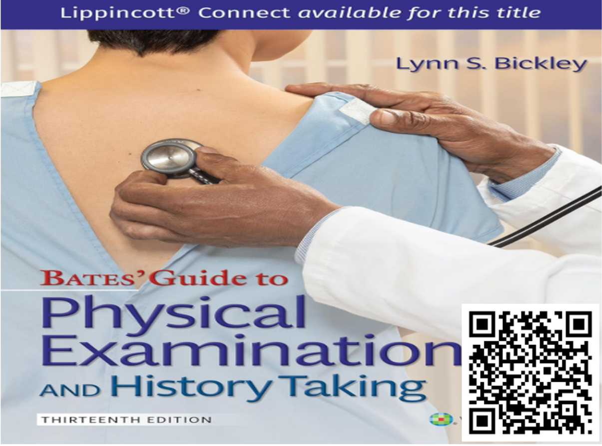
Bates' Guide To Physical Examination and History Taking 13th Edition PDF

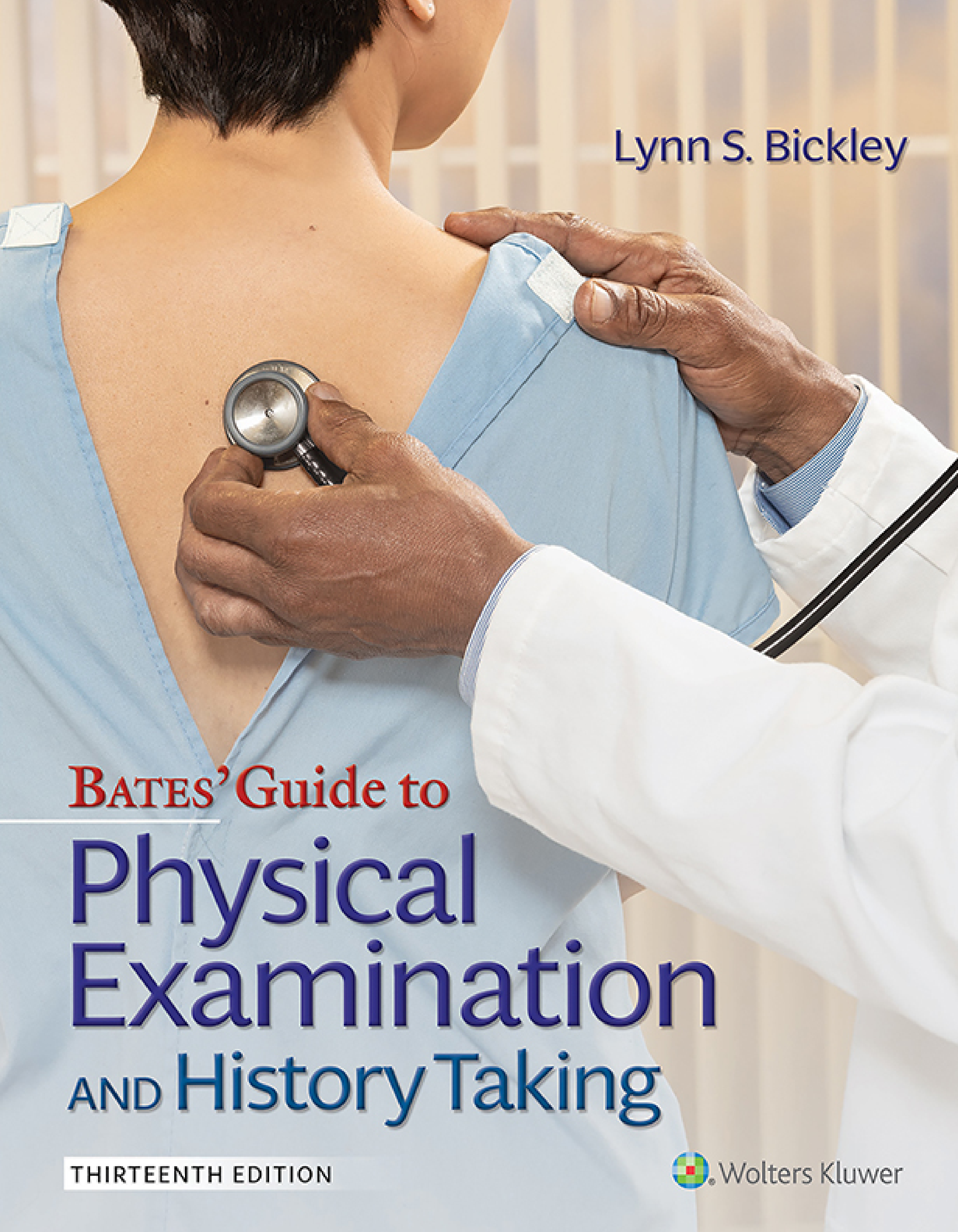
Visit the link below to download the full version of the ebook

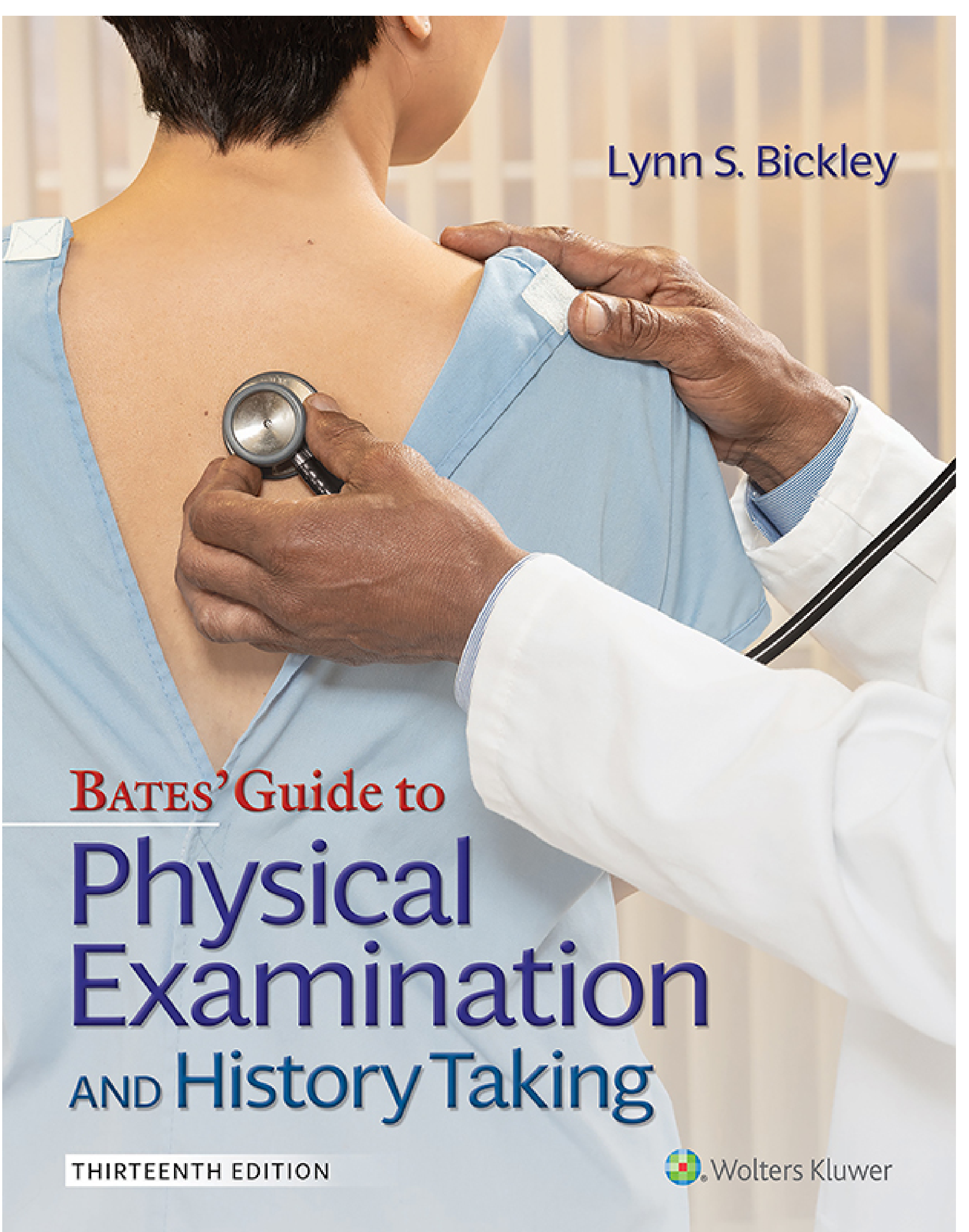
DOWNLOAD NOW



Scan to Download
or Type the Link

ebook.ac/bates13e


Lynn S. Bickley
BATES' Guide to
Physical Examination
AND History Taking
THIRTEENTH EDITION
Wolters Kluwer


Lynn S. Bickley
BATES' Guide to
Physical
Examination
AND History Taking
THIRTEENTH EDITION
Wolters Kluwer

BATES' Guide to Physical Examination AND History Taking

THIRTEENTH EDITION

Lynn S. Bickley, MD, FACP
Clinical Professor of Internal Medicine School of Medicine

University of New Mexico
Albuquerque, New Mexico

Peter G. Szilagyi, MD, MPH
Professor of Pediatrics and Executive Vice-Chair
Department of Pediatrics
University of California at Los Angeles (UCLA) Los Angeles, California

Richard M. Hoffman, MD, MPH, FACP
Professor of Internal Medicine and Epidemiology Director, Division of General Internal Medicine University of Iowa Carver College of Medicine Iowa City, Iowa

Guest Editor

Rainier P. Soriano, MD
Associate Professor of Medical Education, Geriatrics and Palliative Medicine Brookdale Department of Geriatrics and Palliative Medicine Associate Dean of Curriculum and Clinical Competence Icahn School of Medicine at Mount Sinai New York, New York

Philadelphia • Baltimore • New York • London
Buenos Aires • Hong Kong • Sydney • Tokyo

Acquisitions Editor: Crystal Taylor *Development Editor:* Andrea Vosburgh
Freelance Development Editor: Kelly Horvath *Editorial Coordinator:* Emily Buccieri *Editorial Assistant:* Parisa Saranj
Marketing Manager: Phyllis Hitner
Senior Production Project Manager: Alicia Jackson *Team Lead, Design:* Stephen Druding
Art Director, Illustration: Jennifer Clements *Illustrator:* Body Scientific International *Photography:* Thibodeau Media Group
Manufacturing Coordinator: Margie Orzech *Prepress Vendor: Aptara, Inc.*

Thirteenth Edition

Copyright © 2021 Wolters Kluwer.

Copyright © 2017 Wolters Kluwer. Copyright © 2013, 2009 by Wolters Kluwer Health/Lippincott Williams & Wilkins. Copyright © 2007, 2003, 1999 by Lippincott Williams & Wilkins. Copyright © 1995, 1991, 1987, 1983, 1979, 1974 by J. B. Lippincott Company. All rights reserved. This book is protected by copyright. No part of this book may be reproduced or transmitted in any form or by any means, including as photocopies or scanned-in or other electronic copies, or utilized by any information storage and retrieval system without written permission from the copyright owner, except for brief quotations embodied in critical articles and reviews. Materials appearing in this book prepared by individuals as part of their official duties as U.S. government employees are not covered by the above-mentioned copyright. To request permission, please contact Wolters Kluwer at Two Commerce Square, 2001 Market Street, Philadelphia, PA 19103, via email at permissions@lww.com, or via our website at shop.lww.com (products and services).

9 8 7 6 5 4 3 2 1

Printed in China

Library of Congress Cataloging-in-Publication Data Names: Bickley, Lynn S., author. | Szilagyi, Peter G., author. | Hoffman, Richard M., author. | Soriano, Rainier P., editor.
Title: Bates’ guide to physical examination and history taking / Lynn S. Bickley, Peter G. Szilagyi, Richard M. Hoffman ; guest editor, Rainier P. Soriano.
Other titles: Guide to physical examination and history taking Description: Thirteenth edition. | Philadelphia: Wolters Kluwer, [2021] | Includes bibliographical references and index. | Summary: “The thirteenth edition of Bates’ Guide to Physical Examination and History Taking is your comprehensive guide to learning to effectively conduct the health interview and physical examination. This section introduces you to the features and learning tools that will lead to successful health assessments, regional examinations, and working with special patient populations. At the start of every chapter, you will see a list of additional learning resources that complement the book in order to build your knowledge and confidence in history taking and examination. The Bates’ Visual Guide to Physical Examination offers over more than 8 hours of video content and delivers head-to-toe and systems-based physical examination techniques. When used alongside the book, you have a complete learning solution for preparedness for the boards and patient encounters”– Provided by publisher.
Identifiers: LCCN 2020019448 | ISBN 9781496398178 (paperback) Subjects: MESH: Physical Examination–methods | Medical History Taking–methods
Classification: LCC RC76 | NLM WB 205 | DDC 616.07/54–dc23
LC record available at https://lccn.loc.gov/2020019448

This work is provided “as is,” and the publisher disclaims any and all warranties, express or implied, including any warranties as to accuracy, comprehensiveness, or currency of the content of this work.

This work is no substitute for individual patient assessment based upon healthcare professionals’ examination of each patient and consideration of, among other things, age, weight, gender, current or prior medical conditions, medication history, laboratory data and other factors unique to the patient. The publisher does not provide medical advice or guidance and this work is merely a reference tool. Healthcare professionals, and not the publisher, are solely responsible for the use of this work including all medical judgments and for any resulting diagnosis and treatments.

Given continuous, rapid advances in medical science and health information, independent professional verification of medical diagnoses, indications, appropriate pharmaceutical selections and dosages, and treatment options should be made and healthcare professionals should consult a variety of sources. When prescribing medication, healthcare professionals are advised to consult the product information sheet (the manufacturer’s package insert) accompanying each drug to verify, among other things, conditions of use, warnings and side effects and identify any changes in dosage schedule or contraindications, particularly if the medication to be administered is new,

infrequently used or has a narrow therapeutic range. To the maximum extent permitted under applicable law, no responsibility is assumed by the publisher for any injury and/or damage to persons or property, as a matter of products liability, negligence law or otherwise, or from any reference to or use by any person of this work.

shop.lww.com

This book is dedicated to you, the ever-constant student, teacher, and practitioner of this continuously evolving art and science of medicine.

Faculty Reviewers and Additional Contributors

George A. Alba, MD
Instructor, Pulmonary and Critical Care Medicine
Department of Medicine
Massachusetts General Hospital
Harvard Medical School
Boston, Massachusetts

Catherine A. Bigelow, MD
Maternal-Fetal Medicine Subspecialist Minnesota Perinatal Physicians
Allina Health
Minneapolis, Minnesota

Y. Julia Chen, MD
Clinical Fellow
Department of Pediatric Surgery
Johns Hopkins University School of Medicine Baltimore, Maryland

Suzanne B. Coopey, MD
Assistant Professor, Harvard University Faculty of Medicine
Division of Surgical Oncology
Massachusetts General Hospital
Boston, Massachusetts

Christopher T. Doughty, MD
Instructor, Neurology
Department of Neurology, Division of Neuromuscular Disorders Harvard Medical School/Brigham and Women's Hospital Boston, Massachusetts

Ralph P. Fader, MD
Child and Adolescent Psychiatry Fellow Department of Psychiatry
New York-Presbyterian
New York, New York

Raisa Gao, MD, FACOG
Assistant Professor
Department of Obstetrics, Gynecology, and Reproductive Science Icahn School of Medicine at Mount Sinai New York, New York

Sarah Gustafson, MD
Assistant Clinical Professor, Pediatrics Division of Pediatric Hospital Medicine, Harbor-UCLA David Geffen School of Medicine at UCLA Los Angeles, California

Alexander R. Lloyd, MD
Resident Physician
Department of Physical Medicine and Rehabilitation University of Pittsburgh Medical Center Pittsburgh, Pennsylvania

Christopher C. Lo, MD
Instructor
Stein and Doheny Eye Institutes, Department of Orbital and Oculofacial Plastic Surgery University of California at Los Angeles Los Angeles, California

S. Andrew Mccullough, MD

Assistant Professor, Clinical Medicine Assistant Director, Graphics Laboratory Department of Medicine, Division of Cardiology Weill Cornell Medicine
New York, New York

Matthew E. Pollard, MD
Fellow, Male Reproductive Medicine and Surgery Scott Department of Urology
Baylor College of Medicine
Houston, Texas

Katelyn O. Stepan, MD
Fellow, Head and Neck Surgical Oncology and Microvascular Reconstruction Otolaryngology—Head and Neck Surgery Washington University School of Medicine in St. Louis St. Louis, Missouri

Joseph M. Truglio, MD, MPH
Assistant Professor of Internal Medicine, Pediatrics and Medical Education Program Director, Internal Medicine and Pediatrics Residency Departments of Internal Medicine and Pediatrics Icahn School of Medicine at Mount Sinai New York, New York

ADDITIONAL CONTRIBUTORS

Paul J. Cummins, PhD
Assistant Professor, Medical Education Department of Medical Education, The Bioethics Program Icahn School of Medicine at Mount Sinai New York, New York

Rocco M. Ferrandino, MD, MSCR
Resident Physician
Department of Otolaryngology—Head and Neck Surgery Icahn School of Medicine at Mount Sinai New York, New York

David W. Fleenor, STM
Director of Education, Center for Spirituality and Health Icahn School of Medicine at Mount Sinai New York, New York

Beverly A. Forsyth, MD
Associate Professor of Medicine, Infectious Diseases and Medical Education Medical Director of the Morchand Center for Clinical Competence Division of Infectious Diseases and Department of Medical Education Icahn School of Medicine at Mount Sinai New York, New York

Nada Gligorov, PHD
Associate Professor, Medical Education Department of Medical Education, The Bioethics Program Icahn School of Medicine at Mount Sinai New York, New York

Joanne R. Hojsak, MD
Professor, Pediatrics and Medical Education Director, Pediatric LifeLong Care Team Pediatric Critical Care/Mount Sinai Kravis Children's Hospital Icahn School of Medicine at Mount Sinai New York, New York

Scott Jelinek, MD, MED, MPH
Resident Physician
Department of Pediatrics
Icahn School of Medicine at Mount Sinai New York, New York

Giselle N. Lynch, MD
Resident Physician
Department of Ophthalmology
New York Eye and Ear Infirmary of Mount Sinai New York, New York

Anthony J. Mell, MD, MBA
Resident Physician

Boston Combined Residency Program
Boston Children's Hospital and Boston Medical Center Boston, Massachusetts

Ann-Gel S. Palermo, DRPH, MPH
Associate Professor
Associate Dean for Diversity and Inclusion in Biomedical Education Department of Medical Education
Office for Diversity and Inclusion
Icahn School of Medicine at Mount Sinai New York, New York

Katherine A. Roza, MD
Staff Physician
Northwell Health House Calls Program Zucker School of Medicine at Hofstra/Northwell New Hyde Park, New York

Annetty P. Soto, DMD
Clinical Assistant Professor and Team Leader Division of General Dentistry
Department of Restorative Dental Sciences University of Florida College of Dentistry Gainesville, Florida

Mitchell B. Wice, MD
Integrated Geriatric and Palliative Care Fellow Brookdale Department of Geriatrics and Palliative Medicine Icahn School of Medicine at Mount Sinai New York, New York

STUDENT CONTRIBUTORS

Emily N. Tixier, BA
Medical Student
Icahn School of Medicine at Mount Sinai New York, New York

Isaac Wasserman, MPH
Medical Student

Icahn School of Medicine at Mount Sinai New York, New York

Preface

For more than 40 years, *Bates' Guide to Physical Examination and History Taking* has been the singular authoritative source for students of medicine, nursing, and rehabilitation and others who are learning the skills of an effective, safe, and efficient patient clinical encounter. It also has been the preferred textbook of clinical skills program directors and educators in the United States.[1] Since its inception by Drs. Barbara Bates and Robert Hoekelman in 1974, topics relating to the physical examination and the clinical interview have served as the core content of the textbook for teaching and learning clinical skills. The thirteenth edition marks a significant expansion of the scope of the textbook to include the remaining critical components and features of the clinical encounter and now comprises 27 chapters. As authors, we remain committed to providing you with the critical concepts and frameworks you will need to understand and retain material as you encounter abundant new evidence supporting the techniques of examination, interviewing, health promotion, and disease prevention.

New Content and Features

The thirteenth edition has new and expanded content as well as unique features to facilitate student learning and clinical skills education.

- Six new chapters expand the scope of the textbook to better delineate all aspects of clinical skills training and education.
- The opening chapter now focuses on the patient encounter, including critical elements such as the use of preferred names, gender pronouns, the approach to special populations including persons who are differently abled, and discussions of LGBTQ health medical ethics and racism in health care.
- Frameworks of advance communication and interpersonal skills are expanded, including communicating difficult news using SPIKES and Ask-Tell-Ask methods; motivational interviewing and teach-back methods in patient communication; and the SBAR method for interprofessional communication.
- A stepwise approach to the process of clinical reasoning includes an emphasis on the use of illness scripts and semantic qualifiers and the development of summary statements with illustrative examples.
- A key regional chapter, Head and Neck, is subdivided into smaller chapters for a more focused understanding of its component organ systems and their pathophysiologic interconnectedness.
- General health maintenance screening and counseling topics are organized into a single chapter for easy access that includes informative tables of updated recommendations.
- All regional chapters follow a uniform template that facilitates locating critical information.
- Key terms commonly discussed in clinical rounds and rotations are highlighted in **bold text** throughout the

textbook, and their “must-know” definitions are located in a glossary available in the eBook.

- Summary checklists of key physical examination steps are included in the regional examination chapters for review purposes.
- Many of the figures are new or provided with more descriptive captions.
- For the first time, all textboxes are numbered to make them easier to locate and reference in both the print and electronic editions.

Organization

The book comprises three units: *Foundations of Health Assessment*, *Regional Examinations,* and *Special Populations.*

Unit 1*, Foundations of Health Assessment,* consists of chapters that follow a logical sequence beginning with an overview of the components of the patient encounter, followed by important concepts in assessment of clinical evidence and clinical decision making.

- **Chapter 1**, *Approach to the Clinical Encounter,* features the sequence of the key elements of the clinical encounter using the Enhanced Calgary-Cambridge Guides as a framework. This chapter also includes general approaches to establish rapport with different age groups and persons with varying physical and sensory abilities. It also includes foundational concepts on social determinants of health, medical ethics, and bias in health care.
- **Chapter 2**, *Interviewing, Communication, and Interpersonal Skills,* presents the techniques of skilled

and advanced interviewing. Expanded topics include informed consent, working with medical interpreters, discussing advance directives, and disclosing serious news. This chapter also provides approaches to challenging patient behavior and situations.

- **Chapter 3**, *Health History,* describes the components of the health history and effective interviewing techniques for eliciting the patient's history. Differences between comprehensive and focused health history taking are also discussed. Techniques for transforming information gathered in the interview into the structured format of the written health history are also described. There are expanded discussions of the sexual health history and the SBIRT (Screening, Brief Intervention, and Referral to Treatment) model for behavioral modification as well as general approaches to tailoring the health history for specific patient situations. Chapter 3 also presents guidelines for creating a clear, succinct, and well-organized patient record including helpful templates for constructing the History of Present Illness.
- **Chapter 4**, *Physical Examination,* provides a model for sequencing the art and science of the physical examination that optimizes patient comfort. This new chapter includes a section of required equipment and their descriptions as well as guidance for modifying the examination for various care sites and situations.
- **Chapter 5**, *Clinical Reasoning, Assessment, and Plan,* was expanded and rewritten for the thirteenth edition by Drs. Rainier Soriano and Joseph Truglio. It provides a discussion of the basic steps of the clinical reasoning process highlighted by key concepts of the use of illness scripts, semantic qualifiers, and the construction of summary statements (problem identification). Helpful memory aids and illustrative examples are also provided

to help students master this complex skill of synthesizing information gathered from the clinical interview and physical examination to develop an assessment and plan. The chapter also provides guidance on giving oral presentations of your patient and their clinical findings.

- **Chapter 6**, *Health Maintenance and Screening,* is one of the new chapters written for the thirteenth edition by Drs. Richard Hoffman and Rainier Soriano and organizes the various general health recommendations for screening and counseling from the U.S. Preventive Services Task Force (USPSTF) into a single chapter.
- **Chapter 7**, *Evaluating Clinical Evidence,* was streamlined for this edition by Dr. Richard Hoffman and clarifies key concepts to ensure student understanding of the use of history and physical examination as diagnostic tests; tools for evaluating diagnostic tests such as sensitivity, specificity, positive and negative predictive values, and likelihood ratios; types of studies that inform recommendations for health promotion; and an approach to critical appraisal of clinical literature and types of bias.

Unit 2, *Regional Examinations,* covers the regional examinations from head to toe. The 17 chapters in this unit were reorganized and thoroughly updated. They contain a review of anatomy and physiology, the common symptoms encountered in the health history, detailed descriptions and images of techniques of examination, a sample written record, and comparative tables of abnormalities, and they conclude with extensive references from the recent clinical literature. Important topics for health promotion and counseling were moved to the end of the chapter for a more focused understanding of these complex topics. Chapters with the most significant revisions are highlighted below.

- **Chapter 8**, *General Survey, Vital Signs, and Pain,* provides updates on home and ambulatory blood pressure monitoring and features new illustrations for height, weight, and temperature determinations.
- **Chapter 9**, *Cognition, Behavior, and Mental Status,* was substantially revised to focus on common mental health concerns in primary care settings. Updates on neurocognitive disorders according to the *Diagnostic and Statistical Manual of Mental Disorders,* 5th Edition (*DSM-5*) are also included.
- **Chapter 10**, *Skin, Hair, and Nails,* continues the framework for assessing common lesions and abnormalities from previous editions and now includes illustrations of primary lesions.
- **Chapter 11**, *Head and Neck*; Chapter 12, *Eyes*; Chapter 13, *Ears and Nose*; and Chapter 14, *Throat and Oral Cavity* are new chapters subdivided from a single chapter in previous editions. These individual chapters provide a more focused understanding of their component organ systems and their pathophysiologic interconnectedness.
- **Chapter 23**, *Musculoskeletal System,* contains a more systematic approach to the musculoskeletal examination, and each discussion of the regional joint follows the Look-Feel-Move method.

Other notable features include discussion of updated screening guidelines for breast cancer, prostate cancer, and colon cancer as well as updated information on sexually transmitted infections and their prevention.

Unit 3, *Special Populations,* includes chapters covering stages in the life cycle—infancy through adolescence, pregnancy, and aging.

- **Chapter 25**, *Children: Infancy Through Adolescence,* was reorganized to highlight the different stages in pediatric development. Additional content includes assessment and discussion of LGBTQ youth as well as the many tables and figures that highlight key concepts.
- **Chapter 26**, *Pregnant Woman,* expands on key information regarding health promotion and counseling topics from the American College of Obstetricians and Gynecologists (ACOG) and USPSTF such as nutrition, substance abuse, intimate partner violence, and postpartum depression.
- **Chapter 27**, *Older Adult,* presents updated information on frailty, when to screen, immunizations and cancer screening, the spectrum of cognitive decline and its screening; differentiation of the 3Ds (dementia, delirium, and depression), and inclusion of the updated Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults from the American Geriatrics Society (AGS).

Additional Resources

Bates' Pocket Guide to Physical Examination and History Taking

As a companion to Bates' thirteenth edition, we recommend *Bates' Pocket Guide to Physical Examination and History Taking, Ninth edition.* The *Pocket Guide* is an abbreviated version of the Bates' thirteenth edition textbook, which is designed for portability and convenience at the point of care. Return to the textbook whenever more comprehensive study and understanding are needed. New to the *Pocket Guide* are useful clinical algorithms for commonly occurring concerns to assist in diagnostic reasoning and plan of care.

Bates' Visual Guide to Physical Examination

Bates' Visual Guide to Physical Examination (www.batesvisualguide.com) is a key adjunct for mastering the many techniques of physical examination, featuring 18 volumes of head-to-toe and systems-based physical examination videos along with 15 clinical skills videos that prepare students for the Objective Structured Clinical Examinations (OSCEs). We encourage students to study the written chapters and videos in tandem, often numerous times.

The physical examination videos depict experienced clinicians conducting each of the regional examinations and demonstrate visually the varying techniques of inspection, palpation, percussion, and auscultation in the regional examinations and special populations.

For students preparing for clinical testing, the 15 OSCE videos show students evaluating patients with common clinical problems in standard OSCE formats, interspersed with questions to guide learning key points. These OSCEs cover:

1. Chest Pain
2. Abdominal Pain
3. Sore Throat
4. Knee Pain
5. Cough
6. Vomiting
7. Amenorrhea
8. Falls
9. Back Pain
10. Shortness of Breath

11. Shoulder Pain

12. Child and Adolescent Asthma

13. Headache

14. Child and Adolescent Obesity

15. Memory Loss

New content continues to be added to *Bates' Visual Guide*, including upcoming videos on how to interview new patients as well as on effective communication.

---

[1]Uchida T, Achike FI, Blood AD, et al. Resources used to teach the physical exam to preclerkship medical students: results of a national survey. *Acad Med*. 2018;93(5):736–741.

Acknowledgments

Bates' Guide to Physical Examination and History Taking, now in its thirteenth edition, spans an evolution of five decades. Drs. Barbara Bates and Robert Hoekelman launched the first edition in 1974 as a hands-on manual for medical and advanced practice nursing students learning the techniques of regional examination for adults and children. They devised the classic format of the *Bates' Guide* still present today—black explanatory text in the major column, examples of abnormalities in red in the minor column, and comparative tables of abnormalities at the end of each chapter. Dr. Lynn S. Bickley has been chief editor and author since the seventh edition, joined by Dr. Peter L. Szilagyi for the eighth edition. Drs. Bickley and Szilagyi have made continuous innovations to ensure that each edition provides clear and current text for students and teachers of the physical examination and history taking, including sections on health promotion and counseling; colored photographs and illustrations; chapters on clinical reasoning, vital signs, behavior and mental status, and the older adult; and extensive references to clinical evidence from the medical literature. In the twelfth edition, Dr. Richard M. Hoffman joined the author team, providing expertise in complex concepts governing evaluation of clinical evidence and clinical guidelines in health promotion and counseling.

For our thirteenth edition, we introduce with pleasure and esteem our guest editor, Dr. Rainier Soriano, Associate Professor and Associate Dean of Curriculum and Clinical Competence at the Icahn School of Medicine at Mount Sinai. Observing our tradition of making the Bates' Guide ever more useful to our students and teachers, Dr. Soriano has invigorated this edition with a well-constructed reorganization and notable content expansion that covers the full range of clinical skills essential for mastery of patient assessment. Readers will now find separate chapters in Unit 1, Foundations of Health Assessment, that address the Approach to the Clinical Encounter; Interviewing, Communication, and Interpersonal Skills; the Health History; the Physical Examination; Clinical Reasoning; Health Maintenance and Screening; and Evaluating Clinical Evidence. Highlights of these chapters include new content on the approach to the patient, such as use of gender pronouns, advanced communication skills, and motivational interviewing; helpful illness scripts that clarify the steps of clinical reasoning and related documentation; and guidelines for health maintenance and screening now gathered in a single chapter. Tools for evaluating clinical evidence and using the history and physical examination as diagnostic tests are updated and streamlined. In Unit 2, Regional Examinations, Dr. Soriano has given each chapter an easy-to-access and consistent format as well as updated content, tables, and references. Of note, to facilitate student learning, there are now individual chapters for examination of the head and neck, the eyes, the ears and nose, and the throat and oral cavity as well as chapters with revised approaches to assessing mental status and the musculoskeletal system. Look for new content in Unit 3, Special Populations, that features the different stages of pediatric development, American College of Obstetricians and Gynecologists (ACOG) and U.S. Preventive Services Task Force recommendations for

healthy pregnancies, and comprehensive information for assessing older adults. As a leader in medical education, Dr. Soriano brings additional talents to Bates' thirteenth edition as Associate Editor for MedEdPORTAL's *Journal of Teaching and Learning Resources*; author of the case-based *Fundamentals of Geriatric Medicine* for medical students; and primary lead for clinical skills courses, clinical clerkships, and skills preparatory courses for licensure.

Each edition of the *Bates' Guide* builds on an extensive review process, with many thanks due. The authors elicit intensive chapter critiques and updates from faculty at health sciences schools and academic medical centers across the country. These individuals are chosen not only for their expertise in the field but also for their critical place in the frontlines of direct patient care and their familiarity with current student clinical skills education. We are truly indebted to our colleagues: George A. Alba, MD (Chapter 1, *Approach to the Clinical Encounter*); Catherine Bigelow, MD (Chapter 26, *Pregnant Woman*); Julia Chen, MD (Chapter 19, *Abdomen*); Suzanne Brooks Coopey, MD (Chapter 16, *Cardiovascular System*); Christopher T. Doughty, MD (Chapter 24, *Nervous System*); Ralph Parker Fader, MD (Chapter 10, *Skin, Hair, and Nails*); Raisa Gao, MD (Chapter 21, *Female Genitalia*); Sarah Gustafson, MD (Chapter 25, *Children: Infancy Through Adolescence*); Alexander Lloyd, MD (Chapter 23, *Musculoskeletal System*); Christopher Lo, MD (Chapter 12, *Eyes*); S. Andrew McCullough, MD (Chapter 17, *Peripheral Vascular System* and Chapter 18, *Breasts and Axillae*); Matthew Pollard, MD (Chapter 22, *Anus, Rectum, and Prostate*); Katelyn Ostendorf Stepan, MD (Chapter 13, *Ears and Nose* and Chapter 14, *Throat and Oral Cavity*); and Joseph Truglio, MD (Chapter 5, *Clinical Reasoning, Assessment, and Plan*).

To compose and produce the *Bates' Guide* requires the deft touch of a maestro. Newly revised chapters must be reviewed, author queries issued and answered, and photos and illustrations checked and rechecked for teaching style and accuracy. Text, textboxes, examples of abnormalities, and images all must be carefully aligned. Each page is designed to hold reader appeal, highlight key points, and facilitate student learning. For her untiring craft and dedication, we especially thank our Development Editor, Kelly Horvath, who has woven these many strands into a coherent and exemplary text and prepared the book for the compositor, Aptara, who turned complex text documents into corrected print proofs ready for publication. We also would like to acknowledge the following: Andrea Vosburgh, Development Editor, and Emily Buccieri, Editorial Coordinator at Wolters Kluwer, for their incredible support throughout this edition; Jennifer Clements, Art Director at Wolters Kluwer, who created and provided updated and meticulous illustrations; and Crystal Taylor who has been an astute Senior Editor of Acquisitions for the Bates' Suite of teaching materials, contracting, and marketing. The publishing team brings invaluable talent to the tradition of excellence that has made the *Bates' Guide* a premier text for students learning the time-honored skills of patient assessment and care.

How To Use

Bates' Guide to Physical Examination and History Taking

The thirteenth edition of *Bates' Guide to Physical Examination and History Taking* is your comprehensive guide to learning to effectively conduct the health interview and physical examination. This section introduces you to the features and learning tools that will lead to successful health assessments, regional examinations, and working with special patient populations.

At the start of every chapter, you will see a list of additional learning resources that complement the book in order to build your knowledge and confidence in history taking and examination. The *Bates' Visual Guide to Physical Examination* offers over more than 8 hours of video content and delivers head-to-toe and systems-based physical examination techniques. When used alongside the book, you have a complete learning solution for preparedness for the boards and patient encounters.

Key Terms—NEW!

These terms, highlighted in **bold text,** are frequently asked in clinical rounds and rotations and worth remembering. These "must-know" definitions are also compiled in a glossary section available in the eBook.

The *left ventricle* (LV), behind the RV and to the left, forms the left lateral margin of the heart (see Fig. 16-1). Its tapered inferior tip is often termed the *cardiac apex*. It is clinically important because it produces the apical impulse, identified during palpation of the precordium as the **point of maximal impulse** (**PMI**). This impulse locates the left border of the heart and is normally found in the fifth intercostal space at or just medial to the left midclavicular line (or 7 to 9 cm lateral to the midsternal line). In supine patients, the diameter of the PMI is approximately 1 to 2.5 cm. The PMI is not always palpable, even in a healthy patient with a normal heart. Detection is affected by both the patient's body habitus and position during the examination.

Rarely, in **dextrocardia**, the PMI is located on the right side of the chest.

A PMI >2.5 cm is evidence of left ventricular hypertrophy (LVH), often seen in hypertension or dilated cardiomyopathy.

Clinical Pearls

Be sure to pay special attention to the clinical pearls, printed in **blue.** These clinical comments provide practical "pearls" that enhance your understanding of the assessment techniques.

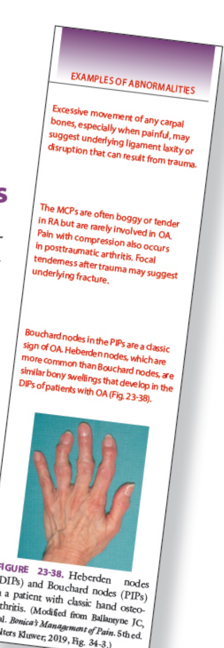
Past Obstetric History. How many prior pregnancies has the patient had? How many were term deliveries, preterm deliveries, spontaneous and terminated pregnancies, and how many were live births? Were preterm births spontaneous or iatrogenic? Were there any complications from diabetes, hypertension, pre-eclampsia, intrauterine growth restriction, or preterm labor in any of the prior pregnancies? Were deliveries by vaginal delivery, assisted delivery (vacuum or forceps), or cesarean section? Were there any complications during labor and delivery such as large babies (fetal macrosomia), fetal distress, or emergency interventions? Were prior deliveries complicated by shoulder dystocia or post-partum hemorrhage?

A nomenclature for pregnancy outcomes has been developed and has evolved over time. It is often part of any oral or written communication related to a woman's reproductive history. *Gravidity* refers to the number of times that a woman has been pregnant, and *parity* is the number of times that she has given birth to a fetus to a viable age (≥24 gestational weeks), regardless of whether the child was born alive or was stillborn. For example, a woman who is described as "gravida 2, para 2" (G2P2) has had two pregnancies and two deliveries after 24 weeks, and a woman who is described as "gravida 2, para 0" (G2P0) has had two pregnancies, neither of which survived to a gestational age of 24 weeks.[10]

Parity is further broken down into *term deliveries, preterm deliveries, abortions* (spontaneous abortions and terminated pregnancies), and *living children,* which yields the mnemonic "TPAL" when listed in that order. A woman with two spontaneous losses prior to 20 weeks' gestation, three living children who were delivered at term, and a current pregnancy, would be referred to as "G6P3023." One common error is to assign a multiple pregnancy, for example, twins, as a count of two for either gravity or parity. In practice, each pregnancy receives only one count in any of the categories regardless of the number of fetuses, except for *living children,* when all are counted. So, for a first pregnancy with twins delivered at term, the correct designation is G1P1002.

Examples of Abnormalities

As in past editions, *Bates' Guide to Physical Examination and History Taking* offers an easy-to-follow two-column format with step-by-step examination techniques on the left and abnormalities with differential diagnoses on the right. As your skills progress, study the abnormal variants of common physical findings in the red *Examples of Abnormalities* column to deepen your knowledge of important clinical conditions.



EXAMPLES OF ABNORMALITIES

Excessive movement of any carpal bones, especially when painful, may suggest underlying ligament laxity or disruption that can result from trauma.

The MCPs are often boggy or tender in RA but are rarely involved in OA. Pain with compression also occurs in posttraumatic arthritis. Focal tenderness after trauma may suggest underlying fracture.

Bouchard nodes in the PIPs are a classic sign of OA. Heberden nodes, which are more common than Bouchard nodes, are similar bony swellings that develop in the DIPs of patients with OA (Fig. 23-38).

FIGURE 23-38. Heberden nodes (DIPs) and Bouchard nodes (PIPs) in a patient with classic hand osteoarthritis. (Modified from Ballantyne JC, et al. *Bonica's Management of Pain*. 5th ed. Wolters Kluwer; 2019, Fig. 34-3.)

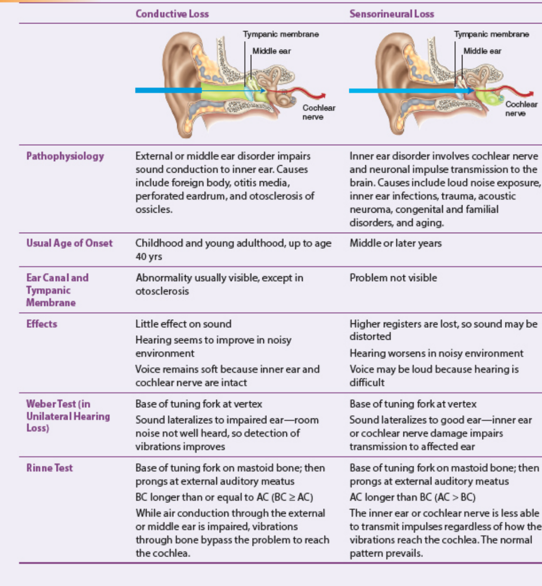
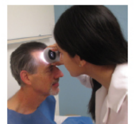
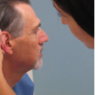


TABLE 13-4. Patterns of Hearing Loss

	Conductive Loss	Sensorineural Loss
	Tympanic membrane; Middle ear; Cochlear nerve	Tympanic membrane; Middle ear; Cochlear nerve
Pathophysiology	External or middle ear disorder impairs sound conduction to inner ear. Causes include foreign body, otitis media, perforated eardrum, and otosclerosis of ossicles.	Inner ear disorder involves cochlear nerve and neuronal impulse transmission to the brain. Causes include loud noise exposure, inner ear infections, trauma, acoustic neuroma, congenital and familial disorders, and aging.
Usual Age of Onset	Childhood and young adulthood, up to age 40 yrs	Middle or later years
Ear Canal and Tympanic Membrane	Abnormality usually visible, except in otosclerosis	Problem not visible
Effects	Little effect on sound Hearing seems to improve in noisy environment Voice remains soft because inner ear and cochlear nerve are intact	Higher registers are lost, so sound may be distorted Hearing worsens in noisy environment Voice may be loud because hearing is difficult
Weber Test (in Unilateral Hearing Loss)	Base of tuning fork at vertex Sound lateralizes to impaired ear—room noise not well heard, so detection of vibrations improves	Base of tuning fork at vertex Sound lateralizes to good ear—inner ear or cochlear nerve damage impairs transmission to affected ear
Rinne Test	Base of tuning fork on mastoid bone; then prongs at external auditory meatus BC longer than or equal to AC (BC ≥ AC) While air conduction through the external or middle ear is impaired, vibrations through bone bypass the problem to reach the cochlea.	Base of tuning fork on mastoid bone; then prongs at external auditory meatus AC longer than BC (AC > BC) The inner ear or cochlear nerve is less able to transmit impulses regardless of how the vibrations reach the cochlea. The normal pattern prevails.

To further sharpen your clinical acumen, turn to the end-of-chapter *Tables of Abnormalities*, which allow you to compare and contrast clinical conditions in a convenient table format with accompanying photographs and illustrations.





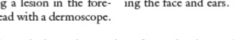


FIGURE 10-17. Inspecting a lesion in the forehead with a dermoscope.

FIGURE 10-18. Inspecting the face and ears.

FIGURE 10-19. Inspecting an anterior neck lesion with a dermoscope.

Now ask the patient to lean forward, ask permission before opening the gown, and then inspect the *upper back* (Fig. 10-20).

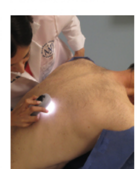


FIGURE 10-20. Inspecting a lesion in the back with the patient leaning forward.

Now inspect the *shoulders, arms,* and *hands* (Fig. 10-21). Inspect and palpate the *fingernails* (Fig. 10-22). Note their color, shape, and any lesions. Longitudinal bands of pigment are normal in people with darker skin.

Examination Techniques

This section is where you will learn the crucial and relevant examinations you will perform every day. Additional *Special Techniques* offer the examination approach for more uncommon conditions and special circumstances.

Key Components of the Examination Checklists—NEW!

The *Techniques of Examination* sections are now preceded by a listing of the *Key Components of the Examination* to serve as a checklist and guide.

TECHNIQUES OF EXAMINATION

Key Components of the Cardiovascular Examination

- Note general appearance and measure blood pressure and heart rate.
- Estimate the level of jugular venous pressure.
- Auscultate the carotids (bruit) one at a time.
- Palpate the carotid pulse including carotid upstroke (amplitude, contour, timing) and presence of a thrill.
- Inspect the anterior chest wall (apical impulse, precordial movements).
- Palpate the precordium for any heaves, thrills, or palpable heart sounds.
- Palpate and locate the PMI or apical impulse.
- Palpate for a systolic impulse of the right ventricle, pulmonary artery, and aortic outflow tract areas on the chest wall.
- Auscultate S_1 and S_2 in six positions from the base to the apex.
- Identify physiologic and paradoxical splitting of S_2.
- Auscultate and recognize abnormal sounds in early diastole, including an S_3 and OS of mitral stenosis and an S_4 later in diastole.
- Distinguish systolic and diastolic murmurs, using maneuvers when needed. If present, identify their timing, shape, grade, location, radiation, pitch, and quality.

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS

Important Topics for Health Promotion and Counseling

- Oral health
- Oral and pharyngeal cancer

Oral Health

Clinicians should play an active role in promoting oral health because it is integral to an individual's overall health and well-being. Up to 19% of children aged 5 to 19 years have untreated caries, as do about 91% of adults aged 20 to 64 years. Dental caries among adults aged 35 to 64 years were higher (94% to 97%) compared with adults aged 20 to 34 years (82%). Nearly 19% of those older than age 60 years have no teeth at all (*edentulous*).[19,20]

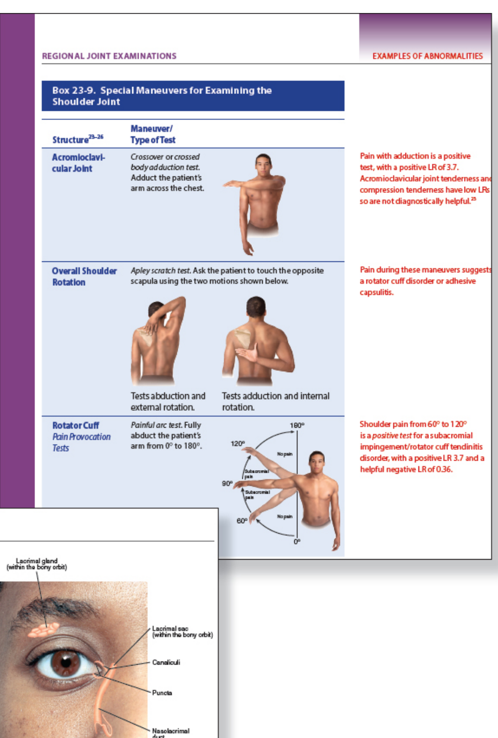
Nearly 50% of dentate adults aged 30 years and above have some form of periodontal disease, including 8.9% with severe disease.[21] Risk factors for periodontal disease include low income, male sex at birth, smoking, diabetes, and poor oral hygiene.

Health Promotion and Counseling: Evidence and Recommendations Sections

General health maintenance screening, counseling, and immunization topics occur as the last sections in each chapter for easy access. Updated recommendations are provided in helpful boxes.

Photographs and Illustrations

The art program includes detailed, full-color photographs, drawings, and diagrams, some new or revised, to further illustrate key points in the text. They will enhance your learning potential by providing accurate and realistic representations.



REGIONAL JOINT EXAMINATIONS | EXAMPLES OF ABNORMALITIES

Box 23-9. Special Maneuvers for Examining the Shoulder Joint

Structure[25–26]	Maneuver/ Type of Test	
Acromioclavicular Joint	*Crossover or crossed body adduction test.* Adduct the patient's arm across the chest.	Pain with adduction is a positive test, with a positive LR of 3.7. Acromioclavicular joint tenderness and compression tenderness have low LRs so are not diagnostically helpful.[25]
Overall Shoulder Rotation	*Apley scratch test.* Ask the patient to touch the opposite scapula using the two motions shown below. Tests abduction and external rotation. Tests adduction and internal rotation.	Pain during these maneuvers suggests a rotator cuff disorder or adhesive capsulitis.
Rotator Cuff *Pain Provocation Tests*	*Painful arc test.* Fully abduct the patient's arm from 0° to 180°.	Shoulder pain from 60° to 120° is a *positive test* for a subacromial impingement/rotator cuff tendinitis disorder, with a positive LR 3.7 and a helpful negative LR of 0.36.

Each figure has a figure number and caption to make the figures easier to find and understand.

ANATOMY AND PHYSIOLOGY

FIGURE 12-3. Sagittal section of the anterior eye.

FIGURE 12-4. Lacrimal apparatus and drainage system.

Box 17-1. Atherosclerotic Plaque Formation

- In atherosclerotic plaques, there is a proliferation of smooth muscle cells and extracellular matrix that breaches the endothelial lining.
- Atherosclerotic plaques contain a fibrous cap of smooth muscle cells that overlies a necrotic lipid-rich core, vascular cells, and a wide range of immune cells and prothrombotic molecules.
- Inflammatory mediators that alter collagen repair and cap fibrosis are increasingly implicated in plaque rupture and plaque erosion, which expose thrombogenic factors in the plaque core to coagulation factors in the blood, resulting in overlying thrombus formation.
- If in the coronary arteries, these thrombi can result in acute myocardial infarction. If in the carotid arteries, the thrombi can dislodge and travel to the brain, resulting in stroke.

Numbered Boxes—NEW!

Helpful supplementary information in boxes is now numbered for easier location and reference.

Recording the Physical Examination of the Pregnant Woman

"32-year-old G3P1102 at 18 weeks' gestation by LMP presents to establish prenatal care. Pregnancy complicated by closely spaced pregnancies, prior iatrogenic preterm birth for preeclampsia, and prior cesarean delivery. Patient does not yet note fetal movement; denies contractions, vaginal bleeding, and leakage of fluids. On external examination, low-transverse cesarean scar is evident; fundus is palpable just below umbilicus. On internal examination, cervix is open to fingertip at the external os but closed at the internal os; cervix is 3 cm long; uterus enlarged to size consistent with 18-week gestation. Speculum examination shows leukorrhea with positive Chadwick sign. FHR by Doppler is between 140 and 145 BPM."

These findings describe the examination of a healthy pregnant woman at 18 weeks' gestation.

OR

"21-year-old G1P0 at 33 weeks' gestation as determined by 19-week ultrasound presents with chief complaint of decreased fetal movement. Pregnancy complicated by rare prenatal visits and homelessness. Patient reports minimal fetal movement over the last 24 hours; denies contractions, vaginal bleeding, or leakage of fluid. On external exam, a nontender gravid abdomen with no scars is noted; fundus is measured at 32 cm; fetus is vertex but not engaged in pelvis by Leopold maneuvers. On internal examination, cervix is closed, long, and high; speculum examination shows thin gray discharge with clue cells on wet mount. FHT by Doppler are between 155 and 160 BPM."

These findings describe the examination of a more complex presentation of a pregnant woman at 33 weeks' gestation.

Recording Your Findings

Constructing a well-organized clinical record must clearly display important clinical information and your clinical reasoning and plan. You will gain this skill and learn the descriptive vocabulary of physical findings in the *Recording Your Findings* section of each of the regional examination and special populations' chapters.

References

Consult the *References* at the end of the chapters to deepen your knowledge of important clinical conditions. The habit of searching the clinical literature will serve you and your patients well throughout your career.

REFERENCES

1. Minami Y, Kajimoto K, Sato N, et al. Third heart sound in hospitalised patients with acute heart failure: insights from the ATTEND study. *Int J Clin Pract.* 2015;69(8):820–828.
2. Shah SJ, Nakamura K, Marcus GM, et al. Association of the fourth heart sound with increased left ventricular end-diastolic stiffness. *J Card Fail.* 2008;14(5):431–436.
3. O'Gara P, Loscalzo J. Chapter 267: Physical examination of the cardiovascular system. In: Kasper DL, Fauci AS, Hauser SL, et al. *Harrison's Principles of Internal Medicine.* 19th ed. New York: McGraw-Hill; 2015.
4. Yancy CW, Jessup M, Bozkurt B, et al. 2013 AACF/AHA Guideline for the Management of Heart Failure. *J Am College Cardiol.* 2013;62:e148.
5. Vinayak AG, Levitt J, Gehlbach B, et al. Usefulness of the external jugular vein examination in detecting abnormal central venous pressure in critically ill patients. *Arch Int Med.* 2006;166(19):2132–2137.
6. Schorr R, Johnson K, Wan J, et al. The prognostic significance of asymptomatic carotid bruits in the elderly. *J Gen Intern Med.* 1998;13(2):86–90.
7. McConaghy JR, Oza RS. Outpatient diagnosis of acute chest pain in adults. *Am Fam Physician.* 2013;87(3):177–182.
8. Mozaffarian D, Benjamin EJ, Go AS, et al. Heart disease and stroke statistics—2016 update: a report from the American Heart Association. *Circulation.* 2016;133(4):e38–e360.
9. O'Gara P, Kushner FG, Ascheim DD, et al. 2013 ACCF/AHA Guideline for the management of ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *J Am College Cardiol.* 2013;61(4):e78–e140.
10. Abrams J. Chronic stable angina. *N Engl J Med.* 2005;352(24):2524–2533.

19. Clark AL, Cleland JG. Causes and treatment of oedema in patients with heart failure. *Nat Rev Cardiol.* 2013;10(3):156–170.
20. Shah MG, Cho S, Atwood JE, et al. Peripheral edema due to heart disease: diagnosis and outcome. *Clin Cardiol.* 2006;29(1):31–35.
21. Clark D 3rd, Ahmed MI, Dell'italia LJ, et al. An argument for reviving the disappearing skill of cardiac auscultation. *Cleve Clin J Med.* 2012;79(8):536–537, 544.
22. Markel H. The stethoscope and the art of listening. *N Engl J Med.* 2006;354(6):551–553.
23. Vukanovic-Criley JM, Hovanesyan A, Criley SR, et al. Confidential testing of cardiac examination competency in cardiology and noncardiology faculty and trainees: a multicenter study. *Clin Cardiol.* 2010;33(12):738–745.
24. Wayne DB, Butter J, Cohen ER, et al. Setting defensible standards for cardiac auscultation skills in medical students. *Acad Med.* 2009;84(10 Suppl):S94–S96.
25. Marcus G, Vessey J, Jordan MV, et al. Relationship between accurate auscultation of a clinically useful third heart sound and level of experience. *Arch Intern Med.* 2006;166(6):617–622.
26. Johri AM, Durbin J, Newbigging J, et al. Canadian Society of Echocardiography Cardiac Point of Care Ultrasound Committee. Cardiac Point-of-Care Ultrasound: State of the Art in Medical School Education. *J Am Soc Echocardiogr.* 2018;31(7):749–760.
27. McGee S. *Evidence-based Physical Diagnosis.* 4th ed. Philadelphia, PA: Saunders; 2018.
28. The Rational Clinical Examination Series. *JAMA.* Available at http://jamaevidence.mhmedical.com/book.aspx?bookID=845. Accessed July 5, 2018.

Contents

Faculty Reviewers and Additional Contributors
Preface
Acknowledgments
How To Use Bates' Guide to Physical Examination and History Taking

UNIT 1

Foundations of Health Assessment

CHAPTER 1

Approach to the Clinical Encounter

FOUNDATIONAL SKILLS ESSENTIAL TO THE CLINICAL ENCOUNTER
APPROACH TO THE CLINICAL ENCOUNTER
STRUCTURE AND SEQUENCE OF THE CLINICAL ENCOUNTER
Stage 1: Initiating the Encounter
Stage 2: Gathering Information
Stage 3: Performing the Physical Examination
Stage 4: Explaining and Planning
Stage 5: Closing the Encounter
DISPARITIES IN HEALTH CARE
Social Determinants of Health
Racism and Bias
Cultural Humility
OTHER MAJOR CONSIDERATIONS
Spirituality
Medical Ethics

Documenting the Clinical Encounter
REFERENCES

CHAPTER **2**

Interviewing, Communication, and Interpersonal Skills

FUNDAMENTALS OF SKILLED INTERVIEWING
Active or Attentive Listening
Guided Questioning
Empathic Responses
Summarization
Transitions
Partnering
Validation
Empowering the Patient
Reassurance
APPROPRIATE VERBAL COMMUNICATION
Use Understandable Language
Use Nonstigmatizing Language
APPROPRIATE NONVERBAL COMMUNICATION
OTHER CONSIDERATIONS IN COMMUNICATION AND INTERPERSONAL SKILLS
Broaching Sensitive Topics
Informed Consent
Working with a Medical Interpreter
Advance Directives
Disclosing Serious News
Motivational Interviewing
Interprofessional Communication
CHALLENGING PATIENT SITUATIONS AND BEHAVIORS
Patient Who Is Silent
Patient Who Is Talkative
Patient with Confusing Narrative
Patient with Altered State or Cognition
Patient with Emotional Lability
Patient Who Is Angry or Aggressive
Patient Who Is Flirtatious
Patient Who Is Discriminatory
Patient with Hearing Loss
Patient with Low or Impaired Vision
Patient with Limited Intelligence

Patient Burdened by Personal Problems
Patient Who Is Nonadherent
Patient with Low Literacy
Patient with Low Health Literacy
Patient with Limited Language Proficiency
Patient with Terminal Illness or Who Is Dying

BEING PATIENT-CENTERED IN COMPUTERIZED CLINICAL SETTINGS

LEARNING COMMUNICATION SKILLS FROM STANDARDIZED PATIENTS

REFERENCES

CHAPTER **3**

Health History

HEALTH HISTORY

Different Kinds of Health Histories
Determining the Scope of Your Patient Assessment: Comprehensive or Focused?
Subjective versus Objective Data

COMPREHENSIVE ADULT HEALTH HISTORY

Initial Information
Chief Complaint
History of Present Illness
Past Medical History
Family History
Personal and Social History
Review of Systems

RECORDING YOUR FINDINGS

MODIFICATION OF THE CLINICAL INTERVIEW FOR VARIOUS CLINICAL SETTINGS

Ambulatory Care Clinic
Emergency Care
Intensive Care Unit
Nursing Home
Home

REFERENCES

CHAPTER **3**

Physical Examination

ROLE OF THE PHYSICAL EXAMINATION IN THE ERA OF TECHNOLOGY

DETERMINING SCOPE OF THE PHYSICAL EXAMINATION: COMPREHENSIVE OR FOCUSED?

Comprehensive Adult Physical Examination

HEAD-TO-TOE PHYSICAL EXAMINATION

General Survey
Vital Signs
Skin
Head, Eyes, Ears, Nose, Throat
Neck
Back
Posterior Thorax and Lungs
Breasts and Axillae
Anterior Thorax and Lungs
Cardiovascular System
Abdomen
Lower Extremities
Nervous System
Additional Examinations

ADAPTING THE PHYSICAL EXAMINATION: SPECIFIC PATIENT CONDITIONS

Patient on Bedrest
Patient Using a Wheelchair
Patient Who Is Postprocedure
Patient Who Is Obese
Patient in Pain
Patient on Special Precautions

RECORDING YOUR FINDINGS

REFERENCES

CHAPTER 5

Clinical Reasoning, Assessment, and Plan

CLINICAL REASONING: PROCESS

Basic Structure of the Clinical Reasoning Process
Clinical Diagnostic Errors

CLINICAL REASONING: DOCUMENTATION

Document the Problem Representation (Summary Statement)
Assessment and Plan

RECORDING YOUR FINDINGS

PROGRESS NOTE AND PATIENT PROBLEM LIST IN THE ELECTRONIC HEALTH RECORD

Patient Problem List

ORAL PRESENTATION

REFERENCES

CHAPTER **6**

Health Maintenance and Screening

CONCEPT OF PREVENTIVE CARE

GUIDELINE RECOMMENDATIONS

U.S. Preventive Services Task Force Approach

Grading of Recommendations, Assessment, Development, and Evaluation

SCREENING

Basic Approach to Screening

BEHAVIORAL COUNSELING

Motivational Interviewing

IMMUNIZATIONS

SCREENING GUIDELINES FOR ADULTS

Screening for Unhealthy Weight and Diabetes Mellitus

Screening for Substance Use Disorders, Including Misuse of Prescription and Illicit Drugs

Screening for IPV, Domestic Violence, Elder Abuse, and Abuse of Vulnerable Adults

COUNSELING GUIDELINES FOR ADULTS

Weight Loss

Healthful Diet and Physical Activity

SCREENING AND COUNSELING GUIDELINES FOR ADULTS

Unhealthy Alcohol Use

Tobacco Use

Screening and Counseling for STIs

IMMUNIZATION GUIDELINES FOR ADULTS

Influenza Vaccine

Pneumococcal Vaccine

Varicella Vaccine

Herpes Zoster Vaccine

Tetanus, Diphtheria, Pertussis Vaccine

Human Papillomavirus Vaccine

Hepatitis A Vaccine

Hepatitis B Vaccine

PREVENTIVE CARE IN SPECIAL POPULATIONS

DISEASE-SPECIFIC RECOMMENDATIONS

REFERENCES

CHAPTER **7**

Evaluating Clinical Evidence

USING ELEMENTS OF THE HISTORY AND PHYSICAL EXAMINATION AS DIAGNOSTIC TESTS
EVALUATING DIAGNOSTIC TESTS
Validity
APPLYING CONCEPTS TO SCREENING TESTS
Fagan Nomogram
Natural Frequencies
Reproducibility
CRITICALLY APPRAISING THE CLINICAL EVIDENCE
COMMUNICATING CLINICAL EVIDENCE TO PATIENTS
REFERENCES

UNIT 2

Regional Examinations

CHAPTER 8

General Survey, Vital Signs, and Pain

HEALTH HISTORY: GENERAL APPROACH
Fatigue and Weakness
Fever, Chills, and Night Sweats
Weight Change
Pain
PHYSICAL EXAMINATION: GENERAL APPROACH
TECHNIQUES OF EXAMINATION
General Survey
Vital Signs
Acute and Chronic Pain
Types of Pain
Assessing Acute and Chronic Pain
RECORDING YOUR FINDINGS
HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS
Screening for Hypertension
Blood Pressure and Dietary Sodium
REFERENCES

CHAPTER **9**

Cognition, Behavior, and Mental Status

ANATOMY AND PHYSIOLOGY
HEALTH HISTORY: GENERAL APPROACH
Anxiety, Excessive Worrying
Depressed Mood
Memory Problems
Patients with Medically Unexplained Symptoms
PHYSICAL EXAMINATION: GENERAL APPROACH
TECHNIQUES OF EXAMINATION
Appearance and Behavior
Speech and Language
Mood
Thought
Perceptions
Cognitive Functions
Higher Cognitive Functions
RECORDING YOUR FINDINGS
HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS
Screening for Depression
Assessing for Suicide Risk
Screening for Neurocognitive Disorders
Screening for Substance Use Disorders, Including Misuse of Alcohol and Prescription and Illicit Drugs
REFERENCES

CHAPTER **10**

Skin, Hair, and Nails

ANATOMY AND PHYSIOLOGY
Skin
Hair
Nails
Pilosebaceous Glands and Sweat Glands
HEALTH HISTORY: GENERAL APPROACH
Lesions
Rashes and Itching (Pruritus)
Hair Loss and Nail Changes
DESCRIBING SKIN LESIONS

Primary Lesion
Size
Number
Distribution
Configuration
Texture
Color

PHYSICAL EXAMINATION: GENERAL APPROACH
Lighting, Equipment, and Dermoscopy
Patient Gown
Handwashing

TECHNIQUES OF EXAMINATION
Standard Technique: Patient Position—Seated Then Standing
Alternative Technique: Patient Position—Supine Then Prone
Integrated Skin Examinations

SPECIAL TECHNIQUES
Patient Instructions for the Skin Self-Examination
Examining the Patient with Hair Loss
Evaluating the Bedbound Patient

RECORDING YOUR FINDINGS

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS
Epidemiology
Skin Cancer Prevention
Skin Cancer Screening
Screening for Melanoma: The ABCDEs

REFERENCES

CHAPTER **11**

Head and Neck

ANATOMY AND PHYSIOLOGY
Head
Neck

HEALTH HISTORY: GENERAL APPROACH
Neck Mass or Lump
Thyroid Mass, Nodule, or Goiter

PHYSICAL EXAMINATION: GENERAL APPROACH

TECHNIQUES OF EXAMINATION
Hair
Scalp

Skull
Face
Skin
Cervical Lymph Nodes
Trachea
Thyroid Gland
Carotid Arteries and Jugular Veins

RECORDING YOUR FINDINGS

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS

Screening for Thyroid Dysfunction
Screening for Thyroid Cancer

REFERENCES

CHAPTER **12**

Eyes

ANATOMY AND PHYSIOLOGY

Visual Fields
Visual Pathways
Autonomic Nerve Supply to the Eyes
Extraocular Movements

HEALTH HISTORY: GENERAL APPROACH

Vision Changes
Eye Pain, Redness, or Tearing
Double Vision

PHYSICAL EXAMINATION: GENERAL APPROACH

TECHNIQUES OF EXAMINATION

Visual Acuity
Visual Fields
Color Vision
Contrast Sensitivity
Eye Position and Alignment
Eyebrows
Eyelids
Lacrimal Apparatus
Conjunctiva and Sclera
Cornea and Lens
Iris
Pupils
Extraocular Muscles
Ophthalmoscopic (Funduscopic) Examination

SPECIAL TECHNIQUES
Eye Protrusion (Proptosis or Exophthalmos)
Nasolacrimal Duct Obstruction
Everting Upper Eyelid to Search for Foreign Body
Swinging Flashlight Test
RECORDING YOUR FINDINGS
HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS
Visual Impairment
Screening for Glaucoma
UV-Related Eye Injuries
REFERENCES

CHAPTER **13**

Ears and Nose

ANATOMY AND PHYSIOLOGY
Ear
Nose and Paranasal Sinuses
HEALTH HISTORY: GENERAL APPROACH
Hearing Loss
Earache and Ear Discharge
Tinnitus
Dizziness and Vertigo
Rhinorrhea and Nasal Congestion
Epistaxis
PHYSICAL EXAMINATION: GENERAL APPROACH
TECHNIQUES OF EXAMINATION
Auricle
Ear Canal and Tympanic Membrane
Testing Auditory Acuity or Gross Hearing
Testing for Conductive versus Sensorineural Hearing Loss: Tuning Fork Tests
Surface of the Nose
Nasal Cavity and Mucosa
Nasal Septum
Paranasal Sinuses
RECORDING YOUR FINDINGS
HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS
SCREENING FOR HEARING LOSS
REFERENCES

CHAPTER **14**

Throat and Oral Cavity

ANATOMY AND PHYSIOLOGY
Mouth, Gingiva, and Teeth
Tongue
Pharynx
HEALTH HISTORY: GENERAL APPROACH
Sore Throat
Bleeding or Swollen Gums
Hoarseness
Malodorous Breath
PHYSICAL EXAMINATION: GENERAL APPROACH
TECHNIQUES OF EXAMINATION
Lips and Oral Mucosa
Gums and Teeth
Roof and Floor of the Mouth and the Tongue
Pharynx
RECORDING YOUR FINDINGS
HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS
Oral Health
Oral and Pharyngeal Cancer
REFERENCES

CHAPTER **15**

Thorax and Lungs

ANATOMY AND PHYSIOLOGY
Locating Findings on the Chest
Breathing
HEALTH HISTORY: GENERAL APPROACH
Shortness of Breath (Dyspnea) and Wheezing
Cough
Hemoptysis
Chest Pain
Daytime Sleepiness, Snoring and Disordered Sleep
PHYSICAL EXAMINATION: GENERAL APPROACH
TECHNIQUES OF EXAMINATION
Initial Survey of Respiration and the Thorax

Posterior Chest
Anterior Chest

SPECIAL TECHNIQUES

Clinical Assessment of Pulmonary Function
Forced Expiratory Time
Identification of a Fractured Rib

RECORDING YOUR FINDINGS

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS

Lung Cancer
Latent Tuberculosis
Obstructive Sleep Apnea

REFERENCES

CHAPTER 16

Cardiovascular System

ANATOMY AND PHYSIOLOGY

Surface Projections of the Heart and Great Vessels
Cardiac Chambers, Valves, and Circulation
Events in the Cardiac Cycle
Splitting of Heart Sounds
Heart Murmurs
Relation of Auscultatory Findings to the Chest Wall
Conduction System
The Heart as a Pump
Arterial Pulses and Blood Pressure
Jugular Venous Pressure and Pulsations
Changes Over the Life Span

HEALTH HISTORY: GENERAL APPROACH

Chest Pain
Palpitations
Shortness of Breath
Swelling (Edema)
Fainting (Syncope)

PHYSICAL EXAMINATION: GENERAL APPROACH

TECHNIQUES OF EXAMINATION

Blood Pressure and Heart Rate
Jugular Venous Pressure
Carotid Arteries
Heart

SPECIAL TECHNIQUES: BEDSIDE MANEUVERS TO IDENTIFY MURMURS AND HEART FAILURE

Standing and Squatting
Valsalva Maneuver
Isometric Handgrip
Transient Arterial Occlusion

RECORDING YOUR FINDINGS

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS

Challenges of Cardiovascular Disease Prevention
Health Disparities in Cardiovascular Disease
Screening for Cardiovascular Risk Factors
Promoting Lifestyle Change and Risk Factor Modification

REFERENCES

CHAPTER **17**

Peripheral Vascular System

ANATOMY AND PHYSIOLOGY

Arterial System
Venous System
Lymphatic System
Transcapillary Fluid Exchange

HEALTH HISTORY: GENERAL APPROACH

Peripheral Arterial Disease
Peripheral Venous Disease (or Venous Thromboembolism)

PHYSICAL EXAMINATION: GENERAL APPROACH

TECHNIQUES OF EXAMINATION

Arms
Abdomen
Legs

SPECIAL TECHNIQUES

Assessing for Peripheral Arterial Disease
Evaluating Arterial Perfusion of the Hand

RECORDING YOUR FINDINGS

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS

Screening for Lower Extremity Peripheral Artery Disease
Screening for Abdominal Aortic Aneurysm

REFERENCES

CHAPTER **18**

Breasts and Axillae

ANATOMY AND PHYSIOLOGY
Female Breast
Axilla
Male Breast
HEALTH HISTORY: GENERAL APPROACH
Breast Lump or Mass
Breast Discomfort or Pain
Nipple Discharge
PHYSICAL EXAMINATION: GENERAL APPROACH
TECHNIQUES OF EXAMINATION
Female Breast
Axillae
Male Breast
SPECIAL TECHNIQUES
Examination after Mastectomy or Breast Reconstruction
RECORDING YOUR FINDINGS
HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS
Breast Cancer in Women
MALE BREAST CANCER
REFERENCES

CHAPTER **19**

Abdomen

ANATOMY AND PHYSIOLOGY
Abdominal Cavity and Contents
Pelvic Cavity and Contents
HEALTH HISTORY: GENERAL APPROACH
Abdominal Pain
Abdominal Pain and Associated Gastrointestinal Symptoms
Difficulty Swallowing (Dysphagia) and/or Painful Swallowing (Odynophagia)
Change in Bowel Function
Diarrhea
Constipation
Jaundice
Urinary Symptoms

Flank Pain and Ureteral Colic

PHYSICAL EXAMINATION: GENERAL APPROACH

TECHNIQUES OF EXAMINATION

Abdomen
Liver
Spleen
Kidneys
Urinary Bladder
Aorta

SPECIAL TECHNIQUES

Assessing Possible Ascites
Assessing Possible Appendicitis
Assessing Possible Acute Cholecystitis
Assessing Ventral Hernias
Abdominal Wall Mass

RECORDING YOUR FINDINGS

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS

Viral Hepatitis
Colorectal Cancer

REFERENCES

CHAPTER **20**

Male Genitalia

ANATOMY AND PHYSIOLOGY

Genitalia
Groin
Lymphatics
Male Sexual Development and Function

HEALTH HISTORY: GENERAL APPROACH

Penile Discharge or Lesions and Scrotal or Testicular Pain, Swelling, or Lesions
Sexually Transmitted Infections

PHYSICAL EXAMINATION: GENERAL APPROACH

TECHNIQUES OF EXAMINATION

Penis
Scrotum and Scrotal Contents

SPECIAL TECHNIQUES

Evaluating Groin Hernias
Testicular Self-Examination

RECORDING YOUR FINDINGS

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS

Testicular Cancer

REFERENCES

CHAPTER **21**

Female Genitalia

ANATOMY AND PHYSIOLOGY

Vulva
Vagina
Uterus
Adnexa
Pelvic Floor
Lymphatics

HEALTH HISTORY: GENERAL APPROACH

Menarche and Menses
Abnormal Bleeding
Menopause
Pelvic Pain—Acute and Chronic
Vulvovaginal Symptoms

PHYSICAL EXAMINATION: GENERAL APPROACH

Positioning
Examining Equipment

TECHNIQUES OF EXAMINATION

External Examination
Internal Examination
Hernias

SPECIAL TECHNIQUES

Assessing Urethritis

RECORDING YOUR FINDINGS

HEALTH PROMOTION AND COUNSELING: EVIDENCE AND RECOMMENDATIONS

Cervical Cancer
Menopause and Hormone Replacement Therapy
Ovarian Cancer

REFERENCES

CHAPTER **22**

Anus, Rectum, and Prostate