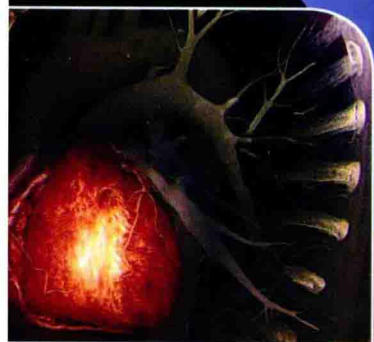


# CURRENT

## Medical Diagnosis & Treatment



# 2016

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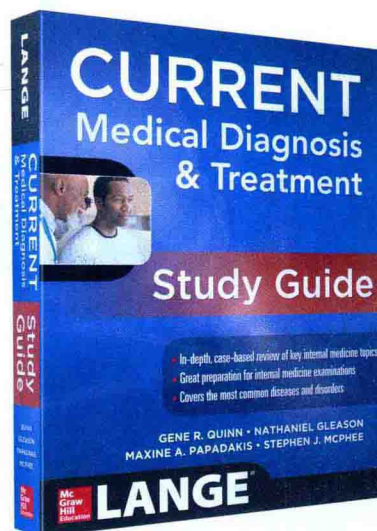
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*Gynecologic Disorders*

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# Preface

*Current Medical Diagnosis & Treatment 2016 (CMDT 2016)* is the 55th edition of this single-source reference for practitioners in both hospital and ambulatory settings. The book emphasizes the practical features of clinical diagnosis and patient management in all fields of internal medicine and in specialties of interest to primary care practitioners and to subspecialists who provide general care.

## INTENDED AUDIENCE FOR CMDT

House officers, medical students, and all other health professions students will find the descriptions of diagnostic and therapeutic modalities, with citations to the current literature, of everyday usefulness in patient care.

Internists, family physicians, hospitalists, nurse practitioners, physicians' assistants, and all primary care providers will appreciate *CMDT* as a ready reference and refresher text. Physicians in other specialties, pharmacists, and dentists will find the book a useful basic medical reference text. Nurses, nurse-practitioners, and physicians' assistants will welcome the format and scope of the book as a means of referencing medical diagnosis and treatment.

Patients and their family members who seek information about the nature of specific diseases and their diagnosis and treatment may also find this book to be a valuable resource.

## NEW IN THIS EDITION OF CMDT

- Expanded section on opioids for chronic noncancer pain
- Updated smoking cessation therapies, including e-cigarettes
- Revised treatment for patients with hypertension who have diabetes mellitus or chronic kidney disease
- Updated treatment recommendations for diabetes mellitus, including incretins (GLP-1 receptor agonists and DPP-4 inhibitors), sodium-glucose co-transporter 2 (SGLT2) inhibitors, and inhaled insulin
- Updated weight loss treatments for obesity
- New Table outlining when to operate in chronic severe aortic regurgitation
- New Table summarizing the 2014 AHA/ACC Guidelines for defining severe aortic stenosis
- 2014 AHA/ACC Treatment Guidelines for aortic stenosis, including transcatheter aortic valve replacement (TAVR)
- Revised recommendations for managing anticoagulation in patients with prosthetic heart valves who are pregnant or undergoing noncardiac procedures
- Updated recommendations on dual antiplatelet therapy in patients with acute coronary syndrome who have received bare metal or drug-eluting stents
- Revised treatment section for ventricular premature beats and ventricular tachycardia
- New pharmacologic therapy recommendations for chronic lymphocytic leukemia and hairy cell leukemia
- New medications for metastatic prostate cancer
- New discussion on role of antidepressants in managing generalized anxiety disorder
- New biologics and anti-integrins for Crohn disease and ulcerative colitis
- New treatment algorithm for pulmonary hypertension
- Updated treatment options for reducing rate of lung function decline in patients with idiopathic pulmonary fibrosis
- Comprehensive update on Ebola virus
- Updated treatment options for erythema multiforme/Stevens Johnson syndrome/toxic epidermal necrolysis
- New section on heart failure with preserved ejection fraction
- Revised treatment options for varicose veins
- New colon cancer test that combines fecal DNA with fecal immunochemical test for stool hemoglobin
- New diagnosis and treatment guidelines for familial adenomatous polyposis
- New treatment section for hepatitis C virus infection
- Extensively revised discussion of intrahepatic cholestasis of pregnancy
- Rewritten section on Allergic Diseases
- New section on drug-induced lupus
- Rewritten section on Renal Amyloidosis
- Extensive revision of Endocrine Disorders
- Updated HIV treatment guidelines
- New Table on dosing influenza vaccines



- Rewritten section on staphylococcal bacteremia
- Extensively revised chapter on Disorders Related to Environmental Emergencies
- Options for managing emetogenic chemotherapy

## OUTSTANDING FEATURES OF CMDT

- Medical advances up to time of annual publication
- Detailed presentation of primary care topics, including gynecology, obstetrics, dermatology, ophthalmology, otolaryngology, psychiatry, neurology, toxicology, urology, geriatrics, orthopedics, women's health, preventive medicine, and palliative care
- Concise format, facilitating efficient use in any practice setting
- More than 1000 diseases and disorders
- Annual update on HIV infection and AIDS
- Specific disease prevention information
- Easy access to medication dosages, with trade names indexed and costs updated in each edition
- Recent references, with unique identifiers (PubMed, PMID numbers) for rapid downloading of article abstracts and, in some instances, full-text reference articles

CMDT Online ([www.AccessMedicine.com](http://www.AccessMedicine.com)) provides full electronic access to *CMDT 2016* plus expanded basic science information and six additional chapters. The six online-only chapters (Anti-Infective Chemotherapeutic & Antibiotic Agents, Fundamentals of Human Genetics & Genomics, Diagnostic Testing & Medical Decision Making, Information Technology in Patient Care, Integrative Medicine, and Podiatric Disorders) are available at [www.AccessMedicine.com/CMDT](http://www.AccessMedicine.com/CMDT). CMDT Online is updated throughout the year and includes an expanded, dedicated Media Gallery as well as links to related Web sites. Subscribers also receive access to *Diagnosaurus* with 1000+ differential diagnoses, *Pocket Guide to Diagnostic Tests*, *Quick Medical Diagnosis & Treatment*, and *CURRENT Practice Guidelines in Primary Care*.

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Many students and physicians also have contributed useful suggestions to this and previous editions, and we are grateful. We continue to welcome comments and recommendations for future editions in writing or via electronic mail. The editors' email addresses are below and author e-mail addresses are included in the Authors section.

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From inability to let alone; from too much zeal for the new and contempt for what is old; from putting knowledge before wisdom, and science before art and cleverness before common sense; from treating patients as cases; and from making the cure of the disease more grievous than the endurance of the same, Good Lord, deliver us.

—Sir Robert Hutchison



# Contents

Authors  
Preface

v  
xi

<b>1. Disease Prevention &amp; Health Promotion</b>	<b>1</b>
<i>Michael Pignone, MD, MPH, &amp; René Salazar, MD</i>	
<b>2. Common Symptoms</b>	<b>19</b>
<i>Paul L. Nadler, MD, &amp; Ralph Gonzales, MD, MSPH</i>	
<b>3. Preoperative Evaluation &amp; Perioperative Management</b>	<b>44</b>
<i>Hugo Q. Cheng, MD</i>	
<b>4. Geriatric Disorders</b>	<b>55</b>
<i>G. Michael Harper, MD, C. Bree Johnston, MD, MPH, &amp; C. Seth Landefeld, MD</i>	
<b>5. Palliative Care &amp; Pain Management</b>	<b>71</b>
<i>Michael W. Rabow, MD, &amp; Steven Z. Pantilat, MD</i>	
<b>6. Dermatologic Disorders</b>	<b>94</b>
<i>Kanade Shinkai, MD, PhD, Timothy G. Berger, MD, &amp; Lindy P. Fox, MD</i>	
<b>7. Disorders of the Eyes &amp; Lids</b>	<b>166</b>
<i>Paul Riordan-Eva, FRCOphth</i>	
<b>8. Ear, Nose, &amp; Throat Disorders</b>	<b>201</b>
<i>Lawrence R. Lustig, MD, &amp; Joshua S. Schindler, MD</i>	
<b>9. Pulmonary Disorders</b>	<b>242</b>
<i>Mark S. Chesnutt, MD, &amp; Thomas J. Prendergast, MD</i>	
<b>10. Heart Disease</b>	<b>321</b>
<i>Thomas M. Bashore, MD, Christopher B. Granger, MD, Kevin P. Jackson, MD, &amp; Manesh R. Patel, MD</i>	
<b>11. Systemic Hypertension</b>	<b>435</b>
<i>Michael Sutters, MD, MRCP (UK)</i>	
<b>12. Blood Vessel &amp; Lymphatic Disorders</b>	<b>468</b>
<i>Christopher D. Owens, MD, MSc, Warren J. Gasper, MD, &amp; Meshell D. Johnson, MD</i>	

<b>13. Blood Disorders</b>	<b>495</b>
<i>Lloyd E. Damon, MD, &amp; Charalambos Andreadis, MD</i>	
<b>14. Disorders of Hemostasis, Thrombosis, &amp; Antithrombotic Therapy</b>	<b>542</b>
<i>Patrick F. Fogarty, MD, &amp; Tracy Minichiello, MD</i>	
<b>15. Gastrointestinal Disorders</b>	<b>568</b>
<i>Kenneth R. McQuaid, MD</i>	
<b>16. Liver, Biliary Tract, &amp; Pancreas Disorders</b>	<b>663</b>
<i>Lawrence S. Friedman, MD</i>	
<b>17. Breast Disorders</b>	<b>721</b>
<i>Armando E. Giuliano, MD, &amp; Sara A. Hurvitz, MD</i>	
<b>18. Gynecologic Disorders</b>	<b>749</b>
<i>Jason Woo, MD, MPH, FACOG, &amp; Alicia Y. Armstrong, MD, MHSCR</i>	
<b>19. Obstetrics &amp; Obstetric Disorders</b>	<b>783</b>
<i>Vanessa L. Rogers, MD, &amp; Kevin C. Worley, MD</i>	
<b>20. Rheumatologic, Immunologic, &amp; Allergic Disorders</b>	<b>812</b>
<i>David B. Hellmann, MD, MACP, &amp; John B. Imboden, Jr., MD</i>	
<b>21. Electrolyte &amp; Acid-Base Disorders</b>	<b>869</b>
<i>Kerry C. Cho, MD</i>	
<b>22. Kidney Disease</b>	<b>898</b>
<i>Suzanne Watnick, MD, &amp; Tonja C. Dirkx, MD</i>	
<b>23. Urologic Disorders</b>	<b>938</b>
<i>Maxwell V. Meng, MD, FACS, Thomas J. Walsh, MD, MS, &amp; Thomas D. Chi, MD</i>	
<b>24. Nervous System Disorders</b>	<b>962</b>
<i>Michael J. Aminoff, MD, DSc, FRCP, &amp; Geoffrey A. Kerchner, MD, PhD</i>	

<b>25. Psychiatric Disorders</b>	<b>1033</b>	<b>37. Disorders Related to Environmental Emergencies</b>	<b>1538</b>
<i>Nolan Williams, MD, &amp; Charles DeBattista, DMH, MD</i>		<i>Jacqueline A. Nemer, MD, FACEP, &amp; Melissa C. Clark, MD</i>	
<b>26. Endocrine Disorders</b>	<b>1087</b>	<b>38. Poisoning</b>	<b>1554</b>
<i>Paul A. Fitzgerald, MD</i>		<i>Kent R. Olson, MD</i>	
<b>27. Diabetes Mellitus &amp; Hypoglycemia</b>	<b>1190</b>	<b>39. Cancer</b>	<b>1585</b>
<i>Umesh Masharani, MB, BS, MRCP(UK)</i>		<i>Patricia A. Cornett, MD, &amp; Tiffany O. Dea, PharmD</i>	
<b>28. Lipid Disorders</b>	<b>1239</b>	<b>e2 Fundamentals of Human Genetics &amp; Genomics</b>	<b>Online*</b>
<i>Robert B. Baron, MD, MS</i>		<i>Reed E. Pyeritz, MD, PhD</i>	
<b>29. Nutritional Disorders</b>	<b>1249</b>	<b>40. Inherited Disorders</b>	<b>1655</b>
<i>Robert B. Baron, MD, MS</i>		<i>Reed E. Pyeritz, MD, PhD</i>	
<b>30. Common Problems in Infectious Diseases &amp; Antimicrobial Therapy</b>	<b>1267</b>	<b>41. Sports Medicine &amp; Outpatient Orthopedics</b>	<b>1664</b>
<i>Peter V. Chin-Hong, MD, &amp; B. Joseph Guglielmo, PharmD</i>		<i>Anthony Luke, MD, MPH, &amp; C. Benjamin Ma, MD</i>	
<b>e1 Anti-Infective Chemotherapeutic &amp; Antibiotic Agents</b>	<b>Online*</b>	<b>42. Women's Health Issues</b>	<b>1698</b>
<i>B. Joseph Guglielmo, PharmD</i>		<i>Megan McNamara, MD, MSc, &amp; Judith Walsh, MD, MPH</i>	
<b>31. HIV Infection &amp; AIDS</b>	<b>1310</b>	<b>e3 Diagnostic Testing &amp; Medical Decision Making</b>	<b>Online*</b>
<i>Mitchell H. Katz, MD</i>		<i>C. Diana Nicoll, MD, PhD, MPA, Michael Pignone, MD, MPH, &amp; Chuanyi Mark Lu, MD, PhD</i>	
<b>32. Viral &amp; Rickettsial Infections</b>	<b>1342</b>	<b>e4 Information Technology in Patient Care</b>	<b>Online*</b>
<i>J. Daniel Kelly, MD, &amp; Wayne X. Shandera, MD</i>		<i>Russ Cucina, MD, MS</i>	
<b>33. Bacterial &amp; Chlamydial Infections</b>	<b>1417</b>	<b>e5 Integrative Medicine</b>	<b>Online*</b>
<i>Brian S. Schwartz, MD</i>		<i>Kevin Barrows, MD, &amp; Sanjay Reddy, MD</i>	
<b>34. Spirochetal Infections</b>	<b>1463</b>	<b>e6 Podiatric Disorders</b>	<b>Online*</b>
<i>Susan S. Philip, MD, MPH</i>		<i>Monara Dini, DPM, &amp; Cynthia A. Luu, DPM</i>	
<b>35. Protozoal &amp; Helminthic Infections</b>	<b>1482</b>	<b>Appendix: Therapeutic Drug Monitoring &amp; Laboratory Reference Intervals, &amp; Pharmacogenetic Testing</b>	<b>1710</b>
<i>Philip J. Rosenthal, MD</i>		<i>C. Diana Nicoll, MD, PhD, MPA, &amp; Chuanyi Mark Lu, MD, PhD</i>	
<b>36. Mycotic Infections</b>	<b>1524</b>		
<i>Samuel A. Shelburne, III, MD, PhD, &amp; Richard J. Hamill, MD</i>			



# Disease Prevention & Health Promotion

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# 1

## GENERAL APPROACH TO THE PATIENT

The medical interview serves several functions. It is used to collect information to assist in diagnosis (the “history” of the present illness), to understand patient values, to assess and communicate prognosis, to establish a therapeutic relationship, and to reach agreement with the patient about further diagnostic procedures and therapeutic options. It also serves as an opportunity to influence patient behavior, such as in motivational discussions about smoking cessation or medication adherence. Interviewing techniques that avoid domination by the clinician increase patient involvement in care and patient satisfaction. Effective clinician-patient communication and increased patient involvement can improve health outcomes.

### Patient Adherence

For many illnesses, treatment depends on difficult fundamental behavioral changes, including alterations in diet, taking up exercise, giving up smoking, cutting down drinking, and adhering to medication regimens that are often complex. Adherence is a problem in every practice; up to 50% of patients fail to achieve full adherence, and one-third never take their medicines. Many patients with medical problems, even those with access to care, do not seek appropriate care or may drop out of care prematurely. Adherence rates for short-term, self-administered therapies are higher than for long-term therapies and are inversely correlated with the number of interventions, their complexity and cost, and the patient's perception of overmedication.

As an example, in HIV-infected patients, adherence to antiretroviral therapy is a crucial determinant of treatment success. Studies have unequivocally demonstrated a close relationship between patient adherence and plasma HIV RNA levels, CD4 cell counts, and mortality. Adherence levels of more than 95% are needed to maintain virologic suppression. However, studies show that over 60% of patients are less than 90% adherent and that adherence tends to decrease over time.

Patient reasons for nonadherence include simple forgetfulness, being away from home, being busy, and changes in daily routine. Other reasons include psychiatric disorders (depression or substance abuse), uncertainty about the

effectiveness of treatment, lack of knowledge about the consequences of poor adherence, regimen complexity, and treatment side effects.

Patients seem better able to take prescribed medications than to adhere to recommendations to change their diet, exercise habits, or alcohol intake or to perform various self-care activities (such as monitoring blood glucose levels at home). For short-term regimens, adherence to medications can be improved by giving clear instructions. Writing out advice to patients, including changes in medication, may be helpful. Because low functional health literacy is common (almost half of English-speaking US patients are unable to read and understand standard health education materials), other forms of communication—such as illustrated simple text, videotapes, or oral instructions—may be more effective. For non-English-speaking patients, clinicians and health care delivery systems can work to provide culturally and linguistically appropriate health services.

To help improve adherence to long-term regimens, clinicians can work with patients to reach agreement on the goals for therapy, provide information about the regimen, ensure understanding by using the “teach-back” method, counsel about the importance of adherence and how to organize medication-taking, reinforce self-monitoring, provide more convenient care, prescribe a simple dosage regimen for all medications (preferably one or two doses daily), suggest ways to help in remembering to take doses (time of day, mealtime, alarms) and to keep appointments, and provide ways to simplify dosing (medication boxes). Single-unit doses supplied in foil wrappers can increase adherence but should be avoided for patients who have difficulty opening them. Medication boxes with compartments (eg, Medisets) that are filled weekly are useful. Microelectronic devices can provide feedback to show patients whether they have taken doses as scheduled or to notify patients within a day if doses are skipped. Reminders, including cell phone text messages, are another effective means of encouraging adherence. The clinician can also enlist social support from family and friends, recruit an adherence monitor, provide a more convenient care environment, and provide rewards and recognition for the patient's efforts to follow the regimen. Collaborative programs that utilize pharmacists to help ensure adherence are also effective.