Reviews of Books and Software

Book Reviews Len Scarpinato, DO, Section Editor

Constructive Therapies. William J. Hoyt, PhD (ed). Guilford Press, New York, NY, 1994, 340 pp, \$35.00. ISBN 0-89862-094-5.

In this age of managed care, increasing emphasis is being directed toward lowering health care costs and providing brief, effective services. The field of psychotherapy is no exception. In *Constructive Therapies*, William F. Hoyt has collected writings from prominent leaders in the field, who discuss their ideas about a "new direction" in psychotherapy. They suggest a shift in thinking that "focuses more on the strengths and resources that patients bring to the enterprise than on their weaknesses or limitations. Similarly, more emphasis is put on where people want to go than on where they have been."

There are many names used to describe this emerging model. Family physicians should take note of the following terms especially when referring their patients to mental health clinicians who use this model: solution-focused, solution-oriented, narrative, competency-based, constructivist, possibility therapy, solution talk, and restorying. Although differences exist between them, all share a common ground to develop "a respectful partnership between therapist and client, an emphasis on strengths and resources, and a hopeful eye toward the future."

Constructive Therapies will give the reader clear insight into the solutionoriented model. There are numerous case examples, including applications for drug and alcohol abuse, eating disorders, toilet training, severe sexual abuse, marital difficulties, and smoking cessation.

As a behavioral scientist with family therapy training, I enjoyed reading this book and understood the terminology. However, this book targets experienced mental health practitioners rather than

tamily physicians.

I recommend this book for two specific audiences: behavioral scientists working with residents who consult with practicing family physicians, and well-trained family physicians with Level 3 skills. (Doherty WJ, Baird MA. Developmental levels in family-centered medical care. Fam Med 1986; 18:153-6).

Coaching from a behavioral scientist or related consultant is important to

model and clarify the seemingly simple techniques described in the book. For instance, I recently demonstrated the use of a scaling question with a patient. "On a scale of 1 to 10, with 1 being no pain and 10 being excruciating pain, how would you rate your back pain?" The resident I was working with found that question very useful. Scaling gave the patient a way to express her pain using numbers.

I recommend this book to family physicians who have the desire, experience, and personal insight required to effectively deal with affect in patients and themselves. For example, the patient may describe her pain as a "7" and burst into

tears

Perhaps the best use of this book is by family physicians interested in keeping their fingers on the pulse of the current trends in the psychotherapy field. Although the constructivist model is certainly not the only model in the field of psychotherapy, family physicians who read this book will be well acquainted with one of the more popular models in the field today.

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Software Reviews
Gary N. Fox, MD, Section Editor

wDIAG: Computer Assisted Diagnosis of Skin Disease (1993). Intercept Press Ltd, 23 Peveril Hill Rd South, Toronto, Ontario, Canada M6C 3A7 (416-785-3611). \$75, DOS version; \$100, Windows

DOCUMENTATION: 21-page, 8.5×11 -in. black-and-white, photocopied manual with numerous screen prints for illustration.

HOW SUPPLIED: 1 high density 3.5-in. diskette.

MINIMUM HARDWARE REQUIREMENTS: DOS version: IBM PC-compatible with 640KB RAM; Windows version requires Windows 3.1. Although DOS version can be run from a floppy drive on a 286 machine, 486 66-MHz PC recommended for satisfactory response times.

MOUSE SUPPORT: For Windows version. TOLL-FREE CUSTOMER SUPPORT: No. DEMONSTRATION DISKS: None indicated. MONEY-BACK GUARANTEE: None specified. RATING: Marginal.

Computers have the capacity to assist health care providers in managing information. One such potential is the storage of findings, such as symptoms, signs, and ancillary test data, and the ability to produce differential diagnoses from combinations of the findings. Ideally, using a database model, users should be able to generate a differential diagnosis for a specific patient, create differential diagnoses for a specific finding, and view the database's list of findings for a specific disease. For a dermatology program, for example, users should be able to determine all papulosquamous lesions in the database, or all papular lesions associated with pruritus and fever.

wDIAG is a Microsoft Windows program for differential diagnoses of dermatologic conditions; a DOS version is also available. A cover letter accompanying wDIAG indicates that it was developed "by doctors for doctors," and that "sales of this software are being used to finance the further development of diagnostic programs for use by general practitioners."

Using the Windows File-Run command, wDIAG installs smoothly and creates an icon. It occupies 651KB hard-disk space. I encountered no technical difficulties in testing wDIAG on a 486 25-mHz laptop with a gray-scale VGA screen. Once invoked, wDIAG loaded in 10 seconds, including passing through

compulsory screens.

wDIAG's main screen consists of a menu bar across the top with four choices for drop-down menus: Inquiry, Diagnosis, Disease Rules, and Patient Files, all accessible by mouse or keyboard. All diagnostic inquiry is patient-based. From Inquiry-Create menu wDIAG's process begins with a forced sequence of patient name, age, temperature, and sex; and the eruption's duration (7 choices), course (6 choices), extent (generalized, regional, singular), and so on. Once all required data is entered, wDIAG may present a series of questions, such as whether there are annular lesions or known exposure to chicken pox. Once data gathering is complete, the user must actively select the Diagnosis section to obtain wDIAG's primary diagnosis and differential diagnostic possibilities, along with their ranking based on a possible score of 1000.

During data entry, some screens allow return to previous screens, but this

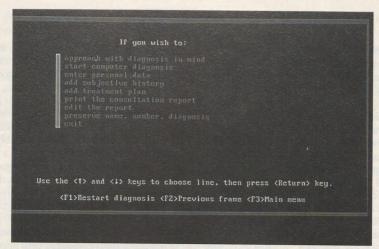


Figure. Screen showing checklist with brief explanation of terms.

feature is not fully implemented. There are few unnecessary key strokes. Users cannot elect to stop and "see" wDIAG's diagnostic considerations until all data are entered. Additionally, there is no feature allowing listing of diagnoses meeting limited specified criteria, such as all papulosquamous listings; users must provide all required entries. Among the better features of wDIAG are some checklists with good, brief explanations of terms (Figure). wDIAG allows users to choose any of the diseases it contains and view the set of logic "rules" used to arrive at the diagnosis.

wDIAG's patient-specific data are stored as consecutively numbered patient records. To review or modify a patient's findings, users must first determine the patient's number, then re-access menus to enter the patient's number. Similarly, to find wDIAG's rules for a disease, the user must first look up the disease in the alphabetical disease index, obtain the disease's "template number," and then manually reenter this number.

To test wDIAG, I entered the profile of a patient with erythema chronicum migrans (ECM). Receiving a message that there was "Insufficient information for diagnosis," I searched the disease section; there was no listing for ECM or Lyme disease. Entering a description consistent with early varicella (eg, youngster with head and neck erythematous papules and vesicles), wDIAG listed varicella as its primary diagnosis (500 points) when a history of varicella exposure was provided. In the absence of known exposure, Gianotti-Crosti syndrome (325 points) and impetigo (300 points) outscored varicella (125 points, tied with ecthyma).

Adenoma sebaceum was also listed (50 points).

Evaluating wDIAG, I felt users should have better access to the differential diagnosis of an individual or set of findings, better ability to access differential diagnoses anywhere along the clinical path, and, in the era of scrolling list boxes, a better interface for accessing previous patients and disease rules. In a welldesigned program, users should be unaware that intermediary numbers exist. For wDIAG's questions, users must click on "Yes" or "No" on opposite ends of the screen, which is an inconvenience. Users should not have to request the differential diagnosis as a separate step. Less common illnesses, especially those associated with substantial morbidity, should be included in the database. The obligatory storing of patient profiles, a nice option, is generally unnecessary for primary care use. Disappointingly, windows functions are incompletely supported: there is no Print function or any provision for exporting information, such as the differential diagnosis list, to other programs. Even basic windows Copy and Paste functions are not supported. wDIAG's main limitation may be its inflexible, sequential design. Although perhaps acceptable a decade ago, clinicians should now expect better functionality from their medical

The main utility of *wDIAG*, in my opinion, is to allow a physician to create an expanded differential diagnosis and to maintain awareness of "zebras" while treating ordinary "hoofbeats." Its interface is usable, although deficient, and its accuracy on the "Fox test" was lacking; therefore, I would be hesitant to recom-

mend it for anything other than expanding a differential. There are physicians, especially academicians, who may find the program useful for this purpose, but would recommend purchase only with a money-back guarantee. I would suggest the authors consider marketing wDIA6 as shareware ("try before you buy").

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ClinDerm, Version 3.00 (1994). Expert Class Computing, Inc, PO Box 262, Michigan City, IN 46360 (219-8748981). \$295 + \$7.50 shipping & handling.

DOCUMENTATION: Fourteen 8.5×11 -in photocopied pages, unillustrated. How supplied: One 720K 3.5-in. or 5.25-in diskette.

MINIMUM HARDWARE REQUIREMENTS: IBM PC-compatible with 256KB RAM, any version of DOS; hard drive or one 3.5-in floppy drive or two 5-in. floppy drives. MOUSE SUPPORT: No.

TOLL-FREE CUSTOMER SUPPORT: No. DEMONSTRATION DISKS: Not specified. MONEY-BACK GUARANTEE: None specified. RATING: Good.

The rationale and ideal functionality of software for differential diagnoses of dematologic conditions, as well as another product (Windows DIAG [wDIAG]), have been described in the preceding software review.

Clinderm is a DOS-based program for differential dermatologic diagnoses. The program may be run from floppy disks or from the hard drive by creating a directory and copying the Clinderm files to it. I tested Clinderm using Windows DOS sessions, both full screen and partial screen; there were no problems with either. Clinderm popped up on my 480 25-mHz laptop within 2 seconds and required no modification for my gray-scale VGA screen. The intended user is the clinician.

After passing through the copyright screen, *Clinderm*'s main screen (Figure 1) offers two main choices and several other options. The primary option, "start computer diagnosis," initiates a series of branching logic menus, which apparently, in addition to being copyrighted, are patented as well. The next menu is primarily location (skin, scalp, nail, mucous membrane, normal skin, overproduction of hair). If "on the mucous membrane" is chosen, the subsequent menu

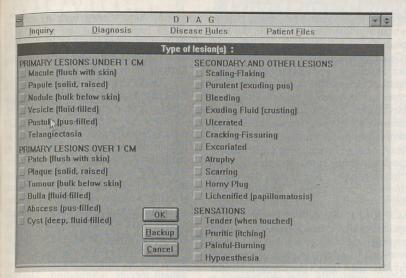


Figure 1. ClinDerm's main screen.

provides a forced choice between "of the mouth" and "of the genitalia" and so on. Choosing "skin" as the location, users are offered 11 morphologic choices (macular, papular, vesicular, etc; Figure 2) with descriptions ("crusted, [sic] circumscribed, discolored, desiccated concretions") for the second selection. Depending on the morphology selection and subsequent selections, another two to six layers of choices are presented, followed logically by the program's differential diagnoses list with the cursor resting beside Clinderm's favored diagnosis.

Differential diagnoses appear in clusters and the order of the diagnoses in the list is always the same (Table). The last question in the sequence generally modifies only which diagnosis is flagged as the

leading candidate. Users can generally follow the logic path to the diagnoses by retracing steps and selecting different options. The F2 function allows retracing consecutive previous screens back as far as the user wishes.

The second major feature of *Clinderm*, "approach with diagnosis in mind," provides choices that would lead to a specific diagnosis, which provides users with a glimpse of the disease's characteristics. After choosing this option, a user would next choose *Clinderm*'s alphabetical list of diseases. Following each disease listing is a series of numbers. The user must then select "observe the routes to a diagnosis," enter one of these numbers, view the path to its diagnosis, and repeat this procedure for each number to

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macular: flat. change in celor of the skin
papular: solid, palpable, elevated, slightly protuberant
vesicular: defined, elevated, blistered, containing fluid
pustular, rounded, prominent, containing purulent fluid
ulcerated: skin surface destroyed
crusted: circumscribed, discolored, desiccated concretions
squamous: dry, slightly thickened and hyperplastic scaling
atrophic: thinned, depressible, diminished consistence
scleratic: firm, condensed, adherent deeply, not depressed
modular, circumscribed, firm, industed, indulent
polymorphous: composed of lesions of more than one type

Use the <f> and <i> keys to choose line, then press <feturn> key.

(F1)Restart diagnosis 
<f2)Previous frame </p>
<f3>Main menu
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Figure 2. After selecting "skin" from the list of locations, the user is presented with 11 morphologic choices and descriptions.

TABLE. Differential Diagnostic Cluster that Includes Lyme Disease

Intertrigo
Erythema annulare centrifugum
Insect bite
Urticaria pigmentosa
Cholinergic urticaria
Erythema marginatum
Erythema chronicum migrans
Lyme disease
Erythema gyratum repens

see all possible paths. One of the two paths for varicella, for example, is:

The following indicators:
on the skin
vesicular; defined, elevated, blistered, containing fluid
acute, of recent onset
extensive, widespread, diffuse,
disseminated distribution

and
fever with clear, turbid and
crusted scattered vesicles
lead to the diagnosis of
VARICELLA.

The second path to the varicella diagnosis substitutes "pustular, rounded, prominent, containing purulent fluid" for the morphology and does not require acute onset. It maintains the requirement for widespread, disseminated distribution, however, which precludes diagnosis of early, localized varicella. In other words, like wDIAG, Clinderm flunked "the early varicella test." However, unlike wDIAG, Clinderm nailed erythema chronicum migrans (ECM) and Lyme disease as the selected diagnoses when a history of tick bite was included with a description of ECM, and included these diagnoses in the differential when all features of ECM except tick bite were selected.

Clinderm's other features include ability to add a patient's name, date, vital signs, symptoms, recommended therapy, and so on, then edit, print, and store a note if desired.

Clinderm, a DOS program, outperforms Windows wDIAG. The only feature that wDIAG has that Clinderm lacks is a numerical scoring system based on decision rules. These rules allow ranking of diagnoses within the differential, and unique, as opposed to fixed, sets of differential diagnoses. Although wDIAG's pseudoquantification is more intellectually attractive and may provide a stronger foundation for future development, its implementation is currently less func-

tional than Clinderm's. With Clinderm, entry and storage of patient-specific data are optional, notes can be printed, and, while running in a partial screen DOS session, windows edit (Copy and Paste) functions can be used. None of these features are present in wDIAG.

Differential dermatologic diagnosis programs are far from dependable. Their primary utility, in my opinion, is to expand differential diagnosis, ie, to provide additional ideas and reminders. My major concern is their failure to "recognize" important and common primary care dermatoses. Summaries about diseases contained in their knowledge bases, particularly history, examination, and laboratory findings distinguishing among entities in the differential diagnosis, would be a powerful addition.

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Codelink Plus (1994). Context Software Systems, Inc, 241 S Frontage Rd, Suite 38, Burr Ridge, IL 60521 (708-654-1910). \$795 (single user).

187-page, DOCUMENTATION: loose-leaf notebook.

HOW SUPPLIED: Five 720K 3.5-in. disks; 5.25-in, disks available.

HARDWARE REQUIREMENTS: IBM PC or 100% compatible, 10MB hard-disk space, 640K RAM, MS-DOS or PC-DOS 3.0 or higher.

MOUSE SUPPORT: Yes. CUSTOMER SUPPORT: 1-800-783-3378; FAX 1-708-654-1607.

MONEY-BACK GUARANTEE: Yes, 30 days. RATING: Very good to excellent.

I hate code books! To manage a practice, I have to use and understand them, but I still hate them. Codelink Plus, however, makes coding fun because it eliminates endless flipping through pages of numbers. Codelink Plus puts all of the CPT-4 (Common Procedural Terminology), ICD-9-CM (International Classification of Diseases), and HCPCS (Health Care Financing Administration Common Procedural Coding System) codes literally at the user's fingertips through the magic of computers.

This software package is simple, but very flexible, practical, and powerful. It is a DOS program that runs concurrently with most other software and "pops up" only when you need to use it. Imagine that your billing clerk (the intended user) is running your financial software. She is in the process of entering a bill for the

patient with congestive heart failure whom you just discharged from the hospital. She simply uses a single keystroke (Ctrl-SpaceBar) to open Codelink Plus. A search window appears in the upper righthand corner of her screen, and she first types in "congestive heart failure," and hits Enter. Immediately, a list appears from which she can choose one of seven broad categories, including rheumatic heart disease, hypertensive heart disease, cardiomyopathy, and a more generic "heart failure." She brings the cursor down to "heart failure," hits Enter, and her screen offers four options under the ICD-9-CM code 428. If she chooses the generic 428.9 "heart failure" code, a message screen warns her that this code is nonspecific and may result in payment delay. She then moves the cursor up to the more specific "congestive heart failure," 428.0. By hitting Enter, the code is automatically "typed down" (a cut-and-paste feature) to the point on the billing form from which Codelink was invoked.

Since the patient had pleural effusion as well, you did a thoracentesis. Not being familiar with this procedure, your clerk again goes to the Search window and types in "thoracentesis." Four options appear: thoracentesis with aspiration, with chest tube insertion, for administration of chemotherapy, and with ultrasound guidance. She selects the first option and, the "typedown" feature inserts the proper code number on the billing form.

The third powerful feature of Codelink Plus is implied in its name—it will link diagnosis and procedural codes, so there is less chance of billing and payment errors. Suppose your billing clerk notes a red checkmark on the left side of the screen as she picks out the procedural code for "thoracentesis." This mark indicates that there are ICD-9-CM codes linked specifically to this procedure. Wanting to doublecheck her coding, she hits F8 and a list of 19 linked diagnosis codes appear. Noting that "congestive heart failure" is not on the list, she inquires further about it, and you tell her the procedure was done for a pleural effusion not mentioned in your diagnosis notes. The clerk moves the cursor down to "pleural effusion NOS." Hitting Enter brings her to the page in the ICD-9-CM book describing this code (511.9). When she tries to "typedown" this code to your bill, a Warning window appears again. Explaining that the .9 suffix is nonspecific and without special documentation may result in payment delays, it advises a more

specific code. Going back to the ICD. 9-CM page, she moves up to 5118 ("other specified forms of effusion") and then "typesdown" this code to her billing

These examples illustrate the most basic uses for this powerful software package. Codes can be searched by alphabetical index and code number (or even CPT modifiers), as well as the "keyword" approach described above. Moreover, the entire HCPCS code system is included. All the CPT coding rules can be reviewed, and many pop up as windows during searches to warn of potential mistakes such as gender, age, or diagnosis-specific codes. There is a "Coder's Notepad" feature, which provides the user with a place to organize and accumulate codes, modifiers, and fee information on a form with patient-specific information. This form can be subsequently printed as a hard copy or electronically filed for future reference. Another feature of the Notepadis the "E/M Coder." It "walks" the user through each element of the Evaluation and Management coding system and automatically chooses the appropriate code. This program is very flexible, allowing the user to edit many parts of the program to suit a specific practice. Eponyms can be added to diagnosis or procedure lists; code linkages can be added, deleted, or changed; "hot keys" sequences can be changed; and local HCPCS codes can be added, to cite just a few.

Codelink Plus is a powerful program that cannot be done justice by these few paragraphs. I am sure that the longer one uses this package, the more it will be appreciated. Because of the diversity in family practice, even the most experienced billing clerk will regularly encounter coding questions, requiring reference. Code link Plus is ideal for this use and will most likely increase the efficiency and accuracy of the coding process in most offices. I highly recommend it to practices where people, like me, hate flipping through

codebooks!

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