

## Why Aren't We There Yet?

By S. Andrew Spooner, MD, MS, FAAP  
SCOCIT Chair

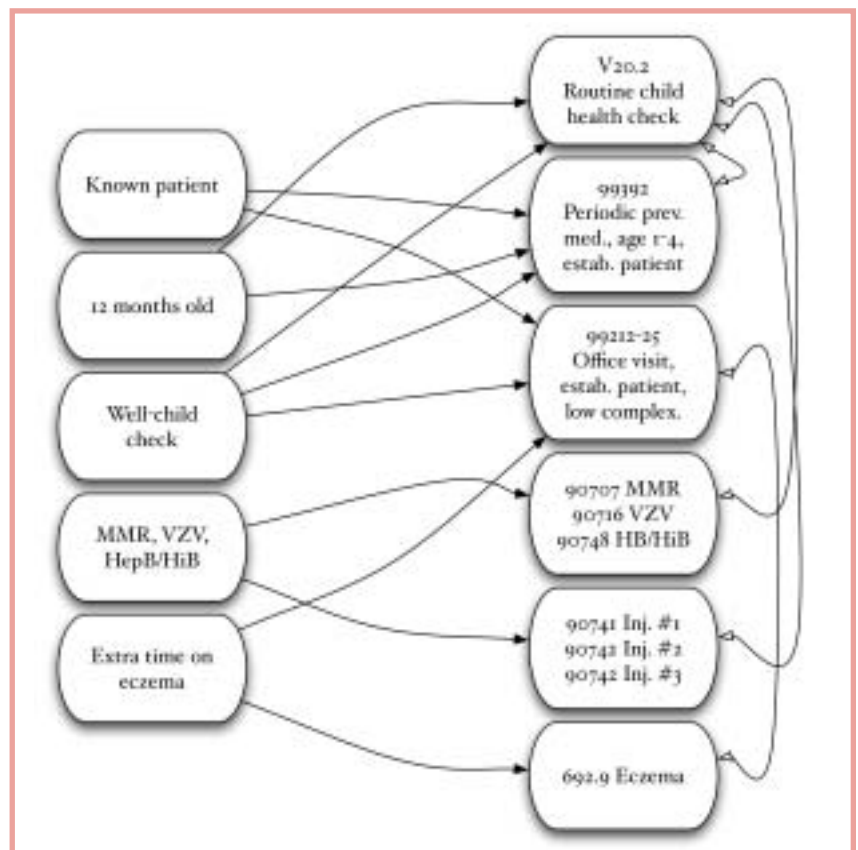
*Why don't physicians use an electronic medical record? Sure, some do, but the percentage that does is still in the single-digit range.*

While I do not use a full-fledged electronic medical record (EMR) where I work (in a clinical faculty role), some of my pediatrician friends in Memphis, TN, are using one, and my hospital and practice group are hard at work implementing clinical information systems that will one day add up to an EMR. Participating in these implementations has given me an up close and personal view of what one must overcome to get fully wired in a pediatric setting. See if you recognize any of these factors in your own implementation.

### 1 Costorrhea: The Unimaginable Total Cost of Ownership

This is the most common response to the question, "Is your office electronic?" or "How could I possibly afford it?" Despite the existence of data, most people balk at the initial costs, even though vendors cite the cost-effectiveness of clinical information systems. And discussions of the ongoing upkeep make people even less enthusiastic. The fact is, it is difficult to show a return on investment (ROI) in pediatric practices in which the patients are mostly uncomplicated, well children. Return on investment usually is demonstrated through savings on dictation, capture of missing charges, malpractice premium discounts, or savings on medical records personnel. Compared to some other specialties, most pediatricians are not concerned with these issues, so ROI is a hard argument.

**What to do about it:** Do your best to analyze costs in your practice. Most vendors will gladly give you a pro forma analysis of how their system will save you money. Take it with a grain of salt, and focus instead on the nonfinancial benefits of clinical information systems, like reduced errors, better communication among colleagues, and showing your patients that you are serious about keeping the details straight about their care. And do not fall into the trap of thinking that developing your own



From Physician to Computer

system will save you money. Remember, a well-known health plan spent \$442,000,000 on their homegrown system before writing off the loss and making a deal to buy an EMR vendor's product for \$1.8 billion.

### 2 Technotedium: Simple Stuff Made Complex

The division of labor between computer and pediatrician often is not what we would expect. The Figure shows what must happen in the transformation from what a pediatrician knows about a well-child check (left column) to what the computer must know to generate a valid bill (right column). The transformation should be fairly automatic; it is not a hard programming problem. Yet most charge-capture software still requires the physician to select all codes in the right column individually—a practice that invites error and causes frustration. Can't a computer figure out that the small set of facts on the left translates into the 10 codes and 1 modifier on the right? Asking a physician to do what it seems like a computer ought to

be able to do makes clinical information systems hard to swallow.

**What to do about it:** Vendors do not want to think that their product is tedious to use. Ask existing customers how well the company responds to suggestions for interface improvements. Realize that no system is going to be as easy to use as scribbling free text on a piece of paper. And try to think of what some of this unavoidable tedium will get you. Unlike the scribbled stuff on paper, your tedium buys you organization, legibility, searchability, and the ability to better analyze your practice.

### 3 The Knowledge Tax: New Stuff You Need to Know

The first time I tried a computerized physician order entry (CPOE) system, I wrote an order for gentamicin. The computer required me to specify exactly which type of intravenous (IV) fluid to run it in! It would not take the order until I had gone through the IV fluid selection process. Obviously, this system was not very well thought out, but it illustrates something that comes

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## Why Aren't We There Yet?

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up again and again. The little details that others (eg, pharmacists, nurses, therapists) filled in for us now are details that we need to know. Quick—do you know the generic name for every drug you use? A computer near you may ask you this information soon.

**What to do about it:** What one person thinks is essential information for a physician to know may be considered trivial by another, so there is no way to escape this unless you build the system from scratch. Ask the vendor whether there are mechanisms in place to add customized synonyms for things like diagnosis codes and drug names. Ask current users to tell their tales of things they were surprised they needed to know, and decide if you can live with those kinds of surprises.

### 4 The Paper Albatross: Old Charts Live Forever

If your office went paperless today, when would you really be able to get rid of the paper chart? Not for a while. This means that the costs of a paper chart system will continue—perhaps for years. Paper reports from other providers keep rolling in, and they will need to be kept somewhere, as either hard copy or scanned images. If you are counting on reclaiming some income from turning your medical records room into a couple of examination rooms, hold that thought for a few years.

**What to do about it:** In pediatrics, when most of our patients are well and have thin charts, it makes sense to have a chart abstraction process for the first couple of years of EMR use. This process asks users to indicate whether each chart has important information that needs to be brought to each future encounter. For the

majority of well children, only the immunization record will need to be retained, and even those can be abstracted at a high level (eg, those patients older than 4 years who have all of their shots could be described in the EMR as being “IUTD-4y”). After each chart has been processed—which usually only takes a minute per visit—it can be sent to storage. Paper-copy reports coming in from other providers can be scanned in or abstracted (eg, “Normal EEG 8/29/03”) and sent to storage.

### 5 Process Steamrolling: Individual Variation Made Intolerable

Computers tend to expect to do things in a certain way and a certain order, adhering to prescribed procedures to move from point A to point B. In manual systems, people have more freedom to develop a personal style. When people are asked to abandon their personal styles and do everything the same way (ie, “steamroll” the process into one uniform procedure), they feel cheated out of one of the pleasures of their job. They will often say, “I don’t know who programmed this thing, but they obviously know nothing about clinical medicine.” No matter how much time was spent making the program work perfectly for one person, the next person thinks the program is inherently “user unfriendly” and may refuse to use it. It is not about user-friendliness. It is about changing your way of doing things to someone else’s.

**What to do about it:** Again, try to get physicians to take the long view. Especially in incremental implementations in which the EMR is rolled out gradually in modules, people need to know the rationale behind doing things a certain way. Some user

interface conventions do not make sense until all modules are in place. And try to focus on the one big advantage of following guidelines in any kind of behavior. Once behavior is uniform across providers, process improvements can be applied across the entire organization at once, with potentially great cost savings.

### 6 Benefit Redistribution: Physician Work Frees Up Hourly Wage Earners

Some of the things we are asked to do with clinical information systems do not really benefit us as physicians. They may free up the time of a clerical person. For instance, if you are asked to hand-type an order instead of scribbling it on a piece of paper, chances are this change reduces the work for the unit secretary. Should you care?

**What to do about it:** This is a tough one because it is hard to refute the idea that a person making a physician’s salary should not be engaged in clerical work. But what will be the impact on the patient? Studies of CPOE systems suggest that when physicians enter their own orders, the response time for getting the ordered care to the patient is dramatically decreased and errors of transcription are prevented. Could you achieve the same results by hiring a highly trained scribe to handle the clerical work for you? Yes, and some physicians in high-margin specialties do this. Pediatricians tend not to because of concerns about the bottom line. When looking at benefit shifting, make sure you are not overlooking opportunities to redefine the jobs of others to relieve the clerical burden where it can be relieved. Emphasize the patient service and error reduction features of physician engagement with a clinical information system.

### 7 Information Management Versus Patient Management

We went to medical school to learn how to take care of patients, not to take care of information. While members of the Steering Committee on Clinical Information Technology generally take the view that the information is very important, not all physicians agree. Information is something “required” by insurance companies, malpractice carriers, and other bureaucrats.

**What to do about it:** As we gain experience in pediatrics, we learn to get by with less and less data recording (remember your first history and physical examination?). For veteran pediatricians, it can be hard to devote time to the activity of information management when the clinical management is so well under control. Young colleagues who were so enthusiastic about maintaining data details at the onset of your implementation get weary of it once they get more comfortable in practice. What to do? Luckily, the bureaucrats do want the details, so if you want to get paid and protect against audits, do what you can to make getting the details easier with templates and macros when possible. Assign a partner to the study of regulations to be sure you can get away with the absolute minimum documentation to adhere to the rules (it is often less than you think).

Implementing any clinical information system—especially an EMR—is a monumental task that disrupts the conventional way of working and causes great pain before benefits start to accrue. Plan to overcome these 7 barriers to make the process less painful and accelerate the arrival of the benefits.

## Streaming Video for Our Membership



Looking to find alternatives for members that cannot attend the National Conference & Exhibition programs? We are planning to develop streaming video presentations for our membership. Early discussions are taking place with the American Academy of Pediatrics (AAP) information technology staff about the feasibility of capturing speaker presentations. You may have seen some presentations already on the AAP Web site, [www.aap.org](http://www.aap.org). These are being expedited with the availability of the AAP streaming video server. This new technology traditionally has been available through Real Networks servers or a Microsoft Media Player server, but this permits a different method to communicate with the membership.

The next question will be what programs to show. It will be a hard choice because just by looking in this newsletter, you can read about the varied topics that will be presented in the Computer Lab and major subjects available at general membership presentations. There are arrangements now to do some video capturing in the Computer Lab as a test. If this is successful and supported by the AAP, this will be another benefit of membership. Plans are being made to make these presentations available through the Steering Committee on Clinical Information Technology Web site, [scocit.aap.org](http://scocit.aap.org).

## ☆☆☆ COMMITTEE UPDATES ☆☆☆

### Technology Committee

By Kevin B. Johnson, MD, FAAP  
Application Technology Chair



This year has continued to be an important one for the American Academy of Pediatrics (AAP) with respect to its role in shaping the national agenda for quality and safety in health care. The following are 3 issues of interest to Steering Committee on Clinical Information Technology (SCOCIT) members:

- Open-source electronic medical record (EMR) initiative
- Health and Human Services proposal for EMR data standards
- Institute of Medicine priority areas

#### Open-Source Electronic Medical Record Initiative

Last winter, there was a flurry of activity surrounding a proposal by the American Academy of Family Physicians (AAFP) to pioneer an ambulatory electronic medical record. SCOCIT members **Joe Schneider, Kevin Johnson, Ed Gottlieb, Andy Spooner, Mark Simonian**, and a group of staff from the AAP had a very detailed discussion with the representatives of that initiative. Although we were very excited about the prospect of a low-cost, widely available EMR, we had many concerns at the end of their presentation. Subsequent information about the business model, the technology being proposed as the platform for this EMR, and the proposed approach to maintain the product raised more concerns, and we were not alone in our concerns. Therefore, because the proposal as written did not get adequate support from the professional societies, it was tabled, to be reconstructed and presented to us at a later date. I thank Joe for his efforts to help us understand this proposal and his well-written summary that helped inform us about its strengths and weaknesses. Keep watching this newsletter and the SCOCIT-TECHNOLOGY electronic mailing list for more about this project.

#### Health and Human Services Proposal for Electronic Medical Record Data Standards

Many of us heard that Tommy G. Thompson, secretary for the Department of Health and Human Services, asked the Institute of Medicine (IOM) and Health Level Seven (HL7) to develop a standard for a national EMR. I was a member of the IOM subcommittee charged with drafting that report. The summary of the initiative may be found at [www.ehrcollaborative.org](http://www.ehrcollaborative.org). This report was intended to be a high-level specification of the functions that should be provided for an EMR to be minimally effective in 4 care settings: hospitals, ambulatory care facilities, nursing homes, and the community. You will notice that there is very little detail at the level that was proposed by the AAP Task Force on Medical Informatics a few years ago. HL7 has been charged with drafting a more detailed transaction standard that should get to a level of detail of interest to our members. A copy of the ballot to be voted on by the HL7 members may be found at [www.ehrcollaborative.org](http://www.ehrcollaborative.org). The AAP has drafted a statement emphasizing the importance of pediatric-specific data elements and approaches to this functional document. I will continue to work with the EMR Collaborative as a pediatrician. *Let's keep the pressure on.*

#### Institute of Medicine Priority Areas

The last and perhaps most promising activity of the year was the release of a report from the IOM that identified priority areas for redesign of the health care system to promote safe, high-quality care. These areas are as follows, with those likely to be of interest to pediatricians in bold:

1. **Asthma: appropriate treatment for persons with mild or moderate persistent asthma**
2. Cancer screening that is evidence-based: focus on colorectal and cervical cancer
3. **Children with special health care needs**
4. **Diabetes: focus on appropriate management of early disease**
5. End of life with advanced organ system failure: focus on congestive heart failure or chronic obstructive pulmonary disease
6. Frailty associated with old age: preventing falls and pressure ulcers, maximizing function, and developing advanced care plans
7. **Hypertension: focus on appropriate management of early disease**
8. **Immunization: children and adults**
9. Ischemic heart disease: prevention, reduction in reoccurring events, and optimization of functional capacity
10. **Major depression: screening and treatment**
11. **Medication management: preventing medication errors and overuse of antibiotics**
12. **Nosocomial infections: prevention and surveillance**
13. Pain control in advanced cancer
14. **Pregnancy and childbirth: appropriate prenatal and intrapartum care**
15. **Severe and persistent mental illness: focus in the public sector**
16. Stroke: early intervention and rehabilitation
17. Tobacco dependence treatment in adults
18. **Obesity (emerging area)**

More information may be obtained by reviewing the report, which is located at [www.nap.edu](http://www.nap.edu). The next steps, as recommended by the IOM, are to convene a "Quality Chasm Summit" in the winter to develop a strategy for 5 initial

priority areas: asthma, diabetes, chronic heart failure, major depression, and pain control with an emphasis on end of life. We encourage SCOCIT members to become involved in the work done in their favorite priority area. There is likely to be significant funding and high visibility for your efforts!

### Policy Committee

Edward M. Gottlieb, MD, FAAP, FSAM  
Policy Chair



The Final Privacy Rule of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) went into effect in the United States on April 14, 2003. Although HIPAA privacy rules apply generally, there are specific areas that are different or differently applied to adolescent patients, specifically those considered to be "emancipated minors."

The personal representative has the right to limit access to protected health information under HIPAA. *A minor's parent or guardian, or the adolescent himself or herself, if specified by state law, is considered to be the minor's "personal representative," and has control over protected health information.*

"Where the parent, guardian, or other person acting in loco parentis, is not the personal representative...and where there is no applicable access provision under State or other law, including case law, a covered entity may provide or deny access...to a parent, guardian, or other person acting in loco parentis, if such action is consistent with State or other applicable law, provided that such decision must be made by a licensed health care professional, in the exercise of professional judgment."

*Section 164.524(g)(3)(i)(A), (B), or (C)*

Generally, state law governs adolescent privacy. A licensed health care provider may use professional discretion in certain cases.

- The privacy rule contained in HIPAA states, "State law governs disclosures to parents. In cases where state law is silent or unclear, the revisions would preserve state law and professional practice by permitting a health care provider to use discretion to provide or deny a parent access to such records as long as that decision is consistent with state or other law."
- HIPAA "allows a covered health care provider to choose not to treat a parent as a personal representative of the minor when the provider is concerned about abuse or harm to the child." *Section 164.502(g)(5)*
- "...a covered provider may disclose health information about a minor to a parent in the most critical situations, even if one of the limited exceptions discussed above apply. Disclosure of such information is always permitted as necessary to avert a serious and imminent threat to the health or safety of the minor." *Section 164.512(j)*
- An adolescent's parent may cede confidentiality to the adolescent.
- HIPAA "allows the minor to exercise control of protected health information when the parent has agreed to the minor obtaining confidential treatment." *Section 164.502(g)(3)(i)(C)*

### Education Committee

Mark M. Simonian, MD, FAAP  
Education Chair



Activity was well underway to create the AAP 2003 National Conference & Exhibition (NCE) program with our Computer Lab 2 years in advance of the meeting. I stay tuned into pediatric information technology projects in which our membership might be interested. Proposals have been submitted for SuperCME and we have been evaluating the possibility of a separate 2-day continuing medical education (CME) program on information technology.

Special thanks to **George R. Kim, MD**, who did an outstanding job as newsletter editor. The content received high marks from all who shared their thoughts. Dr Kim is continuing on with his training in information technology and all of us wish him well as we look for a new newsletter editor. Dr Kim's efforts triggered this new format for the newsletter and we hope you like it. Please send us your comments and suggestions on articles for future issues.

The 2004 NCE program was just received from the AAP NCE Planning Group. Following are the titles and speakers at press time:

Title	Speakers
Future Office 2004: The Internet and Continuing Medical Education	S. Andrew Spooner, MD, MS, FAAP Jan Berger, MD, FAAP
SCOCIT Sunday Morning Program on Electronic Medical Record for SCOCIT Members	Joseph H. Schneider, MD, FAAP Eugenia Marcus, MD, FAAP David Paperny, MD, FAAP, FSAM
Future Office 2004: Wireless and Mobile PDA	Lewis C. Wasserman, MD, FAAP
Future Office 2004: Why You Need the Electronic Medical Record (Session for General AAP Members)	Joseph H. Schneider, MD, FAAP David Paperny, MD, FAAP, FSAM Lewis C. Wasserman, MD, FAAP Stuart Weinberg, MD, FAAP

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# Scientific Abstract Session for the New Orleans NCE

By Christoph U. Lehmann, MD, FAAP  
Abstract Session Moderator

**B**e prepared for another full program at the Scientific Abstract Session of the Steering Committee on Clinical Information Technology (SCOCIT). Nine abstracts and 8 posters will fill the afternoon session at the American Academy of Pediatrics National Conference & Exhibition (NCE) in New Orleans. Like last year, SCOCIT received a record number of abstracts and, thanks to 8 reviewers, we were able to narrow the contributions to a manageable size.

This year, we will, for the first time, have a wine-and-cheese reception following the abstract session to allow more time for viewing and discussing poster presentations as well as the opportunity to network.

**Event:** Wine Reception and Poster Presentation

**Best Paper Award** also will be presented and the winner named.

**Location:** Magnolia Room, Hilton New Orleans Riverwalk

**Date:** Sunday, November 2, 2003

**Time:** 4:45–5:30 pm

Personally, I look forward to the abstract session every year. Usually, I have just returned from the American Medical Informatics Association (AMIA) Annual Symposium, and one would assume that I had enough of abstracts. However, the opposite is true. I am consistently excited about attending this session for an obvious reason. Under the leadership of **S. Andrew Spooner, MD, MS**, and **Mark Simonian, MD**, this session has encouraged submissions from pediatricians and clinicians with practical solutions to real-life clinical information problems. Unlike the esoteric talks on medical informatics topics like natural language processing or genomic informatics, I know to expect real-world solutions by clinicians. Pediatricians with genuine interest in the application of information technology to problems in their life and with the desire to develop solutions and share those experiences with others make this session valuable to me. I come every year for the opportunity to meet and network with clinicians who share my interest in bringing better care to patients through the use of technology.

Last year, I had the honor of being selected to an AMIA committee, which was asked to redesign the AMIA Annual Symposium. As a result, for the first time, the AMIA has added a clinical tract to its symposium (Applied Informatics) with a mission and directions similar to the SCOCIT annual meeting. The AMIA discovered that discussing problems that affect the clinician and technical solutions to these problems is of great interest to attendees. SCOCIT discovered this years ago, and it is a nice confirmation of our strategy when a large medical informatics association such as the AMIA decides to take a similar approach to attract participants to its meeting.

This year's program is loaded with topics of interest to pediatricians and other clinicians. Clearly, provider order entry (POE) systems are making their advances throughout the country; we are fortunate to have 2 speakers discussing the successful implementation of a POE system in their institutions, which should be highly educational. In addition, we will hear about tools to reduce medication errors with the aid of a POE system. Computer-assisted medical education remains an annual topic, and we will hear about the development and assessment of a Web-based teaching module. A big concern for clinicians is the quality of consumer health information on the Internet; we will see a poster on information on water fluoridation on the Web and how it measures up to current guidelines. Many other solutions to clinical care problems, such as identifying patients for immunization and tracking staff and residents, will be addressed.

This is just a small glimpse into the program for the SCOCIT Scientific Abstract Session. I hope to see you at the session and look forward to meeting many of you who I know only via e-mail, in hopes of sparking many successful collaborate efforts over the coming year. See you in New Orleans!

Scientific Abstract Session and Technology Updates; Best Paper Award	
Time	Topic
2:00 pm	<b>Successful Implementation of a Computerized Provider Order Entry System for Pediatric Inpatients at Massachusetts General Hospital.</b> <i>Sandra Smith, BA</i> , Information Systems/Clinical Systems Management, Partners HealthCare Systems, Inc, Charlestown, MA
2:15 pm	<b>Implementation of Computerized Physician Order Entry at a Children's Hospital: A Pediatric Resident's Perspective.</b> <i>Eric Tham, MD</i> , Department of Pediatrics, Children's Hospital of Pittsburgh, PA
2:30 pm	<b>Dose Checking in a Computer Order Entry System.</b> <i>David Rich, MD, FAAP</i> , Pediatrics, Columbus Children's Hospital, OH
2:45 pm	<b>Delivering Bioinformatics Training for Pediatrics Researchers and Clinicians.</b> <i>Christopher Dubay, PhD</i> , Division of Medical Informatics and Outcomes Research, OHSU, Portland, OR
3:00 pm	<b>Identifying and Assessing Patient Populations for Influenza Vaccination in a Children's Hospital Primary Care Setting.</b> <i>Stuart Weinberg, MD, FAAP</i> , Children's Hospital of Pittsburgh, PA
3:15 pm	<b>Development, Implementation, and Assessment of a Web-based Teaching Module in Neonatology.</b> <i>Matthew Abrams, MD, FAAP</i> , Pediatrics, Indiana University School of Medicine, Indianapolis
3:30 pm	<b>Break</b>
4:00 pm	<b>Portrait or Landscape Display: Does It Make a Difference?</b> <i>Alan Zuckerman, MD, FAAP</i> , Pediatrics, Georgetown University, Washington, DC
4:15 pm	<b>Implementation of a Distributed Database for Quality Improvement in the Shriners Hospitals for Children.</b> <i>Donald Lighter, MD, FAAP</i> , Clinical Outcomes, Shriners Hospitals for Children, Tampa, FL
4:30 pm	<b>Applying Axiomatic Design Representation to Model Immunization Guidelines.</b> <i>Alicia Scott-Wright, MD, MPH</i> , Decision Systems Group, Brigham & Women's Hospital, Harvard Medical School, Boston, MA
4:45–5:30 pm	<b>Presentation of Best Paper Award</b>
	<b>Wine Reception and Poster Presentation</b>
	<b>Poster Presentations</b>
627	<b>Use of an Electronic Medical Record System to Support a Medical Home for Children With Special Health Care Needs.</b> <i>Jodi Cohen, MD, FAAP</i> , Primary Care, Children's Hospital of Philadelphia, PA
949	<b>Scanning In Versus Signing In—More Efficient Tracking of Resident Conference Attendance.</b> <i>Tara Cancellaro, MD</i> , Pediatrics, Medical University of South Carolina, Charleston
321	<b>A Novel Computer Program-based Patient Record: Improving Pediatrics Health Care.</b> <i>Graciela Damilano, PhD</i> , Pediatrics, Cemic University, Buenos Aires, Argentina
458	<b>Pharyngitis Study: Informatics for Primary Care Research.</b> <i>Kristin Benson, MD, FAAP</i> , Health Informatics, University of Minnesota, Minneapolis
103	<b>The Mobile Solution to 80-hour Workweek Errors.</b> <i>Todd Ponsky, MD</i> , Pediatric Surgery, Children's National Medical Center, Washington, DC
193	<b>WWW Survey on Water Fluoridation.</b> <i>Christine Kim</i> , JABSOM, Honolulu, HI
87	<b>Answering Clinical Cardiology Questions With Evidence-based Medicine.</b> <i>Jeffrey Boris, MD, FAAP</i> , Keesler Medical Centre, Keesler Air Force Base, MS <b>Biofeedback Therapy Via Telemedicine.</b> <i>L. Hammond, MD</i> , Division of Urology, Springfield, IL

## Committee Updates (continued from page 3)

The results will be reported on our electronic mailing list and [scocit.aap.org](http://scocit.aap.org). On the same Web site you will have an opportunity to influence the programs for the Washington, DC, NCE in 2005. I am using the same online form in which you can choose from the most common topics members have mentioned. There is space to add additional topics in a comments box. This tool has helped me immensely because it tallies the results into a ranking viewed as a percentage of total votes. You have

5 votes and you can vote for all or only one.

Another challenge is to suggest a program for our members. This year, it is about the direction of information technology for the next 5 to 10 years. John Zapp, MD, a family practitioner, and Dr Johnson will be our speakers. Dr Zapp has been involved in the white paper on the direction of the EMR as well as Dr Johnson, who serves along with Dr Zapp on several national committees to make recommendations about pediatric issues on technology. I expect they will update us about the direction of the national dialog and

also educate us about the new directions in which we should be headed. Dr Spooner will add his own unique perspectives and keep the topic focused on potentials including ideas of where we could be and what would be helpful.

For the 2004 San Francisco NCE, our program will be headed into the most highly requested topic and question, **the EMR**. What will we need to do to choose one? There will be a panel of our most experienced members discussing their experiences and what you need to do to make a decision. I expect this group will not just lecture but provide a sounding board

for your questions and comments. You can help establish a direction for future discussions with the AAP Board of Directors. I hope to get input from Antony Chan, CIO/director of the AAP Department of Information Technology, who can discuss the direction of the AAP. How will our national organization pursue its role in developing guidelines for its members addressing the EMR?

What will be our program in 2005 in Washington, DC? Our board depends on your input to help come up with a topic that we hope is timely and pertinent to your practice.

# The National Health Information Infrastructure

By Aiysha Johnson, MA  
Previous SCOCIT Staff

*The US Department of Health and Human Services has created an initiative to develop and promote a standard model for the electronic medical record.*

Through this initiative, the US Department of Health and Human Services (DHHS) will provide incentives for the health care community to adopt and use certain standards, including Systematized Nomenclature of Medicine (SNOMED). The Institute of Medicine (IOM) was commissioned to develop the standard for the electronic medical record (EMR) and Health Level Seven (HL7) will validate it. Secretary Tommy G. Thompson has formed an intra-agency council to begin looking at implementing it within the DHHS. Unless there is strong pediatric involvement early in this process, child health needs will not be represented. The American Academy of Pediatrics (AAP) has developed a strategy to ensure that child health needs are represented in this initiative.

Among the national activities were a series of open forums that were held in various states in August 2003 to "gather input." The open forum meetings were designed to gather feedback on the EMR model and standards being developed by HL7 before they were delivered to the DHHS. The agenda for the forums included an overview of the draft HL7 model and its implications and provided an opportunity for gathering comments. Participant feedback was compiled in a summary report for HL7 and the DHHS. A copy of the report was to be made available for public review.

The AAP Washington office was aware of these forums and worked with staff to gather information and prepare for future National Health Information Infrastructure (NHII) activities. AAP representation included members of the Steering Committee on Clinical Information Technology (SCOCIT) and Steering Committee on Quality Improvement and Management (SCOQIM). The EMR has major implications for patient safety, reduction of medical errors, and improved child health outcomes.



Several **SCOCIT members** attended the open forums on behalf of the AAP, including **Edward Gotlieb, MD**, chair of the SCOCIT Policy and Regulatory Affairs Committee. **Joseph Schneider, MD**, and **Jan Berger, MD**, of the Policy and Regulatory Affairs Committee were invited to attend local meetings in Texas and Illinois, respectively. **Kevin Johnson, MD**, chair of the SCOCIT Applications and Technology Committee, was one of the participants in the IOM commission to develop a report on the EMR functional model. The committee issued a letter on the development.

AAP representatives at open forum meetings provided input on the current model and submitted a comment letter based on the policy

statement, "Special Requirements for Electronic Medical Record Systems in Pediatrics," developed by the AAP Task Force on Medical Informatics in August 2001. The complete report can be accessed on the AAP Web site at [www.aap.org/policy/0042.html](http://www.aap.org/policy/0042.html).

The AAP will continue to discuss strategies as an ongoing effort to ensure adequate representation at future NHII activities. The AAP will seek involvement on several levels, including

- Investigating the activities of the DHHS Council on the Application of Health Information Technology to determine appropriate AAP activity for supporting and informing NHII efforts.

- Educating pediatricians on the free availability of SNOMED to the health care community.

Beginning in January 2004, SNOMED Clinical Terms (CT) will be available free of charge through the National Library of Medicine Unified Medical Language System. It will break down barriers to obtaining standard terminology that small to mid-size practices face. This is important information because pediatric practices with limited resources can obtain SNOMED and support the use of standard terminology in health care.

- SCOCIT becoming involved with HL7 activities to allow provider input in the validation of the EMR.
- Involving SCOQIM in AAP activities of the NHII because of EMR implications for patient safety, reduction of medical errors, and improved child health outcomes.

The AAP also is paying close attention to other clinical information technologies including the automated use of bar coding for the reduction of medical errors. The AAP Washington office recently submitted a letter to the Food and Drug Administration (FDA) commending the agency for drafting legislation on bar coding. Recommendations in the letter were supported by the Pediatric Academic Societies. The proposed legislation, Bar Code Label Requirement for Human Drug Products and Blood (Docket No. 02N-0204), was published in the *Federal Register* on March 14, 2003, and can be accessed (PDF version) at [www.fda.gov/cber/rules/barcodelabel.pdf](http://www.fda.gov/cber/rules/barcodelabel.pdf).

## Nanobyte

Digital video recorders (eg, TiVo, ReplayTV, EyeTV) can make management of television time for kids much easier, safer, and more valuable. Digital video recorders collect all episodes of a selected program and store them digitally without the hassle of VCR programming or swapping tapes. Once episodes of a few carefully selected shows are collected, your kids will have a library of shows, they can watch for their TV time, thus eliminating the dicey practice of channel surfing or wasting time watching whatever happens to be on television. Your kids will learn that the only shows they can watch are the ones that are stored. *You as a parent can control exactly what they watch and when they watch it.*

# What's New With Office 2003?

By Donald E. Lighter, MD, MBA, FAAP  
SCOCIT Member



I have been a beta tester for Microsoft for a number of years and, as you might expect, it has been quite a ride. Starting with “Chicago,” which was the precursor to Windows 95, the software that I have tested over the years has been alternately thrilling to use and a major challenge to maintain. The first week I used the Windows 95 beta, my computer crashed at least 3 times a day, and I ended up reformatting the hard drive twice. But I did get to see features that really blew Windows 3.11 away, and it was fun to be just a little ahead of the curve.

The beta products that Microsoft has been putting out in the past few years have become much more reliable, even though they still do have their problems. But after all, what is a beta tester for? Anyhow, I have been using Microsoft Office 2003 for the past 3 months now, and what a difference a generation makes in this suite of productivity software. I am going to describe just 3 of the most interesting changes that I have discovered in using the beta product. I will be presenting a more extensive overview in the Computer Lab at the American Academy of Pediatrics 2003 National Conference & Exhibition (NCE). The following are some of the new features:

- New Outlook 2003 interface
- Research Feature—an XML application using technology called “smart client”
- OneNote—a new text editor interface with greatly improved functionality

## Outlook 2003

I have used Outlook as my e-mail client and personal organizer since version 1.0 and while it certainly is not perfect, this new version has a much nicer look and feel than even the most recent XP version. The nicest feature is the user interface that provides a preview of messages along the right side of the window that is much bigger than the current system. In most cases, you can see an entire message, rather than half or less as in Outlook XP. The interface now can include all the folders that you normally access in Outlook along the left side, with different views for “Inbox,” “Calendar,” “Journal,” and “Contacts.” In fact, you can customize the interface more than ever before.

The other useful attribute of this new interface is the ability to group messages and replies so that you can easily see the most recent message or reply to any message in a thread. Rather than the convoluted method of flagging messages in the XP version, any message on the list can be flagged with a single click, so marking important messages for follow-up is exceptionally easy. Search folders can be customized to create nonstandard views, grouping by dates like “Last Week” or “Today’s Mail” or cutting through the clutter by showing only those messages with flags, for instance. The interface can be configured many different ways, even to look just like Outlook XP, if you want.

Spam-blocking features seem to be much better in this version, too, including a built-in filter and the ability to build or even import lists of accepted and junk mail domains. In version 2003, Outlook not only identifies mail as junk, it either tosses it into a new “Junk E-mail” folder or automatically deletes it. Current versions of Outlook require creation of rules to manage your “Inbox”—something I never really appreciated. The new program lets you set a security level and everything that looks like junk can be put in the “Junk E-mail” folder or deleted. It is a good idea to use the folder, at least for a while, since some of your regular mail may be filtered out (you can retrieve it from the folder and mark it “not junk”). After a while, the program gets better at filtering the spam, and at this point, I rarely get any regular e-mail sent to the “fourth dimension.”

## Research Feature

All of the Office programs have a new feature known as “Research,” an XML application that pops up (remember <Shift> F7) when you decide you need a new word, interesting data like stock prices and news searches, or even translations of words and phrases into other languages. The interesting part of this feature is the ability of large organizations, and even commercial vendors, to make content available to Office users through a 1- or 2-click interaction that brings up a pane on the right side of the window with an application or information resource.

With Office 2003, a client application (eg, a database) can become part of the information management cycle, so that content created in other programs can be reused by Word, Excel, or other applications. XML has made it easier to define a data schema that crosses many applications, so it is now simpler to integrate data into smart client solutions for an organization. For example, the smart client approach can provide information about a particular procedure in the hospital so that every time the procedure is noted in a document, a “smart tag” (usually denoted by an underline) appears with the procedure text that links to the explanation. As developers begin to use this feature, look for quick links to Web-enabled applications, like online conferencing or quick access to information resources maintained on organizational servers or at reference Web sites.

## OneNote

This program is like Notepad on steroids. If you are an inveterate note taker, this application could change your life. This program lets you write, record, and edit notes in a single interface, much like the “Notes” function in Outlook, but these notes are available without opening Outlook.

The main screen has almost all of the same menus and keyboard shortcuts as other Microsoft applications, but OneNote acts like a word processor mixed with a design program, sort of like Paint or Photoshop inside Word. A click anywhere on the page creates a blue box that looks like a text or picture box in a design program that can take text, drawings, or handwriting (if you have a pen or tablet PC screen). Anything on the screen can be edited or formatted several ways.

OneNote is designed for tablet PCs and gives users the ability to convert handwriting to text (even my barely passable handwriting). Quite honestly, I can type faster than I can write, so I will probably continue to use the keyboard. Even with a keyboard and mouse, though, I could put text or drawings literally anywhere on the screen, so it is particularly flexible for the terminally disorganized. The program still is pretty rough around the edges, but some of the features that caught my eye were the ability to choose many colored pens, put an audio recording on the sheet, and flag notes using several different types of flags. Once you are done taking notes, you can transfer them easily by copying and pasting to other applications in the Office suite.

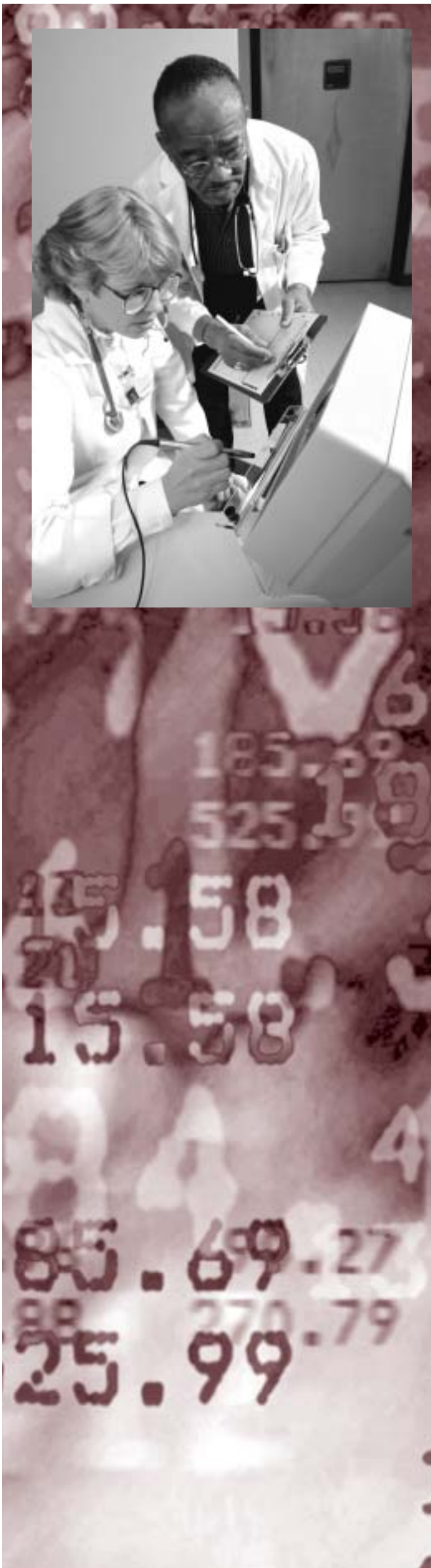
## Office 2003 Beta Availability

If you want to give this software a try, the current beta version is available on the Microsoft Web site at [www.microsoft.com/office/preview/default.asp](http://www.microsoft.com/office/preview/default.asp).

If you have a sense of adventure, you might want to give it a try, but like any beta product, **be sure you back up your computer before loading it.** If you would like to see a demonstration before you try it, come on by the Computer Lab at the 2003 NCE in New Orleans, LA.

# Update on Computerized Physician Order Entry and Electronic Medical Record

By Joseph H. Schneider, MD, FAAP  
SCOCIT Executive Committee



I was asked to update the Steering Committee on Clinical Information Technology (SCOCIT) membership on what is happening in the world of electronic medical records (EMRs) and computerized physician order entry (CPOE) since the last SCOCIT newsletter, which described a proposal by the American Academy of Family Physicians (AAFP) to implement an open-source, community-based record early this year.

The following are some highlights:

- The AAFP proposal failed to gain enough support among other major medical organizations, in part because of problems with the business plan and uncertainty of the costs of modifying the proposed system. Not to be deterred, the AAFP has joined the Healthcare Information and Management Systems Society (HIMSS) to conduct a 6-month demonstration of the AAFP EMR at up to 10 practices across the nation. It is an open application service provider (ASP) system that will provide access to medical records to multiple users as patients move to different facilities for care. Because the AAFP EMR would not require a license fee and records could be stored on a secure Internet site for sharing with patients and physicians, the system price might be significantly reduced.
- In July, Department of Health and Human Services Secretary Tommy G. Thompson asked Health Level 7 (HL7) and the Institute of Medicine (IOM) to develop standards for EMRs by September. The intention of this project is to allow Medicare to begin paying an extra amount to physicians who use an EMR that meets these standards. HL7 accepted votes until September 5, 2003, and reviewed the votes in Memphis, TN, the following week. It is not clear when Medicare would start paying extra or how this would be managed.
- To help guide HL7, the EMR Collaborative was formed, consisting of the American Health Information Management Association (AHIMA), American Medical Informatics Association (AMIA), American Medical Association (AMA), American Nurses Association (ANA), HIMSS, and 3 other organizations. Meetings were held in Seattle, WA; Boston, MA; Dallas, TX; Chicago, IL; Los Angeles, CA; and Atlanta, GA, to collect feedback on an IOM proposal for EMR standards that was published in July. The IOM has proposed that EMRs must include real-time point-of-care patient information and be integrated with billing, outcomes reporting, quality management, and public health systems. Almost 2,000 people attended these meetings. The American Academy of Pediatrics (AAP) sent physician representatives to most of the meetings and submitted a position paper outlining special pediatric EMR needs.
- The AAFP has joined ASTM International, HIMSS, and the Massachusetts Medical Society to develop a standard continuity of care record (CCR), which would be created or updated at the end of each encounter between a patient and provider. The CCR would contain minimum content standards for physicians discharging or referring patients to ensure a consistent standard of care when patients are moved to different facilities.

## Individual Health Care Systems Have Been Very Active

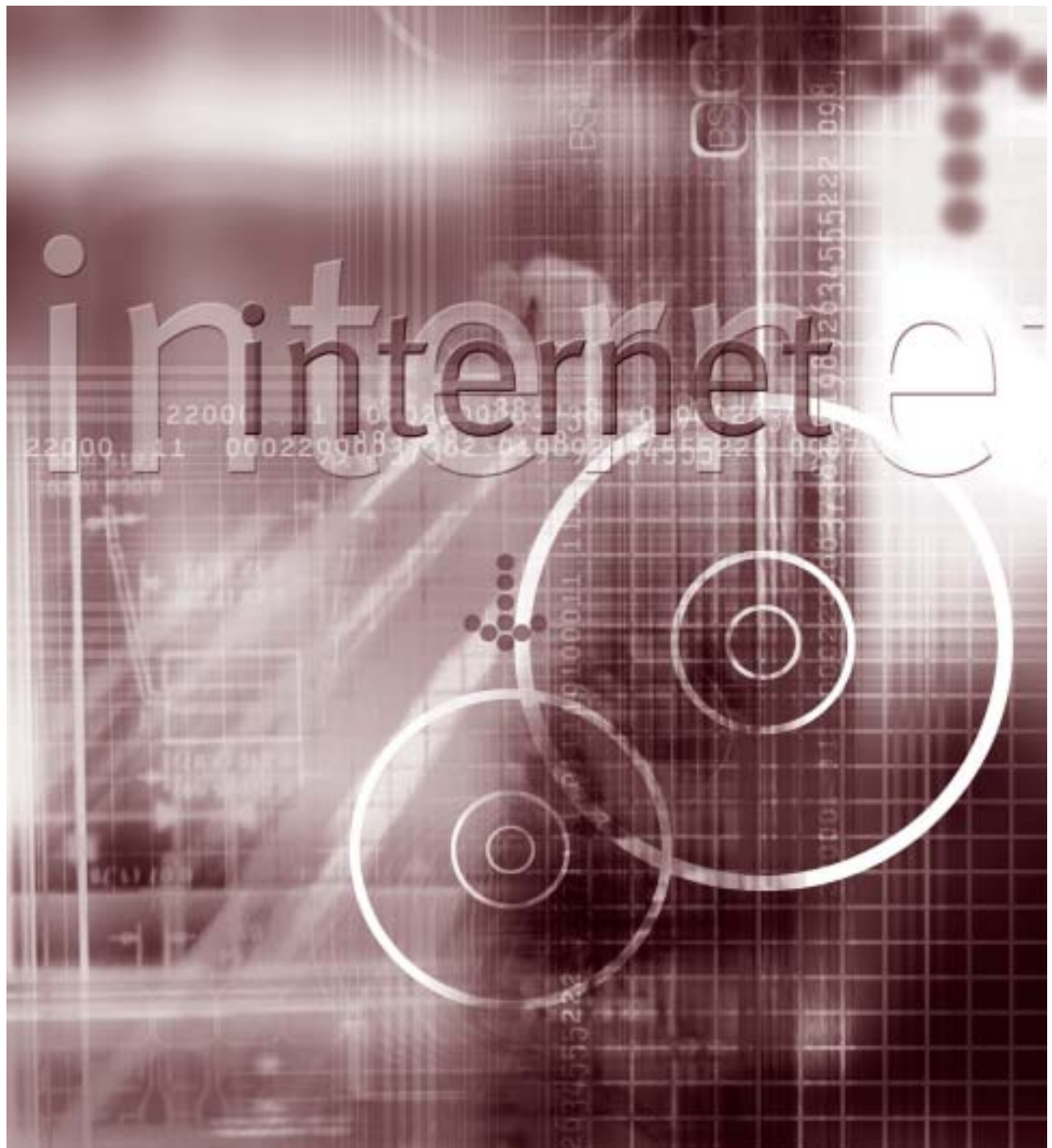
- For example, Aurora Health Care in Wisconsin has computerized records for its 3 million patients, about 56% of the state's population. The EMR contains a patient's entire clinical information, including hospital stays, emergency department visits, laboratory test results, and prescriptions. Half of Aurora clinics use a CPOE system connected to the hospital system to check drug orders and dosages. An estimated 50,000 errors have been avoided in the past year alone.
- The Department of Veteran Affairs (DVA) anticipates that its clinicians will electronically input 95% of medication orders by October 1. The DVA system (Vista) has an EMR plus CPOE, pharmacy, laboratory, and radiology information systems. About 30 hospitals have digital imaging. The EMR creates progress notes and codes and facilitates CPOE and clinical alerts. The DVA also has implemented a bar-coding system for medications, which showed zero errors in 5.7 million doses administered.
- MyHealthVet, a DVA program to begin next spring, will allow patients and their many physicians to access their medical records online. DVA physicians will allow patients to view parts of their records, such as progress notes, discharges, medications, and laboratory test results.
- Finally, individual states have been pursuing new EMR technologies to cut costs. Delaware is developing a statewide plastic card that will store a person's medical information, and Rhode Island has been piloting a statewide e-prescribing system.

The pace of activity seems to have quickened greatly. Efforts are still largely at the state and local levels, but the CCR and IOM/HL7 projects may have major national pediatric implications. To keep up with these developments, consider subscribing to the free iHealthBeat ([www.ihealthbeat.org](http://www.ihealthbeat.org)), produced by the California HealthCare Foundation. If you feel that these EMR projects may have potentially significant impacts on pediatrics and your practice, it is important to let your chapter and district representatives know that the AAP should take a leadership role in these efforts.

# Using IT for Advocacy: A Tale of 2 Districts

By Anthony Battista, MD, FAAP, AAP District II Webmaster, and  
George R. Kim, MD, FAAP, AAP District III Webmaster

*The power that information technology has to support the clinical work of pediatricians also can be used to support our work as advocates for children (and for ourselves as professionals) via organized group communication (eg, e-mail and the Internet). We share the experiences of 2 American Academy of Pediatrics districts (New York and the mid-Atlantic region) in leveraging these technologies to help pediatricians stay in touch.*



## **District II (New York)**

District II of the American Academy of Pediatrics (AAP) was one of the first districts to host a Web site. Having established the New York Chapter 2 Web site in 1998, I was approached by District II in October of 1999 to set up their Web site. It had been deemed necessary to establish an Internet presence to provide (1) an electronic forum for all 3 chapters of District II (important because the district covers all of New York), (2) a focal point through which district and chapter members can connect to pertinent professional activities, and (3) a means for the district and chapter leadership to make information about statewide events and concerns available to members.

The necessary logistics to achieve these goals were not as difficult as might have been guessed.

1. We obtained Web server space. Many Internet service providers (ISPs) offer server space to subscribers. District II subscribes to an ISP that provides space to nonprofit organizations for free. Thus, the server is always directly available to the Webmaster so that changes can be made in a timely manner.
2. The Web address ([www.aapDistrictII.org](http://www.aapDistrictII.org)) was chosen, approved by the district, and registered with InterNIC via the ISP for a renewable fee of \$70.
3. A Web page template was designed to allow flexibility for the use of future technologies while maintaining accessibility for older browsers. Knowledge of hypertext markup language (HTML), although helpful, is not necessary (we used a ready-made template from Microsoft FrontPage). Major sections of the Web site, including Advocacy, Research, Newsletters, Parent Information, and Committees, were specified.
4. Once the basic design and layout were accepted and planned, it was coded and deployed to the Web server using WS\_FTP LE (a shareware file transfer program).
5. The District II Web site was advertised to the membership and also linked through the AAP Members Only Channel (MOC) on the national AAP Web site.
6. As the Internet and its usage mature, the content, presentation, and technology of the Web site will continue to be updated. Content for updates is easily obtained at district meetings. To date, we have not needed professional Web services, and that has kept costs to a minimum.

Links to New York Chapters 1 (1999) and 3 (late 2000) were made as those Web sites launched. As statewide issues are posted, individual chapter Webmasters are notified of links on the District II Web site to prevent unnecessary (and confusing) duplications. The district site also provides e-mail contact for all board members as well as downloadable copies of the district newsletter, the *New York State Pediatrician* (as a PDF). Most frequently updated items are the calendar, meeting announcements, Parents' Resources, and the





Pediatric Resident's Section. Pediatric residents in New York are very organized, and links to each teaching center's resident representative are available on the District II Web site.

District II is not yet relying on the Web site as its primary means of communication with its members. The *New York State Pediatrician* is still mailed to all members, although our Communications Committee is currently investigating "teaser" articles in print with expanded articles on the District II Web site. At this time, District II has decided that all broadcast e-mail to members is to be sent from the national AAP office, but a multistate e-mail survey was coordinated last September for research purposes. This proved to be very successful and promises to open opportunities in the future.

### **District III (Mid-Atlantic Region)**

District III consists of 6 chapters in the mid-Atlantic region (Delaware; Maryland; New Jersey; Pennsylvania; Washington, DC; West Virginia). In 1995, under the encouragement and guidance of then-District III Chair **Susan Aronson, MD**, and past Section on Computers and Other Technologies Chair/Pennsylvania AAP (PA AAP) President **Jerold Aronson, MD**, we began to form the basis for district-wide e-communications. At that time, the Web and e-mail were relatively new to pediatricians, with most experience with e-mail and broadcast fax being in Pennsylvania, where **Suzanne Yunghans**, PA AAP executive director, sent a periodic NewsFax to PA AAP members.

The District III leadership was looking for solutions to several problems: (1) the slowness of communicating with members on breaking issues (AAP PedComms—printed or mailed messages that were slow, very expensive, and often reaching members after their patients knew about the content) and (2) the high cost and inflexibility of communicating with members in an ongoing fashion. The district leadership also wanted to include and network local pediatric residents, particularly seniors searching for jobs.

During successive district and chapter meetings, National Conferences & Exhibitions, and countless e-mails, we started to develop the network by collecting District III members' e-mail addresses (from chapter databases, residency programs, and lists

passed at meetings). By 1998, the national AAP consolidated its membership database by including e-mail addresses as a database field, thus facilitating this task. The AAP MOC also allowed experimentation with and development of communication tools to reach the membership.

#### **1. Individual Chapter Web Sites or Members Only Channel**

At some point in the last 8 years, each chapter in District III has had its own Web site. These sites were started and maintained by interested individuals or companies providing free Web sites and services to chapters. As the "dot-com" boom passed, some chapters found that a Web site did not fit the needs of their particular members and discontinued them. At this writing, 4 of 6 chapters in District III maintain independent sites.

In 1998, the AAP created the MOC, a password-protected area on the main AAP Web site configured to the membership of each member. One feature of the MOC is space for user-specific information for the district, chapter, and sections to which the member belongs. This information, available to the member on sign-in to the MOC, can be presented on Web pages (of district- or chapter-specific content) with links to additional material from the AAP and external chapter Web sites. Thus, members using the MOC have a central location for connecting to information about their district and chapter.

Types of information provided on both Web sites include district chair reports, contact information (telephone, fax, or e-mail) for district and chapter leadership (on the password-protected MOC area), event calendars, electronic newsletters, advertisement of individual events, and registration and course materials (including full slide sets) for continuing medical education (CME) teleconferences. One chapter, Maryland, has taken its newsletter to the next level by making it available only in electronic format (by Web, e-mail, or broadcast fax).

A special project we undertook was a cooperative Web-based bulletin board for pediatricians searching for jobs in the mid-Atlantic region and employers searching for practitioners. Originally designed for local graduating residents, it allows free posting of contact information for candidates or practices and free searching for listed opportunities

and availabilities. Feedback has been generally positive, with the highest frequency of use by local practices and pediatricians relocating to the area.

#### **2. Group E-mail and Broadcast Fax**

Establishment of the e-mail network initially was slow, involving manual collection, entry, and double-checking of membership e-mail addresses from diverse sources. As the AAP consolidated the membership database and Web-enabled portions of it, electronic mailing lists and group e-mail became new options for selective broadcasting of messages to members. A combination of increasing e-mail use by members and inclusion of e-mail addresses in the membership database facilitated the growth of the network. Currently, there are approximately 4,000 addresses registered within District III.

With the help of the AAP information technology staff (particular thanks to **Jaymes Nauta** and **Scott Foutz**), we were able to configure group e-mail for each chapter office in District III to allow chapter executive directors and their designees to send broadcast messages directly to their chapter memberships. To test group e-mail, I began to send a periodic district-wide e-newsletter with short timely summaries and hyperlinks to documents, journal abstracts, and sites of pediatric interest. The newsletter, *Pediatric News on the WWW*, is transmitted every 3 weeks (or so) with generally positive feedback from recipients. We also get regular group messages from the Department of Federal Affairs.

A special local project that was suggested after the anthrax incidents of 2001 was a winter virus information network. Within an e-mail network of FAAPs, group members would share information about reports of cases of influenza, respiratory syncytial virus (RSV), and febrile respiratory illnesses in children (no identifiers given). It was moderately successful (based on verbal feedback) the first year (2001), but showed less interest and participation from the network in the subsequent year.

Broadcast fax is used and paid for on an individual chapter basis, directly from the chapter offices. We experimented with Internet fax on a district level when a provider offered free services to nonprofits, but stopped when the free service ended. Broadcast fax is useful when

used in conjunction with group e-mail to increase coverage of certain messages.

The chapter offices and I spent a great deal of effort trying to coordinate information about District III pediatric residents, with variable results. As the AAP Resident Section became more centralized and active electronically, with its own Web site, newsletter, and group e-mail, it took over the functions of local coordination directly through resident liaisons.

#### **3. Teleconferencing, Chat, and Discussion**

District III has had intermittent (but highly successful) experience with teleconferences, primarily through the coordination of PA AAP, which coordinates 10 CME teleconferences per year. Group e-mail, broadcast fax, and chapter Web sites have been used to advertise events and provide a low-cost depot for conference materials (eg, PowerPoint slides, handouts, CME registration). Provision for CME hours has been arranged in the past. These have been very popular with broad geographic attendance (record remote connection: Italy!).

Chat rooms and open discussion boards for our group have been less successful than in other settings. Within our domain, e-mail, fax, phone conferences, and face-to-face meetings seem to be the preferred forms of communication.

District III continues to experiment with applications of information technology as needs and solutions present themselves. District III leadership, including current Chair **Alan Kohrt, MD**, has continued support of our efforts to, I hope, the benefit of all.

Districts II and III are distinct in their organizational structures (one state vs multistate). They are similar in the closeness (eg, geographic, concerns, interests) of their individual chapters and individuals that have facilitated the development of information technology to connect their members. Each has used resources in different ways with positive results. It would be interesting to hear of the experiences of other AAP districts.

# Welcome to the World of Electronic Prescribing: A View From the Office

By Eugenia Marcus, MD, FAAP  
SCOCIT Member

**W**e began faxing prescriptions to our local pharmacies. Drug searches are lightning fast and drug names come up with just a few letters typed in. The strengths and forms of the drugs are laid out in full view (just click!). The Sig creator allows for all the fractions of doses needed for children, gives dosage ranges for the patient's weight, and checks drug/drug interactions and patient drug allergies. You can add the diagnosis to the prescription, which is helpful, for example, for attention-deficit/hyperactivity disorder prescriptions. My scanned signature is applied at the time of printing or faxing. Renewals repeat the prescription as written. You also can edit the renewal. Faxed prescriptions are treated like a prescription called in by telephone.

When patients learn the prescription is legible and drug allergies and interactions have been checked, they are **stunned!**

Although I tell them I am going to fax their prescription to the pharmacy and they see me click through the script, they wait for a piece of paper to be handed to them. "You mean I don't need anything to take with me?" "No, the prescription is already at the pharmacy." "Oh" ... in disbelief.

In the unfortunate cases of a patient arriving at the pharmacy and there is no prescription, the pharmacist calls and I give the prescription verbally and hunt down what happened to it. In the early days, it was user (physician) and hardware or software error. We did not know exactly where to click. Pharmacy databases had to be edited and updated to hit all the pharmacies our patients used. Some towns had multiple stores of the same company (eg, one had 2 stores on Main St so the identification had to



be further defined, ie, near Rte 128 or near Watertown Sq). We put descriptors in the identification line of the pharmacy table such as, "in Marshall's Mall." The fax manager software that actually does the faxing had to be restarted manually in case of a loss of power (a backup battery on that workstation fixed the power interruptions).

Then there are the little pharmacies with the eccentric pharmacists who do not have a fax machine and do not want one. We print those prescriptions and hand them to the patient.

Our staff had to learn to ask for different information for refill requests coming in by phone. We can search the pharmacy table by phone number or fax number, but it is easier to search by pharmacy and town. Patients requesting refills by e-mail or through our Web site had to learn to identify their pharmacy differently. It was a learning process for physicians, staff, and patients.

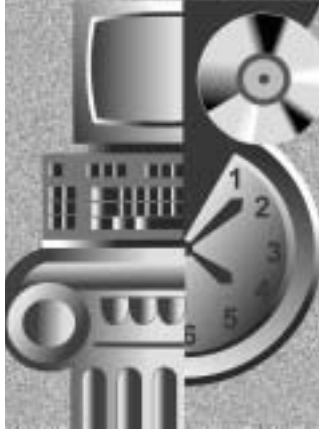
Now that faxing prescriptions by computer is part of our everyday activities, these learning curve events are gone. The pharmacists love it. The nurses are not interrupted by patients who used to hand them prescriptions I just wrote and ask them to call the prescriptions in for them so they do not have to wait. Gone are the long messages on the pharmacy phone lines that only get through to the actual pharmacist about 75% of the time. We even have fax lines into the prescription benefit management companies.

Many states have laws and regulations about prescriptions and the laws have not kept up with technology. There is a need to change these laws and regulations so that prescriptions can be sent over the Internet—computer to computer.

## Nanobyte

Recently I have noticed that some individuals are including disclaimers in their regular e-mail. Our children's hospital adds an addendum to every e-mail message created on our e-mail system. What does it all mean? Will this avert legal action if you are sued? Probably not. But it does show effort by the e-mail creator to provide some warning if the wrong or an unintended person receives private health information. So, whether you join the Health Insurance Portability and Accountability Act (HIPAA) generation, you are welcome to copy the following alert:

**"Alert: This e-mail and any files transmitted with it are intended solely for the use of the individual or entity to whom they are addressed and may contain confidential, patient health, or other legally privileged information. If you have received this e-mail in error, please notify the sender by e-mail and delete and destroy this message and its attachments. Any unauthorized review, use, disclosure, or distribution is prohibited."**



# 2003 Computer Lab Schedule of Sessions

By *Lewis C. Wasserman, MD, FAAP*  
*SCOCIT Computer Lab Coordinator*



The Steering Committee on Clinical Information Technology presents the Computer Lab at the American Academy of Pediatrics (AAP) National Conference & Exhibition. It is a potpourri of computer and medical information technology. We have a broad variety of topics, a great selection of speakers, and always someone who can give you a hand learning something new about technology you can use in your practice. It is located in Information Alley in the Exhibit Hall. Computers and personal digital assistants (PDAs) are available for practicing and learning, and a sampling of AAP and other software is available for demonstration.

## Saturday, November 1, 2003

- 3:00 pm **Secret Features of Windows and Web Browsers**  
*Joseph H. Schneider, MD, FAAP*  
 Learn secret features that can speed your use of Windows-based computers. Selected keyboard shortcuts and special toolbars will be covered. At this session you will learn tricks that are guaranteed to save you time.
- 4:00 pm **So You Want to be a Hacker?**  
*Lewis C. Wasserman, MD, FAAP*  
 Ever wonder what you could find out about your neighbor, or how to get information out of your competitor's computer? Would you like to know what secrets your kids have been keeping? Are you curious what people can find out about you? Come get a glimpse at the hacker's art, and perhaps find a few pearls for protecting yourself.
- 5:00 pm **Introduction to Database-Driven, Dynamic Web Sites**  
*Stuart Weinberg, MD, FAAP*  
 Would you like your Web site to update itself automatically, removing notices of events after they occur and posting news items during specified time periods, without using Web publishing software? See demonstrations of Web sites where content is stored in databases and manipulated using scripts. The concepts of scripts and Web-based databases will be introduced, using PHP and MySQL, and some simple examples will be illustrated.
- 6:00 pm **Dermatlas: An Online Clinical Atlas**  
*Christoph U. Lehmann, MD, FAAP*  
 The Dermatology Image Atlas (Dermatlas) is an online clinical atlas of more than 4,000 images. This presentation will introduce the audience to Dermatlas, discuss its features, and provide attendees with skills to effectively use this clinical tool in their practices.

## Sunday, November 2, 2003

- 10:00 am **What's New With PubMed?**  
*Michelle Malizia, MA*  
 PubMed is the free National Library of Medicine (NLM) interface to its premiere biomedical journals database, MEDLINE. PubMed is a constantly updated and improved resource and it can be difficult to keep abreast of all the useful changes. This presentation will demonstrate many of the innovative tools and search features added to PubMed in the last year.
- 11:00 am **Preparing for Your EMR**  
*Roy Schutzengel, MD*
- 12:00 noon **Using Your Data for Performance Improvement**  
*Donald E. Lighter, MD, MBA, FAAP*  
 With all the data we collect in the office or hospital, it sure seems like we should be able to do something good with it. During this hour presentation, sources and uses of data in office and hospital settings will be discussed, as well as methods of analyzing and reporting information using tools that most people already have on their computers (eg, spreadsheets, presentation programs). Some useful, inexpensive add-ins for Excel will be presented that can make data analysis faster and more accurate.
- 1:00 pm **Meeting Your Patient's Health Information Needs**  
*Michelle Malizia, MA*  
 According to recent research, 6 million Americans go online daily to search for information about health and disease. Additional findings show that nearly 70% of patients nationwide would pay serious attention to a Web site recommended by their physician. Help guide your patients (and their families) to up-to-date, reliable, consumer-friendly information on the Web. This presentation will include demonstrations of MEDLINEplus, the Household Products Database, and other FREE resources available in English and Spanish.

## Sunday, November 2, 2003 (continued)

- 2:00 pm **Beyond the EMR: Changes in the Way We Practice Medicine**  
*Roy Schutzengel, MD*  
 The electronic medical record (EMR) simply is a tool that allows individual physicians and physician groups to enhance the way they practice medicine. Facilitating medical documentation and improving its quality are only the first steps. Physicians can spend less time doing redundant paperwork and chart reviews and more time face-to-face with patients in the office. In addition to improving care to patients individually, EMR technology allows for the creation of a national data bank of patient care information, which in turn can be incorporated in standards for best care practices.
- 3:00 pm **Newer Methods of Physician-Patient Communication**  
*Donald E. Lighter, MD, MBA, FAAP*  
 Many pediatricians have started using modalities such as e-mail for communicating with patients, but there are a number of newer methods on the horizon. Using demonstrations of secure messaging modalities and live online Web conferencing, this presentation will provide some insight into the newer methods that are becoming increasingly available to physicians. Some of these technologies also will be available in the Computer Lab for participants to sample.

## Monday, November 3, 2003

- 10:00 am **Best of the Pediatric Web**  
*Joseph H. Schneider, MD, FAAP*  
 Catch up on the classic pediatric Web sites and learn about new ones! See them demonstrated and learn how they can help your practice. Audience contributions are strongly encouraged. Bring your best sites and share them with others!
- 11:00 am **Prescription Writer**  
*Mark M. Simonian, MD, FAAP*  
 Pediatric practices are looking for methods to create and distribute their prescriptions in a legible format that can be shared with patients and pharmacies. There will be a discussion of a custom database creation and vendor product that marries practice management data and faxes the prescription wirelessly through the Internet to the pharmacy.
- 12:00 noon **Introduction to Database-Driven, Dynamic Web Sites**  
*Stuart Weinberg, MD*
- 1:00 pm **Office 2003: What's New, What's Cool**  
*Donald E. Lighter, MD, MBA, FAAP*
- 2:00 pm **Using a PDA in Pediatrics**  
*Mark M. Simonian, MD, FAAP*  
 Pocket PC and Palm devices are gaining popularity as a useful tool and alternate entry device for the practicing pediatrician. Practical examples of programs and applications will be demonstrated as well how to pick the PDA that will work best for you.
- 3:00 pm **Using Technology to Prevent Medical Errors**  
*Christoph U. Lehmann, MD, FAAP*  
 Children are 3x more likely than adults to suffer from an adverse drug event in hospitals. This presentation will discuss the identification of system failures leading to medical errors. Also to be discussed are simple technology solutions to reduce medical errors (eg, infusion calculators, automated code cards) and how to leverage technology to improve medical systems.

The Computer Lab schedule may change. Please visit [scocit.aap.org/labsched.php](http://scocit.aap.org/labsched.php) for up-to-date schedules, course descriptions, and speaker information.



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www.aapca1.org/aapca1/scocit.asp

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Response Requested by December 1, 2003

STEERING COMMITTEE ON  
CLINICAL INFORMATION TECHNOLOGY  
(SCOCIT)

CALL FOR NOMINATIONS

The American Academy of Pediatrics (AAP) Steering Committee on Clinical Information Technology (SCOCIT) seeks nominees to run for election to the Executive Committee. Four positions are up for election.

Successful Executive Committee member candidates will serve 2-year terms, to begin immediately following the 2004 AAP National Conference & Exhibition in San Francisco, CA.

Summaries of responsibilities for Executive Committee members can be found on the AAP Members Only Channel (www.aap.org/moc). Go to the "Member Services" area and select "Orientation Materials for New National Committee and Section Executive Committee Members." The Steering Committee will appoint a nominations committee to review the nominees and select the candidates for the ballot. Submission of this form does not guarantee inclusion on the ballot.

If you would like to be considered for candidacy, or if you would like to nominate a colleague, please

1. Complete this form.
2. Attach a brief biographical sketch (no more than 250 words), which will be used on the ballot if you are nominated.
3. Fax it to 847/434-8000, ATTN: Beki Marshall, no later than December 1, 2003.

NAME (PLEASE PRINT)

ADDRESS (PLEASE PRINT)

TELEPHONE

FAX

E-MAIL

CURRENT POSITION

Fax (847/434-8000) to Beki Marshall on or before December 1, 2003.

Thank you.

