id-Base and Electrolyte Abnormalities," uses clinical examples in a tutorial process. Such a style will either excite or annoy the reader, and this highlights the stylistic inconsistencies common in multiple-author books.

Finally, certain "hot-button" critical care issues are given limited consideration in this text, such as adrenal insufficiency and tight glucose control in the ICU, which are both discussed in the chapter "Care of the Patient With Endocrine Emergencies." The presentation does not capture the importance currently placed on these subjects, perhaps (1) because they do not fit into the idea of perioperative care, (2) because of the chapter structure, or (3) because they were simply not on the "front burner" when the book was being re-imagined. When the third edition is published, we will find out if such topics merit a more complete discussion or if they are simply a passing trend.

Critical Care Medicine: Perioperative Management, 2nd edition, is an efficient and timely tool for introducing and reviewing a wide variety of topics in the care of ICU patients in the perioperative period and other periods. At a cost of $149 it should be within reach of a fellow, resident, or student who is spending a substantial fraction of time in a surgical intensive care setting. Allied health professionals will also benefit from consulting this book, but I doubt that its content will motivate them to purchase their own copies. Perhaps they will be able to find the book on the shelves of surgical ICUs, where it will be a welcome addition.

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Coding Essentials for Respiratory Therapy and Pulmonary Function Testing. St Paul, Minnesota: Medical Learning Incorporated. 2003. Soft cover, 203 pages, $99.

Respiratory schools train therapists for problems of the cardiopulmonary system but not necessarily in the secrets of the ever-changing process of coding and billing for services rendered in the workplace. **Coding Essentials for Respiratory Therapy and Pulmonary Function Testing** was written by the experts at Medical Learning Incorporated to unlock those mysteries in a clearly written text. The company describes itself as "a nationally recognized consulting, pub-

lications, and training company that specializes in providing coding, reimbursement, compliance and educational services for hospitals, physicians, and other health care service organizations." This book provides the newest information from the *CPT 2003: Current Procedural Terminology* book from the American Medical Association (AMA). There are also frequent references to specific back issues of the Center for Medicare and Medicaid Service's National Correct Coding Initiative edits, and the AMA's *CPT Assistant* publication. The book has a soft cover and is bound with spiral wire, which may tend to wear with the frequent handling this manual may receive as a reference. There are no illustrations, but there are several charts and an algorithm flowchart that help clarify the material.

The intended audience includes respiratory care managers, pulmonary function laboratory directors, department administrators, and anyone else who needs to deal with coding issues for respiratory care, pulmonary function testing, and blood gas testing. I thought I was well versed in coding issues from my years in the respiratory field, but I learned many things from reading through this handy manual. Mutually exclusive procedures, comprehensive codes, component codes, revenue center codes, payment status indicators, and modifiers are all explained in detail in the beginning of the book. Throughout the book are helpful references and resources, including Web sites and business phone numbers.

Chapter 1 covers Medicare payment methods for respiratory therapy services. Chapter 2 discusses coding and billing for correct reimbursement. Chapter 3 deals with coding and billing strategies for diagnostic testing. Chapter 4 has information on respiratory therapy and various treatments modalities. Chapter 5 covers miscellaneous other services, such as blood gases, sleep studies, and supply, service, and equipment charges.

Chapters 3–6 delve into the specifics of the respiratory care and pulmonary function codes. This is the only weak area of the book; as I read it, I could tell someone not familiar with respiratory care wrote it. If a second edition is released, I would suggest the authors collaborate with respiratory medical personnel to proofread the text.

The chapters are arranged in numerical test code order. In a future edition it would be helpful to add an index for looking up pulmonary function tests and respiratory

therapy codes by name instead of number. Typically, each code has a separate page, but if there is extensive discussion, it may go to 2 or 3 pages. Occasionally, when codes are connected and only differ by physician interpretation or test complexity, then 2 or 3 codes may be logically grouped together. Each code or code group has a test description, as worded in the AMA codebook. The proper revenue center codebook is included, followed by a section of one to several paragraphs called "Intended Use of Code." The authors discuss issues that may be of concern for each code. In some sections there are discussions of fiscal intermediaries' and carriers' statements regarding particular codes. Each code has a billing tip section that discusses medical necessity and other tests that cannot be billed on the same day unless a modifier is used. There are discussions of which tests are usually not covered and why. References to the Correct Coding Initiative edits and fiscal intermediaries are provided. Chapter 6 discusses pulmonary rehabilitation services and the Medicare national coverage policy. This chapter will need to be updated soon, because the National Emphysema Treatment Trial results were released at the American Thoracic Society Conference in May 2003 and Medicare is reviewing pulmonary rehabilitation and lung-volume reduction surgery.

The book includes reference appendices that concisely organize needed information. Appendix A has sample Local Medical Review Policies (LMRPs). Appendix B is a 2-page table of CPT codes, Ambulatory Payment Classification (APC) names, and payment rates—a great resource. Appendix C lists the current Medicare guidelines for respiratory therapy.

Specific issues and problems I found in this book were as follows.

• In Chapter 3 (on pulmonary function billing and coding strategy) there is an algorithm on page 22 that is described as a useful guide that may be considered for medical necessity reviews by Medicare fiscal intermediaries and carriers. This algorithm is not referenced, and I believe there are some flaws in it. The major problem I see is that the algorithm would label as "asthmatic" patients who have a normal methacholine challenge test and elevated diffusing capacity for carbon monoxide.

• The section on bronchospasm evaluation (on pages 29 and 30) could be enhanced by adding the code that most laboratories use to bill for the delivery of methacholine

or other challenge agent (95070) which is, instead, listed in the allergy coding section.

• On page 34, on expired gas collection, the section on quantitative single separate procedure (94250) has an erroneous note in the billing tip section: it refers the reader to an earlier section in the book, but there is no such section.

• Page 35 has the coding for thoracic gas volume (94260) and mentions that this is a component of code 93720, total body plethysmography. This code in the AMA book is listed under vascular, not pulmonary function, testing procedures. My understanding is that this clarification issue lies not with the authors of this book, but with the fiscal intermediaries. It seems that since the vascular study called "total body plethysmography" has the same name as the body-box test conducted during pulmonary function testing, they think that the testing would be redundant if performed on the same day and therefore should be inclusive if the pulmonary function testing laboratory bills for any of the body-box codes, such as thoracic gas volume.

• Page 37 discusses resistance to airflow (94360), and in the "Intended Use of Code" section the authors refer to the Merck Manual, Section 6, Chapter 64, Pulmonary Function Testing, which I looked up because the following statement in **Coding Essentials** was not correct: "The value for airway resistance *that is used in calculating the functional residual capacity* may be inferred from dynamic lung volumes and expiratory flow rates." (Italics mine.) I found that there was a transcription error in referencing the information from the Merck Manual: the italicized portion should not be included.

• Page 40 is supposed to cover breathing response to carbon dioxide and hypoxia, but the "Intended Use of Code" section only covers the hypercapnic challenge, not the hypoxic challenge.

• Page 42 is the end of the section on pulmonary stress testing, and in the billing tip section it is advised to bill with code 94761 (noninvasive ear or pulse oximetry for oxygen saturation; multiple determination) for exercise testing with pulse oximetry to document desaturation or determine oxygen needs.

• Chapter 6 delves into pulmonary rehabilitation, and page 82 indicates that CPT code 97750 (physical performance of test) could be used for billing the 6-minute walk test by all clinicians—occupational therapist, physical therapist, or respiratory ther-

apist—but I believe that code can only be used in a pulmonary rehabilitation setting if a physical therapist is present in the program.

These caveats aside, I highly recommend **Coding Essentials for Respiratory Therapy and Pulmonary Function Testing** to anyone who needs to deal with coding and billing issues in the pulmonary realm. This book should be within fingertip reach of those who deal with billing and coding issues. Comments I found on the American Association for Respiratory Care Listserv suggest that this book is already being referenced and quoted when coding questions arise. The authors have achieved their mission in providing a clearly written, well-organized handbook of coding essentials.

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The Internet for Physicians, 3rd edition. Roger P Smith MD. New York: Springer-Verlag. 2002. Soft cover, illustrated, 288 pages, includes CD ROM, $34.95.

The Internet is the latest information frontier: boundless, perpetually expanding, and vastly beneficial to those able to harness its resources. **The Internet for Physicians**, 3rd edition, provides an essential roadmap to this unlimited frontier and attempts to lay a basic foundation for those relatively unfamiliar with the workings of the World-Wide Web. Extensive in coverage yet concise in description, this book can rightly be called a reference piece deserving of a place next to the computer keyboard. Although intended for physicians, the material is general enough to be useful for anyone in the health care profession involved directly with patient care, computers, and the exchange of health-related information.

The book is divided into 10 chapters organized in a logical sequence. The table of contents is concise yet detailed enough that referencing a specific topic is a breeze. Chapter 1 begins with a basic introduction to the origins and capabilities of the World-Wide Web. Written with the non-geek in mind, terms such TCP/IP and ARPANET are explained in a basic, nontechnical manner; for example, TCP/IP means transmission control protocol/internet protocol—"the lan-

guage used by computers connected to the Internet to talk to each other." In this manner the reader is introduced to the language of the Internet.

Chapter 2 delves further into the basics introduced in the first chapter. The numerous ways of connecting to the Internet directly (eg, via modem) or indirectly (eg, through an intervening network) are presented. Important technical requirements are mentioned, such as the need for an Ethernet card to establish a high-speed connection. The author makes clear his bias for the Macintosh computer early on, in the section "IBM vs Mac: A Matter of Religion," but takes care to keep descriptions of technical processes general enough that users of either Mac or IBM/Windows-based computers will grasp the message. A technical description of Internet addressing, uniform resource locators (URLs), the structure/meaning of domain names, and domain name system (DNS) entries follows. The terms may sound like geek-speak, but the author deftly succeeds in conveying the underlying concepts without losing the reader in a morass of cryptic detail. A useful list of top-level domains and their meanings is also presented, such as ".com" (commercial organization), ".edu" (educational institution), ".gov" (government), ".net" (networking organization), and ".org" (nonprofit organization), for those who have ever wondered what those terms represent. Even more useful is a table of common Internet abbreviations, which I am sure many have encountered in e-mail or Internet forums, such as AFAIK (As Far As I know), FWIW (For What It's Worth), TIA (Thanks In Advance), and YMMV (Your Mileage May Vary). Finally, an absolutely essential explanation of security issues is presented, focusing on viruses, cookies, credit card fraud, secure transmissions, encryption, and firewalls. Important Internet security tips are recommended, including the need for passwords that are not obvious and avoiding password sharing.

With background information and definitions established in the first 2 chapters, the real utility of this book manifests in Chapters 3–10. On a general level Chapter 3 focuses on how to find the information you are looking for. Use of Web portals and search engines (eg, Google, Alta Vista, Yahoo, and Hotbot) is detailed. Tips for effective searches (eg, use of AND, OR, NOT, and use of plus and minus signs) are elucidated at the end of this chapter. Chapter 4