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

details the process of becoming a presence on the Internet, including choosing a Web hosting service and the use of HTML (hypertext markup language) coding for writing a Web page. Although not a detailed tutorial for creating Web pages, common HTML tabs are shown to give the reader a taste of what can be accomplished with such code (eg, hypertext links, ordered and unordered lists, bolding, space, and italics). Useful tips for effective Web pages are given at the end of this chapter.

Chapters 5–10 are devoted specifically to medical topics. Chapter 5, "Patient Education and Information," elaborates on the recent phenomenon of patients accessing the Internet for medical information. A large repository of consumer-oriented medical Web sites now exists on the Web (eg, WebMD, Discovery Health, and IntelliHealth). When faced with a patient armed with such information during the clinical encounter, the obvious question becomes, how reliable are those sources? Guidance for determining where these Web sites stand in terms of quality is given here; it would behoove any health care provider to be at least be familiar with sources your patients are consulting from their keyboards. At the very end of this chapter is a useful bibliography of medical literature that discusses various aspects of this topic.

Chapter 6, "Patent Care," delves further into topics centered around the clinical encounter. Web sites that focus on diseases and diagnosis assistance are mentioned; the Centers for Disease Control and Prevention Web site has a wealth of authoritative, disease-specific information. Web sites that deal specifically with evidence-based medicine and its effects on medical practice are also presented (eg, The Cochrane Library, Database of Abstracts of Reviews of Effectiveness, and

The Cochrane Controlled Trials Register). There are even Web sites that provide information about prescription, nonprescription, and nontraditional therapies available on the Internet (eg, ClinicalTrials.gov and PDR.net). A particularly useful feature of PDR.net is the multi-drug interaction report, which allows you to check for drug-drug interactions. Finally, the chapter ends with the subjects of medical record keeping (either stand-alone or Internet-based) and telemedicine/remote presence.

Chapter 7, "Medical Literature, Publishing, and Informatics," discusses publishing and the Web, including such topics as submitting manuscripts via the Web for peer review, manuscript transferring, and editing. The ever valuable on-line journals and how to access them are discussed. MEDLINE and other literature repositories are touched upon, followed by Web-based textbooks and references such as *Harrison's On-line*. Finally, special on-line resources such as dictionaries and foreign language translators (eg, freetranslation.com) are mentioned.

Chapter 8, "Finding Medical Information," tells you how to effectively find specific medical information on the Web. Use of MEDLINE and PubMed are detailed, along with a brief but extremely useful tutorial on how to conduct productive searches using those search engines.

Chapter 9 deals effectively with the ongoing process of continuing medical education. Direct education such as computer-aided instruction is detailed. Various and sundry continuing medical education sites (both free and fee-based) are listed. Some of these resources I had never known existed until I picked up this book!

The final chapter, "Medical Practices and the Web," shows you how to blend the Internet into your medical practice. The advantages of this process include enhanced efficiency of many of the labor-intensive aspects of daily existence, such as practice man-

agement. In addition, practice development/marketing, public and patient relations, and patient interactions via e-mail are described.

Appendix 1 lists sources of additional information to be found in the medical literature. Appendix 2 catalogues sources available on the Web. Authoritative and extensive, the appendixes expand upon the sources mentioned in the previous chapters. Taking up over one third of the volume of the book, the appendices by themselves are worth more than their weight in gold! Finally the book ends with a glossary of terms commonly used in the world of Internet and computers. Again, in nimble manner the author uses plain English without losing grasp of true technical meaning.

In summary, I found **The Internet for Physicians** to be well-rounded and comprehensive in scope, yet written in a nontechnical fashion that even the Internet novice or beginner could easily understand. Nearly every aspect of how the Internet pervades medical practice and the clinical encounter is dealt with authoritatively, accurately, and effectively. Yet the book is small and light enough to be carried with you wherever there is a computer—or just carry the accompanying CD with you and leave the book at home! Not only does this book establish a well-grounded foundation for the Internet newbie in Chapters 1–4, the subsequent chapters provide a rich, all-embracing source of references even the most seasoned "cybersmith" will find enlightening. IMHO (In My Humble Opinion), this book definitely deserves a permanent home next to any health care provider's keyboard!

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