electronic medical record, this process places an added responsibility on the provider to ensure computer screens are not left unattended where patient data can be seen or reviewed by unauthorized individuals. These guidelines also regulate with whom a provider can share patient information. In addition, HIPAA regulations require the patient to provide consent for his or her medication information to be disclosed to other individuals. The challenge for the provider is to write an appropriate record of the history and physical examination, using the latest technology available, without violating the patient's right to confidentiality. The use of e-mail and faxes to share patient information poses an additional problem. Most institutions advise that a disclaimer be inserted at the bottom of any patient-related communication that indicates that the following information is confidential. For example, if information needs to be shared electronically, the following disclaimer may be used:

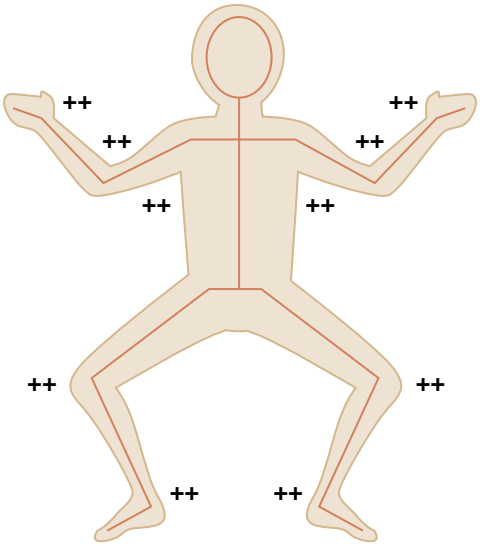

FIGURE 3-3 A stick figure can be used to document deep tendon reflexes. 0, no response; 1+, sluggish; 2+, expected response; 3+, slightly hyperactive; 4+, hyperactive.

> HIPAA Notice: The information transmitted within this e-mail or in any attached documents is intended solely for the individual or entity to which it is addressed. That information may contain confidential and/or privileged material. If you believe you have received this e-mail in error, please immediately contact the sender and delete the material from your system.

BOX 3-1 DO'S OF DOCUMENTATION

Use only approved abbreviations
If charting on paper, write legibly
Avoid opinion
Record only facts
Document succinctly and clearly to promote understanding.

SOAP Approach

The most common approach for documenting a history and physical is the subjective data, objective data, assessment, and plan (SOAP) format. In documenting the history and physical examination, you should remember that the *subjective* section includes any information or facts that the patient presents or that the chart provides. Standard sections within the *subjective* section include chief complaint, history of present illness, past medical history, medications, allergies, last menstrual period for women, family history, social history, nutritional assessment, and the review of systems. The *objective* section consists of data and information obtained by the examiner with his or her eyes, ears, and hands. If obtained at the time of the examination or immediately afterward, laboratory findings and diagnostic test results are also recorded in the objective section. Previous test results belong in either the history of present illness or in the review of systems. *Assessment* refers to the final assessment; it pulls together the findings presented in the subjective and objective sections to form a diagnosis. The *plan* outlines the treatment plan related to the chief complaint, current comorbidities, and/or additional problems that have become evident during the examination. (For further explanation of subjective and objective data, see Box 1-1 in Chapter 1.)

Two broad subclassifications of the SOAP format are a comprehensive health history and physical examination and a focused, or episodic, health history and physical examination. Both a comprehensive and focused history and physical use the same format, but the extent of the information obtained varies. (See Chapter 1 for a detailed description of the components of each type of history.) The reason for the patient's visit and the extent of the illness dictate which approach is used. If a patient is presenting to the healthcare provider for a specific problem, such as a sore throat, then a focused history and physical is completed. If a patient presents for an annual physical examination or is a new patient, then the provider should use a comprehensive format, which explores all the systems. Part of the role of the healthcare provider is to determine which SOAP format is to be used, what questions are pertinent to explore, and how the data can be integrated into an appropriate list of diagnoses, differential diagnoses, and problems. This organization of data presents the stepping stone for the next phase, the development of the treatment plan or plan of care.

Documentation Tips

Each component of the health history contains information that is important for making diagnosis and treatment decisions (for more information, see Chapter 1). Just as the right questions must be asked, the right data must be documented. This section provides tips for ensuring proper documentation. Most medical practices now use electronic medical records; these allow for computer-generated formats that facilitate complete documentation, data collection, and optimum reimbursement. For those practices still utilizing paper records, there are a number of different formats that can be used for documentation, including a preprinted form that requires checking off the correct box and an open format in which no preprinted information appears. Both systems have advantages and disadvantages. The preprinted formats are easy and quick to use. They help to ensure that all the desired areas are assessed, and they eliminate the struggle over wording. However, the preprinted forms frequently limit the amount of extra information that can be added, so in some cases when positive findings are obtained, it is difficult to individualize the form to accurately document the data. On the other hand, the open format is similar to a blank page, where no headings or prompts are included. With the open format, the provider can include as much information as she or he wishes; however, a provider may fail to include all the necessary data because prompts or choices were not provided. In addition, the open format is more time-consuming because each provider must individually write each finding in the history and physical examination, and word selection may become an issue.

Whether you are using an electronic medical record, a "check-off" format, or an open format, it is important that each system is covered completely and the data accurately reflect both what the patient stated and the provider's physical findings. Note that frequently the patient will provide additional information scattered throughout the examination process. It is important for the documentation process that the subjective information is properly recorded in the subjective component of

the encounter note, and that any physical findings that the provider identifies are documented in the objective component. It is also important to accurately listen to the information the patient is providing, and then document the information in the most accurate medical terminology possible. Usually only the chief complaint is provided as a direct patient quote. For example, the patient may state that she or he had a "heart attack," but the provider's documentation should indicate the patient had a myocardial infarction. Also with respect to the physical examination, it is important to realize that the examination itself is performed region by region, or area of the body by area of the body, but the data are documented according to systems. For example, when examining the neck, assess the thyroid and the carotid arteries. However, documentation of the thyroid occurs under the system heading "endocrine," and carotid artery findings are documented under "cardiac" or "cardiovascular."

Subjective Data

Patient Identifiers and Chief Complaint

The provider should first document patient identifiers, including the patient's name, date of birth, and the date and time of examination. This is followed by the "chief complaint" (CC). The chief complaint must be expressed in the patient's own words and is written in quotation marks. For example, if a patient presents to a clinic with a chief complaint of abdominal pain and expresses it as "my stomach is killing me," then the phrase "my stomach is killing me" is documented in the chief complaint. Documenting the patient's chief complaint in his or her own words serves to highlight the patient's reason for presenting to the healthcare facility.

History of Present Illness

Along with the chief complaint, the history of present illness is documented. The history of present illness (HPI) is a concise description of the patient's recent history. The opening sentence should contain key pertinent data that both the provider and any other healthcare professional should know, including age, gender, and significant comorbidities. For example, if the patient presents with a chief complaint of a "lump in her breast" and is 10 weeks' pregnant, the opening sentence of the history of present illness should state "a 26-year-old female who is 10 weeks' pregnant presents with a recent history of a lump in the upper outer quadrant of her left breast." This information alerts the provider and all other healthcare workers that the patient is pregnant, a key factor that must be considered when developing the patient's treatment plan. If in fact this patient has breast cancer, then the typical treatment guidelines for breast cancer will need to be altered. The patient will not be a candidate for any treatment or medication that would be harmful to the fetus. Failure to document this information would have significant legal implications.

Once the opening sentence is developed, the clinician then documents the patient's presenting signs and symptoms. For each sign or symptom, the clinician should fully explore each topic by asking pertinent questions using the mnemonic PQRST or CLIENT OUTCOMES, as discussed in Chapter 1. These are important factors that guide this patient's plan of care and help to identify future teaching needs.

If a patient describes more than one sign or symptom, each one should be explored. For example, if the patient states that she has a severe headache as well as nausea and vomiting, each component needs to be described or explored in depth. The clinician never wants to make the assumption that the signs and symptoms are related. The headache may be a long-term problem that the patient always has, but the nausea and vomiting may be a new onset.

For situations in which the patient has an extensive recent history, such as a trauma patient admitted into the hospital, the key pertinent data are summarized in the history of present illness, so all healthcare providers who are involved in the patient's care understand what has happened to the patient, and what treatment modalities have already been implemented. In addition, all recent diagnostic tests, along with the outcome of any intervention taken during this recent hospitalization, should be summarized. For example, if a patient is intubated in the emergency room, the practitioner should record whether the initial intubation effort was successful, what size tube was inserted,

where the ET tube markings are in relationship to the patient's lips, and what was suctioned from the lungs. If it was a traumatic intubation, this should be documented in an effort to alert other healthcare workers that the patient may have bloody oral secretions as well as hemoptysis. It also alerts others that the patient may develop laryngeal edema upon extubation.

The history of present illness should include any pertinent recent test results and test dates. For example, if a patient presents with chest pain but indicates that he had a negative stress test 2 weeks ago, these data should be incorporated into the history of present illness, as they have a direct bearing on the patient's chief complaint. However, if the same patient presents for evaluation of hematuria, then a recent stress test result should be incorporated into the past medical history. Test results should be summarized, providing other healthcare workers, physicians, nurses, and other practitioners with an overview of results and indications. The history of present illness should not be a repetition of the formal diagnostic reports. Dates also help other healthcare workers understand previous occurrences, but it is important to summarize the information in the history of present illness and not just list the dates in a bulleted format. Thus, the history of present illness should be a concisely written paragraph (or paragraphs) that describes the patient's signs and symptoms and the course of events up until the present encounter. A guiding rule of thumb is to consider the record to cost "a dollar a word." The key for the novice provider is to determine what is pertinent information and what is superficial information.

Past Medical History

Once the history of present illness is concisely documented, describe the patient's past medical history (PMI). The past medical history should include significant information about previous or current illnesses, hospitalizations, surgeries, injuries, immunizations, medications, and allergies (for a complete list, see Chapter 1). Also, document information about transfusions and any transfusion reactions, immunizations, and results of any screening examinations. When recording this information, it is important that dates, or approximate dates, are included to provide an accurate perspective of the patient's past history. For females, last menstrual period (LMP) should be documented. Although the history of present illness is written in paragraph form, the past medical history is typically presented as bulleted information with appropriate dates included. If a preprinted form is being used, it is important to add the appropriate dates and outcomes in addition to the finding itself. For example, if the patient has a history of hypertension (HTN), and the preprinted form has a selection for HTN, not only should HTN be checked, but it should indicate either the year it was diagnosed, or the number of years the patient has had the condition, and if the hypertension is well controlled. If the patient does not have allergies or if she or he is not taking any medications, it is important that the word *none* is listed beside the heading. This eliminates a question as to whether the clinician forgot to ask about allergies or medications.

Family History

Following the past medical history, the family history (FH) is documented. The family history should include pertinent negatives, as well as positive findings. Broad categories that are usually explored in this section include a family history of cancer, diabetes, cerebrovascular accidents, myocardial infarctions, and genetic defects. Within each of these categories it is appropriate to further explore positive findings. For example. if a patient has a family history of cancer, the clinician should document the type of cancer and which family member. For cardiovascular diseases, it is also appropriate to document the family member's age at the time of the event. For example, it makes a difference in terms of cardiovascular risk factors if a patient's father had a myocardial infarction at the age of 54 and died from it or whether the father had a myocardial infarction at the age of 84.

In some cases, a genogram may be included. The genogram provides a rapid way to condense the data and indicates whether immediate relatives are alive or have died, and what type of comorbidities each individual has or had. Symbols are used to represent family members when developing the genogram. An open circle refers to female relatives, an open square represents male relatives; if either the circle or square is colored in, it indicates that the individual is deceased. Lines

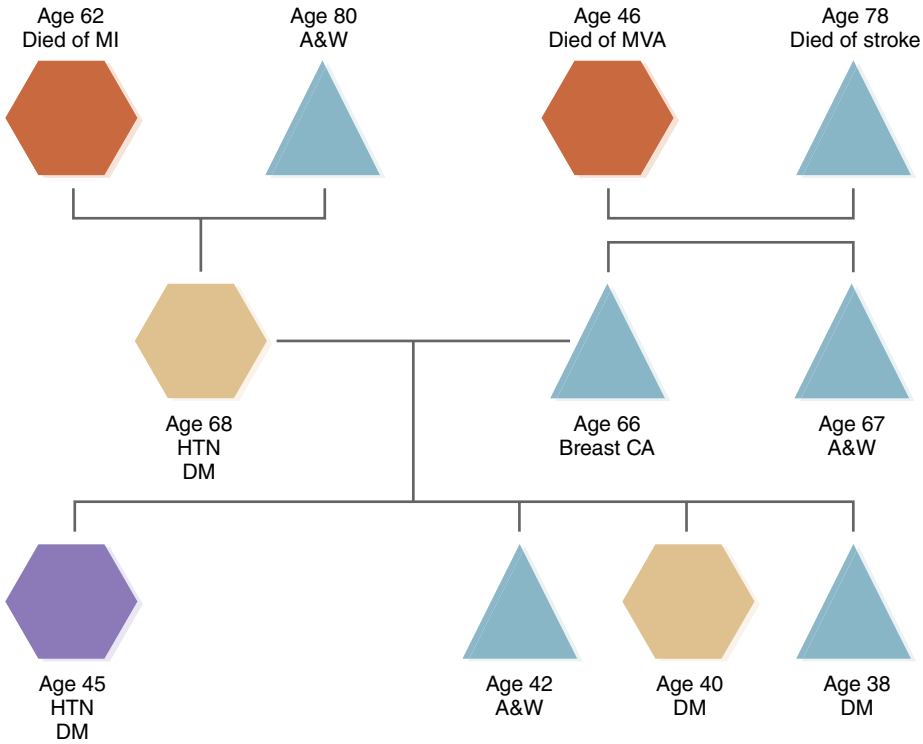

FIGURE 3-4 Genogram. This patient is a 45-year-old man who has HTN and diabetes mellitus (DM). He has three siblings: two sisters and a brother. One sister and his brother have DM. The patient's parents are alive. His father has HTN and DM and is 68 years old. His mother is 66 years old and has had breast cancer (CA). His aunt is age 67 and alive and well (A&W). Maternal grandparents are both dead. His grandfather died in a motor vehicle accident (MVA) at age 46, and his maternal grandmother died of a stroke at age 78. Paternal grandparents were divorced. His paternal grandfather died of a myocardial infarction (MI) at the age of 62, and his paternal grandmother is A&W.

are used to indicate both marriages and children, and a broken line indicates a divorce. In developing a genogram, it is important to indicate the patient's position within the genogram with an arrow. **Figure 3-4** depicts a genogram.

Social History

Following family history, the provider should document the patient's social history (SH), including the nutritional history. Social history should include the patient's marital status, highest level of education, and use of alcohol, tobacco, and recreational drugs (see Chapter 1 for a more inclusive list). Other items can be included such as sleep habits, exercise habits, and religious preference. In obtaining this information, it is important to be concise and summarize the pertinent points in order to individualize the patient's plan of care. Hence, although a patient may exercise daily and do a number of different types of sports or exercises, a brief summary of the patient's exercise pattern is all that is needed. For example, unless the patient is presenting for a sports-related injury, it is sufficient to state, "Patient exercises for 45 minutes three times per week." On the other hand, if the patient's history indicates that he has a limited income, poor housing, and no running water, these details belong in the written social history because they may have a direct impact on the patient's plan of care.

Nutritional history can be documented as a summary statement, and does not need to include a 24-hour recall unless nutritional status is a pertinent problem for the patient. For example, if a patient is homeless and has an open wound that has been healing poorly, then a more complete documentation of that patient's dietary intake may be appropriate in order to document her or his need for further assistance or social services.

Review of Systems

The next broad category under the subjective findings is the review of systems (ROS). Within each system, the clinician should document the data that were sought, including pertinent negatives. The term *no significant findings* or *negative* should be avoided. Such forms of documentation fail to provide any specific information as to what was asked or not asked. Also, fully describe any positive findings. For example, if the patient's chief complaint is a "cold," but the review of systems reveals he or she has a history of asthma, the clinician should determine how many years the patient has had asthma, what seems to trigger the asthma, how the attacks present themselves, what makes it better, what makes it worse, and when the last attack was. Subsequent chapters discuss the specific questions related to each system that need to be explored in further detail. Chapter 1 lists the broad categories. Which systems are explored is determined by the patient's CC, list of comorbidities, and whether the examination is a comprehensive history and physical or a focused history and physical. For a comprehensive examination, all the systems should be appropriately explored in the review of systems, and for the focused examination only those systems pertinent to the history of present illness and past medical history are explored.

Determining which systems are explored in the review of systems is an important clinical decision that guides the remainder of the physical examination and the documentation process. The review of systems represents the end of the subjective component of the SOAP.

Objective Data

Physical Examination

The objective component begins with the physical examination; the review of systems and physical examination should match each other (i.e., if all systems are evaluated in the review of systems, then all systems should be evaluated in the physical examination). If a focused examination is being done, and if only the general, respiratory, and cardiac systems are explored in the review of systems, then the physical examination should focus on these same three components.

Correct terminology, accurate descriptions, appropriate legends, and completeness are vital components within the physical examination. Legally, the standard rule is: If it is not documented, it either was not assessed or not done. Hence, omissions can be critical. If the clinician fails to document that all lobes of the lung are clear to auscultation, then one cannot assume that all lobes were assessed. Also, if in the documentation of the cardiac assessment, the provider does not comment about rate, rhythm, or pulse deficit, then one cannot derive that these aspects were evaluated or assessed.

Diagnostic Tests

The last component of the objective section is diagnostic tests (laboratory findings). In some institutions, the laboratory findings are integrated into the appropriate system. For example arterial blood gases and the most current chest X-ray may be documented in the respiratory section. In other institutions, laboratory findings, such as a basic or complete metabolic panel, are listed separately. Again, abbreviations and symbols may be used, if approved by the institution or facility.

Assessment

Once the subjective and objective data are completed, the clinician then organizes the findings into an appropriate section called assessment, or final assessment findings. The final assessment findings can be divided into three categories: (1) all new diagnoses, as well as any preexisting diagnoses; (2) differential diagnoses, or those diagnoses that require further testing in order to confirm them; and (3) a problem list. When this approach is used, the final assessment findings include any additional findings that may or may not be directly related to the history of present illness. For example,

BOX 3-2 SAMPLE PROBLEM LIST FOR A PATIENT IN HEART FAILURE

Atrial fibrillation
Hypokalemia
Potential hyperkalemia (secondary to the use of a potassium-sparing diuretic)
Fluid overload
Shortness of breath
Skin breakdown
Anxiety (secondary to shortness of breath)
Potential for deep venous thrombosis (secondary to inactivity)
Potential for respiratory failure
Potential for cardiogenic shock

if the patient has a history of smoking, cigarette abuse should be listed. If the patient is a type 2 diabetic, then type 2 diabetes should be listed, in addition to any diagnoses related to the patient's chief complaint. Many times, however, the diagnosis is not firmly established; in this case, possible diagnoses are listed as *differential diagnoses*. Some individuals may label these as *rule outs*. For example, consider a 54-year-old man who presents with a 2-hour history of chest pain that is epigastric in nature, does not radiate, and is relieved by antacids. These symptoms may lead the novice practitioner to think about gastro-esophageal reflux disease (GERD), but another more significant differential is acute coronary syndrome, which needs to be "ruled out" before the diagnosis of GERD can be focused on.

A third component of the assessment section is called the problem list. Not all patients will have a problem list, but for many hospitalized patients, the problem list includes other issues that are not true diagnoses, but issues that need to be addressed as the result of either the diagnosis or the plan of care. For example, if a patient is hospitalized for heart failure and her basic metabolic panel indicates that she is hypokalemic, then the diagnosis is *heart failure*, and hypokalemia would appear in the problem list. Typically, items in the problem list are conditions that can be treated and, it is hoped, resolved. For example, with heart failure, the heart failure will be treated, but not cured. However, with appropriate potassium replacement, the hypokalemia can be eliminated as a problem. It may need to be continually reassessed; hence, developing a problem list helps to guide further treatment and care. It documents in a readily retrievable format other issues that need to be potentially reevaluated. **Box 3-2** provides a sample problem list.

Plan

The last component of the findings is the plan. There are five components of the plan. These are nonpharmacological interventions, pharmacological interventions, educational needs for both the patient and his family, follow-up, and referrals. Which components are included in the plan are determined by both the data obtained in the subjective and objective components of the write-up as well as the diagnosis and differentials. Not every patient will have a non-pharmacological section to the treatment plan. This component is frequently reserved for hospitalized patients, and it represents the "orders" for the staff nurses to follow. Also, depending on the patient's diagnosis, medications may not be ordered. Under *education*, it is critical to document any instructions that have been given to the patient and/or family. This includes any instructions in terms of when to seek additional medical attention. One common legal problem that frequently surfaces is the patient's or family's comment "we were not told." To avoid these situations, the clinician should document (1) what was taught or explained, (2) to whom it was told, (3) if the patient or family stated that he/she or they understood the information presented, (4) and the format. For example, were they given written instructions as well as verbal instructions?

Summary

Documentation of the patient's health history and physical examination is vital to guide the care and treatment of the patient, to provide ongoing feedback to other healthcare providers, and to provide a sound basis for legal review. The provider must complete documentation that is accurate, concise, and confidential. It is an important aspect of assessment that should not be overlooked. **Figure 3-5** demonstrates documentation of a sample case. This format is used to demonstrate cases throughout the rest of the text.

Name JS	Date 1/19/13	Time 0845
	DOB 1/16/48	Sex M
HISTORY		
CC "I have chest pain."		
HPI 57-year-old Caucasian male in acute distress presents with a 2-hour history of chest pain. Mr. S woke up and felt a new "heaviness" in his chest. He took two Tums, which did not relieve the pain. Pain has gotten worse and is radiating down his left arm. He rates the pain an 8 (out of 10). He states he feels nauseated and slightly short of breath.		
Medications Vasodec: 10 mg qd for HTN. Last dose 1/18/13. ASA: 81 mg qd for "blood thinner." Last dose 1/18/13.		
Allergies NKA		
PMI Illnesses No history of angina or MI. History of hypertension for 5 years. History of GERD, self-treats with Tums.		
Hospitalizations/Surgeries No history of hospitalizations or surgeries.		
FH Father died of MI at age 52. No history of cancer or diabetes mellitus.		
SH Mr. S is married (for 25 years) and has two grown children living in the area. Mr. S is self-employed as a consultant and has insurance. He exercises 1–2 times per month. Mr. S tried to follow a low-fat diet. He smokes 2 packs per day (for 25 years).		
ROS		
General No history of recent weight change or dietary changes.	Cardiovascular History of HTN. Chest pain, radiating to left arm (see HPI).	
Skin Denies history of scars, eczema, psoriasis, or cancer.	Respiratory Smokes 2 ppd (≈ 25 years); slight SOB.	
Eyes Nearsighted and wears glasses. No history of glaucoma.	Gastrointestinal Nausea started with chest pain. History of GERD, well controlled with PPI.	
Ears Denies hearing problems.	Genitourinary/Gynecological Difficulty starting stream for past year. Has noctura » 2 nightly. 6 months ago, diagnosed with benign prostate hypertrophy.	
Nose/Mouth/Throat Denies oral problems; wears dentures, upper and lower.	Musculoskeletal Denies history of fractures, arthritis, or trauma.	

FIGURE 3-5 Sample documentation.

Breast Denies problems.	Neurological Denies history of seizures, strokes, or syncope. No history of Parkinson's, tremors, paralysis, headaches, falls, or vertigo. Denies depression, memory impairment, dementia, or speech impairment.	
PHYSICAL EXAMINATION		
Weight 195 lb	Temp 98.0	BP 92/78
Height 6'	Pulse 118	Resp 24 and labored
Skin Cool and pale; turgor, brisk recoil.		
HEENT Eyes: No erythema of the sclera; pink conjunctiva, no discharge; EOMs intact w/o lid lag or nystagmus; fundoscopic exam revealed no AV nicking or cotton wool patches. Ears: Tympanic membrane pearly gray with no discharge. Mouth: Buccal mucosa pink, without lesions.		
Cardiovascular S1 and S2 heard with no splitting or murmurs. S3 audible predominantly at apex. PMI 5th ICS midclavicular line. No JVD noted. Carotids equal bilaterally with no bruits. No bruits over aorta, renal, iliac, or femoral arteries. Capillary refill brisk. Pretibial edema +1 bilaterally.		
Respiratory Respirations labored. Clear to auscultation in all lobes.		
Gastrointestinal Bowel sounds active in all quadrants. Abdomen soft and without tenderness. No hepatomegaly or splenomegaly noted.		
Genitourinary Not examined.		
Musculoskeletal Muscle strength 5/5 in upper and lower extremities bilaterally. Full ROM in all joints. No atrophy noted. No crepitus over joints noted. Gait deferred.		
Neurological Awake, alert, and orient ≈ 3. Moderately anxious. PERRLA. Speech clear. CN II–XII intact. All DTRs bilaterally 2+.		
Other		
Lab Tests Tropin I, CK-MB, basic metabolic panel, PT, PTT drawn but not back from lab.		
Special Tests 12 lead ECG indicates ST segment elevation in leads II, III, and AVF. No Q wave present; good progression of R wave leads V_1–V_3. Chest x-ray clear.		
Final Assessment Findings 1. Acute coronary syndrome 2. HTN 3. Cigarette abuse		

FIGURE 3-5 Sample documentation *(Continued)*.

Bibliography

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Additional Resource

HIPAA Regulations

https://www.hhs.gov/hipaa/index.html
This website gives national standards about maintaining patient privacy.

Chapter 4

Cultural and Spiritual Assessment

Previously, you were introduced to the concept of providing culturally competent care, which discussed the Healthy People 2020 initiative and the topical areas of health life stages and the social determinants of health. Attaining goals associated with these key topical areas requires a responsive healthcare delivery system and healthcare providers who deliver culturally competent care.

Providers need to understand the five domains encompassed in the social determinants of health to better prepare them to provide culturally competent care. The five domains of social determinants of health are depicted in **Figure 4-1**.

Why is cultural competence in healthcare delivery important? The Institute of Medicine's report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* concluded that racial and ethnic disparities in health care exist, which often result in worse outcomes and healthcare provider bias, stereotyping, prejudice, and clinical uncertainty that may contribute to racial and ethnic disparities in health care (Smedley, Stith, & Nelson, 2003). Based on these findings, it becomes incumbent upon healthcare professionals to enhance their knowledge, skills, and abilities to provide culturally competent care.

Cultural competence in healthcare is a concept that has been explored by many. Central to the concept is the capacity of the healthcare professional to work within the patient's cultural context. The patient's cultural context transcends the singularity of just the individual patient and encompasses the concepts of the patient's family and cultural community (Campinha-Bacote, 2007). In addition to cultural competence, Campinha-Bacote's model of cultural competence encompasses the concepts of cultural awareness and cultural knowledge (Campinha-Bacote, 2011).

Cultural awareness encompasses exploration of one's own biases and assumptions about others (Campinha-Bacote, 2011), but healthcare professionals—members of a community whose aim it is to "care" for others—are challenged in acknowledging that they have biases that impact the care they provide. Social cognition research provides an extensive body of evidence that implicit cognitive bias can plague even the most well-intended providers (Burgess, Fu, & van Ryn, 2004).

Braverman and Blumenthal-Barby (2012) define bias as the cognitive tendency to make systematic decisions based on cognitive factors rather than evidence. In 2007, Burgess et al. reported that racial and ethnic bias negatively impact provider clinical decision making. Findings