cocitnews

The Council on Clinical Information Technology

Volume 5, Number 1, Spring 2007

inside this issue

From the Chairperson

By Mark M. Simonian, MD, FAAP
Chairperson, Council on Clinical Information Technology

What are the agenda and strategic plan of the Council on Clinical Information Technology (COCIT)? Beki Marshall has been providing a new service to our members, sending more frequent e-mail updates based on the Executive Committee and other member activities. We hope you find these informative and they keep you updated about the council plans and agenda.

The council meets each year in the spring to look at what we have accomplished and what we can do to move information technology to the forefront of American Academy of Pediatrics (AAP) activities. We believed that we might be able to integrate information technology into the strategic plans of the AAP in a similar manner as how obesity has been integrated. We were not successful, yet we heard from the AAP that it is aware of the importance that information technology is playing in enterprise and outpatient pediatric practices. We will continue to ask the AAP to include information technology in its initiatives.

In increasing numbers, hospitals are adopting computerized physician order entry (CPOE), electronic prescribing, electronic health records (EHRs), and other innovative technologies to address concerns about quality of care and patient safety. To speak to the changes in direction that users are facing, COCIT sponsored some excellent presentations and abstracts at the AAP National Conference & Exhibition (NCE) this past fall in Atlanta, GA.

Listening to our members and responding to their needs has been a priority for me. One recurring comment from our enterprise and hospital-based members is that they have not seen enough in our writings and agenda addressing technology they want to learn. Recently, the *EHR: Where's the Value?* Speaker's Kit became available; this will allow members to provide well-written commentary on the subject, especially for outpatient practices. To address the needs of hospital systems and technology, Christoph Lehmann, MD, FAAP, and George Kim, MD, FAAP, are developing a statement on "Pediatric Aspects of Inpatient Health Information Technology Systems." We will look at other topics to include in future newsletter articles and educational activities in upcoming NCE events. This should help provide additional information that our members felt was lacking; you will hear more in the upcoming months.

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An issue that I have spoken on in the past is how to present the excellent educational topics to the majority of members who can't attend the NCE. Attempts at videotaping and summary description in our newsletter don't do the NCE justice. The Pediatric Documentation Challenge has had limited viewing for those in some local regions. Some chapters have tried to put together pediatric scenarios based on EHR systems by vendors running software to attract the pediatric practice. At this year's event, there was another challenge to the vendors to create online animation that would show how each system would meet the pediatric scenario not limited by time, presenter nerves, or equipment snafus. Unfortunately no vendor has provided such a presentation yet.

Continuing to look at innovative ways to share information, I have been wondering if a blog, an online narrative that can allow direct commentary from readers, would be used by COCIT members. Are podcasts or other similar technologies that allow online audio or video broadcasting something we should investigate? I am looking for your ideas and innovations to share how technology can improve your practice work flow, patient tracking, and clinical decision support. You can reach me with your ideas at msimonian@aap.net.

Editor's Column

By David C. Stockwell, MD, FAAP
Editor, cocitnews

Welcome to the latest edition of *cocitnews.* Our members continue to participate in amazing health information technology (HIT) projects and shape national HIT policy. The articles contained in this edition will certainly show their breadth of experience. We are all the beneficiaries of their hard work. As is noted by several of our Council on Clinical Information Technology (COCIT) officers, the policies revolving around pediatric HIT are barely formed and in some cases may be misguided. In other areas pediatricians are putting the final touches on HIT projects. All of this reflects the tremendous activity in pediatric HIT. Hopefully this newsletter serves to inform our members about the activity of our high-profile members as well as motivate some to become more involved.

One article that sums up the reason for me why we work so hard on trying to perfect pediatric HIT is by Kristin Benson, MD, FAAP. She is correct that the real reason that we become involved with HIT is that we want things to be better for our patients. HIT solutions hold incredible promise, but the solutions are not simple and require a large volume of optimization work. So if you have an experience to relate about HIT, are interested in learning more, or just want to give a few comments, please consider writing me at dstockwe@cnmc.org. Thank you to all of the authors for an excellent edition.

Content Submission

Would you like to contribute to this newsletter? Articles should be approximately 500 to 1,000 words in length. Submit articles to Beki Marshall, COCIT staff, at bmarshall@aap.org.

Watch the COCIT Web site at www.aapcocit.org for information on submission deadlines for the fall 2007 issue.

An Open Letter to Certification Commission for Health Information Technology and Electronic Health Record Vendors

By Joseph H. Schneider, MD, MBA, FAAP
Vice Chairperson, Council on Clinical Information Technology

Subject: Some Certification Commission for Health Information Technology–certified electronic health records may not be suitable for the care of children because child health care is *not* a specialty.

In 2006, the Certification Commission for Health Information Technology (CCHIT) produced the first list of certified ambulatory electronic health records (EHRs). Growth charts were to be included in the required features, but at the last minute were removed from the list. The rationale was that growth charts are "specialty-specific" and that the "average" EHR didn't need them. Growth charts have now become a sort of lightning rod with articles in the popular trade press using them as an example of how CCHIT almost was "excessive" in its requirements and "shanghaied" by the pediatricians.

Arguments for excluding growth charts are 1) adult care doesn't require them and 2) pediatrics is a specialty. The former is true, but the latter is not. Thinking of pediatrics—the care of children—as a specialty is a cultural phenomenon. For example, most of us don't think of adult internal medicine as a specialty, but internal medicine physicians treat far less than 50% of the US population. Children make up about 33% of the US population.

According to the CCHIT Web site, certification is supposed to provide an assurance that *"an EHR product meets basic requirements for functionality…interoperability…and security…."*

Are growth charts a "basic requirement for functionality" in documenting and evaluating the care of children? The American Academy of Pediatrics (AAP) certainly thinks so, and it's difficult to think of adequately assessing a child's development, at least physically, without them. When will growth charts be a part of the "core" CCHIT-certified EHR? This is still unknown. We don't have a commitment from CCHIT and overcoming the belief that child health care is a specialty is going to take a lot of additional education and lobbying.

(As an aside, this discrimination against child health care in EHRs isn't limited to CCHIT. President Bush's recent executive order addressing health information technology completely excluded Medicaid from consideration.)

What does this have to do with you, a Council on Clinical Information Technology (COCIT) member?

Powerful forces are rapidly setting the foundation for the future of EHRs and personal health records (PHRs). Many don't want so-called "core" EHRs and PHRs to have the features they need to properly care for children. As a result, some CCHIT-certified EHRs currently are essentially unsafe for use in children's health care.

A small group of COCIT members (S. Andrew Spooner, MD, MS, FAAP; Eugenia Marcus, MD, FAAP; Alan Zuckerman, MD, FAAP; and others) are working hard in organizations like CCHIT, Health Level 7 (HL7), and ASTM to ensure that basic child health features are included in "core" EHR and PHR requirements. But they need help. For example, several of them will soon be rotating off of CCHIT subcommittees and will need to be replaced. There are no guarantees that these positions will be filled by pediatricians.

To paraphrase Edmund Burke's famous saying about good and evil, *"All that is necessary for the triumph of child-unfriendly EHRs is that pediatricians do nothing."*

There are an enormous number of activities in which pediatrics needs representation. COCIT is involved in much more than standards and helping community pediatricians with EHR choices. Mark A. Del Beccaro, MD, FAAP, for example, is chairing the CCHIT inpatient work group and is heavily involved in computerized physician order entry research.

So please get involved. Subscribe to the COCIT e-mail list (if you haven't done so already) and report what's happening in your practice, hospital, region, and state on the list (cocit@listserv.aap.org) and to Beki Marshall at the AAP. Rate your EHR vendor on the COCIT Web site (www.aapcocit.org/emr). It's important that each of us contributes to the child health informatics effort at this critical time.

Update on the Certification Commission for Health Information Technology

By Eugenia Marcus, MD, FAAP
Member, Council on Clinical Information Technology Executive Committee

When you walk down the aisles of a medical meeting exhibit hall, there are rows of electronic health record (EHR) companies eager to attract you to their products. On their displays are several statements of prizes they won or recommendations they earned. Now amidst all the listings there is a new one: CCHIT Certified. Pay attention to this one.

The Certification Commission for Health Information Technology (CCHIT) was created by several technology organizations and supported by many medical specialty societies, including the American Academy of Pediatrics (AAP). Now funded by a grant from the US Department of Health and Human Services, this organization is tasked with assuring the purchasing community that the EHR in which they are about to invest really can do the things they need it to do to run their practices.

This certification is more than a beauty contest. No slick salesperson wowed an audience. There was no contest or opinion poll. The EHR vendor had to sit for an examination. Think of it as a board examination for EHRs. They had to prove that they could perform a list of more than 200 functions from the very basic (eg, record a name, address, and phone number) to the complex (eg, document name changes and still be able to locate the record based on the former name[s]).

The 2006 criteria aimed to test the core functions of an EHR and to include functions that physicians will need to meet the various pay-for-performance criteria and quality assurance tasks being asked of physicians' offices today. The criteria were also vetted against market availability. Functions deemed necessary but not widely available are road mapped for future-year certification. The 2006 certification is good for 3 years. For 2007 certification, 80 additional functions are being added that will raise the bar on what an EHR is capable of doing. So going forward, it will be important to know not only that a company is CCHIT certified, but for what year.

As each year goes forward EHRs will get closer to interoperability. This will allow EHRs to exchange information and actually be able to import information from one system to another. The standards to accomplish this are being established now and will be tested in future years. With such a mobile population,

having medical records that will travel with you will increase patient safety by having the right information available at the right time. It will also avoid duplication of testing and imaging when these results can travel with the patient and be accessed when needed. Needless to say, interoperability will save the whole health care system money.

Keeping in mind pediatric patients and their unique needs is the added task of all of the pediatricians that serve on the CCHIT work groups. Specialty-specific certification has not been addressed yet but is being considered. But the AAP has addressed this in a policy statement, "Special Requirements of Electronic Health Records Systems in Pediatrics," to be published in the March 2007 issue of *Pediatrics.* Just because the CCHIT criteria didn't include a particular function (eg, growth charts) doesn't mean a vendor doesn't have it. It just means that the vendor was not tested on it.

So CCHIT Certified should be the floor when searching for an EHR, but specifying additional pediatric functions should be part of your request for proposal and you should test that those functions are there and work. The AAP, through the Pediatric Awards at the Towards the Electronic Patient Record (TEPR) conference and the Pediatric Documentation Challenge at TEPR and the AAP National Conference & Exhibition, will help you round out your search and find the system that will work in your office.

Health Level 7 Pediatric Update

By S. Andrew Spooner, MD, MS, FAAP, and David Classen, MD (not pictured)
Cochairs, Health Level 7 Pediatric Data Standards Special Interest Group

The Health Level 7 (HL7) Pediatric Data Standards Special Interest group (PeDSSIG) has succeeded in getting a wide range of functions essential for the care of children into the HL7 functional model standard for electronic health records (EHRs) that was authored by the HL7 EHR Technical Committee (TC). Following is a list of the most recent additions, as of December 2006. This model is a detailed description of the things an EHR may do, and it is the basis for functional standards for what an EHR should do. The PeDSSIG is working to include child health functions into the basic model. It is also working on specialty-specific profiles of the model for neonatology and other pediatric subspecialties. All American Academy of Pediatrics Council on Clinical Information Technology members are invited to join the HL7 PeDSSIG. There is no cost to join, although if you elect to join HL7 itself, you do get to vote on data standards like this.

The latest child health-compatible functions to be added to the EHR TC functional model ballot include

- Simplifying the registration process for families or related patients by creating a new Conformance Criteria: If related patients register with identical data, THEN the system SHOULD provide the ability to propagate the common data to all of their records.
- Adding "time of birth" and "date of birth" in the description of an EHR.
- Recognizing the need to account for multiple and varied decision levels by adding a new Conformance Criteria: The system SHALL provide the ability to document, for each patient, patient's personal representative's (eg, guardian, surrogate) varying levels of consent or authorization.
- Adding 2 new Conformance Criteria related to caring for patients with allergies: The system SHALL provide the ability to capture and display the date on which the allergy information was entered; and the system SHOULD provide the ability to capture and display the approximate date of allergy occurrence if exact date is not known.

- Assisting caregivers in planning and discussing well-child care by providing information about when immunizations are due by modifying an existing Conformance Criteria: The system SHALL provide the ability to recommend required immunizations and when they are due, based on widely accepted immunization schedules.
- Recognizing that standard immunization schedules offer different recommendations based on patient risk factors (usually chronic disease) by adding a new Conformance Criteria: The system SHOULD provide the ability to recommend variations to immunizations and immunization schedules.
- Recognizing the need to record incidents affecting successful medication administration by modifying an existing Conformance Criteria: The system SHALL provide the ability to capture all pertinent details of the medication administration including medication name, strength, dose, route, time of administration, administrator of the medication, and exceptions to administration.
- Adding 6 new Conformance Criteria that support patient-specific dosing and warnings.
  - The system's drug dosage functions SHOULD work using any component of a combination drug (eg, acetaminophen-hydrocodone).
  - The system SHOULD compute drug doses, based on appropriate dosage ranges, using the patient's body weight.
  - The system SHOULD allow the user to specify an alternative "dosing weight" for the purposes of dose calculation.
  - IF the maximum daily doses are known, THEN the system SHALL apply the maximum dose per day in dosing decision support.
  - The system SHOULD allow the recording of the dosage used to calculate the dose for a given prescription.
  - The system SHOULD provide the ability to re-prescribe a medication from a prior prescription using the same dosage but updating the body weight.
- Providing for age-based norms: The system MAY compute normal ranges for data based on age and other parameters such as height, weight, ethnic background, and gestational age.
- Providing for norms defined by multiple criteria, such as blood pressure, which is normed by age and height: IF required by the scope practice, THEN the system SHALL capture patient vital signs such as blood pressure, temperature, heart rate, respiratory rate, and severity of pain as discrete elements of structured or unstructured data.

For questions about the HL7 PeDSSIG—especially how you can join and participate—visit www.hl7.org or e-mail Joy Kuhl at joy.kuhl@chca.com.

The Council on Clinical Information Technology Electronic Medical Record Review Site: www.aapcocit.org/emr

The Council on Clinical Information Technology (COCIT) officially launched the Electronic Medical Record (EMR) Review Web site in July 2005 and now has nearly 90 reviews posted. Please help us make this a valuable tool for all American Academy of Pediatrics (AAP) members by rating your EMR today!

Still looking for an EMR? See your colleagues' rankings and review comments based on their experiences.

COCIT EMR REVIEW SITE
www.aapcocit.org/emr

COMMITTEE UPDATES

Policy Committee

By Mark A. Del Beccaro, MD, FAAP
Chairperson, Council on Clinical Information Technology Policy Committee

The Policy Committee has been incredibly productive thanks to the great efforts of current and past members of the Policy and Executive committees, along with other active members of the Council on Clinical Information Technology (COCIT) who have worked with the Policy Committee. I will briefly outline some of their contributions. These are important milestones and will help serve as great references for many groups working on standards for electronic health records (EHRs) and making sure they are responsive to the needs of pediatrics.

1) S. Andrew Spooner, MD, MS, FAAP, completed the clinical report, "Special Requirements of Electronic Health Records Systems in Pediatrics," and it will be published in the March 2007 edition of *Pediatrics.*
2) A policy statement and technical report by Robert Gerstle, MD, FAAP (past chairperson of the Policy Committee), and Christoph Lehmann, MD, FAAP, "A Rationale and Functionality Requirements for e-Prescribing Systems in Pediatrics," were submitted to the American Academy of Pediatrics (AAP) Board of Directors in late October 2006 and will hopefully be approved soon.
3) Alan Zuckerman, MD, FAAP, and Joseph Schneider, MD, MBA, FAAP, have been making progress on their statement on personal health records.
4) Dr Lehmann and George Kim, MD, FAAP, wrote an intent for statement (technical report) on "Pediatric Aspects of Inpatient Health Information Technology Systems," which was approved by the AAP Board of Directors in October 2006.
5) Dr Spooner will review the statement "Telemedicine: Pediatric Applications" (published in June 2004) and recommend reaffirmation, revision, or retirement.
6) Eugenia Marcus, MD, FAAP, agreed to review the statement "E-mail Communication Between Pediatricians and Their Patients" (published in July 2004) and recommend that it be reaffirmed, revised, or retired.

Several members of the Policy Committee and frequent guests of the committee have been very active in the Certification Commission for Health Information Technology (CCHIT). Dr Marcus (COCIT Executive Committee/Policy Committee) continues to serve on the Ambulatory Functionality Work Group; Dr Zuckerman (COCIT Executive Committee and frequent guest to Policy Committee) serves on the Interoperability Work Group (Ambulatory Interoperability Cochair); Dr Schneider (COCIT Vice Chairperson/Policy Committee) serves on the CCHIT Process Work Group; and I (COCIT Executive Committee/Policy Committee Chairperson) serve as cochair of the Inpatient Functionality Work Group. These COCIT members are helping to make sure the needs of children are not forgotten. COCIT members are also working with Children's Hospital Corporation of America (CHCA) to try to get the immunization criteria accepted. All pediatricians and COCIT members should help in this effort. Respond during the CCHIT public comment periods (see the CCHIT Web site at www.cchit.org for public comment periods).

I again want to thank the COCIT Policy Committee members who have recently stepped down from the committee, including Dr Gerstle (past chairperson) and Dr Lehmann. Their efforts and help have been crucial to the success of the committee and we hope to keep them involved. I also want to welcome new member Eric Tham, MD, who joins the committee while finishing his pediatric emergency medicine fellowship as a Masters student in the Department of Biomedical Informatics at the University of Pittsburgh. Dr Tham joins the other current committee members—Gregg Lund, DO, FAAP, and Dr Marcus—as well as frequent guests Dr Spooner; Dr Zuckerman; Willa H. Drummond, MD, FAAP; and of course Mark Simonian, MD, FAAP, COCIT chairperson. The Policy and Executive committees could never operate without the tireless help and organization of Beki Marshall of the AAP. While her official title is manager, health information technology initiatives, we call her wonderful.

Please get involved. We are always looking for ways for COCIT members to get involved in helping on projects, policy statements, lobbying—almost anything.

Applications Committee

By Michael Leu, MD
Chairperson, Council on Clinical Information Technology Applications Committee

This month, we are conducting a survey of the Council on Clinical Information Technology (COCIT) membership. This survey occurs every 2 to 3 years and allows the Executive Committee to better focus our efforts on the wishes of the membership. I would like to encourage you to participate in this effort. The survey will be conducted through SurveyMonkey; please watch your e-mail for the survey link.

Also, if you could make sure that your American Academy of Pediatrics (AAP) membership information is current (www.aap.org; log into the Member Center and use "Update my Personal Profile" as necessary), it would be helpful.

As the Applications Committee chairperson, there are 3 things that I would like to ascertain through the survey.

1. Do you think that it is important for COCIT to facilitate the creation of electronic tools for you to use? If so, which tools would you like, and how would you like for new tools to be announced? These could be as simple as clinical calculators for height, weight, or body mass index percentiles; immunizations; or growth charts, or more sophisticated automated screening tools.
2. Do you have software- or tool-development expertise or tools to share with other COCIT members (that may or may not require a little polish)? Would you be interested in participating in a subgroup to develop or coordinate development of these tools?
3. Which electronic health record systems are you using or have you had experience with? Would you like to mentor or be put in contact with others on COCIT using similar systems?

We are also interested in any opinions you may have as to policies or educational opportunities that you believe may be facilitated by COCIT—we are working closely with other groups within the AAP on policies for quality improvement facilitated by health information technology and on the information technology–related educational needs of our members. Let us know what you'd like for us to do, and we'll take that input into consideration! Thanks!

Education Committee

By Lewis Wasserman, MD, FAAP
Chairperson, Council on Clinical Information Technology Education Committee

Hello from your Education Committee chairperson and Technology Learning Center (TLC) coordinator (also known as Alpha-Geek).

Last year's TLC was very successful, despite the lack of a hands-on teaching area. I do not have all the numbers yet, but our seminars were well attended and the feedback I have seen has been positive. The Pediatric Frontier Forum was a resounding failure, attended by a greater number of faculty than audience, but I did receive some worthy suggestions and feedback. It will not be repeated this year.

This year's schedule is shaping up nicely, and although not finalized as I write this, we will have a total of 51 hours of programming this year—almost 2 full tracks (including some sessions we are cosponsoring with other groups). I believe this is the most programming ever sponsored by our group (regardless of what initials we have gone by). We have some innovations in mind for the demonstration area this year, most notably docent tours of our sponsors' booths led by our faculty. This will be an opportunity to look critically at specific electronic health record (EHR) functions and will increase exposure for our sponsors.

Highlighting the 2007 TLC will be a lecture by Mark Leavitt, MD, PhD, chairperson of the Certification Commission for Health Information Technology, and our Alan Zuckerman, MD, FAAP. The Pediatric Documentation Challenge will make its third TLC appearance, and we will have Council on Clinical Information Technology–sponsored seminars on a wide variety of topics, as usual. New topics this year will include personal health records, pay-for-performance, and immunization registries.

Our principal goal for 2007 is to garner funding for the hands-on computer area that we have had almost every year. Any suggestions and assistance in this endeavor are most welcome.

I would like to acknowledge Eugenia Marcus, MD, FAAP, and Joseph Schneider, MD, MBA, FAAP, for bringing the Pediatric Documentation Challenge to our stage. This event has been very well attended despite the lack of continuing medical education. If you are considering implementing an EHR, you want to be here for it this year. All of our faculty members deserve special praise, not the least because I force them to work long hours without pay and wear Geek pins. Mark Simonian, MD, FAAP, and Ali Loveys, MD, FAAP, have been especially generous with their time and support. My job has gotten too big for just me, so I would like to acknowledge Donna D'Alessandro, MD, FAAP; George Kim, MD, FAAP; Christoph Lehmann, MD, FAAP; Don Lighter, MD, MBA, FAAP; and Dr Loveys, who have agreed to help shoulder some of the burden this year. (I'll get to the last half of the alphabet later.) I could not end this without a special shout-out to Beki Marshall, our intrepid staff person, who has among her 9,824 duties the momentous responsibility of trying to keep me on track to meet deadlines and get everything done.

As always, feel free to contact me at nce07@wasserman.org with any comments, suggestions, or abuse. All is welcome.

From the National Conference & Exhibition: The Council on Clinical Information Technology 2006 Scientific Abstract Session

By George Kim, MD, FAAP
Council on Clinical Information Technology Abstract Chairperson

The Council on Clinical Information Technology (COCIT) 2006 Scientific Abstract Session at the National Conference & Exhibition in Atlanta, GA, was held on October 8, 2006. During the session, there were a total of 17 platform presentations and posters focusing primarily on pediatric clinical care and the application of information technology, but also on implementations and their challenges within pediatric health care institutions. The winner for best presentation was awarded to Donald Lighter, MD, MBA, FAAP, for "Challenges of EHR Implementation in a Pediatric Subspecialty Hospital System," which examined the issues of institution-wide deployment of the electronic health record within the Shriners System. Honorable mention was given to Reid Thompson, MD, for "The Impact of Computer-Assisted Auscultation on Physician Recognition and Interpretation of Heart Murmurs," and to Allison Agwu, MD, for "A Novel Web-Based Antimicrobial Approval Program Improves Efficiency, Communication, User Satisfaction, and Results in Significant Cost-Savings."

Many thanks to the COCIT members who served as judges.

COCIT Chairperson Mark M. Simonian, MD, FAAP, presents the 2006 Byron Oberst Award to Richard Shiffman, MD, FAAP.

Dr Simonian congratulates Donald Lighter, MD, MBA, FAAP, on winning the 2006 Best Paper Award. Dr Lighter received the award for his abstract, "Challenges of EHR Implementation in a Pediatric Subspecialty Hospital System."

Executive Summary:
Council on Clinical Information Technology Executive Committee

Conference Call
October 4, 2006
and
Meeting
Hilton Atlanta, GA
October 9, 2006

The Council on Clinical Information Technology (COCIT) Executive Committee met via conference call on October 4, 2006, and in Atlanta, GA, on October 9, 2006. The Executive Committee discussed the following items:

- Some concern was expressed with regard to very short time frames for response to requests for review of external documents for public comment and American Academy of Pediatrics (AAP) policy documents. Often, the time frame to prepare a response is extremely short. It was suggested that COCIT develop a method of distributing responsibility for reviews to ensure that such items are covered and deadlines are met.
- The COCIT core and noncore budgets were reviewed.
- The COCIT Annual Report of Councils for fiscal year 2005–2006 was reviewed.
- Recommendations are being developed for the 2007 Annual Leadership Forum to address sharing data from electronic health record (EHR) systems and the development of regional health information organizations.
- All AAP committees, sections, and councils are assigned to an action group that meets during a breakout session at the Annual Leadership Forum. COCIT has chosen to participate in the Practice Action Group.
- Open Executive Committee positions for the 2007 election were discussed. A Nominations Committee has been appointed to select candidates.
- During the COCIT Council Program for Council Members (H Program) at the 2006 National Conference & Exhibition, the COCIT Best Paper Award winner will for the first time have been chosen by a panel of judges based on abstract content and presentation.
- The Executive Committee discussed the possibility of establishing a mentorship program to cultivate volunteerism and future leaders.
- The report from the Policy Committee noted progress toward revising the statement on EHRs; the development of a new policy statement and technical report on e-prescribing; the development of a new policy statement on personal health records; the development of a new technical report on inpatient health information systems; and the need for standardized vocabulary for pediatrics.
- The COCIT representative from the Section Forum Management Committee urged COCIT to consider how to relate policy activities to education activities to implementation projects.
- *cocitnews* Editor David C. Stockwell, MD, FAAP, has indicated that he is seeking a volunteer COCIT member to serve as coeditor for the spring 2007 issue and take over as editor for the fall 2007 issue and beyond.
- The report from the Education Committee included plans for the 2007 Council Program for Council Members (H Program), scientific abstract session, and Technology Learning Center (TLC).
- Additional Web resources for the 2006 TLC were posted on the COCIT Web site. The new AAP Practice Management Online site also features lots of COCIT content. COCIT will consider developing a wiki as an additional vehicle for information sharing and member communication.
- The Executive Committee heard reports from liaisons to the
  - AAP Section on Residents
  - Physicians Electronic Health Record Coalition
  - Certification Commission on Health Information Technology
  - Health Level 7 Pediatric Data Standards Special Interest Group
  - eHealth Initiative

  - American Health Information Community/ ANSI Health Information Technology Standards Panel
  - AAP Steering Committee on Quality Improvement and Management
  - AAP Department of Federal Affairs
  - Electronic Health Records Vendors Association
  - Partnership for Policy Implementation
- An update was provided on the imminent release of the toolkit and speaker's kit on EHRs.
- A report was provided on the EMR Review Web site.
- The Applications/Technology Committee was replaced by a new Application Committee that will focus on the application of policy and education to new programs and will be chaired by Michael Leu, MD.
- Reports were provided on the formation of the Alliance for Pediatric Quality and ongoing efforts to reach out to AAP chapters.

The following recommendation was made:

RECOMMENDATION: That the COCIT Affiliate Membership category be expanded to include allied health professionals and office managers.

The COCIT Executive Committee will next meet in spring 2007 (dates and location to be determined).

For a complete set of minutes or further information on specific items, please contact Beki Marshall, manager, health information technology initiatives, at 800/433-9016, ext 4089, or bmarshall@aap.org.

Designate Your Friends of Children Fund Contribution for Council on Clinical Information Technology Activities!

Did you know that you can designate your tax-deductible Friends of Children Fund contribution to specific programs or even a section or council? You can donate online at https://www.aap.org/sforms/fcfform.htm. Toward the bottom of the form, where it says, "Please apply my gift to:" select "a program of my choice" and type "COCIT" in the text box. Donations received in this manner will supplement your COCIT dues and allow COCIT to continue ongoing programs or launch new programs.
We appreciate your support!

Do We Know How to Find You?

To ensure that your contact information is kept up-to-date (so your colleagues can find you), please take the time to visit the Membership Information Change Form (www.aap.org/moc/memberservices/updatememberinfoform.cfm). You need to be logged into the Member Center to get to this link. If you prefer to contact us by phone or fax, you can do this by calling 866/THE-AAP1 and providing one of the AAP customer service representatives with your updated address information.

Microsoft's Common User Interface

By J. Randolph Bak, MD, FAAP
Member, Council on Clinical Information Technology

At the Microsoft Healthcare Users Group Tech Forum 2006 in August on the Redmond Campus, one talk stood out to me as a physician: "Towards a Common User Interface: Lessons Learnt from the NHS" (see slides at www.mshug.org/docs/techforum_fall2006/njordan.pdf). As part of England's National Health Service (NHS) push for technology in health care, Microsoft has contracted with the NHS to develop tools to facilitate access and utilization of health information. This presentation by the Microsoft team dedicated to this job focused on the concept of a common user interface (CUI), but gave a glimpse of what an electronic health record (EHR) user interface could be in the future.

In the background lies the NHS program, Connecting for Health, which aims to provide a backbone of technology infrastructure for health care information throughout the entire country. By contrast, under this program, each of 5 regions is selecting an EHR application on a regional basis. Each had a different large consulting firm. Each contracted with different large EHR vendors for the application that would go to hospitals and clinics in their area.

While this regionalization may have made sense from a contractual and strategic standpoint, it presents a very real clinical problem: when providers moved from facility to facility in the country, they could be faced with very different user interfaces. Such differences, if substantial, would at best be frustrating and lead to inefficiency. At worst, they would distract enough to rise to an issue of patient safety.

Hired to address these issues, Microsoft created a team of designers, who then pulled in clinicians from the NHS. Getting down into the nitty-gritty of work flows, they developed a set of principles that were distilled into a CUI design guide with goals of ease of use, patient safety, and consistency. Going further, a software development kit was created that would allow each vendor to build a Windows-based application for its system, following the design guide principles. These tools would allow each vendor to keep a look and feel consistent with its brand, while clinicians would see a functional environment whose arrangement and signals would be familiar wherever they worked. Analogies can be made to phones or vehicles, from cars to large trucks—despite the variety of forms, the typical user can function in each instance.

This design team was sequestered from the rest of Microsoft as it imagined its ideal user interface. As the concept evolved, the team began to transcend what the NHS and its vendors could handle. For the project, a modest extension of current standards for EHR user interfaces was adopted. During this talk, the team presented some of the ideas that went beyond the NHS CUI. Suffice it to say, there remains a lot of interesting work in how to present clinical information over a networked computer framework. The team reported that even the Vista developers found some surprises.

I took away a sense that we are just beginning to work with information technology in health care. Apple and now Microsoft have been refining the notion of the user interface. More powerful graphics and processors, connected with faster networks, sitting behind better screens, on devices that are increasingly more practical, are combining to create the possibility of a much richer information environment. All of this geeky stuff can be a lot of fun, for geeks, and others, I suppose. Not to be ignored are some hardheaded issues about which designs can deliver care that is safer and work flow that is at least not less efficient. Whether centrally dictated or sorted out in the marketplace, we clinicians have an important role to play if these tools are to achieve their full potential.

The Art of Medicine

By Kristin Benson, MD, FAAP
Member, Council on Clinical Information Technology Executive Committee

As a physician, I appreciate art and hate to see it tainted. Art in medicine belongs where the complexity of human interactions and clinical judgment cannot be replaced by a machine. It belongs where we need creative thought, such as in research ideas and design. It does not belong, like an elephant in the room, where we are missing the benefits of modern technology. It is time for physicians to wake up and realize that without computer technology, we are behaving like the charlatans and quacks of days gone by.

Do aspects of your practice feel more and more like Bill Murray in *Groundhog Day?* Do you feel that you are doomed to repeat the same flawed day over and over until you somehow find the insight to get it right? If there is an art to medicine, where is the science to what we are doing in primary care? Why aren't we learning from our collective experiences? What human being could do an adequate review of the thousands of peer-reviewed articles published each month? How can we accept all the errors, big and small, that occur without demanding better systems to support our efforts? How in the world can we justify the appalling lack of evidence, particularly in primary care, by calling it an "art"? This needs to change.

We work with blinders on, telling ourselves over and over that we deliver good health care because we are paid for doing it this way. We justify what we are doing because we are working very, very hard. But can we really divulge ourselves of responsibility for the health care system we work in? How often is good care delivered by a visit in the examination room without sufficient patient education and follow-up? Are we always optimizing access by requiring an examination so that we can charge for our time? Is the patient education we distill into 2 minutes effective? Is it enough to scrawl a barely legible note on the page for the medical record so we can go on to the next room, with no effort given to chronic disease management? Can we expect to manage chronic disease in 10-minute visits among multiple providers when there is no problem list on the chart? What about sentinel, harmful events resulting from our treatments that are rare but devastating? How can we justify not sharing our experiences to prevent these from happening? How can we ever move forward with the current health care model? Why is everyone trying to manage quality except the physicians themselves?

I can remember the amazement I had at first finding things on a computer. I remember using MapQuest the first time. I remember finding the Agency for Healthcare Research and Quality and the National Library of Medicine, e-mailing national leaders from my living room and getting helpful replies, using a PDA with a drug database, and searching PubMed. But there was even more! What would happen if there were stored clinical data at the point of care in an electronic database? What if everything we did could be saved and analyzed statistically to find out what actually works best for our patients? How can we not be excited about this? Many contemporary issues are problems of information management, including practice redesign. The steps are always to collect objective data, perform statistical data analysis, and provide feedback of the knowledge gained.

Once that is done, the rest can be left for "art." We need to become savvy enough to realize what a change the availability of electronic data can make. Every physician should know what a database is and why it is important. We need to advocate for primary care research, decision support, and disease management tools. If we do not, stakeholders who are more vocal and committed, such as the payers and members of the health care bureaucracy, will be the ones to dictate how these systems are designed and implemented.

And what about *quality?* Do you want *Current Procedural Terminology* codes to determine quality? Why would physicians want such a crude measure to

be used for such a complex issue? Wouldn't you rather see quality measures based on clinical data from the point of care?

Are you willing to use information technology to further the science of medicine? Perhaps you wish to be a physician who can truly practice an art by forging all available tools into an effective practice. If computer tools do their job, we will push the artistic envelope. We will unveil Michelangelos of clinical medicine, Monets of psychology, and Ruebenses of research who used to be drawing with crayons!

Linux for the Pediatrician: How and Why

By Eric L. Beyer, MD, FAAP
Member, Council on Clinical Information Technology

As a general pediatrician in clinical practice, I use computers for a wide range of clinical tasks including patient scheduling, billing, and dictation. I have found that Linux is among the most practical and reliable solutions for my office.

As a desktop operating system, Linux has been available since the late 1990s. It is not created and sold by any one software company. Rather, many distributions are made available by different companies and organizations. Many of these distributions are made available for free download. A good place to look for information about specific distributions as well as links to the disk images is www.distrowatch.org. This approach requires that you know how to download the file or files and burn the disk images onto CDs. You can sometimes request a CD be mailed to you. Some distributions, like Ubuntu (Canonical, www.ubuntu.com), will send you a CD for free; others charge a nominal fee, often less than $10.

There are many reasons to consider using Linux. The first is cost. If you are comfortable with getting and installing the operating system, it costs you nothing at all. If you want a physical CD and telephone support, a commercial version is available for about $50 to $60. All Linux distributions give you access to hundreds of very functional, free tools. OpenOffice is a complete office suite that includes a word processor, spreadsheet, database, and presentation tools that open and save files in Microsoft Office proprietary file format. Firefox and Konqueror are Web browsers that work on most sites, including www.aap.org. You can get most, if not all, of your work done on an operating system that, compared with its competitors, is dirt cheap.

Many distributions also make available a commercial version of their product. Companies such as Novell (SUSE Linux Enterprise Desktop), Red Hat (Red Hat Enterprise Linux), Linspire, and Canonical (Ubuntu) offer telephone support. Most free versions offer support in their Web-based forums.

Linux tends to run faster on older hardware. Vista, the newest version of Windows, will tax most current computers. This is especially so if you want to use the latest features of that operating system (www.eweek.com/article2/0,1895,1843945,00.asp). Linux can be reasonably expected to run on machines that are several years old (http://polishlinux.org/choose/linux-on-old-hardware). So you won't have to replace your office computers quite so quickly and this could save you some real money down the road.

Another major consideration is security. There are an estimated 60,000 known viruses for Microsoft Windows and about 40 for Linux. Many reasons have been offered for this, including the relative popularity of Windows, the fact that Linux won't let programs be installed or change system files without a password, and the very nature of proprietary and open-source software. Because you need a password to install software, you can also more easily lock down computers used by your staff. The bottom line is that trading in Windows for Linux will greatly reduce the threat to your computers and data

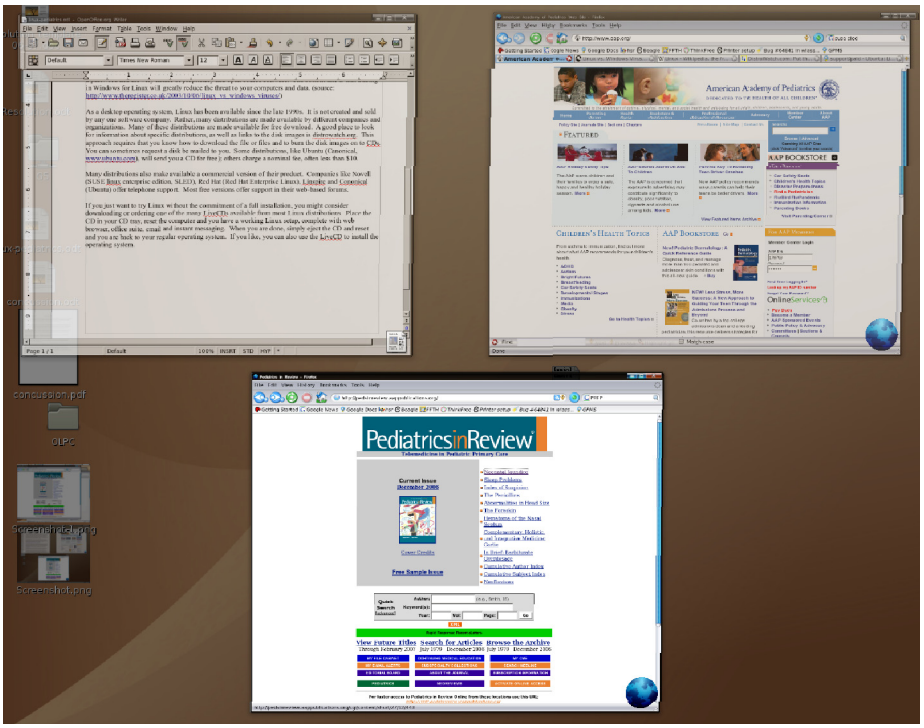
(www.theregister.co.uk/2003/10/06/linux_vs_windows_viruses). There are a few viruses affecting Linux. In addition to security updates offered free by individual Linux distributions, there is virus scanning software that is open source (eg, Clam AntiVirus, www.clamav.net) and commercial (eg, Symantec, www.symantecstore.com/dr/v2/ec_Main.Entry17C?SID=49999&SP=10023&CID=151796&PID=811654&PN=1&V1=811654&CUR=840&DSP=&PGRP=0&ABCODE=&CACHE_ID=0).

Getting started with Linux is easy with low, if any, risk. If you just want to try Linux without the commitment of a full installation, you might consider downloading or ordering one of the many LiveCDs available from most Linux distributions. Place the CD in your CD tray, reset the computer, and you have a working Linux setup, complete with Web browser, office suite, e-mail, and instant messaging. When you are done, simply eject the CD and reset and you are back to your regular operating system. If you like, you can also use the LiveCD to install the operating system.

Most pediatricians use Microsoft Windows as the primary operating system on their work computers and are reluctant to consider another one. You may have a specific application that has no version for Linux. If this is the case for you, consider a virtualization tool. Virtualization lets you run more than one operating system on your computer at the same time. For example, you can run Linux as a window inside Windows. You can also run Windows as a window under Linux. Two popular tools for doing this are Xen (www.xensource.com) and VMware (www.vmware.com). Also consider that virtualization is often offered directly by commercial Linux distributions. Another option is dual booting. This is when you have each operating system on its own hard disk drive or its own partition on your existing drive (www.xensource.com). Each of these options should make it easier for you to implement Linux in settings where Windows predominates.

If you're convinced but need guidance on migrating your data and software from Windows (or Mac OS X), help abounds. Most distributions have free help on online forums and Internet Relay Chat channels. These are often moderated by key people in the distribution and are usually timely. If you decide to go with a commercial distribution, you can typically just call for help too. There are also a number of helpful Web sites with instructions on how to migrate (www.tomshardware.com/2004/03/29/migrating_from_windows_to_linux/index.html). Lastly, there are hundreds of Linux user groups around the world that answer e-mail and meet regularly (www.linux.org/groups).

Linux is more than just a free (or near-free) operating system. It is a powerful alternative to the PC/Windows paradigm. It is typically more secure, easier to lock down, and very easy to set up. And the tools it comes with will do most, if not all you need it to do. So give Linux a try.



Ubuntu Linux OpenOffice and Firefox.

An Introduction to Pediatric Brain Wave Biofeedback Technology

By David Paperny, MD, FAAP, FSAM, cASCH
Member, Council on Clinical Information Technology

Electroencephalographic (brain wave) biofeedback (usually called *neurofeedback)* is an application of personal growth and change that helps correct problems as diverse as attention-deficit/hyperactivity disorder in children and drug addiction in young adults. This technique is also useful for pediatric patients with chronic pain, migraine headaches, anxiety disorders, premenstrual syndrome, seizure disorders, chronic fatigue syndrome, obsessive-compulsive disorders, and a number of other difficult clinical conditions. The approach is as cutting-edge technology as current brain chemical research and also grounded in the most ancient understandings of human health.

Neurotherapy practitioners worldwide are now using neurofeedback with adults and children who have learning problems, depression, sleep problems, and other medical and psychological conditions. Most people know about biofeedback, but neurofeedback is far beyond traditional biofeedback, like the space shuttle is beyond the first airplane. The neurofeedback process uses computerized biofeedback to help learn *self-regulation.* The mind-body is an integrated whole with self-regulating mechanisms that are very taxed in our modern society. Neurofeedback enlists the person's own self-regulatory mechanisms to create a state of optimal health, which leads to lasting changes after a number of training sessions. The use of brain wave feedback allows people to develop skills that often take years to learn through traditional approaches.

How does a child learn to control his or her brain waves? An audiovisual display responds when one is producing desired brain wave patterns. This information helps the brain learn to *make normal transitions between brain wave states,* rather than being *habitually stuck in one* state most of the time. The depressed person is often stuck in a low arousal pattern. The anxious person's brain may be producing too much high-frequency brain wave activity; that person can learn to make the transition to a more relaxed, lower arousal state. The child with an attention problem may have trouble making the shift to an alert, focused brain wave state. The person with a substance abuse problem may produce high arousal brain waves and not enough of the "feel good" brain waves. Neurofeedback teaches a natural, permanent tool—before neurofeedback the brain was stuck in a pattern; after training, *the brain becomes more flexible.* Specific brain-based training techniques can identify and address neurophysiologic processes and issues with *precision and speed* unmatched by older approaches. These interventions are specific enough to *abort a migraine* headache in progress without drugs, and general enough to promote the development of *empathy and self-control* in certain individuals.

What can such technology do for healthy people? It is believed that we use about 25% of our brainpower. Optimal performance training with neurofeedback facilitates mental adaptability and higher level brain functions. It trains brain operations to more peak performance and is used extensively in sports performance enhancement for athletes (and it's legal). The evolution of consciousness is both a group and an individual process. High-tech brain training offers an effective, verifiable way to accomplish this task—another doorway to personal progress, to reach higher levels of consciousness. Many people find themselves resistant to approaches such as yoga, meditation, and spiritual practices, but some find it easier to accept the benefits of transformative experiences when they use a technologic approach. Neurofeedback is the most holistic use of technology. Many people all over the world devote a great deal of time and energy learning to regulate their brain waves. They just call it different things—some call it trance work, some

call it meditation, some call it personal healing. They are trying to reach a state of freedom and a more calm and centered way to live.

Brain training technologies are just that, training. There is no magic or instant cure. They require the same kinds of training as do traditional behavioral approaches. This technology does allow a more precise, targeted training process that produces results relatively quickly. Neurofeedback training is a useful and innovative technique and the logical evolution of standard pediatric biofeedback.

Attention Section and Council Members!
2007 Election Update

Web-based Section and Council Elections

In 2007, voting section and council members of the American Academy of Pediatrics (AAP) will vote for open positions on section and council executive committees using an electronic ballot system.

The online ballot as well as the candidates' biographical information will be available beginning March 1 at a dedicated election Web site,www.aap.org/elections. Because not all members have computer access or capability, paper ballots are available (by request only) by contacting the AAP Department of Com-munity and Specialty Pediatrics at 800/433-9016, extension 4079. *Affiliate members are not eligible to vote in section or council elections.*

Ballots, whether paper or online, must be received by the AAP no later than Saturday, March 31, 2007, to be counted. It is hoped that the Web-based ballot is found to be an efficient and enjoyable means by which to vote for the candidate(s) of your choice.

For the Web-based election, section and council members will receive an e-mail notification when the online ballot is available.

Those elected will take office in November 2007 at the AAP National Conference & Exhibition (for sections) or July 1, 2007 (for councils).

Any questions about this service may be directed to Carolyn Mensching, manager, section administration, Department of Community and Specialty Pediatrics, AAP, at 847/434-4079 or cmensching@aap.org.

CALL FOR ABSTRACTS

for the American Academy of Pediatrics
National Conference & Exhibition
October 27–30, 2007
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NCE
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SUBMISSION DEADLINE

April 13, 2007

The Council on Clinical Information Technology (COCIT) is seeking presentations and posters on information technology in pediatric patient care, research, and education for its Scientific Session at the 2007 American Academy of Pediatrics (AAP) National Conference & Exhibition (NCE) in San Francisco, CA.

Section and council programs provide a forum for the discussion of clinical matters or research related to a particular subspecialty or special interest area. Submissions by AAP members and nonmembers are welcome; participation is open to health professionals in any field. (However, some sections require a sponsor for any papers whose authors do not include a member of the section.)

The following sections and councils accept abstracts for presentation at the AAP NCE:

Abstracts are not accepted for general pediatrics or for other pediatric subspecialties or special interest areas not listed as follows.

- Adoption and Foster Care
- Breastfeeding
- Cardiology and Cardiac Surgery
- Clinical Information Technology
- Critical Care
- Emergency Medicine
- Epidemiology
- Hospital Medicine
- Injury, Violence, and Poison Prevention
- Orthopaedics
- Perinatal Pediatrics
- Residents
- School Health
- Sports Medicine and Fitness
- Surgery
- Transport Medicine
- Urology

Submit electronically from the AAP Web site (www.aap.org) under Professional Education & Resources.

Questions? E-mail abstracts@aap.org or call Carolyn Mensching at 847/434-4079.

COCIT E-mail Discussion Lists

COCIT Announcements E-mail List
All Council on Clinical Information Technology (COCIT) members are automatically subscribed to the COCIT-NEWS e-mail list. This list was created for announcements and newsletter distribution. If you have an announcement you would like posted on the list, please send it to COCIT-NEWS@LISTSERV.AAP.ORG. If you would like to be removed from this list, please send a message with UNSUB COCIT-NEWS in the body of the message to LISTSERV@LISTSERV.AAP.ORG.

COCIT (General) E-mail List
Most COCIT members also participate in this list, which encourages open discussion of items of interest to COCIT members. Discussions may include topics such as electronic health records, practice management software, hardware, and other topics related to clinical information technology. To subscribe to the list, send a request with SUB COCIT in the message body to LISTSERV@LISTSERV.AAP.ORG. If you already subscribe to this list and would like to send a message to the list, send your message to COCIT@LISTSERV.AAP.ORG.

COCIT AAP-eProducts E-mail List
There is an additional e-mail list specifically for a discussion on the development of American Academy of Pediatrics (AAP) electronic products and Web services. Staff from the AAP Department of Marketing and Publications have also subscribed to this list so that they can keep COCIT members posted on new product development and get feedback from you. To subscribe to the new list, send a message to LISTSERV@LISTSERV.AAP.ORG with SUB AAP-EPRODUCTS in the body of the message.

COCIT-RES E-mail List
The COCIT-RES list has been established to encourage open discussion among resident members of COCIT on health information technology issues faced during residency. To subscribe, send a message to LISTSERV@LISTSERV.AAP.ORG with SUB COCIT-RES in the message body.

COCIT-HOSP E-mail List
The COCIT-HOSP list has been established to encourage open discussion among hospital-based COCIT members on health information technology issues faced in your institutions. To subscribe, send a message to LISTSERV@LISTSERV.AAP.ORG with SUB COCIT-HOSP in the message body.

***** For All of the Mentioned E-mail Lists**
Digest Version: If you'd like to participate in a list but wish to limit the number of e-mails you receive, try the digest version. Send a message to LISTSERV@LISTSERV.AAP.ORG and in the body of the message, enter SET [listname] DIGEST MIME NOHTML, where [listname] is the name of the list (without the brackets).

To withdraw from a list, send a request with UNSUB [listname] in the message body to LISTSERV@LISTSERV.AAP.ORG, where [listname] is the name of the list (without the brackets). You must send these commands from the e-mail address under which you are subscribed.

COCIT Online Discussion Board
COCIT maintains an online discussion board on the COCIT page of the AAP Member Center (www.aap.org/moc). To post a message to the discussion board or see previous postings, log into the AAP Member Center. On the left-hand side of the screen, you will see a drop-down box with a list of the sections and councils to which you belong. Select Council on Clinical Information Technology from the list. On the COCIT page, click on the COCIT Discussion Group link.

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Officer Listing

11-31/0307

Interested in Joining COCIT?

To join COCIT, contact AAP Membership at 800/433-9016. Ask for Membership. E-mail: membership@aap.org

Don't forget to participate in the COCIT survey on topics for future education programs at the NCE, CME, and our newsletter.

www.aapcocit.org/survey1.php