

LOGGED ON TO THE FUTURE OF

# CME



**New on-line offerings are more sophisticated and varied, and the physicians who sign on say it's easy, convenient, and economical.**

ILLUSTRATION BY BRYAN LEISTER

By Cynthia Myers

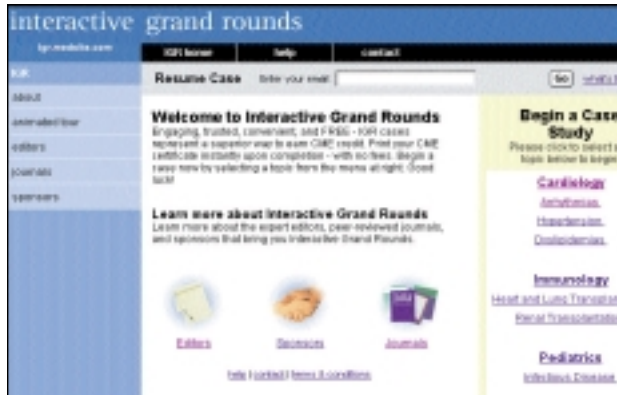
**I**T'S 12:30 AND A RURAL PEDIATRICIAN RETREATS TO HER OFFICE for a bite to eat. A glance at the afternoon's schedule shows a follow-up appointment for a two-year-old presenting with recurrent otitis media. While she nibbles a salad, the doctor logs onto her favorite medical Web site. A quick search brings up information about otitis media. She listens as a leading authority in the field talks about the latest treatment for this condition. A series of exercises takes the doctor through a case study very similar to the patient she's treating. She answers questions about what she's just read and heard. By the time she's finished her salad, the doctor has learned a new treatment method she thinks will help her patient, and she's earned one continuing medical education (CME) credit in the process.

This hypothetical scenario could soon be everyday reality for physicians across the country and around the world as Web-based CME expands to harness the unique power of the Internet to help physicians. With the ability to transmit data that's accessible at any time inexpensively to anywhere in the world, the Internet presents an ideal medium for storing and sharing medical information. Add the growing technology to make Web-based offerings interactive, and the educational possibilities of the Internet multiply.

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The home page of interactive grand rounds from Medsite.com. The site currently offers eight categories of case studies.

### Physicians now embracing the Internet

Vincent Friedewald Jr., MD, has been involved in continuing education for physicians since the late 1970s. The current executive editor of Medsite's interactive grand rounds, Friedewald sees tremendous potential in Web-based CME. "The challenge is, how can we offer something that's not just the same [as previous CME offerings] but how can we take advantage of the Internet's real power?"

The Internet itself has been around a long time. Distance education programs on the Internet have existed since the mid 1980s. But Web-based CME for physicians is still in its infancy. Part of that has been due to reluctance by physicians to use the Internet. When the American Medical Association first surveyed physicians about computer and Internet use in 1997,

## What to Look For in On-line CME

### ■ Authority.

Who is the author of the material? When Medsite surveyed physicians about what they wanted from CME, the most important factor mentioned was quality of content and the authority of those who are presenting the content. Vincent Friedewald Jr., MD, the executive editor of Medsite's



interactive grand rounds,

suggests looking for recognized experts in a field, especially those who hold academic appointments. Where appropriate, check to see if there are references for further information about the topic.

### ■ Accreditation.

While anyone can put up a Web site and fill it with content, not everyone can get accredited. The Accreditation Council for Continuing Medical Education (ACCME) accredits companies that



provide continuing medical education, both traditional offerings and on-line courses. Candidates for accreditation must undergo a rigorous review process and meet ACCME's standards. Other organizations such as the AMA and the American Academy of Family Practice Physicians also offer accreditation.

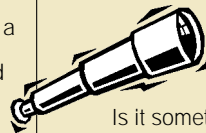
### ■ Accessibility.

Is the site easy to use? Is it quick to load and easy to navigate? Can you bookmark your place and return later? Can you print off information to read later? Is there a toll-free number to call if you have questions?



### ■ Applicability.

Is the course offered pertinent to you and your practice? Is it something you're interested in learning more about? Is it something that will improve your skills or knowledge base? Check the date the program was written. Anything older than a year may be out of date.



### ■ Objectivity.

If the course is sponsored by a manufacturer, is there a lack of bias toward its product or products? ACCME's Standards for Commercial Support attempt to minimize conflicts of interest between corporate sponsors and course content.



### ■ Security.

Is the information you provide to register for the course secure? The site should have a privacy policy posted promising your information will be kept confidential and will not be sold or shared with anyone else. Many sites have a logo or other indication that the site is secure. Also, most browser programs will alert the user when entering or exiting a secure site or page. ■



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only 42 percent of physicians reported using a computer and only 20 percent made use of the World Wide Web.

Also, early on-line offerings consisted of reading pages of information and answering questions. Compared with the chance to attend a CME dinner or conference and interact face-to-face with experts in the field, it's no wonder few physicians took advantage of these early on-line CME opportunities.

As more physicians have become familiar with computers and the Internet, however, interest in on-line CME has grown. An AMA survey last year of 7,000 physicians found that 75

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—Pamela Arn, MD, the chief of genetics and medical education at Nemours Children's Clinics in Jacksonville, Florida.

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percent used computers and 70 percent made regular use of the Web. Eighty-six percent of those who used the Web used it to gather medical information, and 59 percent had taken advantage of the Web for continuing medical education. And when Nemours Children's Clinics in Jacksonville, Florida, surveyed 300 physicians asking if they were interested in Web-based CME, three of four of the respondents said they would take advantage of Web-based CME if offered.

### Convenience drives growth

Another factor driving increased interest in on-line CME is the growing time and money crunch for physicians. "Doctors have less and less available time and less money to spend," says Friedewald.

Most on-line CME courses allow a physician to work at his own pace. The doctor can mark his place in the material and return to it later. "We're available 24-7-365," says Les Ward, the CEO of [WebCE](#), a Dallas-based continuing education company. "If they have 15 minutes of free time, they can log on and work on a course, so it's very convenient." Sixty-one percent of Web-using physicians in the AMA survey reported accessing the Web in the evening, while 20 percent log on in the morning and 19 percent in the afternoon.

"It makes a lot of sense for physicians today who are inundated with paperwork and patient responsibilities, and who have limited travel time and difficulty getting out of their office to hear a live lecture," says Pamela Arn, MD, the chief of genetics and medical education at Nemours Children's Clinics. "I think there's a lot of room for growth in this area as content and availability grows."

On-line CME is also inexpensive. Many courses are free, while others charge registration fees ranging from five

to 20 dollars. Physicians avoid travel costs and the costs of being out of the office for a day or more.

### New generation of on-line CME

Whereas early on-line CME offerings took printed material and posted it to a Web site, the new generation of on-line CME involves interaction. The physician logs on to participate in multi-media presentations, and exercises require the physician to participate in decision making. "You're moving from a passive activity of simply reading something and sitting there to active involvement," Friedewald says. "When you're involved in an activity, your powers of retention are enhanced and your learning capacity is greater. By making it truly interactive, the quality of the educational activity itself is greater."

Newer interactive CME programs not only provide doctors with information, they engage the doctor in learning. For instance, instead of merely showing a picture of a diseased hip joint, an interactive program would allow the physician to move the joint, to turn it in different directions, and to enlarge sections for better viewing. In some programs, the physician is asked to make decisions along the way, followed by an expert's discussion of why that decision is or is not best in the case presented. These kinds of innovations make on-line CME more attractive to physicians. In fact, 64 percent of Web-using physicians in the AMA survey indicated they preferred sites with graphics to text-only sites.

"The best way to learn would be to sit down next to a doctor who was an expert in a field, who would share that knowledge with you," says Rod Ammon, the president of [Stonehouse Media](#), a developer of on-line educational material. "If you're lucky enough to get in front of a dynamite speaker at a seminar, that's

wonderful. But people often don't have the time or the money to travel to see these experts. An interactive presentation [on line] helps you get some of those same benefits allowing you to review the material with an actual content expert, for a lot less money, and you can absorb the material at your own pace."

Another factor pointing toward the success of on-line CME is the potential to offer a great variety of specialized information on line. An increased number of offerings would mean physicians could find information that was pertinent to them and their patients. Like the hypothetical doctor treating recurrent otitis media in the example that began this article, future physicians will be able to select material when they need it and apply what they learn right away. "Once you get enough content offerings, on-line CME can be pertinent," Arn says. "You can choose to learn something at that time because maybe you're seeing a patient that afternoon and you want to know something in that realm. You can actually pick and choose topics and not just wait for something someone else chooses for you."

Despite its advantages, not every doctor is interested in on-line CME or the Internet in general. Of the 7,000 physicians surveyed by the AMA, the greatest Internet usage was found among physicians 40 years of age or younger. Seventy-two percent of the physicians surveyed who were not already accessing the Web at work indicated they had no plans to add access in the next six months, while 52 percent of those who didn't currently access the Web at home did not plan to do so in the next six months.

Doctors not familiar with the Internet face a learning curve before the new technology becomes comfortable for them. Others may have tried searching for medical information on line, only to

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be confronted with slow downloads and frustrating waits.

"One of the things we're dealing with as a CME provider is that we have the ability to do audio and video streaming and some pretty sophisticated presentations, but some physicians are still accessing the Web through a regular phone line," Arn says. "They don't have a dedicated line or a broad-band connection." Nemours' solution has been to offer the option of a faster connection without as many 'bells and whistles.' Even this streamlined presentation has been modified to be visually interesting.

### The on-line experience

One successful on-line CME program is Medsite's interactive grand rounds (<http://igr.medsite.com>). Since Medsite launched interactive grand rounds (IGR) in 1999, nearly 15,000 physicians have participated in the program. IGR currently offers 34 case studies in four different specialties. A physician calls up the site on a computer, selects a specialty and a case study. As the physician reads the case study, she is asked to answer questions. Following each question, an explanation of the correct answer is given. The program keeps track of the physician's score and awards credit once the physician has completed all the questions. The physician can mark her place and return at her convenience, or she can receive an instant CME certificate at the conclusion of the activity.

The [American Medical Association](#) has taken note of the on-line CME boom. In February the AMA approved Stanford University's [SKOLAR MD](#) as the first participant in a new pilot program evaluating physician self-directed Internet-based continuing education. "This is truly interactive, physician-initiated continuing education," explains Dennis Wentz, MD, the director of continuing

professional development for the AMA. "In this case, you don't start with a pre-planned program. You start by asking the question in the management of a patient. 'I'm confronted by a symptom I don't understand.' You can enter a couple of words and within eight seconds the SKOLAR program will give you references where you can find information about that." References are annotated by SKOLAR faculty to steer the doctor in the right direction. For example, there are 500-600 references for congestive

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heart failure alone. Annotations help guide the physician to those references most pertinent to his query.

Participants in [SKOLAR](#) ([www.SKOLAR.com](http://www.SKOLAR.com)) must follow through by re-searching the topic using the references given and keeping a log of the references consulted. Once they have this log inspected by Stanford faculty, they are awarded one AMA PRA Category 1 credit.

Wentz sees this as the next generation of on-line CME. "What you have to do is get information to people at the point of need," he says. "That's when you have a real learning opportunity."

### The future of on-line CME

Perhaps the biggest beneficiaries of the growth in on-line CME will be physicians in remote areas and foreign countries. These physicians have access to fewer tra-

ditional CME offerings and often don't have colleagues or experts they can consult nearby. "We've been amazed at the number of physicians based in other countries using IGR," Friedewald says. "These are physicians in areas where it's really difficult for them to get any kind of CME." Approximately 20 percent of IGR users are from outside of the United States, with users in 30 countries.

Industry experts expect on-line CME to grow exponentially over the next few years, with a greater variety of offerings to serve a number of physician specialties. [International Data Corporation](#) (IDC) estimates Internet enabled learning, or eLearning, will be an \$11- to 12-billion business by 2003. By that time, logging on to access medical information may be as routine for physicians as ordering a lab test or writing out a prescription. "I doubt it will ever replace live conferences and the one-on-one learning that takes place a traditional meetings," Arn says. "But I think it will certainly grow as a nice supplement to physician learning." ■

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