

ACCE News

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American College of Clinical Engineering

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President's Column: Meet Stephen Grimes

As I write my first column as ACCE president, we are on the eve of 2007. As the New Year approaches, it is usual to take the opportunity to reflect on our personal and professional fortunes and to contemplate where we would have those fortunes evolve for ourselves, our families, friends and colleagues in the coming year. Allow me to share some of my personal thoughts and opinions on this subject.

I have been in clinical engineering for over 30 years ... since its infancy. In that time I think I've come to develop a better understanding of our healthcare industry and have seen radical changes in technology, in healthcare availability and healthcare costs. In having seen all this I am struck by a major irony. We have never before had the wealth of technical tools and resources within our reach to provide higher quality healthcare to a larger segment of the US and world's population ... and at the same time we don't seem to be able to gain real ground fast enough in our efforts to provide that care. Colleagues who know me have often heard me say that in the many years I've been in this business, I've never been more excited about the opportunities for me and others in the clinical engineering profession to make a real difference in healthcare. I believe that equal access

to quality healthcare and quality education are the two fundamental services a society must provide to its members if that society is to have any hope fostering its own healthy growth and evolution. I am glad to be part of an industry (healthcare) whose objective it is to fill this fundamental need. And I also believe that healthcare technology, the area in which I profess some expertise as a clinical engineer, can have a profound effect on society's ability to deliver its members equal access to quality care. But we as a society, we as the healthcare industry, and we as clinical engineers haven't done that good a job so far. Why? Perhaps it is due to complacency on our part and perhaps the lack of sufficient leaders who are willing to tell us what we need to hear rather than just what we want to know. Consequently we are in a healthcare crisis ... costs are skyrocketing, payers compensate providers more for maintaining a sick population rather than curing them, and a growing segment of the population is underserved (mostly the under insured).

So it's a "big" society and healthcare industry problem. What can we in clinical engineering do? This is what



Stephen L. Grimes, President ACCE

I would propose. While you contemplate the changes and challenges 2007 will bring, recognize that you can make a difference. The phrase "think globally, act locally" was first used in 1972 to remind us that collectively we can make a difference in helping to save the environment and it applies equally well here. Don't routinely accept the status quo, do avoid complacency which dulls and eventually kills talent and innovation. Do embrace evolution because it is only through new thinking and evolutionary change we make real advances on our problems. Seek out new political and industry leaders who are not afraid to put forth new and controversial solutions to our healthcare crisis ... new ideas for us to consider. Ask yourself what you can do to make the industry and your institutions better and don't be afraid to take a leadership role. We need fresh ideas presented

(Continued on page 2)

Inside this issue:

President's Column	1
Meet the Board	3
Engineers make a World of Difference	3
Perspectives from ECRI	4
Audio CCE Review Courses	4
Foundation Update	5
Nominees Sought for Awards	5
Interfaces Bridge the Gap	6
Zambuto: a HIMSS Fellow	7
View from the Penalty Box	8
Board Highlights	8
UConn CE Program	9
Teleconferences	9
Membership Committee Report	10
CMS Survey	10
Bits and Bytes	10
Calendar	11

President continued

(Continued from page 1)

by thoughtful stakeholders who are willing to speak out and who are not afraid to have those ideas examined and challenged by other thoughtful minds.

We are on an exciting journey, a journey in which success is not guaranteed but in which major failures will surely come if clinical engineering and others do not fully engage themselves in finding solutions to the healthcare crisis. I know we can make a difference, we can “think globally, act locally” and challenge the status quo with evolutionary ideas. Failing that we must be prepared to give up our seat in this journey to others who will come up with the answers. It’s our choice and on that choice I believe hangs the future of clinical engineering.

Before I close, I would be remiss if I didn’t take this opportunity to acknowledge the dedication and hard work my predecessor, Izabella Gieras. In her two years as president of ACCE, Izabella was tireless in her efforts and extremely effective in bringing together diverse resources in our organization and focusing them on the issues challenging clinical engineering today. She did a truly amazing job and I am exceedingly grateful to her for her efforts as are most of us I am sure. Fortunately, while her term as president may be over, she remains active on our board as “past president” and that gives us an opportunity to avail ourselves of her talents. Izabella is a great friend and colleague and I am pleased to once again say “thank you” personally and on behalf of all the clinical engineering community for all she has done ... and I’m sure will continue to do.

Wishing you all a healthy, happy, and successful new year. I do look forward to working with you.

Steve Grimes, President ACCE
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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

CCE Certification—What You Need to Know

- 1) The written exam will be given in 29 cities throughout the US on November 17, 2007. The exam will also be given in Boston on June 19, 2007.
- 2) For an extra fee, the written exam can be given in almost any city in the US or in almost any major city in the world.
- 3) Applications are being accepted now for the November 18 exam. Please include references and transcripts with application.
- 4) The handbook that describes the process, and the application that needs to be completed, can be found on the certification website: www.acce-htf.org/certificaton.
- 5) A study guide has been recommended by several who recently passed the CCE exam and became certified. Walter Burdett of the VA Medical Center in Syracuse, NY said " The Study Guide was an excellent fit to the style, vocabulary, content and level of difficulty of the written exam. The bibliography was very useful."

ACCE News

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Meet the Board: Advice to Future Clinical Engineers

(editor's note) This new series offers ACCE board members' comments on a wide variety of medical technology-related and career-related topics. As you market the Clinical Engineering profession (see article below), here are a few "words of wisdom" to use from the ACCE Board.



Jennifer Jackson, President-Elect

What advice would you offer up and coming Clinical Engineers?

Question everything! Take every opportunity to engage (participate - don't just listen) in thoughtful and challenging conversations about the things you love.



Izabella Gieras, Past-President

What skills do you need to succeed in your job?

Ability to understand technical, clinical, regulatory and financial aspects of healthcare in addition to being innovative and creative.



Paul Sherman, Member-At-Large

What skills do you need to succeed in your job?

Ability to see globally, translate technical issues into common language, assimilate and correlate new information quickly.



Colleen Ward, Vice President

What advice would you offer up and coming Clinical Engineers?

Get involved! There are so many activities and organizations (like ACCE!) that you can participate in...there's truly something for every interest. And, what you get out of this type of participation, both personally and professionally, is far more than the time and energy that you put into it.

Engineers Make a World of Difference

The theme for the 2007 National Engineers Week, February 18-24, 2007, is "Engineers Make a World of Difference." National Engineers Week was founded in 1951 by the National Society of Professional Engineers (NSPE). Its goal was to raise public awareness of the many engineering contributions which enhance our quality of life. Now in its 56th year, the annual celebration includes more than 70 engineering, educational and cultural societies, along with 50 corporations and government agencies. These groups all work together to honor the pivotal role engineering plays in the advancement of our society.

Since its start, National Engineers Week has grown in scope and purpose, expanding its focus to include parents, teachers, schools, businesses and community groups. Among its many goals are stressing the importance of quality math and science programs in middle schools and offering encouragement to women to go into engineering careers.

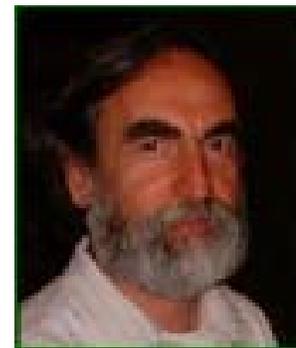
National Engineers Week is always celebrated around George Washington's Birthday. The United States' first President was a military and agricultural engineer (land surveyor). He founded the first US engineering school at Valley Forge, PA, which later became the U.S. Military Academy at West Point, NY.

For more information and ways you can promote our Engineering profession please go to <http://www.eweek.org>.

ACCE encourages all Clinical Engineers to celebrate National Engineers Week in their institutions and highlight the important work done by Clinical Engineers. This is a great way to become more visible in your organizations!

The Advocacy Committee
Nancy Pressly, Chairperson

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Ted Cohen, Member at Large

What is the most valuable lesson you learned in your career?

Importance of teamwork, integrity and communication. Technology is (only) a tool; the patient is what is important.

Perspectives from ECRI: Keller Circles the Globe

I recently had an opportunity to do some international travel on behalf of ECRI. On the same trip I visited Hong Kong, Kuala Lumpur in Malaysia, and London, England. I literally went around the world – all in fourteen days. It was a fairly grueling but very rewarding trip. And, I had the pleasure of spending the first two legs of the trip with Joel Nobel, MD, ECRI's Founder and President Emeritus and a true pioneer in the field of clinical engineering.

In Hong Kong I provided a two-day seminar for about 200 doctors, nurses, and biomedical engineers from Hong Kong's public hospitals. My presentations covered patient safety and medical technology, asset tracking systems (e.g., RFID), selecting and implementing safer infusion therapy devices, bar code-enabled point-of-care systems, new and emerging trends in healthcare technology, and medical device safety in alternate care settings. I found our Hong Kong colleagues to be very technology savvy and they were dealing with the same challenges we are confronted with in the United States like medical device and information technology convergence, patient

safety, and selection of appropriate technology. The public hospitals, which are run by the Hong Kong Hospital Authority, are top notch facilities that provide Hong Kong's citizens with excellent health care services.

In Malaysia I participated in a one day seminar on medical technology management. It was sponsored by an organization called Radibems, which provides third-party clinical engineering services in Malaysia and other Asia-Pacific countries. The seminar covered medical technology and patient safety, emerging trends in medical technology, managing cost and safety in equipment maintenance, development of third-party medical technology maintenance programs, and in-house versus outsourcing of equipment maintenance programs. The faculty included Dr. Nobel and me; John Robson, Director of Biomedical Engineering for Flinders Medical Center in Adelaide South Australia; Mohamed Nasir Talib, General Manager for Radibems; and Jin Lor, Regional Director for ECRI's Asia Pacific Office, which is located in Kuala Lumpur. Seminar participants included about 50 clinical engineers, hospital administrators, and



Jim Keller is ECRI Vice President for Health Technology Evaluation and Safety, and a past Member at Large for ACCE's Board

medical device regulators from Malaysia and other countries from the Asia-Pacific region. It was a very engaging group that was very focused on discussing ways to implement technology in the most cost-effective manner. Key concerns during our discussions included the need for better support from original equipment manufacturers (e.g., for user training, parts and supplies, or service documentation) and finding reliable and effective regional sources for service and maintenance – all at a reasonable cost.

I wrapped up my trip to Malaysia with a full day of business planning with Dr. Nobel and ECRI's Asia Pacific office staff. After our trip to Malaysia, Dr. Nobel and I went our separate ways. I traveled to London for two days of business development meetings with ECRI clients and staff from our European office. Dr. Nobel traveled to Dubai in the United Arab Emirates to work on several projects with ECRI's Middle East office staff.

Feel free to contact me if you are interested in learning more about my trip or about ECRI's international operations.

Jim Keller

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Audio CCE Review Course

ACCE is offering the CCE Review Course on CD. This review was taped live at a recent five-session, 8-hour CCE Review Course. The review course was presented by a faculty of clinical engineers who have broad experience working in hospitals, independent service organizations, consulting, government, and industry. Major topics of the CCE examination are reviewed by a subject specialist.

The audio course includes: 8-hour review on Audio CDs (including Q&A from the audience), Power Point presentations, reference material and sample exam questions.

The topics covered in the course are:

1. Introduction to the CCE Exam
2. Management
 - 2.1 Overall CE Program Management
 - 2.2 Financial & Service Contract Management
 - 2.3 Technical Supervision
 - 2.4 CMMS
3. Technology Assessment
 - 3.1 Product/Vendor Selection
 - 3.2 Capital Planning

(Continued on page 5)

Healthcare Technology Foundation Update

The Foundation continues to advance a number of exciting initiatives. The White Paper from the Clinical Alarms Task Force chaired by Toby Clark, is now available as a download from the Foundation website, <http://www.acce-htf.org>. This task force had a broad and productive membership including contributors who are not members of the Foundation Board. Such participation is essential to the activities of the Foundation. The title of the report is "Impact of Clinical Alarms On Patient Safety." It contains analyses of the original survey conducted by the Task Force, reviews of the FDA-MAUDE and ECRI databases, and recommendations for improving the effectiveness of clinical alarms. Hard copies of the Alarms report can be requested from Yadin David. They are also being distributed to device manufacturers, the FDA, patient safety organizations, and other relevant parties. The availability of this report was the subject of a professionally prepared press release, resulting in a number of high profile publications including 24x7 and forthcoming in the Journal of Clinical Engineering and in Biomedical Safety & Standards. The website also features a new source of links to patient-focused resources.

In addition, the Foundation website also has the downloadable patient oriented Home Medical Devices brochure, in both English and Spanish. The official home of Certification in Clinical Engineering information is also found at the Foundation website. This program is moving strongly ahead with a steady supply of new applicants. The first round of three-year CCE renewals is also now coming due, so if you are one of the early CCE's under the current program you should be watching for renewal information. It is, of course, also available at the Foundation CCE web page.

The Foundation is also nearly ready to officially role out the Clinical Engineering Excellence Award, which will target Clinical Engineers who make strong contributions at the institutional level. This award joins the Shepherd Patient Safety Award as Foundation initiatives. Think of nominating one of your deserving colleagues for these recognitions.

The Foundation is also co-sponsoring a Technology Safety conference which will be held in March, 2007 in Houston. Watch for further news of this event. This program is being organized by Yadin David and William Hyman.

The current officers of the Foundation are Wayne Morse, President; Jennifer Ott, Vice President and Development Chair; William Hyman, Secretary; and Henry Montenegro, Treasurer. The rest of the Board includes Tobey Clark, David Dickey, Denise Korniewicz, James Keller, Ode Keil, Frank Painter, Bryanne Patail, Elliot Sloane, Henry Stankiewicz, Jr., and James Wear. In addition Stephen Grimes represents ACCE on the Board. Yadin David now serves as the first Immediate Past President and has been further recognized with the title President Emeritus.

As always, remember that donations to the Foundation are welcome, at any time, and they are tax deductible.

- Wayne Morse, President

- William Hyman Secretary

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Nominees Sought for Awards

On behalf of the ACCE Board and the ACCE Advocacy Committee, we are happy to announce the call for nominations for the ACCE Advocacy Awards for 2007. The Clinical Engineering profession has many distinguished individuals that deserve to be recognized for their accomplishments. Please take a few minutes to review the awards criteria and send in your nomination. The list of awards, criteria and nomination form can be found on the ACCE website at <http://www.accenet.org>.

Award nominations are due by February 1, 2007. Please help us recognize all the great work being done by clinical engineers by nominating a deserving candidate from our community!

Nancy Pressly

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Audio CCE Review Course

(Continued from page 4)

- 3.3 Clinical Trials Management
- 3.4 Building Plan Review
- 3.5 Building Design
- 3.6 Human Factors
- 4. Regulatory/QA Issues
- 5. Risk Management/Safety
- 6. Education
- 7. Product Development
- 8. Repair/Systems Thinking

9. Miscellaneous Clinical Engineering topics

The Audio Course is available for \$300 (ACCE members) and \$345* (nonmembers). For more information or to purchase please contact Alan Levenson at secretariat@accenet.org

*Special ACCE Membership Offer - Purchase the audio course and receive ACCE Membership at 25% discount. You need to qualify for ACCE membership and complete the application form. See the membership section at www.accenet.org for details.

Interfaces Bridge the Gap between IT and CE

For the past several months I have been involved in a large project to interface our Philips ICU physiological monitors to our EPIC Electronic Medical Record (EMR) system. Several times in my long clinical engineering career at UC Davis Medical Center we have evaluated, but not purchased, this type of interface. But it was never, until recently, practically feasible at a reasonable cost. Several factors made this an optimal time to implement this project, including: Philips recently released a central station option that included HL-7 output as part of the central station with no significant additional hardware requirements, most of our central stations were old and ready to be replaced, and, in our phased rollout of the EMR, we had earlier in 2006 implemented EPIC's Nursing documentation modules which included flow-sheets. Flow-sheet implementation meant that the nurses manually typed into the EMR the vital signs and other physiological monitor parameters, which often takes more time than writing the data on the paper flow-sheets, particularly in the ICUs and PACU, where patients have high acuity and multiple parameters are monitored and recorded frequently. With the interface, the data would automatically go to the flow-sheet and the nurse would use a new EMR function to validate the data prior to it becoming part of the formal, legal electronic medical record. So the "planets were aligned" to (finally) develop this interface.

The Executive Director of Clinical Information Systems and I developed a proposed project plan and presented it to the chief nursing officer and other key management who were supportive. We proceeded with the development of a detailed funding request, gathering quotes and trying to get an accurate estimate of costs and additional infrastructure requirements. Simultaneous to the funding request process, we put together a preliminary team co-led by myself and one of the technology lead persons from our Clinical Information Systems (EMR) group, to look at all the technical issues, at the systems on both ends and the network in between.

Within a couple of months we had full funding approval, but due to several issues that were surfacing we decided to conduct a pilot feasibility study and phase our implementation. We needed to make sure that both the technical interface worked as required and that the interface, did indeed, provide the efficiency benefits to the nurse taking care of the patient. In other words, it all looked good on paper, but does it really work? We recommended that our new Neonatal Intensive Care Unit, with all new Philips monitoring equipment, and central station computers (Patient Links) already in the data closets, be the area chosen for the technical feasibility study (pilot study) and the first phase implementation.

We convinced EPIC and Philips to support us during the short feasibility study by dangling the "carrot" of future sales if all went well in the NICU. We expanded our team to include NICU nursing management and proceeded with some of the technical work, while starting the planning for a full NICU implementation (e.g. testing, training etc). Philips upgraded one of the central stations and we connected the network patch cables, and after about a month of intermittent troubleshooting we had a working system using a few vacant, patient beds.

Although not a particularly complex system, establishing communication between multiple disparate systems is not "plug and play". Some of the problems encountered included: insufficient documentation and miscommunication about the specific HL-7 configuration parameters on each end, standardization of bed labels between our ADT (Admit/Discharge/Transfer) system, EMR and Philips; problems getting the Philips central stations and the EPIC server to time-sync to the same master clock source, and aligning the EPIC flow-sheet parameter labels that were in use throughout UCDCM with the parameter labels on the Philips monitors. We ended up routing all the data through an interface engine that was already in place in our IT department, which al-

lowed us to troubleshoot HL-7 and other communication issues more easily. By the time the major technical problems were resolved, our funding was approved for the entire project and we were ready to start phase 1, implementation in our Neonatal Intensive Care Unit (NICU). The NICU had decided that they did not want to pilot a portion of their unit, but the entire unit. We still needed to answer the question: Will this work well for the nursing and other clinical staff?

We expanded the team to include more NICU staff, and more Clinical Information System (CIS) staff representing training, testing and, intermittently, adult ICU nurses (future super-users) to help with this project as well as to keep us on track for subsequent ICU phases.

The NICU has 52 monitored beds and about 150 nurses, so full implementation in just that unit is a large project. A project schedule, testing and training plans were developed. The formal test plan included making sure every bed was connected properly and every Patient Link, with each of the two models of bedside monitors, were accurately sending each parameter that went into the flow sheet. The parameters chosen for the NICU were heart rate, respiration rate, up to 3 different SpO2 values, arterial blood pressure (systolic diastolic and mean), non-invasive blood pressure (systolic, diastolic and mean), and ICP. Many other parameters were discussed but it was decided they were not used often enough to warrant an automated interface at this time. For the adult ICUs a few additional parameters will be included (e.g. a second arterial blood pressure). Manual data entry continues to be an option so it is not necessary to automate 100% of the possible parameter list, which would make the flow-sheet unbearably long and significantly increase the amount of data being sent and stored.

The expanded CIS team brought in staff that analyzed overall NICU work-

(Continued on page 7)

Gap: Technology and People Gap Bridged

(Continued from page 6)

flow and made recommendations about their Admit/Discharge/Transfer (ADT) processes. They also brought in staff testing specialists that developed, with Clinical Engineering, a comprehensive “end-to-end” test plan and EMR trainers who looked at several options for training.

From a Clinical Engineers perspective, I found both the workflow analysis and the thoroughness of the testing processes to be very interesting. For workflow, a variety of process improvements were recommended, particularly related to how the nursing staff interacted with the ADT system. Historically, the NICU staff had created a variety of workarounds for the situation when the NICU’s unit service coordinators were not on duty. They were the experienced ADT users and not all the nurses knew how to use the ADT well enough to manage admits and transfers. This was particularly a problem on some nights, weekends and holidays. With their paper systems they had developed a variety of “holding” beds and other “workarounds” that would no longer work with an automated interface. Although their use of the ADT was outside the scope of our project, extremely accurate association of the bed label on the monitor to the bed label in the EMR (which came from the ADT) was paramount in order to properly populate the EMR flowsheet with data from the correct patient. Sending data from patient A into the EMR record for patient B would be a severe error and a potential “show stopper” for this project if that kind of problem happened repeatedly. We concluded that some additional nurse training on ADT was required and that was accomplished prior to the interface implementation. Similar, although not quite as critical, problems were found with the parameter labels for the monitors. For example, nurses were used to converting in their minds the various names used for charting arterial blood pressure based on the artery that the catheter was placed in (e.g. umbilical, radial, femoral etc). Since the NICU

EMR flow sheet only had one row set for invasive blood pressure, the monitor label name had to be set to ABP only. If the labels do not match, the data does not flow. A simple, but important, training point.

After comprehensive testing completion and correction of a few “defects” discovered during testing, we implemented the training plan and “went live” the week after Thanksgiving. We are still correcting a few small problems and collecting improvement ideas from the clinical staff, but overall the project has been a great success and the systems are in clinical use continuously.

All parties agreed that this was and is a very successful project, and the cooperation and learning from each other was particularly noted. For example, Clinical Engineering staff taught the EMR testing staff how to use patient simulators and worked together to verify each bed connection “end to end”. EMR staff taught Clinical Engineering staff how to use the EMR and view the parameter data (down to minute by minute if you wanted that level of granularity) coming across the interface. We all learned from the workflow analysis staff about how important the ADT workflow was and how workflow can impact a project even when some of us believe some of the problems were outside the scope of the project. Sometimes, managing what is important to project success is a fine line between sticking to the project’s scope and going far enough to manage the full scope of changes that the project mandates from the end-users perspective.

We informally surveyed the nurses who were trained on this new system and some of their responses were: “... it will be a great help to have our flowsheets automatically populated with data.”, “... it’s nice to have a feature that actually saves time rather than creates new work”, “sweet”. Now that the NICU interface is fully operational, we are in the process of moving support from our project team to operational support (e.g. IT Help desk, Clinical Engineering work orders). During the first

half of 2007, with our knowledge of what we learned in the NICU, we are going to be implementing these interfaces in nine other ICUs and three different recovery room (PACU) areas. When complete, we will have interfaced more than 150 bedside monitors and trained over 600 nurses.

Many thanks to all the people involved in this project. It’s been a huge success. We’ve been waiting a long time to see this type of interface come to fruition!

Ted Cohen, ACCE News co-editor

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Zambuto Named HIMSS Fellow



Ray Zambuto is President of Technology in Medicine in Holliston, MA and a Past President of ACCE

Ray Zambuto, a past President of ACCE, has been named a Fellow of the Health Information Management Systems Society (HIMSS). Ray has been active in many joint HIMSS/ACCE activities and has been instrumental in the development of the Patient Care Devices portion of the HIMSS Integrating the Healthcare Enterprise (IHE) endeavors. Ray is the first Clinical Engineer to be so honored and is a real pioneer in medical device integration. Congratulations, Ray!

View from the Penalty Box: Post-Election Muse

The election is over and the next campaign is starting. Wouldn't it be nice if the politicians actually did something worthwhile other than raising money and putting out statements on how great they are and how bad their opponent is?

In recent weeks, I have read various articles about healthcare and where it is headed and what some "enlightened" people suggest. One article that really ticked me off was an item in the New York Times about hospitals hiring retired pilots to teach the staff how to follow procedures, communicate and implement safety principles. Why are they hiring a pilot when there is a clinical engineer on the staff? Isn't that what we should be doing? Not far behind is the item in Forbes stating that many of the medical devices on the market are unsafe, and the FDA acknowledges the problem. Then in the Washington Post, the FDA stated that they need to reorganize the CDRH to

enhance the exchange of data and data mining from manufacturers and physicians. What about clinical engineers? Also in the New England Journal of Medicine, there is a report that almost half of all medical care in the US is inappropriate.

Some months back I made the suggestion that you ask your financial people what was the cost of a procedure. Some charges for lab tests are based on data from the 1980s before many automated systems were used. In one case, I found that the reagent rental charge for a series of tests was greater than what the hospital was billing for those tests. In another case the hospital did not have a code for a test so it was never billed. In a third case, the reagent rental cost for a chemistry panel was a little over \$4.00 and the hospital billed \$310.00 for the panel. Our whole system of billing is very outdated and needs our attention to move it into the 21st century.

To get our healthcare costs under control in the US we need to get a handle on what our costs are. Not the price that is charged to patients, insurance companies or the government but the costs. Engineers, by training, look for better ways of doing things; we solve problems and move on. But as clinical engineers we have allowed problems to exist in devices because we do not communicate. A major company sells a telemetry system that will give you a "bong" when a lead falls off, change the screen color but leave the patient unmonitored because it does not seek another lead. All its competitors have designed a lead seek, but hospitals still buy the one that does not have that feature. Another major company cannot reject the pacer spike on an ECG waveform if the gain is high enough, so the monitor counts the pacer spike even if the patient has died, but we still keep buying that system. Another company offers an x-ray system where the table moves on its own during a procedure, but we still keep buying it. In another case the x-ray generator will reduce the KV at random times during a procedure but we keep on buying that one too. These are all multi-national companies who should know better, but why fix the problem if it is selling? Check the FDA problem reporting database website. Some of the problems are reported and some are not, or they are reported in such a way that the problem is not clear. Worst of all, we are not sharing the information on problem devices so the same mistakes are being repeated.

As clinical engineers we need to clearly communicate problems to our institutions, the FDA and colleagues. We can make a difference on costs and patient care but we have to communicate quickly and in full voice.

Please share you experiences with others, get involved and finish off this year on a positive note. Happy Holidays!

Dave Harrington

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October 2006 Board Highlights

The October Meeting of the ACCE Board took place on October 19, 2006.

Jennifer McGill has made great progress on streamlining the process for approving new member applications by using a secure website application to manage the process of reviewing and voting on new applicants.

ACCE has received confirmation on a meeting space at HIMMS, which will take place February 25-March 1 in New Orleans. There will be an ACCE Reception/Meeting on Saturday February 24. There will also be an ACCE booth at HIMMS as the importance of this conference grows for Clinical Engineers.

ACCE will once again be conducting a CE Symposium at AAMI, which takes place in May 2007 in Boston. The Strategic Development Committee, headed by Past President, Izabella Gieras has already been planning for an inter-

esting symposium on Medical Device Integration Projects.

New guidelines developed by the Professional Practices Group, let by Paul Sherman, have been posted to the ACCE web site. They include several relevant topics and will be added to as the committee completes its reviews of other guidelines.

Arif Subhan, Chair of the CCE Education Committee, reported on the completion of the Teleconference Series aimed toward those preparing for the CCE Exam on November 18. The feedback form participants was excellent and recordings of the series are available on CDs for those preparing for future exams.

Barbara Maquire, ACCE secretary

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UCONN Clinical Engineer Program Success Continues

The University of Connecticut Clinical Engineering Internship program (formerly the Hartford Graduate Center Clinical Engineering Internship Program) has recently expanded to include 11 hospitals and 14 graduate students. Five will graduate in May, nine will graduate next year.

The students are employed as clinical engineers in their respective hospitals for 20 hours per week. As a result, each student's graduate education is fully funded by UCONN including a student stipend of about \$17,000 per year and a tuition waiver of about \$25,000 per year. Recent student projects and resumes of the second year students can be found at

www.ceeducation.org/uconn.



From left to right: Anthony Angelo-UConn Health, Center, Ashley Renners-CT VA Medical Center, Ilir Kullolli-Middlesex, Hospital, Ahmet Turkman-UConn Health Center, Barrett Franklin St. Francis and St. Mary's Hospital (sponsored by Premier), Ramakrishnan Parchuri-Rhode Island Hospital, Matt Choweniec-Hartford Hospital, Jessica Boyer-RI VA Medical Center, Abhijeet Bhat-UMass Medical Center, Kindall Carlton-CT VA Medical Center, Greg Mierzejewski-Hartford Hospital, Ziad Reslen-Umass Medical Center, Naomi Thonakkaraparayil - Baystate Medical Center and Sofia Iddir-Baystate Medical Center

ACCE 2006/2007 Teleconference Series

The 2006/2007 ACCE Educational teleconference series continues with the following:

1/18/2007: Economical impact of clinical engineering.

Wayne Morse of Morse Medical, Inc. will discuss the needs of the present and future healthcare system.

2/15/2007: Radiology - Latest developments in PACS.

Todd Starnes from Catawba Valley Medical Center will review the latest developments in PACS and address the interconnection of PACS with other clinical applications in healthcare.

These teleconferences are held the 3rd Thursday of each month at 12 Noon Eastern Time (9:00AM Pacific Time etc). Unless otherwise noted,

the teleconferences are one hour long, typically a 45-50 minute presentation followed by 10-15 minutes of Q and A. Registrants will receive the call-in number and presentation material prior to each session.

The cost for each Teleconference is \$150 per site. This allows for four (4) participants from each site, each additional participant is \$10. If nine (9) teleconferences are purchased the tenth one is at no additional charge.

In addition, each registrant receives a CEU certificate from the University of Arkansas for Medical Sciences for each session completed.

Audiotapes of each Teleconference will also be available for \$30 each.

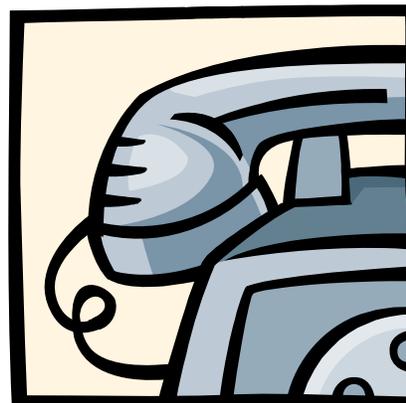
The schedule for new 2007 educational teleconference series will be pub-

lished soon. .

For more information contact: ACCE-Teleconference Series
5200 Butler Pike
Plymouth Meeting PA 19462-1298

or click

<http://www.accenet.org>



Membership Committee Update

The following is a report from Jennifer McGill, the new ACCE membership Committee chairperson.

As the new Chair of the ACCE Membership Committee, I have already made a few changes and wanted to share them with you all. First, we created an online workspace for the committee with the permission of Jim Keller at ECRI. The SharePoint website has allowed the committee to work more effectively and with fewer emails/ attachments to clutter up our already full inboxes. It has also allowed us to create an online voting process for the committee and the ACCE Board. We are already processing applications on a monthly basis!

Membership Committee Members:

Jennifer McGill (Chair), Guru Madhavan, Salil Balar, Walter Bordett, Carol Park, Al Levenson (ACCE Secretariat), Prachi Asher (Liaison with ACCE Professional Practice Committee), Jennifer Jackson (Liaison with ACCE Board).

During our last teleconference meeting, the committee agreed upon four goals for 2007 and they are the

following:

1). Process membership applications monthly, 2). Develop processes for HIMSS applicants and ORBIS sponsorships, 3). Develop process (complaint & appeal) and guidelines for "termination for ethical reasons", and 4). Develop guidelines on interpretation of "demonstrating evidence of professional practice of Clinical Engineering".

If you have any suggestions or feedback for the Membership Committee, please feel free to contact Jennifer McGill at membershipchair@accenet.org

New ACCE Members (October & November)

Fellow: Ray Zambuto

Individual: Jeffrey Burks, Pietro Derico, Pedro Galvan, Jonathan Hill, Gregory Mika, Gregory Hall, Gary Barkov, Patrice Young, Khawar Husain.

Candidate: Jeffrey Ciontea, Jared Koslosky, Theodore Nottage, Gregory Mierzejewski, Ramakrishna Parchuri

Survey: CMS vs JCAHO Differences

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards and the federal Center for Medicare and Medicaid Services (CMS) guidelines regarding medical technology management are similar but not identical. There are also variations in how JCAHO surveyors apply their standards and how CMS inspectors (usually from state health departments) apply the CMS guidelines. These discrepancies can create problems for medical technology managers.

An informal group of clinical engineers has been formed to study these discrepancies. We are collecting information via a survey about the problems that healthcare organizations have experienced. Our objective is to

bring these problems to the attention of JCAHO and CMS so that they can resolve the discrepancies and reduce the regulatory burden on healthcare organizations.

Responses to this survey will remain confidential unless the respondent explicitly authorizes the release of information. If you have questions or comments regarding the survey, please contact Matt Baretich at mfb@baretich.com.

To participate in the survey, go to: <http://www.surveymonkey.com/s.asp?u=140952791484>.

Thank you for your help in addressing this important issue.

- Binseng Wang

binseng@alum.mit.edu



ACCE News Bits and Bytes

Painter to Brazil

Frank Painter was invited to be the clinical engineering keynote speaker for the first joint conference of the Brazilian Biomedical Engineering Society and the Brazilian Clinical Engineering Association held October 23-26, 2006 in Sao Pedro, Brazil, about 150 kilometers NW of Sao Paulo. He gave a presentation on the "Worldwide Status of Clinical Engineering and Clinical Engineering Certification" and on "Technology Management". His presentations were each attended by about 200 conference participants and were the only presentations of the conference given in English.

New CCE Prep Columns

Arif Subhan CCE is writing a bi-monthly column in the magazine 24x7 and a quarterly column in the Journal of Clinical Engineering on the topic of preparing for the CCE certification examination.

FDA Seeks CEs for Panels

The FDA needs qualified people to sit on Advisory Committees for various products. The time requirement is 2 to 4 days per year for meetings in Washington, with expenses covered plus a stipend. The ACCE Advocacy Committee has supported this work as it is a great way to get our input into the various panels.

If you are interested, please send a resume to secretariat@accenet.org, and it will be passed on to the committee for nomination by the ACCE Board..

The ACCE Board and Committee Chairs

President	Stephen Grimes
President Elect	Jennifer Jackson
Vice President	Colleen Ward
Secretary	Barbara Maguire
Treasurer	Alan Levenson
Member-at-Large	Ted Cohen
Member-at-Large	Tony Easty
Member-at-Large	Paul Sherman
Member-at-Large	Bill Rice
Past President	Izabella Gieras
CCE Education Committee Chair	Arif Subhan
Membership Committee Chair	Jennifer McGill
HIPAA Task Force Chair	Stephen Grimes
Advocacy Committee Chair	Nancy Pressly
IHE PCD Task Force Co-chairs	Todd Cooper, Ray Zambuto, Elliot Sloane
International Committee Chair	Tony Easty
Education Committee Chair	James Wear
Medical Errors Task Force Chair	Elliot Sloane
Nominations Committee Chair	Izabella Gieras
Professional Practices Committee Chair	Paul Sherman
Body of Knowledge Committee Chair	Kelley Harris
Strategic Development Committee Chair	Izabella Gieras
Secretariat	Alan Levenson

ACCE Clinical Engineering Certification Study Guide

The American College of Clinical Engineering has completed a Study Guide for the Clinical Engineering Certification examination offered by the 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). Applications are now being accepted for the 2007 exams. Applications and the 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

Calendar of Events

- January 15-19, 2006

IHE North America Connectathon
Chicago, IL

- February 25–March 1, 2007

HIMSS 2007
New Orleans, LA

- June 16-18, 2007

AAMI 2007
Boston, MA

- June 17, 2007

ACCE Annual Membership
Meeting
Boston, MA

Your ad could be here!

Advertise in the ACCE Newsletter
Contact, Dave Smith
dsmith@fdiplan.com
5200 Butler Pike
Plymouth Meeting PA19462
(610) 825-6067

ACCE Website Gets PayPal

Please take a look at the ACCE website and notice that we have now implemented PayPal for the Study Guide, the ACCE Educational Teleconference and the CCE Review Course. In the future, we expect to be able to process membership renewals online, as well. Many Kudos to ACCE webmaster Duane Kamihara for all his hard work and creativity

ACCE

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We're on the Web!

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