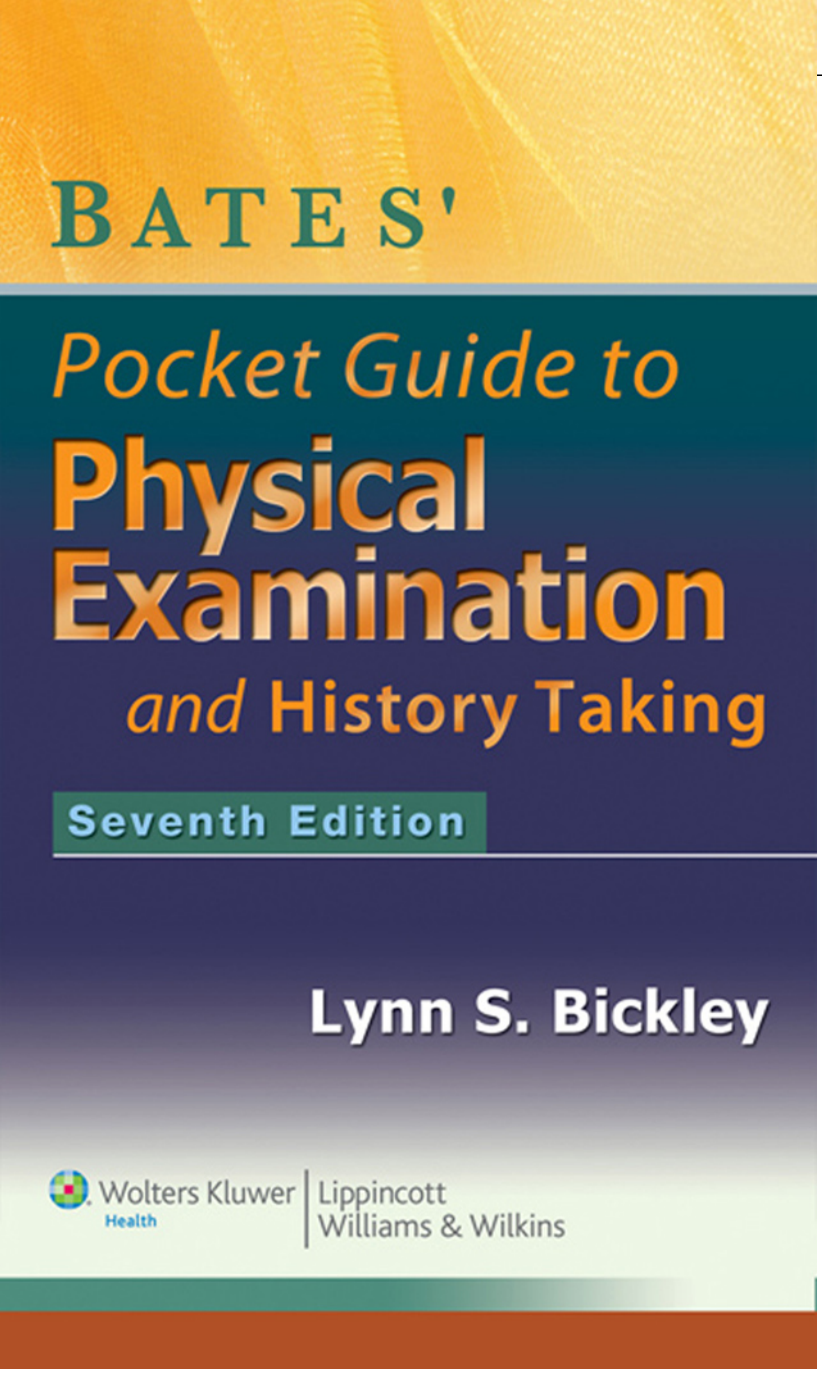
BATES'
Pocket Guide to
Physical Examination
and History Taking
Seventh Edition
Lynn S. Bickley
Wolters Kluwer Health
Lippincott Williams & Wilkins

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Wolters Kluwer Health | Lippincott Williams & Wilkins
Philadelphia • Baltimore • New York • London
Buenos Aires • Hong Kong • Sydney • Tokyo

Acquisitions Editor: Elizabeth Nieginski/Susan Rhyner
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Manufacturing Coordinator: Karin Duffield
Indexer: Angie Allen
Prepress Vendor: Aptara, Inc.

7th Edition

9 8 7 6 5 4 3 2 1

Printed in China

Library of Congress Cataloging-in-Publication Data

Bickley, Lynn S.
Bates' pocket guide to physical examination and history taking / Lynn S. Bickley, Peter G. Szilagyi. — 7th ed.
p. ; cm.
Pocket guide to physical examination and history taking
Abridgement of: Bates' guide to physical examination and history-taking. 11th ed. / Lynn S. Bickley, Peter G. Szilagyi. c2013.

Includes bibliographical references and index.
Summary: "This concise pocket-sized guide presents the classic Bates approach to physical examination and history taking in a quick-reference outline format. It contains all the critical information needed to obtain a clinically meaningful health history and to conduct a thorough physical assessment. Fully revised and updated, the Seventh Edition will help health professionals elicit relevant facts from the patient's history, review examination procedures, highlight common findings, learn special assessment techniques, and sharpen interpretive skills.The book features a vibrant full-color art program and an easy-to-follow two-column format with step-by-step examination techniques on the left and abnormalities with differential diagnoses on the right."—Provided by publisher.

ISBN 978-1-4511-7322-2 (pbk. : alk. paper)
I. Bates, Barbara, 1928-2002. II. Szilagyi, Peter G. III. Bickley, Lynn S. Bates' guide to physical examination and history-taking. IV. Title. V. Title: Pocket guide to physical examination and history taking.

[DNLM: 1. Physical Examination—methods—Handbooks. 2. Medical History Taking—methods—Handbooks. WB 39]

616.07′51—dc23 2012030529

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To Randolph B. Schiffer, for lifelong care and support,
and to students world-wide committed to clinical excellence.

Introduction

The *Pocket Guide to Physical Examination and History Taking*, 7th edition is a concise, portable text that:

- Describes how to interview the patient and take the health history.
- Provides an illustrated review of the physical examination.
- Reminds students of common, normal, and abnormal physical findings.
- Describes special techniques of assessment that students may need in specific instances.
- Provides succinct aids to interpretation of selected findings.

There are several ways to use the *Pocket Guide*:

- To review and remember the content of a health history.
- To review and rehearse the techniques of examination. This can be done while learning a single section and again while combining the approaches to several body systems or regions into an integrated examination (see Chap. 1).
- To review common variations of normal and selected abnormalities. Observations are keener and more precise when the examiner knows what to look, listen, and feel for.
- To look up special techniques as the need arises. Maneuvers such as The Timed Get Up and Go test are included in the Special Techniques sections in each chapter.
- To look up additional information about possible findings, including abnormalities and standards of normal.

The *Pocket Guide* is not intended to serve as a primary text for learning the skills of history taking or physical examination. Its detail is too brief for these purposes. It is intended instead as an aid for student review and recall and as a convenient, brief, and portable reference.

Contents

CHAPTER

1

Overview: Physical Examination and History Taking

This chapter provides a road map to clinical proficiency in two critical areas: the health history and the physical examination.

For adults, the comprehensive history includes *Identifying Data and Source of the History, Chief Complaint(s), Present Illness, Past History, Family History, Personal and Social History,* and *Review of Systems.* New patients in the office or hospital merit a *comprehensive health history;* however, in many situations, a more flexible *focused,* or *problem-oriented, interview* is appropriate. The components of the comprehensive health history structure the patient's story and the format of your written record, but the order shown below should not dictate the sequence of the interview. The interview is more fluid and should follow the patient's leads and cues, as described in Chapter 3.

Overview: Components of the Adult Health History

Identifying Data	◗ *Identifying data*—such as age, gender, occupation, marital status ◗ *Source of the history*—usually the patient, but can be a family member or friend, letter of referral, or the medical record ◗ If appropriate, establish *source of referral* because a written report may be needed
Reliability	◗ Varies according to the patient's memory, trust, and mood
Chief Complaint(s)	◗ The one or more symptoms or concerns causing the patient to seek care

(continued)

Overview: Components of the Adult Health History *(continued)*

Present Illness	◗ Amplifies the *Chief Complaint*; describes how each symptom developed ◗ Includes patient's thoughts and feelings about the illness ◗ Pulls in relevant portions of the *Review of Systems*, called "pertinent positives and negatives" (see p. 3) ◗ May include *medications*, *allergies*, habits of *smoking* and *alcohol*, which frequently are pertinent to the present illness
Past History	◗ Lists childhood illnesses ◗ Lists adult illnesses with dates for at least four categories: medical, surgical, obstetric/gynecologic, and psychiatric ◗ Includes health maintenance practices such as immunizations, screening tests, lifestyle issues, and home safety
Family History	◗ Outlines or diagrams age and health, or age and cause of death, of siblings, parents, and grandparents ◗ Documents presence or absence of specific illnesses in family, such as hypertension, coronary artery disease, etc.
Personal and Social History	◗ Describes educational level, family of origin, current household, personal interests, and lifestyle
Review of Systems	◗ Documents presence or absence of common symptoms related to each major body system

Be sure to distinguish *subjective* from *objective* data. Decide if your assessment will be comprehensive or focused.

Subjective Data	Objective Data
What the patient tells you	What you detect during the examination
The history, from Chief Complaint through Review of Systems	All physical examination findings

The Comprehensive Adult Health History

As you elicit the adult health history, be sure to include the following: date and time of history; identifying data, which include age, gender, marital status, and occupation; and reliability, which reflects the quality of information the patient provides.

CHIEF COMPLAINT(S)

Quote the patient's own words. "My stomach hurts and I feel awful"; or "I have come for my regular check-up."

PRESENT ILLNESS

This section is a complete, clear, and chronologic account of the problems prompting the patient to seek care. It should include the problem's onset, the setting in which it has developed, its manifestations, and any treatments.

Every principal symptom should be well characterized, with descriptions of the seven features listed below and *pertinent positives* and *negatives* from relevant areas of the Review of Systems that help clarify the *differential diagnosis*.

The Seven Attributes of Every Symptom

- Location
- Quality
- Quantity or severity
- Timing, including onset, duration, and frequency
- Setting in which it occurs
- Aggravating and relieving factors
- Associated manifestations

In addition, list ***medications***, including name, dose, route, and frequency of use; ***allergies***, including *specific reactions* to each medication; ***tobacco*** use; and ***alcohol*** and ***drug*** use.

HISTORY

List ***childhood illnesses***, then list ***adult illnesses*** in each of four areas:

- *Medical* (e.g., diabetes, hypertension, hepatitis, asthma, HIV), with dates of onset; also information about hospitalizations with dates; number and gender of sexual partners; risky sexual practices
- *Surgical* (dates, indications, and types of operations)

- *Obstetric/gynecologic* (obstetric history, menstrual history, birth control, and sexual function)

- *Psychiatric* (illness and time frame, diagnoses, hospitalizations, and treatments)

Also discuss ***Health Maintenance,*** including *immunizations,* such as tetanus, pertussis, diphtheria, polio, measles, rubella, mumps, influenza, varicella, hepatitis B, *Haemophilus influenzae* type b, pneumococcal vaccine, and herpes zoster vaccine; and *screening tests,* such as tuberculin tests, Pap smears, mammograms, stool tests, for occult blood colonoscopy, and cholesterol tests, together with the results and the dates they were last performed.

FAMILY HISTORY

Outline or diagram the age and health, or age and cause of death, of each immediate relative, including grandparents, parents, siblings, children, and grandchildren. Record the following conditions as either *present or absent* in the family: hypertension, coronary artery disease, elevated cholesterol levels, stroke, diabetes, thyroid or renal disease, cancer (specify type), arthritis, tuberculosis, asthma or lung disease, headache, seizure disorder, mental illness, suicide, alcohol or drug addiction, and allergies, as well as conditions that the patient reports.

PERSONAL AND SOCIAL HISTORY

Include occupation and the last year of schooling; home situation and significant others; sources of stress, both recent and long term; important life experiences, such as military service; leisure activities; religious affiliation and spiritual beliefs; and activities of daily living (ADLs). Also include lifestyle habits such as *exercise* and *diet, safety measures,* and *alternative health care* practices.

REVIEW OF SYSTEMS (ROS)

These "yes/no" questions go from "head to toe" and conclude the interview. Selected sections can also clarify the Chief Complaint; for example, the respiratory ROS helps characterize the symptom of cough. Start with a fairly general question. This allows you to shift to more specific questions about systems that may be of concern. For example, "How are your ears and hearing?" "How about your lungs and breathing?" "Any trouble

with your heart?" "How is your digestion?" The *Review of Systems* questions may uncover problems that the patient overlooked. *Remember to move major health events to the Present Illness or Past History in your write-up.*

Some clinicians do the *Review of Systems* during the physical examination. If the patient has only a few symptoms, this combination can be efficient but may disrupt the flow of both the history and the examination.

General. Usual weight, recent weight change, clothing that fits more tightly or loosely than before; weakness, fatigue, fever.

Skin. Rashes, lumps, sores, itching, dryness, color change; changes in hair or nails; changes in size or color of moles.

Head, Eyes, Ears, Nose, Throat (HEENT). ***Head:*** Headache, head injury, dizziness, lightheadedness. ***Eyes:*** Vision, glasses or contact lenses, last examination, pain, redness, excessive tearing, double or blurred vision, spots, specks, flashing lights, glaucoma, cataracts. ***Ears:*** Hearing, tinnitus, vertigo, earache, infection, discharge. If hearing is decreased, use or nonuse of hearing aid. ***Nose and sinuses:*** Frequent colds, nasal stuffiness, discharge or itching, hay fever, nosebleeds, sinus trouble. ***Throat (or mouth and pharynx):*** Condition of teeth and gums; bleeding gums; dentures, if any, and how they fit; last dental examination; sore tongue; dry mouth; frequent sore throats; hoarseness.

Neck. Lumps, "swollen glands," goiter, pain, stiffness.

Breasts. Lumps, pain or discomfort, nipple discharge, self-examination practices.

Respiratory. Cough, sputum (color, quantity), hemoptysis, dyspnea, wheezing, pleurisy, last chest x-ray. You may wish to include asthma, bronchitis, emphysema, pneumonia, and tuberculosis.

Cardiovascular. "Heart trouble," hypertension, rheumatic fever, heart murmurs, chest pain or discomfort, palpitations, dyspnea, orthopnea, paroxysmal nocturnal dyspnea, edema, past electrocardiographic or other cardiovascular tests.

Gastrointestinal. Trouble swallowing, heartburn, appetite, nausea. Bowel movements, color and size of stools, change in bowel habits, rectal bleeding or black or tarry stools, hemorrhoids, constipation, diarrhea. Abdominal pain, food intolerance, excessive belching or passing of gas. Jaundice, liver or gallbladder trouble, hepatitis.

Peripheral Vascular. Intermittent claudication; leg cramps; varicose veins; past clots in veins; swelling in calves, legs, or feet; color change in fingertips or toes during cold weather; swelling with redness or tenderness.

Urinary. Frequency of urination, polyuria, nocturia, urgency, burning or pain on urination, hematuria, urinary infections, kidney stones, incontinence; in males, reduced caliber or force of urinary stream, hesitancy, dribbling.

Genital. ***Male:*** Hernias, discharge from or sores on penis, testicular pain or masses, history of sexually transmitted infections (STIs) or diseases (STDs) and treatments, testicular self-examination practices. Sexual habits, interest, function, satisfaction, birth control methods, condom use, problems. Concerns about HIV infection. ***Female:*** Age at menarche; regularity, frequency, and duration of periods; amount of bleeding, bleeding between periods or after intercourse, last menstrual period; dysmenorrhea, premenstrual tension. Age at menopause, menopausal symptoms, postmenopausal bleeding. In patients born before 1971, exposure to diethylstilbestrol (DES) from maternal use during pregnancy. Vaginal discharge, itching, sores, lumps, STIs and treatments. Number of pregnancies, number and type of deliveries, number of abortions (spontaneous and induced), complications of pregnancy, birth control methods. Sexual preference, interest, function, satisfaction, problems (including dyspareunia). Concerns about HIV infection.

Musculoskeletal. Muscle or joint pain, stiffness, arthritis, gout, backache. If present, describe location of affected joints or muscles, any swelling, redness, pain, tenderness, stiffness, weakness, or limitation of motion or activity; include timing of symptoms (e.g., morning or evening), duration, and any history of trauma. Neck or low back pain. Joint pain with systemic features such as fever, chills, rash, anorexia, weight loss, or weakness.

Psychiatric. Nervousness; tension; mood, including depression, memory change, suicide attempts, if relevant.

Neurologic. Changes in mood, attention, or speech; changes in orientation, memory, insight, or judgment; headache, dizziness, vertigo; fainting, blackouts, seizures, weakness, paralysis, numbness or loss of sensation, tingling or "pins and needles," tremors or other involuntary movements, seizures.

Hematologic. Anemia, easy bruising or bleeding, past transfusions, transfusion reactions.

Endocrine. "Thyroid trouble," heat or cold intolerance, excessive sweating, excessive thirst or hunger, polyuria, change in glove or shoe size.

The Physical Examination: Approach and Overview

Conduct a *comprehensive physical examination* on most new patients or patients being admitted to the hospital. For more *problem-oriented*, or *focused*, *assessments*, the presenting complaints will dictate which segments you elect to perform.

- *The key to a thorough and accurate physical examination is a systematic sequence of examination.* With effort and practice, you will acquire your own routine sequence. This book recommends examining from the patient's *right side.*
- Apply the techniques of inspection, palpation, auscultation, and percussion to each body region, but be sensitive to the whole patient.
- *Minimize the number of times you ask the patient to change position* from supine to sitting, or standing to lying supine.
- For an overview of the physical examination, study the sequence that follows. *Note that clinicians vary in where they place different segments, especially for the musculoskeletal and nervous systems.*

BEGINNING THE EXAMINATION: SETTING THE STAGE

Take the following steps to prepare for the physical examination.

Preparing for the Physical Examination

- Reflect on your approach to the patient.
- Adjust the lighting and the environment.
- Make the patient comfortable.
- Determine the scope of the examination.
- Choose the sequence of the examination.
- Observe the correct examining position (the patient's right side) and handedness.

Think through your approach, your professional demeanor, and how to make the patient comfortable and relaxed. *Always wash your hands in the patient's presence before beginning the examination.*

The Physical Examination: Suggested Sequence and Positioning

- General survey
- Vital signs
- Skin: upper torso, anterior and posterior
- Head and neck, including thyroid and lymph nodes
- *Optional:* Nervous system (mental status, cranial nerves, upper extremity motor strength, bulk, tone, cerebellar function)
- Thorax and lungs
- Breasts
- Musculoskeletal as indicated: upper extremities
- Cardiovascular, including JVP, carotid upstrokes and bruits, PMI, etc.
- Cardiovascular, for S_3 and murmur of mitral stenosis
- Nervous system: lower extremity motor strength, bulk, tone, sensation; reflexes; Babinskis
- Musculoskeletal, as indicated
- *Optional:* Skin, anterior and posterior
- *Optional:* Nervous system, including gait
- *Optional:* Musculoskeletal, comprehensive
- *Women:* Pelvic and rectal examination
- *Men:* Prostate and rectal examination
- Cardiovascular, for murmur of aortic insufficiency
- *Optional:* Thorax and lungs—anterior
- Breasts and axillae
- Abdomen
- Peripheral vascular; *Optional:* Skin—lower torso and extremities

Key to the Symbols for the Patient's Position

- Sitting
- Lying supine, with head of bed raised 30 degrees
- Same, turned partly to left side
- Standing
- Lying supine, with hips flexed, abducted, and externally rotated, and knees flexed (lithotomy position)
- Lying on the left side (left lateral decubitus)
- Sitting, leaning forward
- Lying supine

Each symbol pertains until a new one appears. Two symbols separated by a slash indicate either or both positions.

Reflect on Your Approach to the Patient. Identify yourself as a student. Try to appear calm, organized, and competent, even if you feel differently. If you forget to do part of the examination, this is not uncommon, especially at first! Simply examine that area out of sequence, but smoothly.

Adjust Lighting and the Environment. Adjust the bed to a convenient height (be sure to lower it when finished!). Ask the patient to move toward you if this makes it easier to do your physical examination. Good lighting and a quiet environment are important. *Tangential lighting* is optimal for structures such as the jugular venous pulse, the thyroid gland, and the apical impulse of the heart. It throws contours, elevations, and depressions, whether moving or stationary, into sharper relief.

Make the Patient Comfortable. Show concern for privacy and modesty.

- Close nearby doors and draw curtains before beginning.
- Acquire the art of *draping the patient* with the gown or draw sheet as you learn each examination segment in future chapters. *Your goal is to visualize one body area at a time.*
- As you proceed, keep the patient informed, especially when you anticipate embarrassment or discomfort, as when checking for the femoral pulse. Also try to gauge how much the patient wants to know.
- Make sure your instructions to the patient at each step are courteous and clear.
- Watch the patient's facial expression and even ask "Is it okay?" as you move through the examination.

When you have finished, tell the patient your general impressions and what to expect next. Lower the bed to avoid risk of falls and raise the bedrails if needed. As you leave, clean your equipment, dispose of waste materials, and wash your hands.

Determine the Scope of the Examination. Comprehensive or Focused? Choose whether to do a *comprehensive* or *focused examination*.

Choose the Sequence of the Examination. The sequence of the examination should

- maximize the patient's comfort
- avoid unnecessary changes in position, and
- enhance the clinician's efficiency.

In general, move from "head to toe." An important goal as a student is to develop your own sequence with these principles in mind. See Chapter 1 of the textbook for a suggested examination sequence.

Observe the Correct Examining Position and Handedness. Examine the patient from the patient's *right side*. Note that it is more reliable to estimate jugular venous pressure from the right, the palpating hand rests more comfortably on the apical impulse, the right kidney is more frequently palpable than the left, and examining tables are frequently positioned to accommodate a right-handed approach. To examine the *supine patient,* you can examine the head, neck, and anterior chest. Then roll the patient onto each side to listen to the lungs, examine the back, and inspect the skin. Roll the patient back and finish the rest of the examination with the patient again supine.

The Comprehensive Adult Physical Examination

General Survey. Continue this survey throughout the patient visit. Observe general state of health, height, build, and sexual development. Note posture, motor activity, and gait; dress, grooming, and personal hygiene; and any odors of the body or breath. Watch facial expressions and note manner, affect, and reactions to persons and things in the environment. Listen to the patient's manner of speaking and note the state of awareness or level of consciousness.

Vital Signs. Ask the patient **to sit** on the edge of the bed or examining table, unless this position is contraindicated. Stand in front of the patient, moving to either side as needed. Measure the blood pressure. Count pulse and respiratory rate. If indicated, measure body temperature.

Skin. Observe the face. Identify any lesions, noting their location, distribution, arrangement, type, and color. Inspect and palpate the hair and nails. Study the patient's hands. Continue to assess the skin as you examine the other body regions.

HEENT. Darken the room to promote pupillary dilation and visibility of the fundi. ***Head:*** Examine the hair, scalp, skull, and face. ***Eyes:*** Check visual acuity and screen the visual fields. Note position and alignment of the eyes. Observe the eyelids. Inspect the sclera and conjunctiva of each eye. With oblique lighting, inspect each cornea, iris, and lens. Compare the pupils, and test their reactions to light. Assess extraocular movements. With an ophthalmoscope, inspect the ocular fundi. ***Ears:*** Inspect the auricles, canals, and drums. Check auditory acuity. If acuity is diminished, check lateralization (Weber test) and compare air and bone conduction (Rinne test). ***Nose and sinuses:*** Examine the external nose; using a light and nasal speculum, inspect nasal mucosa, septum, and turbinates. Palpate for tenderness of the frontal and maxillary sinuses. ***Throat (or mouth and pharynx):*** Inspect the lips, oral mucosa, gums, teeth, tongue, palate, tonsils, and pharynx. *(You may wish to assess the Cranial Nerves at this point in the examination.)*

Neck. Move behind the sitting patient to feel the thyroid gland and to examine the back, posterior thorax, and lungs. Inspect and palpate the cervical lymph nodes. Note any masses or unusual pulsations in the neck. Feel for any deviation of the trachea. Observe sound and effort of the patient's breathing. Inspect and palpate the thyroid gland.

Back. Inspect and palpate the spine and muscles.

Posterior Thorax and Lungs. Inspect and palpate the spine and muscles of the *upper* back. Inspect, palpate, and percuss the chest. Identify the level of diaphragmatic dullness on each side. Listen to the breath sounds; identify any adventitious (or added) sounds, and, if indicated, listen to transmitted voice sounds (see p. 133).

Breasts, Axillae, and Epitrochlear Nodes. The patient is **still sitting**. Move to the front again. ***In a woman***, inspect the breasts with patient's arms relaxed, then elevated, and then with her hands pressed on her hips. ***In either sex***, inspect the axillae and feel for the axillary nodes; feel for the epitrochlear nodes.

A Note on the Musculoskeletal System. By now, you have made preliminary observations of the musculoskeletal system, including the hands, the upper back, and, in women, the shoulders' range of motion (ROM). Use these observations to decide whether a full musculoskeletal examination is warranted: *With the patient still sitting,* examine the hands, arms, shoulders, neck, and temporomandibular joints. Inspect and palpate the joints and check their ROM.

(You may choose to examine upper extremity muscle bulk, tone, strength, and reflexes at this time, or you may decide to wait until later.)

Palpate the breasts, while continuing your inspection.

Anterior Thorax and Lungs. **The patient position is supine.** Ask the patient to lie down. Stand at the *right side* of the patient's bed. Inspect, palpate, and percuss the chest. Listen to the breath sounds, any adventitious sounds, and, if indicated, transmitted voice sounds.

Cardiovascular System. **Elevate head of bed to about 30 degrees,** adjusting as necessary to see the jugular venous pulsations. Observe the jugular venous pulsations, and measure the jugular venous pressure in relation to the sternal angle. Inspect and palpate the carotid pulsations. Listen for carotid bruits.

Ask the patient to roll partly onto the left side while you listen at the apex. Then have the patient roll back to supine while you listen to the rest of the heart. Ask the patient to sit, lean forward, and exhale while you listen for the murmur of aortic regurgitation. Inspect and palpate the precordium. Note the location, diameter, amplitude, and duration of the apical impulse. Listen at the apex and the lower sternal border with the bell of a stethoscope. Listen at each auscultatory area with the diaphragm. Listen for S_1 and S_2 and for physiologic splitting of S_2. Listen for any abnormal heart sounds or murmurs.

Abdomen. Lower the head of the bed to the flat position. **The patient should be supine.** Inspect, auscultate, and percuss. Palpate lightly, then deeply. Assess the liver and spleen by percussion and then palpation. Try to feel the kidneys; palpate the aorta and its pulsations. If you suspect kidney infection, percuss posteriorly over the costovertebral angles.

Peripheral Vascular System. **With the patient supine,** palpate the femoral pulses and, if indicated, popliteal pulses. Palpate the inguinal lymph nodes. Inspect for edema, discoloration, or ulcers in the lower extremities. Palpate for pitting edema. **With the patient standing,** inspect for varicose veins.

Lower Extremities. Examine the legs, assessing the three systems (see next page) while the patient is still supine. Each of these systems can be further assessed when the patient stands.

Nervous System. **The patient is sitting or supine.** The examination of the nervous system can also be divided into the upper extremity