ACCE News

Newsletter of the American College of Clinical Engineering

Volume 14, Issue 6: Nov Dec 2004

President's Message: Let's All Come Together ...

The beginning of each New Year prompts us to take few moments to reflect on the world and our own personal events. Let us then start the 2005 year by dedicating a moment of silence in memory of all the victims of the recent tsunami disasters in Asia and Africa and the hurricane disasters in the Caribbean. I would like to convey my deepest condolences to our ACCE members and their loved ones that might have been impacted by these calamities.

President George W. Bush used his first radio address of 2005 to say "we join the world in feeling enormous sadness over a great human tragedy." He added, "the carnage is of a scale that defies comprehension." The tsunami-affected regions are in great need of basic food and water supplies, but also in need of medications and working medical equipment. Many of the hospitals have been destroyed and there are only a few trained medical specialists. The United States and countries across the world continue to organize relief efforts and missions to help those in need.

The World Health Organization (WHO) has released a public health emergency strategy focusing on five key objectives to ensure the rapid recovery and rehabilitation of public health services: surveillance of disease, access to essential

Izabella Gieras
President of ACCE

health care through assessing and responding to need, essential public health, strengthening supply systems and coordination of the international health response. ACCE will provide assistance and support to the best of our ability as an organization. I also encourage you all to partake in your local relief efforts.

Now more on the ACCE front.... The integration of medical technologies and the stronger focus on patient safety has led to the closer convergence of the Clinical Engineering and Information Technology professions. The much desired interconnectivity of medical technologies requires expertise from both professions. One of the avenues where this is becoming more visible is at the HIMSS annual conference (see article on page 2). ACCE is involved with HIMSS in many ways including projects on Integrating the Health Care Enterprise (IHE) and Medical Device Security. If you plan to attend the HIMSS conference, please also join us for lively networking at the HIMSS and ACCE breakfast meeting which will take place on February 16th at 7 am in Level 3, Meeting Room A306 at the Dallas Convention Center. Feel free to also stop by at the ACCE booth (Lobby D, CS-3)!

Please take a moment to read the HIMSS 2005 articles in this issue. The clinical engineering presence is growing at HIMSS and it will only get bigger as we solidify our relationships with Information Technology professionals.

We also start the New Year thinking about the ACCE membership. The renewal packages will shortly be appearing in your mail. Please take a moment to review ACCE's benefits and opportunities and join us for yet another year. We have a plethora of activities to keep your brain cells stimulated for a whole year and more!

I would like to thank the ACCE Board, Committee Chairs, Healthcare Technology Foundation, ACCE News editors, Secretariat, and all ACCE members for a great 2004. I wish you a very healthy and prosperous New Year, 2005.

Izabella Gieras

Izabella.Gieras@BeaumontServices.com

Inside this issue:

President's message	1
HIMSS 2005	2
WHO Seeks Assistance	2
ACCE VP Steps Down	3
IHE Moves Beyond Imaging	3
View From the Penalty Box	4
Morris Award Nominees Sought	4
Book Review: CE Handbook	5
Board Meeting Highlights	6
18 Pass CCE Written Exam	7
ECRI Perspective	8
EMC Conference	8
HIMSS: Medical Device Security	9
Calendar of Events	10

WHO Seeks Funds to Prevent Illness in Tsunami Survivors

With over 200,000 lives lost, the recent Indian Ocean tsunami disaster has spawned perhaps the largest relief effort of all times. The World Health Organization's (WHO) current relief focus is on providing clean water, food, immunizations and other preventive medical care, to the hundreds of thousands of people who were left homeless. You can help WHO in this effort by donating money to their relief fund. To make a donation, please see http://www.paho.org/English/PAHEF/tsunamirelief.htm. For further information, contact Antonio Hernandez (e-mail: 1hernana@paho.org).

- Antonio Hernandez

HIMSS 2005: Clinical Engineers to Meet IT

Clinical Engineers will join hundreds of IT professionals at the annual Healthcare Information and Management Systems Society (HIMSS) annual meeting and convention in Dallas Texas on February 13-17th.

At this year's HIMSS conference, ACCE is co-sponsoring a couple of the educational sessions: *The Clinical Engineering/Information Technology Presentation - Partners for Patient Safety on February 16th at 8:30 am, Jeff Cooper and John Glaser* and *The IHE presentation, Patient Care Devices - Focus on Alarm Integration and Interoperability on February 14th at 5:30 pm, Elliot Sloane and Ray Zambuto.*

Please do not miss other value-added sessions: *New Tools and Initiatives for Addressing Medical Device Security on February 17th at 9:45 am, Steve Grimes and Jim Keller;* and *Maximizing Patient Throughput & Decision Support Dashboards: A Case Study on February 15th at 9:45 am, Eric Rosow.*

Also see the ACCE/HIMSS-related articles on Integrating the Healthcare Enterprise (IHE) page 3, and Medical Device Security (page 9) in this issue. See www.himss.org/ASP/index.org for more information about the conference. Hope to see you there!

Ted Cohen

Theodore.cohen@ucdmc.ucdavis.edu

Purchase a copy of the *new* ACCE Clinical Engineering Certification Study Guide

The American College of Clinical Engineering has recently completed a Study Guide for the Clinical Engineering Certification examination offered by the new Healthcare Technology Certification Commission established under the ACCE Healthcare Technology Foundation. The Study Guide is available through ACCE for $30. To order a copy of the Guide, please make out a check payable to ACCE and send to:

Alan Levenson, ACCE Secretariat
5200 Butler Pike
Plymouth Meeting, PA 19462

Or e-mail Secretariat@ACCEnet.org and include credit card information (name on card, type of card, card number, and expiration date).

The next examination may be given in May 2005 and will be given in November 2005. The deadline to apply for this examination is 10 weeks in advance of the exam date. The application form and applicant handbook can be found at www.ACCEnet.org/certification.

The ACCE study guide was written by an independent group of clinical engineers not associated with the exam process.

ACCE News

ACCE News is official newsletter of the American College of Clinical Engineering ACCE). ***ACCE News*** is a benefit of ACCE membership; nonmembers may subscribe for $60.

To subscribe e-mail secretariat@accenet.org

Copyright © 2005 by ACCE

Permission to reprint all generally granted with appropriate credit line.

Manager Jim Keller, jkeller@ecri.org, (610)825-6000

Editors Ted Cohen, theodore.cohen@ucdmc.ucdavis.edu; Melissa Burns, mburns02@yahoo.com

Circulation Alan Levenson, secretariat@accenet.org

Photography S. Knapp Schott II

Advertising Joseph Skochdopole, joe.skochdopole@trimedx.com

Address Corrections Al Levenson, ACCE Secretariat, Secretariat@ACCEnet.org

Baumann Steps Down as ACCE Vice President

Ron Baumann recently resigned from his position as ACCE Board Vice President. Ron's existing personal and professional commitments do not allow him to continue to serve as the ACCE Vice President. Ron's dedication to the ACCE Board and the organization has been well demonstrated through his previous position as the Secretary and most recently as the Vice President. He has shown great enthusiasm in his work and has been a wonderful support to all Board members.

Ron Baumann

On behalf of ACCE and its Board members, I would like to thank Ron for his contributions to the organization. His presence on the ACCE Board will be sadly missed. Ron will continue to be active in spearheading the updating of the Body of Knowledge survey which is an important venture for our organization. We are glad he will be able to be part of it and observe the results reflected in the future certifications of clinical engineers. We wish him all the best in his present and future professional endeavors.

The Vice President position on the ACCE Board is now vacant. I will be responsible for finding a replacement, which will occur in the near future.

Izabella Gieras

Izabella.Gieras@BeaumontServices.com

Integrating the Healthcare Enterprise (IHE) Moves Beyond Imaging

Healthcare technology is rapidly becoming more computerized and more interconnected. While computerization and interconnection of medical devices and systems represents a generally positive development, these trends are not without their challenges. These challenges include: the diversity of technologies, the paucity of technical standards, and the industry's failure to agree to the adoption of those technical standards that do exist. The consequence is a technical "Tower of Babel" where diverse devices and systems from a variety of manufacturers are unable to effectively exchange critical information because they format that information in different ways.

Recognizing both these corresponding obstacles, the Radiological Society of North America (RSNA) and the Healthcare Information and Management Systems Society (HIMSS) launched an initiative called Integrating the Healthcare Enterprise (IHE) in 1999. IHE brought together medical professionals and the healthcare information and imaging systems industry "to agree upon, document and demonstrate standards-based methods of sharing information in support of optimal patient care."

The IHE initiative is defining integration profiles for a variety of systems. These integration profiles describe important, common, core processes (e.g. scheduled workflow, image presentation, information access) in various clinical disciplines (e.g., radiology, laboratory, cardiology). IHE also adopts existing standards (e.g., DICOM, HL7) rather than attempting to create its own. By defining integration profiles and adopting existing standards, IHE is establishing guidelines for medical technology manufacturers to follow to insure their systems will interface and work with components produced by other manufacturers. So far, IHE has achieved considerable success in the area of medical imaging systems.

After successful efforts in medical imaging, IHE is attempting to broaden its scope into clinical laboratory, cardiology and other areas that would benefit from the effective integration of biomedical and information technology systems. Key to the success of IHE's initial efforts in medical imaging was the sponsorship and strong support of HIMSS, RSNA and their constituents (e.g., manufacturers and providers). Likewise, achieving similar success in the development of interoperable technologies for other clinical disciplines depends on the sponsorship and support of key organizations. To that end, the American College of Cardiology (ACC) and NCCLS (formerly the National Committee for Clinical Laboratory Standards) have joined with the IHE initiative to develop integration profiles for cardiology and laboratory systems. Most recently, the ACCE also joined the IHE initiative to work on the development of integration profiles and the adoption of standards for general patient care devices.

It is vitally important that we, as clinical engineers, support IHE efforts. Effectively implemented, medical technology can play a major role in improving the quality, safety, timeliness, and cost-effectiveness of healthcare. That role will only be fully realized when the technology we employ is truly interoperable and widespread interoperability is achievable only if a broad based initiative like IHE succeeds. Clinical engineers must participate in the process, joining with ACCE and other IHE sponsors, encouraging other stakeholders in their institutions to support the initiative, and pressuring manufacturers to provide products that have demonstrated IHE interoperability.

For information on ACCE's efforts in IHE, email ihechair@accenet.org.

Steve Grimes, slgrimes@nycap.rr.com

Editor's note: The original version of this article first appeared in the Journal of Clinical Engineering, Oct-Dec 2004.

The View From the Penalty Box: *Look at the Big Picture*

Well, the holiday season is behind us and the bills have arrived for all the joy we spread. Winter has arrived here with cold, snow, and more drivers than ever that appear to have never seen snow before. It makes for interesting travel.

Some weeks back I had an experience that left me a little shaky. On a Thursday night, I played in an alumni hockey game against the high school varsity team. The players on the varsity team average 16 years old, which made for an interesting night. The young ones took pity on us older ones for a while, but when we did not quickly fold, the intensity picked up. While they won, it was a lot harder work for them than they had planned. When I viewed the video that was made, I found it difficult to believe that I am that slow on the ice; memory and reality are not always the same...

The next night I was flipping through the channels and came to a PBS program that had on singers from the 1950's. Not only did they look old, but they did not sound like I remember them.

Then a day or so later, I happened to see a figure skating program, with a bunch of skaters 10 to 20 years past their primes. They still had most of the moves but did them at a slower speed, and with not as many combinations as they used to have in their programs.

What finally hit home to me was that as we age, or mature for the politically correct crowd, we should change what we do and how we do it. The hockey equipment has been put away, no more games against kids that are just a little older than the grandsons, no more watching PBS for songs of the 50's; when I want to listen to them I'll get out the "45's" and play them. Even with the hiss and pops they will be more enjoyable to me than watching some senior citizens trying to sing like they still have it.

This "awakening" also spills over into our profession. We need the younger generation of Clinical Engineers to become more involved. We have tremendous talent in the ACCE, but we seem reluctant to show that talent to the rest of the medical field. Some months back, I proposed that we nominate Clinical Engineers to sit on the various advisory panels of the FDA. Who better than Clinical Engineers to represent the consumer interests on these panels? So far, only a few have stepped forward to serve. These appointments are paid and the expenses are paid so you and your hospital have no expense. Hospitals generally like to have staff members on national committees, as they can use the memberships to promote the hospitals as good places to work and receive care.

As Clinical Engineers we have the ability to look over the total healthcare environment, but all too often we don't venture outside of technology attached to patients. While this is important, we as a profession, have the knowledge and ability to impact so much more if we allow ourselves to get involved. It is time for all of us to make a break with our past and push the future in healthcare. The equipment is now pretty safe and reliable, but the application of the equipment is where help is needed. We also need to better communicate to medical product manufacturers the needs of all in healthcare, including patients, so better products can be developed, at reasonable costs for all that need the technology. I am not sure who said "Lead, follow, or get out of the way" but it applies to Clinical Engineering. As a clinical engineer, I want to be a leader, because remember the other old saying, "If you are not the lead dog on the sled team your view never changes."

Think about getting more involved or at least e-mailing me your comments, criticisms or jokes.

- Dave Harrington.

Dave@sbttech.com

ACCE Mission

1. To establish a standard of competence and to promote excellence in Clinical Engineering Practice
2. To promote safe and effective application of Science and Technology to patient care
3. To define the body of knowledge on which the profession is based
4. To represent the professional interests of Clinical Engineers

Morris Humanitarian Award Nominees Sought

The *AAMI Foundation / ACCE Robert L. Morris Humanitarian Award* was created "to recognize individuals whose humanitarian efforts have applied health technology to improving global human conditions." For more information regarding the award, please visit the website: http://www.aami.org/awards/index.html

The deadline to submit nominees is March 1, 2005. Take a moment to consider who might be deserving of this important award. A downloadable nomination form is available on the AAMI website (see link above). Please send nominations promptly so that they can be considered for this year's award.

If you have any questions, contact Lori Freeman (lfreeman@aami.org) or the ACCE Secretariat (secretariat@ACCEnet.org).

- Izabella Gieras, President, ACCE

- Jennifer Ott ACCE Liaison, Robert L. Morris Humanitarian Award, Secretary, ACCE Healthcare Technology Foundation.

Book Review: *Clinical Engineering Handbook (Dyro, Editor)*

Partners Biomedical Engineering, consisting of the Biomedical Engineering departments at the Brigham and Women's Hospital and Massachusetts General Hospital, reviewed the Clinical Engineering Handbook. A total of 16 volunteers – including biomedical equipment technicians, clinical engineers, and a physician – read and reviewed a minimum of four chapters each in the handbook, as well as made comments on the entire book. This overall summary is a compendium of the thoughts and comments made by the 16 reviewers.

Joe Dyro, editor of the Handbook, undertook an enormous effort to put together a book that describes the field of Clinical Engineering as it exists today in the early 21st century. The handbook is a compilation of chapters, written by members of the Clinical Engineering community, who lend their expertise to describe a slice of the clinical engineering knowledge. And, at 146 chapters, there is no stone left unturned in this field. In fact, "handbook" is a misnomer that downplays the reality of its size, weight, and content.

The Clinical Engineering Handbook makes an excellent resource, particularly to someone newly entering or thinking about entering the field. It provides a good background to the wide array of tasks, programs, innovations and challenges to the clinical engineering profession. Since many chapters are summaries of the topic, the more experienced clinical engineering professionals often requested more depth. Some reviewers also questioned the thoroughness of the chapters (e.g. missed references to some obvious standards), which made them wary of the quality of other chapters they had not reviewed.

The reviewers found some particular gems in the handbook. These included: Chapter 12, The Clinical Engineer as a Consultant, which provides an excellent introduction for someone who is not familiar with this aspect of the field; Chapter 30, Introduction to Medical Technology Management Practices, which could provide an institution the means of constructively critiquing one's own policies and practices, with an eye towards finding ways to improve efficiency; Chapter 89, Operating Room, which is an excellent primer for someone wishing to learn the basics about the major issues surrounding the Operating Room environment; Chapter 96, Medical Device Troubleshooting, because of its comprehensive, well written, logical nature, especially considering the broad range of its topic; and Chapter 104, Health Insurance Portability and Accountability Act (HIPAA) and Its Implications for Clinical Engineering, a thorough, concise overview of the HIPAA regulations, summarizing all the necessary points and providing a table of relevant HIPAA Security Rule Standards and Specifications that is ideal for using as a quick reference.

As to be expected, there were chapters that were not particularly useful. These included Chapter 52, Skills Identification, which was incoherent and not on topic, and Chapter 78, Techno-Bio-Psycho-Socio-Medical Approach of Health Care, which was baffling on what value it added to the handbook.

Overall, the handbook is well written and the breakdown into very specific chapters makes referencing easy. Although there are many authors contributing to the compilation and making for differing styles between chapters, this does not impede the flow or usefulness of the handbook. The extremely small typeface came up as a problem with all the reviewers. Splitting the book into two volumes and increasing the font size would have been much appreciated. Many typographical errors were found throughout the document, and generic and brand names are sometime interchanged. More thorough copy editing of the document would be warranted for a version two release.

The reviewers all voted on the simple question of whether he or she would recommend purchasing this book. Of the 16 reviewers, 14 gave their thumbs up, 1 was neutral, and 1 gave a thumbs down. Despite some limitations, a few of which could be overcome in future editions, the overall feeling was that this book was worthy of gracing the shelves of the Clinical Engineering professional.

Nancy Lumm

Editor's note: The editors thank Nancy Lumm and her colleagues at Partners Biomedical Engineering in Boston for this book review. Opinions stated in this review are those of the authors and do not necessarily represent the opinions of the ACCE.

The ACCE News welcomes book reviews and other Clinical Engineering-related submittals. Please send them to Ted Cohen (Theodore.cohen@ucdmc.ucdavis.edu) or Melissa Burns (mburns02@yahoo.com).

Highlights of the November/December ACCE Board Meeting

The Clinical Engineering Symposium speaker planning is nearly complete in preparation for AAMI 2005! Izabella Gieras reported that all speakers have been confirmed and the finalized program has been submitted to AAMI.

As reported in the last edition of the ACCE News, a follow-up mission to Kosovo was undertaken to continue the wonderful work that has been done providing support for medical technology and other Clinical Engineering related services in the region. The ACCE Board approved a donation in support of these activities.

Izabella reported that ACCE was recently asked to participate in the review of an FDA document related to Hospital Bed Guidance. Several ACCE members participated in this review, and as a result of this activity, Izabella suggested that a group be formed to address these types of requests for comments, as well as requests for formal endorsements. The Board suggested that there would be great benefit in having a dedicated group of individuals with the appropriate background and knowledge to review such documents, and the motion to form a document review group was approved.

Yadin David just came back from his world travels to Brazil, Panama, and China. He reported that the Chinese Clinical Engineering Society is interested in the certification program, and would like to obtain some assistance from ACCE in that regard. In Panama, the Ministry of Health is hiring Clinical Engineers to oversee medical technology. These present an opportunity for ACCE to become a principal source of information and collaboration for Clinical Engineers internationally, as well as allowing us to encourage international ACCE membership.

Ray Zambuto reported that the Certification Commission examined 24 applicants in November—this is an excellent showing! There was a large international contingent, with eight applicants taking the Certification Exam in Hong Kong. Scheduling for the oral portion of the exam will begin soon and tentatively be completed by the May AAMI Conference in Tampa.

According to Ray, ACCE will have two presences on the exhibit hall floor at HIMSS in February, as part of the Interoperability IHE Showcase. We will be splitting a kiosk with IEEE on Connectivity of Patient Care Devices, with an emphasis on standards, and we will do a single 30-minute presentation in the IHE Theater on an Introduction to Patient Care Devices and their importance to the IHE. We will also be in the co-sponsor's booth area in Lobby D of the Convention Center in Dallas. Izabella is coordinating our booth and welcomes ACCE members who are attending HIMSS to commit some time to help in staffing it. Contact Izabella (igieras@beaumontservices.com) if you are able to dedicate some time to manning the booth. There will be an ACCE-HIMSS breakfast meeting, and a session (Session 112) sponsored by ACCE on Partnering between CE & IT for Patient Safety, featuring two renown speakers, Jeff Cooper and John Glaser – on Wednesday morning 2/16/05. This session is not to be missed!

Colleen Ward reported that the 2004-2005 ACCE Member Survey development is complete, and the survey will be available for members to take beginning in mid-January. Please visit http://www.surveymonkey.com/s.asp?u=27012792606 before February 7th to take the survey if you haven't yet had the opportunity to do so! Your views, combined with those of others, will be of great value to ACCE leadership in improving the College.

2005 Teleconference Planning is well underway and Joe Skochdopole provided the Board with a number of ideas for next year's schedule. ACCE members are encouraged to participate in the teleconference planning by submitting ideas for sessions when they fill out their Member Surveys, or by contacting Joe directly at (joe.skochdopole@trimedx.com).

Joe also dedicated quite a bit of time in December to 2005 budget planning. The final budget is expected to be approved by the Board in early January.

Related to the budget, Ray suggested some strategic planning was needed to determine spending priorities. A number of ideas were suggested: professional website development, automating our membership processing, and other advocacy activities. A motion was approved to form an ad-hoc strategic committee headed by Ray to address what areas to look at to best serve our constituents and best utilize our resources.

Dave Francoeur submitted a Membership Committee report with recommendations for the approval of the membership applications of five individuals. The Board voted on, and approved each of the new members: Victoria Young, Lyman Wolfa, Mary Fazio, Sonia Pinkney, and Charles William Herring. Welcome!

Colleen Ward

secretary@accenet.org

Certification Program Grows: 18 Pass Written Exam

The Clinical Engineering Certification (CCE) exam was given in 22 cities (including Anchorage and Hong Kong) in November 2004. Of the 27 applicants, 24 were found to be eligible, and 22 actually took the written exam. Eighteen people passed the written portion of the exam and are in the process of being scheduled to take the oral exam. It is the Board of Examiners plan that the oral exams will be given at the HIMSS meeting in February, at the AAMI meeting in May, and in two or three other locations where the candidate and two Board of Examiner members can arrange to meet.

The exam reflected the body of knowledge which is published in the CCE exam handbook available on the ACCE website. The major categories that the test covers are Management (32%), Technology Assessment (15%), Regulatory/QA Issues (11%), Risk Management/Safety (9%), Education (8%), Product Development (8%), Repair/ Systems Thinking (6%), and Other CE topics (11%).

The passing score for the exam was set by the Board of Examiners under advisement from PTC, the test administration company, after a detailed analysis of the exam prior to the test. This year the passing score was set at 90 out of 150 questions or 60%.

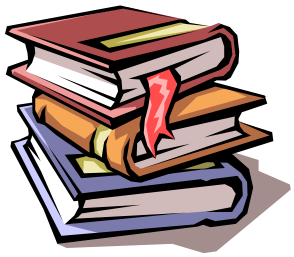
The Healthcare Technology Certification Commission wishes to congratulate all of those who passed the written portion of the exam and looks forward to announcing the list of those who pass both portions of the exam and become certified in clinical engineering.

For more information about the certification program see:

http://www.accenet.org/certification/index.htm

- Frank Painter

frpainter@earthlink.net



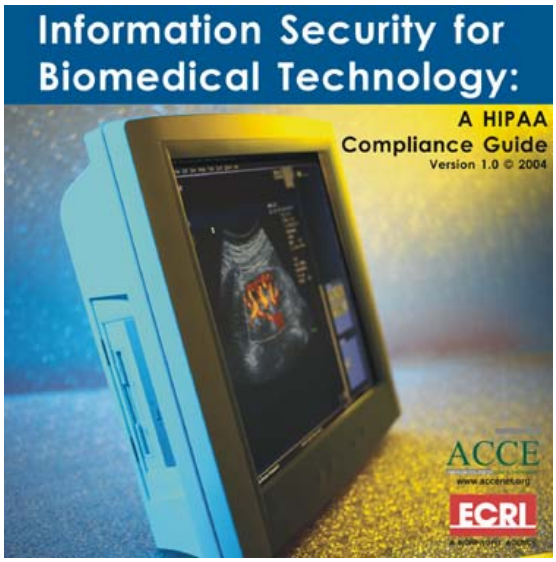
$200 discount for ACCE members!

Information Security for Biomedical Technology: A HIPAA Compliance Guide is a must-have tool for any healthcare facility's data security program. The CD-ROM emphasizes best practices and contains an extensive overview of the HIPAA Security Rule, reviews necessary compliance measures for medical technology, and provides recommendations for implementing the rules with specific medical technology-related examples.

"The HIPAA Compliance Guide will help healthcare organizations identify and address information security issues," says James P. Keller, M.S., director of ECRI's Health Devices Group. "It includes valuable tools and resources, including downloadable forms, customizable worksheets, checklists for inventorying and analyzing risks, tools for setting priorities and implementing a mitigation plan, and much more."

"Time is running out for organizations to comply with the security requirements of HIPAA," says Stephen L. Grimes, FACCE, chair of the ACCE HIPAA Task Force. "This guide can help organizations save precious time and money because a majority of the hard work has already been done and is included in the CD-ROM."

To order, call ECRI at +1 (610) 825-6000, ext. 5891, or visit www.ecri.org or www.accenet.org for more information.



Perspectives from ECRI: Infusion Pump Error Reduction

An increasing awareness of adverse events related to medication administration errors has prompted infusion pump manufacturers to develop software to build safety into the administration process. Several models of general-purpose and syringe pumps now have a dose error reduction system – software that checks programmed doses against preset limits specific to a drug and clinical location profile. Before this technology, nurses could only program pumps in mL/hr and there was no possibility of feedback for erroneous orders, calculations, or programming.

Pumps with dose error reduction systems literally ask a nurse: Where are you and what drug do you want to give? They then present a list of the drugs used in the selected location, in the dosing units and standardized concentrations used in that location. If the programmed dose falls outside a hospital-set range for patients in that clinical specialty, the pump provides a limit alert. Limit alerts and the programming parameters that triggered them should be logged for future analysis. One study of these logs found that 1.7% of attempted infusions triggered a limit alert and that programming changes occurred in almost 25% of these cases.

Many hospitals have started using the data gleaned from these safety systems to analyze and improve work practices. In order to do this, dose error reduction system alerts data must be downloaded on a regular basis. This data will permit clinicians to identify when potential programming errors are occurring and then to modify work practices to reduce the potential for these errors. The data can also be used to make drug library dosing units and dosing limits as practical as possible for clinical use, alert clinicians to potentially harmful dosing practices, and help nursing coordinators plan schedules to allow for more efficient patient care.

Tim Ritter is a Senior Project Engineer at ECRI

During December, ECRI polled Health Devices System members on the following question:

- Is your facility using infusion pumps that include a dose error reduction system (sometimes called "smart pumps")?

Of a total of 61 responding facilities, twenty five (41%) are using pumps with dose error reduction systems. This result is quite remarkable given that infusion pumps have a life expectancy of at least seven years and that pumps with dose error reduction systems have barely been available two years. And not surprisingly . . . "smart pumps" are more expensive than "dumb pumps".

More manufacturers are developing pumps with dose error reduction systems especially for patient-controlled analgesia (PCA) and ambulatory applications. When selecting new infusion pumps for purchase, hospitals should look for the following features:

■ A flexible drug library that is large enough to hold the majority of drugs used and that can be customized to fit the facility's needs

■ Manufacturer assistance with system implementation (developing dose limits and location/application-specific parameters)

■ Continuous display during infusion of the infused drug name, dose, and any doses infused outside of limits

■ A downloadable log of dose error reduction system alerts and subsequent actions for review and refinement of the facility's drug library.

Hospitals should consider 'smart pump' features a major patient safety advantage when selecting infusion pumps for purchase.

If you need additional information, see the December 2004 issue of Health Devices (www.ecri.org) or contact Tim Ritter, 610-825-6000, ext 5168).

Tim Ritter
tritter@ecri.org

ACCE Participates in EMC Conference

ACCE members participated in a pre-conference tutorial on Electromagnetic Compatibility Standards" as part of the Medical Records Institute's Annual National Conference on m-Health and EOE in October, 2004 in Reno.

The tutorial provided guidance to healthcare technical, managerial and professional staff on the risks and mitigation strategies in deploying new wireless technologies in the healthcare environment. Topics covered included: Successfully planning and implementing an EMC Management Program in a healthcare institution, EMI field investigation case studies, why an EMC management policy can save time money and frustration, plus what hospitals need to know about EMC standards and regulations, how to interpret them, and how they can aid in the management of EMC in the healthcare environment.

The audience was a small but enthusiastic mix of CE, IT and clinical professionals. Taking advantage of small size, the session was very interactive with participants asking questions throughout the sessions.

Paul Sherman
Paul.Sherman@med.va.gov.

HIMSS and Medical Device Security: *See you in Dallas*

The Healthcare Information and Management Systems Society (HIMSS) will hold its Annual Conference & Exhibition in Dallas, February 14 though 17.

Ten to twelve years ago, HIMSS annual conferences were aimed primarily at healthcare information technology professionals and drew 2,000 to 3,000 attendees. In recent years, the conference focus has been rapidly broadening from traditional IT (e.g., data processing, medical records, billing) to include an increasing array of clinical systems and emerging healthcare technologies. This year's conference has over 300 educational sessions and draws over 20,000 attendees and 750 exhibitors. Particularly significant to clinical engineering is that the number and size of exhibits by major medical equipment manufacturers have substantially increased in recent years and that both AAMI and ACCE have joined as co-sponsors of the event.

The phenomenal growth of the conference is testament to the confluence of medical, communications and information technologies and the recognition by the industry that the successful integration and further development of these technologies play a critical role in the advancement of the healthcare system. HIMSS recognized that a consequence of this trend was a growing risk to information security ... including medical device security. As a result they formed a Medical Device Security Workgroup last year to identify and help to address data integrity, availability and confidentiality issues associated with medical devices. That Workgroup now has over 30 members representing a broad and diverse range of stakeholders, including major healthcare providers, medical device manufacturers, the FDA, Microsoft, consultants, health lawyers, and other major healthcare and security industry groups. At the conference on Thursday, February 17, HIMSS and the Medical Device Security Workgroup will be hosting a roundtable session on "*New Tools and Initiatives for Addressing Medical Device Security.*" Among the medical device security-related tools and initiatives being discussed are the ACCE ECRI Security Guide for medical devices, FDA recommendations on medical device security (www.fda.gov/cdrh/comp/guidance/1553.pdf) and the HIMSS Manufacturers Disclosure Statement for Medical Devices (MDS2).

Steve Grimes,

slgrimes@nycap.rr.com

Today's Multivendor Environment Demands Highly Trained Service Professionals

We Make Sure YOU Are The Best!

Celebrating Ten Years of Excellence in Training and Support Services

DITEC, Inc. 1992 Anniversary 10 2002 Solon, OH

24x7 READERS' CHOICE "Best Training Programs" 1997-2002

Applied Engineering Diploma
International Certification
Clinical Laboratory Maintenance
Biomedical Equipment Maintenance
CT, MRI, Ultrasound, Nuclear Maintenance
Specific Imaging Products Courses
Networks, DICOM and PACS for Managers
PACS, DICOM, and Teleradiology Systems - Level V
Advanced Concepts of Digital Imaging Maintenance - Level IV
Fundamentals and Advanced Servicing of Diagnostic Imaging Systems - Levels I-III

440.519.1555 fax 440.519.1556 info@DITECnet.com

w w w . D I T E C n e t . c o m

ISO9002 Documented Quality

DITEC

Diagnostic Imaging Technical Education Center, Inc. State of Ohio Board of Proprietary Schools Reg # 94-05-1398T

The ACCE Board and Committee Chairs

President	Izabella Gieras
President Elect	Stephen Grimes
Vice President	Vacant
Secretary	Colleen Ward
Treasurer	Joseph Skochdopole
Member-at-Large	Antonio Hernández
Member-at-Large	Jim Keller
Member-at-Large	Ted Cohen
Member-at-Large	Bill Rice
Past President	Ray Zambuto
Membership Committee Chair	David Francoeur
HIPAA Task Force Chair	Stephen Grimes
Advocacy Committee Chair	Kelly Garland
IHE Task Force Chair	Elliot Sloane
International Committee Chair	Tony Easty
Certification Committee Chair	Frank Painter
Education Committee Chair	James Wear
Medical Errors Task Force Chair	Elliot Sloane
Nominations Committee Chair	Ray Zambuto
Secretariat	Alan Levenson

Baretich Engineering

Is pleased to announce that it is now publishing and will continue to develop the ground-breaking manual created by Marvin Shepherd:

Medical Device Incident Investigation & Reporting

Matthew F. Baretich PE PhD, Editor
Marvin Shepherd PE(Safety), Associate Editor

Phone: 877-795-2738 (toll free)
E-mail: publishing@baretich.com

Calendar of Events and ACCE Teleconferences

- February 13-17, 2005
Healthcare Information and Management Systems Society (HIMSS) Annual Conference & Exhibition
Dallas, TX

http://www.himss.org

- May 14-17, 2005
Association for the Advancement of Medical Instrumentation (AAMI)
Tampa, FL

http://www.aami.org

- June 4-6, 2005
3rd International Conference on Ethical Issues in Biomedical Engineering
Alfred University, Alfred, NY

June 6-7, 2005

HIMSS Summer Conference,
New York, NY

- October 2-4, 2005
Northeastern Biomedical Symposium
Southbridge, MA

- November 20 - 25, 2005
3rd European Medical & Biological Engineering Conference
Prague, Czech Republic

ACCE Teleconferences:

- February 17, 2005

Task Force: Update on Proposed JCAHO Equipment Management Standards by Binseng Wang

This is the last ACCE Teleconference program for the 2004/2005 series.

The next teleconference series will start on May 19 and the full series will be listed in the next ACCE Newsletter. Please "stay tuned".

For more information about the ACCE teleconference program, contact Joe Skochdopole at joe.skochdopole@trimedx.com

ACCE
AMERICAN COLLEGE OF CLINICAL ENGINEERING

Newsletter of the American College of Clinical Engineering

5200 Butler Pike
Plymouth Meeting, PA 19462

Phone: (610)825-6067
Fax: (360)234-8894
Email: editor@accenet.org

We're on the Web!
http://