Reviews of Books and Software

Essentials of Internal Medicine. W.N. Kelley, et al, eds. J.B. Lippincott, Philadelphia, Pennsylvania, 1994, 826 pp, $36.95. ISBN 0-397-51272-4.

While still hefty at 800 pages, this book is a distillation of its larger, more typical-sized cousin, *Textbook of Internal Medicine*, edited by the same team and published by the same company in 1992. The editors, in their revisions, have included information that has become available since the larger text's chapters were written (about 1990 or 1991). The Cardiac Arrhythmia Suppression Trial (CAST) and clarithromycin are mentioned in appropriate chapters, for example. Although references at the end of each chapter are few, they are usually pertinent. Many are from 1992 and 1993.

The book is organized by organ systems, with a focus on traditional internal medicine subspecialties. Except as it relates to cancer, gynecology receives little coverage. Depression is mentioned only in the section on dementia as part of the differential diagnosis, and alcohol abuse is given only half a page. There is no mention of brief office-based interventions that have been shown to be effective in dealing with problem drinking. There are no chapters on the management of chronic pain, although the treatment of cancer pain is allotted 1½ pages. On the other hand, the text includes several chapters on geriatric issues, including ethical issues, advance directives, and common problems, such as incontinence.

Throughout the text, the editors have included charts and algorithms, summarizing differential diagnoses or guiding the laboratory evaluation of a disease. Several chapters address "The Approach to the Patient with . . ." Limited for the most part to more traditional internal medicine topics, such as hemoptysis, jaundice, and erythrocytosis, these chapters are useful, although somewhat superficial, overviews. Other chapters address more common issues, such as abdominal pain, hematuria, and headache, albeit from a secondary care physician's perspective. The chapter on HIV infection was notable for a section entitled, "Complications, Pitfalls, and Indications for Referral." Throughout the rest of the book, it seemed the authors assumed the reader would be the consulting rather than the referring physician.

The basic science of epidemiology is evident throughout much of the text. It includes an appropriately skeptical evaluation of screening tests in asymptomatic persons, an appreciation for the effect that pretest probability has on a test's positive predictive value, and an acknowledgment that common diseases are much more prevalent than those in some of the differential diagnosis lists. Common diseases are, however, mentioned only in passing.

I found few errors; for example, "Children having febrile seizures are at risk of developing epilepsy." Since their risk is no greater than that for other children, this is obviously not an issue for internists. All the chapters I probed in detail, comparing their recommendations with current literature, were essentially correct. Sections on the management of thrombophlebitis and asthma, for example, focused on the salient issues, presenting credible and reliable guidance.

The text's greatest asset is its brevity. This, and its relatively low price, will make it especially attractive for allied health students who want a reference for occasional use. Similarly, it may be helpful as a medicine reference for surgeons and others who do not want or need an extensive resource. Medical students may use it as a stepping stone, a less expensive "temporary" text for third-year clerkship to be replaced by a just-published edition of one of the more traditionally sized references if they enter a medicine-oriented residency.

By the same token, the text's greatest liability is its brevity. It often provides enough information to reassure you that your knowledge is still current and correct, but, if you do not already know what to do, it may leave you in need of another source for essential details.

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Software Reviews
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MAYO CLINIC FAMILY HEALTH BOOK for Windows on CD-ROM, Version 1.2.1 (1994). IVI Publishing Inc, 1380 Corporate Center Curve, Eagan, MN 55121 (1-800-754-1484). $69.95 retail; less than $50 from discount retailers and mail orders.

DOCUMENTATION: A "Read me" file in the directory.
HOW SUPPLIED: One CD-ROM.
MINIMUM HARDWARE REQUIREMENTS: PC with a 386SX processor or higher; 4MB RAM; hard disk; CD-ROM drive; requires VGA, but works best with Super VGA monitor displaying 256 colors; MS-DOS 3.1 or later; Microsoft Windows 3.1 or later; MS-DOS CD-ROM Extensions (MSCDEX) 2.22 or later; Stereo headphones or speakers; Minimum 3MB free hard-disk space; Microsoft Mouse or compatible pointing device; MPC-Level 1 compatible sound card.
MOUSE: Microsoft Mouse or compatible pointing device is required.
TOLL-FREE CUSTOMER SUPPORT: Yes. 1-800-754-1484.
DEMONSTRATION DISKS: No.
MONEY-BACK GUARANTEE: Not specified.
RATING: Excellent.

Mayo Clinic Family Health Book (Mayo) is an educational multimedia (which means it uses video, animation, pictures, and sound) CD-ROM program aimed at the home market. Its content is health information for the layman. The average high school student will understand much of the content, but certainly not all.

Installing *Mayo* is simple: The user selects "run" from the File Menu of Windows' Program Manager and types "d:setup." The main screen is a fairly typical Windows screen, with a drop-down menu bar, function icons, section-choice buttons, and a large working window. The icons and buttons duplicate functions found on the menu, providing for user preference. All graphics and text are displayed in the working window. The sections, represented by large buttons down the right side of the screen, are Preface/Forward, Anatomy, Lifecycle, First Aid/Safety, Keeping Fit, Disease Disorders, Skin Disorders, Modern Care, and Appendices. The functions, represented by icons across the bottom, include Contents, Personal Notes, Trails (bookmarks), Search, Dictionary, Illustrations, and Go Back, which returns the user to the immediate previous screen. The pop-up dictionary provides definitions of more than 1500 medical terms. Words in the dictionary are highlighted in green in the text; a single click on the word opens the dictionary to that word ("hypertext"). The search feature
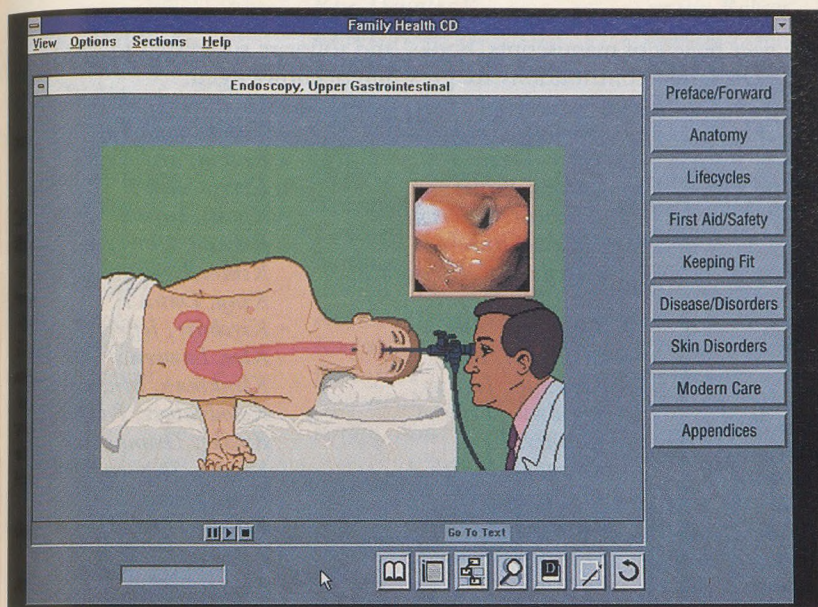
Figure. Animated video of upper gastrointestinal endoscopy procedure.

has "easy" and "advanced" modes. The searches use scrolling lists of terms that advance alphabetically as each new letter is typed and allow selection once the desired term is visible. The advanced search allows use of Boolean operators (and, or, not). These well-designed features permit users to efficiently find pertinent information.

We evaluated *Mayo* on a Pentium 60 MHz PC with a 2X CD-ROM, stereo speakers, and a graphics accelerator. *Mayo* performed well with the machine's internal speaker as well as with the sound card. On our test machine, *Mayo* took 15 seconds to load. CD-ROM programs are noticeably slower than programs residing on the hard disk; but once loaded, time to retrieve information from *Mayo* was not objectionable, although not instantaneous (up to a few seconds). After loading, users may choose to peruse a specific section or invoke the search function to seek specific desired information.

Mayo contains 50 videos and animations and 500 color illustrations and photographs, 90 minutes of narration, and "1372 pages of text." For example, for information about the common cold, using the easy search ("cold") produces 330 matches, whereas the advanced search ("common" and "cold") produces 43, which are listed by section title in a text box. Selecting the most logical

section provides text that answers most of what a layman would need and want to know. Highlighted hypertext links (which means that the user can directly jump to the new subject by clicking on it) include "Beware: Nose Drop Addiction" and "Reye's Syndrome" (referenced with the warning to avoid aspirin in children). The searched terms are highlighted in red to aid in easy scanning of the text. *Mayo* also has a drug index, which provides sketchy descriptions of drugs. For example, under Seldane, it simply indicates that it is an antihistamine. Looking up antihistamines produces four reasonable paragraphs about them, although words like "IgE antibodies" and "anaphylactic shock" are beyond the vocabulary of most non–health professionals.

The atlas of the human anatomy is one of the highlights of *Mayo*. This colorful feature illustrates a skeleton superimposed on a female outline. As the user moves the horizontal scroll bar, layers of organs from the most posterior begin filling in the skeleton, until eventually anterior muscle, subcutaneous tissue, and overlying skin complete the human picture. The second highlight is the motion video/animations, such as Upper Gastrointestinal Endoscopy (Figure). In this animation/video, there is an animation of a physician sitting at the head of the patient. As the physician passes the endo-

scope, it visibly advances from the mouth to the duodenum in the patient. Meanwhile, actual video of an endoscopy simultaneously plays in an inset, graphically and beautifully illustrating what the physician would see at each point as the endoscope is advanced. Narration occurs throughout. The application of this technology to patient education and informed consent is forcefully, immediately, and unmistakably apparent. The quality of audio, animation, video, and color photography throughout *Mayo* is excellent.

There are several things *Mayo* is not. From a content standpoint, it is not a health maintenance guide per se and does not allow users to store their personal medical history or automatically perform health risk appraisal. From a functional standpoint, we could print sections but not selected blocks of text. We also could not print to a file, which could then be imported into a word processing program, handy for students preparing reports. *Mayo* runs only as a full-screen program. With programs that can run as partial-screen programs, users can view several programs on the screen simultaneously. For example, in producing this review, it would have been nice to have *WordPerfect* as the top half of our screen and *Mayo* as the bottom half. Hypertext could be more fully implemented: for example, "anaphylactic shock" does not link to the dictionary term "anaphylaxis."

For less than $50 from some discount distributors, *Mayo* is a bargain. Every physician needs to at least see this product. It is obviously aimed at the well educated—it requires a high school education to understand. *STAT!-Ref* is the application that should have sold CD-ROM PCs to all family practice residencies, and *Mayo* is a "must-add" to residencies' collections. Practices with a multimedia PC might consider incorporating elements of *Mayo* into their patient education. One look convinced us to purchase it for our home.

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