

ACCE News

Newsletter of the American College of Clinical Engineering

March—April 2018

Volume 28 Issue 2



Read all about
**ACCE and HIMSS
2018!**

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President's Message



Greetings from California!

Early in March, I attended the HIMSS 18 conference and had the privilege to represent ACCE in some of the HIMSS activities. ACCE was an official collaborator of HIMSS 18 and participated in some important activities (details are in this Newsletter).

Membership Drive

“Promote and Increase Membership” has been the goal of the ACCE Board for this year. The ACCE Board has been working and discussing ideas on how to increase our membership. We will be launching a “membership drive” at the next AAMI conference in Long Beach.

ACCE members are our best sales people to bring in new members. I ask all of our members to reach out to other Clinical Engineering professionals and encourage them to join ACCE.

Pre-AAMI Activities

ACCE will be offering a two-day CCE Review Course on May 31st and June 1st for Clinical Engineers interested in pursuing the CCE. The CCE course will be taught by an excellent faculty headed by Frank Painter. Please visit the ACCE website to register for the course.

AAMI Conference

I look forward to welcoming our members to the AAMI conference in Long Beach, California. ACCE is actively participating in and is a contributing organization of the AAMI 2018 Conference. Current ACCE members are eligible to register for the conference at discounts off the non-member registration fees.

AAMI 2018 will provide the ACCE members with networking opportunities and a chance to learn from the many educational sessions. I encourage our members to actively participate in AAMI, particularly the sessions sponsored by ACCE. ACCE is partnering with AAMI and IFBME/CED to bring in a new “Global Forum” session on Friday, June 1st. This forum will share and discuss trends and challenges in managing medical equipment in each of the regions of the world. The ACCE symposium will be held on Sunday, June 3rd. This year’s symposium is titled “Managing and Securing Medical Devices in the Home and Non-Traditional Environments.”

Many ACCE members are presenting in the educational sessions at AAMI 2018. ACCE will have a booth in the Expo Hall. I encourage ACCE members to consider volunteering at the ACCE booth and to share with others the benefits of ACCE membership.

Don't forget to join us at the ACCE Annual Members meeting and Awards reception on Saturday, June 2nd. This will provide a chance to network with your peers and acknowledge the 2018 Awards recipients and the 2018 Clinical Engineering Hall of Fame inductees.

(Continued on page 3)

HIMSS 18: Health Technology Alliance ACCE Awards Reception



ACCE President Arif Subhan speaking



Erin Sparnon accepting the 2018 ACCE/HTF Marv Shepherd Patient Safety Award from Arif Subhan, ACCE President



Mark Milligan, VP Product Marketing and Communications at Enlighted, addressing the HTA/ACCE community



Sue Schade accepting the 2018 ACCE CE-HTM Champion Award from Arif Subhan, ACCE President



Thank you to the Enlighted team!

President's Message (Continued)

(Continued from page 1)

Right-to Repair Legislation

ACCE has decided that in the best interest of patient safety, service quality and cybersecurity to support the 'right-to-repair' legislation. More details are available on the ACCE website.

2018 ACCE BOK Survey

Don't forget to participate in the Body of Knowledge (BOK) survey. The results of the survey are used by the US and Canadian Board of Examiners for Certification in Clinical Engineering in designing the CCE exam. See [page 12](#) for more details.

2018 Advocacy Award winners

I would like to congratulate the distinguished group of this year's [ACCE Advocacy Award winners](#). I had the privilege of presenting the awards to some of the winners at HIMSS 18 and will be doing so as well at the awards reception at AAMI 18 in Long Beach.

Until next time.

Arif Subhan
President, ACCE
president@accenet.org

Interoperability Showcase at HIMSS 2018

While attending the Healthcare Information and Management Systems Society 2018 (HIMSS18) conference in Las Vegas and visiting the Interoperability Showcase, I found myself wondering what is the best bet for interoperability. And how do you measure the gamble of where to place your money as a CIO, hospital executive, government director, physician practice or payor to get the software or infrastructure for your business?

Walking among the 45,000 attendees at the Sands Expo Convention Center, attempting to visit as many of the 1,300 vendors as they could, was an eye-opening experience. It appeared that many vendors were claiming their data and software was in the cloud providing seamless data flows, and they were fighting the cybersecurity war at every touchpoint where patient information is concerned.

The American College of Clinical Engineering (ACCE) has been a fifteen-year catalyst to the healthcare industry; knocking on the door of informatics and healthcare information technology.

This year, I have noticed that the Clinical



Engineering and Information Technologists (CE-IT), Integrating the Healthcare Enterprise (IHE) and Healthcare Technology Alliance (HTA) splinter groups have come a long way towards integrating medical equipment patient data into the healthcare information management domain.

The patient data capture has grown from manual entry of the patient's name with the device measured parameter to a chain of automation tracking of every aspect of the patient's journey.

Auto identification of the patient with photo pairing, retina optics and/or old school bar coded wristband is the launching pad coming for the future patient care experi-

ACCE News

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Managing Editor

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

Co-Editors

Ted Cohen
tedcohen@pacbell.net
Jared Ruckman
jared.ruckman@live.com

Circulation & Address Corrections

Suly Chi, ACCE Secretariat
Secretariat@accenet.org

Advertising

Dave Smith
advertising@accenet.org

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ence.

Sophisticated medical device communication has become a differentiator for medical equipment and health analysis machines. Interoperability is now at a point of blending the patient diagnostic results with payors, registries and applying analytics.

It has been a long time coming for the adoption of medical device networking. The value of the ethernet port was tangled up getting into the future with missing communication protocols. The key point here may be Internet Protocol (IP) surfacing into the new emerging medical devices hitting the

(Continued on page 4)

Interoperability Showcase at HIMSS 2018 (Continued)

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new emerging medical devices hitting the market. Many small devices have struggled with no available space for the hardware. Embedded wireless communication is bridging that gap.

Steven Juett, PE
ACCE member & Showcase volunteer
Steven.Juett@crtkl.com

The Interoperability Showcase appeared to have its busiest year yet. Comparing it to my first sight of it, a few hundred square feet with the massive presence now (by far, the largest booth in the exhibit hall), I'm still amazed at how much it's grown. Quite a bit of that growth is due to IHE Patient Care Devices participation. I want to thank all our vendors for joining this work, as well as special thanks to Monroe Pattillo, who manages a number of the vignettes in the Showcase.

Interoperability progress – The Showcase highlights the work accomplished over the last several years. That work continues. My primary purpose in attending HIMSS is to recruit more IHE participation. The vendors

I visited were more open to joining this effort than before, and I think we will have some new members as a result. One thing ACCE members can do to help this effort is to ask your vendors if they are IHE members or at least, are implementing IHE messaging. In particular, we'd like to add more RTLS vendors and REALLY want to start adding CMMS systems to the effort. This would help develop seamless communication of medical equipment status and location information. Imagine if a pump failed on power-on self-test and could send that info and its location directly to your CMMS. The pieces are there. We just need to tie them together – PCD can do that.

Awards Gala – Finally, it was again my privilege to attend the HIMSS annual Award



Gala. ACCE and HIMSS present the ACCE/HIMSS Excellence in Clinical Engineering and Information Technology Synergies Award at the gala. This year's winner was Axel Wirth of Symantec. Axel has been instrumental in advancing cybersecurity for medical systems. He's been able to show us how to effectively balance security with operational needs – something that's an ongoing challenge in healthcare.

Paul Sherman, CCE, FACCE
Technical Program Manager for IHE-PCD
paulshermance@gmail.com



ACCE Education Presentation at HIMSS 18: “Partnering for Medical Device Security and Patient Safety”

On Thursday, March 8th, 80 people congregated in the Delfino room at the Venetian Conference Center in Las Vegas, Nevada to listen to a joint presentation by ACCE and HIMSS. This group of attendees came to learn how to: better strategize and organize for device security management, formulate and structure policies to drive success, and identify and organize a pathway for device integration and security.

The presenters were all employees of Stanford Children's Health including ACCE's President-Elect Ilir Kullolli (Director of Clinical Technology and Biomedical Engineering), Auston Davis (Chief Information Security Officer), and Lisa Grisim (Vice President and Associate CIO). This group

exemplified a successful medical device security program due to a partnership between IS and Clinical Engineering which is sponsored supported by executive leadership.

The description of the session was the following:

As healthcare has become more dependent on applications and software, and medical devices are getting networked and integrated, attacks previously targeted for IT systems are now a possibility for medical devices. Such attacks may place mission critical (and sometimes life critical) systems at jeopardy. The focus of this session will be to discuss a few areas of opportunity for IT and Clinical Engineering to partner



Left to right: Ilir Kullolli, Auston Davis, Lisa Grisim

on management privacy and security areas including policies and management techniques for server management, patching, and MDS2 (manufacturer disclosure statement for medical

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ACCE Education Presentation at HIMSS 18 (Continued)

(Continued from page 4)

device security) documents.

This subject seemed to strike a cord with many attendees as more than 10 people came to the microphone following the presentation to ask multiple questions each. These questions led to further discussion following the session with attendees staying after to talk to the presenters individually. Audience members ranged from CIOs and CTOs, to Clinical Engineers, all hoping to gain some insight into this emerging battle on cyber security in medical equipment.

The response to the presentation spoke volumes to how important this subject is to the healthcare community. ACCE Education Committee is listening to this need and will be planning a complimentary webi-

nar session with these presenters for the ACCE community for August 2018. The committee will also be looking into additional presenters related to this topic to get various perspectives on this quickly emerging area of Clinical Engineering.

Danielle Cowgill

ACCE Education Committee member
dcowgill@stanfordchildrens.org



CLINICAL ENGINEERING OPENING

The Technical Services Partnership www.tsp-uvm.org is an award winning HTM program:

- ⇒ Non-profit university-based shared service clinical engineering entity serving our region since 1973
- ⇒ 100% Certified Clinical Engineering staff; 50+ CE/BMETs; responsible for 70,000 devices
- ⇒ Selected by AAMI/BIT ten times for Bright Ideas and Best Practices column
- ⇒ The only World Health Organization Collaborating Center for HTM in the United States
- ⇒ University benefits include tuition remission and 10% salary retirement contribution after 3 years

We have an immediate opening for an exceptional individual to join our team of certified clinical engineers. The basic functions are:

- Provide clinical engineering consultation services to hospitals in the areas of healthcare technology assessment, acquisition, safety, incident investigation, compliance and maintenance planning.
- Responsibility for organizational efforts related to medical device integration and cybersecurity services

A B. S. in biomedical or related engineering field and two years clinical engineering experience is required.

Click on these links:

[Apply for the position](#)

[University Benefits](#)



The University of Vermont

TSP Technical Services
Partnership

May 31 – Jun 1, 2018 – Long Beach, CA

Prep for Certification in Clinical Engineering Exam (CCE) @ pre-AAMI 2018

Clinical Engineering and CCE Review Course

Prepare for the November Certification in Clinical Engineering Written Exam. This class will be presented by a group of ACCE Faculty who are experienced CCEs. The class will outline and present the material in each of the main subject areas covered on the exam. A mock exam as well as a session on the oral exam will be presented.



Disclaimer: This course is prepared and offered by individuals who are NOT involved in the preparation of the CCE Exam.

Going to AAMI?

Thinking about Getting your CCE but need a refresher?

Sign up Today for our CCE Prep Course to learn from the experts!

[Click here to download the registration form!](#)

To register, please contact Suly Chi, ACCE Secretariat: secretariat@accenet.org

**Thursday and Friday
May 31 and June 1,
2018**

**Time: 8:30AM-4:30PM
Long Beach, CA**

View from the Penalty Box

2018 has not been nice, so far, to many of us in the United States. We went from 70 and sunny to 40 plus inches of snow, high winds and power outages, here in New England. Watching news, when we had power, showed that there were weather problems all over the country, from fires, to mud slides to avalanches, heavy snow and high winds. But the truckers keep rolling and become major parts of the accidents on our crumbling roads. We keep on making the same mistakes, once the current crisis is over, by not looking to prevent the next crisis

In a recent newsletter, an organization came out with its top ten problems. More than most articles it showed that the “pundits” of healthcare have no clue about what the problems really are. Here are several examples. Number 10 on their list is “Leadership engagement in patient safety”. To me this is and always has been the number one goal of clinical engineers, keeping the patient safe from faulty equipment and staff that may be using those devices incorrectly. Maybe the people from the “C Suite” (I still maintain that the C stands for clueless) should work a shift or 2 with the caregivers and support personnel in their institutions. Then maybe they will find that too many of the problems that the patients and staff contend with every day can be solved with minor policy and procedure changes.

Another listed problem was device cleaning, disinfection and sterilization. To me this means that hospitals and clinics are not following the procedures outlined by the manufacturers, the approval agencies and their own infection control personnel. Where is the C Suite on this problem? Probably at a fund raiser for remodeling the lobby?

Then there was “Incorporating health IT into patient safety programs”. A not too bright clinical engineer had an article published in the Journal of Clinical Engineering stating that all equipment would be interconnected within 5 years. Now some 30 years later I am still waiting. What we seem to be getting with all the money put into Electronic Records, is big dollars and

not much to show for it. A hospital group here in the Boston area is investing over 2 billion for their system, but a little note in one of the newsletters stated that even with the 2 billion in costs that they were laying off about 200 people who are doing validation work and sending that work to India. So some 200 people working to find “up charges” are now losing their careers to outsourcing. The main question that has not been answered, to my knowledge, is have these investments actually contributed to saving lives and reducing costs? Not that I have seen published, but it could have happened. If so, get it published and use the savings to improve patient care.

When I first got into engineering an old timer told me, “nobody wants to deal with an engineer unless they will take the blame for the problem or they are looking to do something good but do not know how, so get an engineer to do the work”. He also went on to say if it works, the engineer generally does not get credit for the advancement, but if it fails the engineer is to blame.

There was a bridge collapse in Florida, and most of the media attention placed the blame on the engineers. As the investigators dug into the problem, they came across a message to the inspecting agency that cracking was detected, and the bridge needed to be looked at quickly. The message was not found until several days after the bridge fell. It is never clear when something bad happens who, beside the engineers, knew of the problem and what did they do. In so many cases, the people we report problems to control the budget and will come up with all sorts of excuses to not address the problems reported.

Depending on the newsletter you read, between 150,000 and 450,000 Americans die each year due to medical errors. That is way too many that die because of errors. As engineers can we do anything to cut that number down? To my simple way of thinking it is very possible that we can reduce the death rate with better IT. We do that by taking away the iPads or laptops that the physicians use when they are with you. Require that they look at you and



touch you as part of the exam not basing their diagnosis on what is on the network, but what questions they ask, answers they get, and what they see and feel. A physician told me once that an engineer invented the stethoscope and has been trying to get between the patient and physician since then. We need to work together to provide the best patient care possible and keep the costs down so people can afford healthcare or make it universal as most countries have. Prices do not always mean quality. A hospital in this area charges about \$18,000 for a simple birth, another hospital about 14 miles away charges \$8,000. Care to guess which hospital has the best results? It isn't the expensive one

In closing, I just want to push that, we as a profession, need to get more involved in patient care and spend less time on useless reports and safety inspections.

Dave Harrington
Dave@sbtech.com

ACCE Job Website Job Postings

For posting job opportunities, please contact Dave Smith at advertising@accenet.org

Healthcare Technology Foundation News

The recent fatal crash of a self-driving car and a pedestrian has caused ripples in the autonomous car development. Concerns about what caused the accident, where did the technology fail and what are the long-term implications are getting a lot of discussion and press. To date the regulators have had a pretty flexible attitude regarding the development of these vehicles and the concern is that this may change. There have been other accidents with self-driving cars, but this is the first time a pedestrian has died.

This is of interest in health care as many companies are developing their own version of autonomous systems. Either open loop, semi-closed loop or closed loop systems, there are a lot of systems out there looking to make decisions (Decision Support Systems) for clinicians to assist or to control patient management. There are ventilators, anesthesia systems, artificial pancreas, and glucose/insulin management systems either in the market (outside the USA) or in full development.

The challenge for both systems is how good do they need to be? Does it need to be perfect? You can make it perfect, but no one will be able to afford them. Deployment will take a really long time and it will probably be so complicated that users will reject them. Data has shown that self-driving cars are safer than people driven cars and a fleet of self-driven cars will be even safer (in theory). But how many accidents will the regulators accept?

Autonomous systems, can lower costs, reduce complications, provide earlier and more precise treatments and possibly provide care in areas where there are limited clinical resources. The military is working hard in this area, in part to make sure that the best care can be delivered anywhere,

regardless of who is there to provide treatment. The same issues that are to be dealt with for vehicles are there for “self-driving” health care systems.

And what is the standard for a medical system? Does it need to be better than the best clinician? Does it need to be better than a tired or distracted clinician? As transportation regulators look at what has happened and how to deal with this recent incident, it will most likely have an impact on health care and the development of autonomous systems.

Stay tuned.

*Paul Coss, RN
President, HTF*

March/April News

Robert Dickinson selected for Robert L. Morris Award

Board member Tobey Clark chaired the group who proposed Robert Dickinson for this humanitarian award. See link for more information: <http://www.aami.org/productspublications/pressreleasedetail.aspx?ItemNumber=5791>

HTF Alarms Group

The paper on the 2006, 2011, and 2016 national online alarms survey results has been published in the American Association of Critical-Care Nurses Journal. Link: <http://ajcc.aacnjournals.org/content/27/2/114.full.pdf+html>

HTF Board Members to be Honored at ACCE Award Reception

Bridget Moorman has been selected for the student paper award for ‘Prototype of Med-



Improve healthcare delivery outcomes
by promoting the development,
application and support of safe and
effective healthcare technologies.

ical Device Integration Knowledge Base and Expert System Queries.’ See link: <http://accenet.org/publications/Downloads/Reference%20Materials/BMoorman-StudentPaper.pdf>

Erin Sparnon has received the ACCE/HTF 2018 Marv Shepherd Patient Safety Award.

Link to all award recipients: <http://accenet.org/About/Pages/Advocacy18.aspx>

HTF Future Projects

Have a great idea to share? Please let us know if you have any suggestions on projects for HTF that will meet our mission.

Be sure to visit the HTF website, www.thehtf.org to see our programs and resources. While you are there, feel free to hit the DONATE NOW button. We will accept them anytime and they are always tax deductible!

*Paul Coss, RN
President, HTF
president@thehtf.org*

*Jennifer C. Ott, MSBME, CCE, FACCE
Secretary, HTF
secretary@thehtf.org*

Journal of Clinical Engineering Call for Papers

The Journal of Clinical Engineering prints selections of the ACCE News in each issue and is interested in papers from you. If you have an urge to write, and good clinical engineering activities or ideas to share, please consider JCE as one of your outlets. One type of article not seen in a while is the Department Overview which presents how your department is structured and how it performs its functions. Shorter “Perspective” pieces are also welcome. You can discuss manuscript ideas with fellow member William Hyman, who is one of the editors of JCE. Contact: w-hyman@tamu.edu. Send manuscripts to William or Michael Leven-Epstein at: michael.levinepstein@gmail.com

Perspectives from ECRI Institute

I love the smell of Vaporware in the morning—An update from HIMSS 2018

It was so nice to catch up with my ACCE friends and work-family in Las Vegas- five days, two floors of exhibits, and uncounted miles of walking, all to answer the question, “what’s new this year?”

1. Artificial Intelligence (AI) is this year’s Cybersecurity. As in, the thing that every vendor says they’re doing, often with wildly varying definitions of what ‘the thing’ is. Whether it’s AI for medical decision-making, financial planning, public health forecasting, or any of the dozens of proposed use cases, all the systems I saw need the same thing: a large database of accurate information. And here’s where Clinical Engineering comes in: manual entry of patient data like parameters, images, or waveforms isn’t going to provide the quantity and quality of information needed for AI applications, and we’re going to need to fill the gap with medical device integration. Whether patient data is sent to the EHR to facilitate machine learning tools for clinical decision support or whether your physiologic monitoring system incorporates its own data archive for research, the ability to identify and solve data integration needs will be critical in supporting AI.
2. IT vendors are discovering clinical workflow and usability as an important differentiator. A good half of the vendors I visited in the course of the week were excited to announce that their solution was superior because unlike other systems that are “just big pots of data”, these vendors focused on watching real providers (from more than one facility!) doing their jobs and then designed their systems to accommodate clinician desires, like
 - a. Reducing mental burden of knowing what to do next by combining requests or tasks from disparate systems into one automated worklist that updates on-the-fly as different information is received and prioritized.
 - b. Reducing the need to interact with many disparate systems to do the job, by accessing the new system’s features or data from within systems they already use, like EHR or PACS.
 - c. Supporting safety and risk management during implementation with a formal customization or configuration process. This allows a facility to decide and document choices about fitting the system into clinical practice, including what functions are to be user-customizable and what are to be set to facility standards.

Or, in other words, IT vendors may be more receptive the next time you serve as a user champion and ask “so how are we supposed to get our doctors/nurses/techs to use this safely?”

3. Safety isn’t just for the FDA-cleared device landscape. After hearing that federal funding for a Health IT Safety Center isn’t going to materialize as hoped, ECRI’s Partnership for Health IT Patient Safety is leading the charge in this space. The Partnership announced the launch of a National Health IT Safety Collaborative in conjunction with the Pew Charitable Trusts, the Bipartisan Policy Center, and the Alliance for Quality Improvement and Patient Safety in a letter to the Office of the National Coordinator for Health IT that laid out their shared vision for what a National Health IT Safety Center should look like. The opportunity to collect, learn from, and report out on problems, solutions, tools, and best practices may sound like old news for clinical engineers who do this on a daily basis, but it’s certainly a new and interesting proposition for the non-FDA space. <https://www.ecri.org/HITPartnership/Resources/National/AQIPS-BPC-ECRI-PEW-Collaborative-Letter.pdf>

As always, it’s nice to hear from you in-between the big conferences! Keep in touch as you see new technologies, challenging vendors, or something else breaking because it wasn’t cleaned properly.

Erin Sparnon
Engineering Manager, Health Devices
ECRI Institute
esparnon@ecri.org

The advertisement features a dark red background with white and light red text. At the top left is the 'Internet of Health' logo, which consists of a large white circle followed by the text 'internet of health' in a sans-serif font. To the right of the logo, the event details are listed: 'June 26-27, 2018', 'Hilton Back Bay, Boston, MA'. Below this, a paragraph of text reads: 'After last years' success, Internet of Health is coming back to Boston this June and promises to showcase even more case studies and discussions with a granular focus on how digital health is advancing value-based care.' A large white box with rounded corners contains the text 'Complimentary VIP Pass' in a bold, sans-serif font. At the bottom of the advertisement, there is a line of text: 'Over 150 innovation and clinical leaders from healthcare providers, payers and medtech OEMs will join senior executives from Mayo Clinic, MGH, Mount Sinai and more highly ranked US health systems to dive into how data analytics, AI, digital therapeutics and AR are reducing the cost of treatment while positively impacting clinical outcomes. Providers, payers and medtech OEMs are eligible for a complimentary VIP pass, so find out if you qualify and register today!' At the very bottom, there is a line of text: 'ioh-usa.internetofbusiness.com | #IoBHealth' followed by the 'Internet of Business' logo, which is a blue circle with the text 'internet of business' and 'Health IT For the Connected World' below it.

ioh-usa.internetofbusiness.com | #IoBHealth

*All complimentary passes are prequalified and cannot be guaranteed. (please make sure that this is small and at the bottom of the advert)

Welcome New Members

We welcome our newest members, approved by Membership Committee and supported by the Board of Directors:

Name	Class	Job Title	Organization	Country
Riah Farah	Individual	Medical Engineering Manager	St George Hospital- University Medical Center	Lebanon
Sue Shade	Associate	Director	TSP/Univ. of Vermont	IL/USA
Saleh S. Altayar	Individual	Assistant Professor	King Saud University	Saudi Arabia
Matthew Lancaster	Associate	Team Leader/Clinical Engineering	TRIMEDX	FL/USA
Manuel Nahr	Individual	President	INGENIERIA HOSPITALARIA C.A.	Venezuela
James D. Pope	Individual	Vice President of Information Technology	St. Alexius Hospital – Success Healthcare	MO/USA
Madhu Rao Bankuru	Individual	Clinical Engineer	RENOVO Healthcare	CA/USA
Jose de Jesus Salazar Torres	Individual	Gait Analysis Laboratory Manager	Belfast Health and Social Care Trust	Northern Ireland, UK
Edwin Gonzales	Individual	Medical Equipment Engineer	Arabian Gulf University	Bahrain
Danielle Everhardt	Individual	Biomedical Engineer	Ait Force	MD/USA
Osama Afif	Individual	Director	King Abdulaziz Medical City	Saudi Arabia
Nawaf Munawer Alrashidi	Associate	Healthcare Service Engineer	National Gard Health Affairs	Saudi Arabia
Brandi C. Tellis	Institutional/Individual	Biomedical Engineer	VA	SC/USA
Kamecia Bruce	Institutional/Individual	Biomedical Engineer	VA	FL/USA
Jason Howard	Institutional/Individual	Biomedical Engineer	VA	CA/USA
Alisson Stockdale	Institutional/Associate	Chief Biomedical Engineer	VA	CO/USA
Jin Matsumoto	Institutional/Associate	Clinical Engineer	VA	CA/USA
William Balhorn	Institutional/Associate	Clinical Engineer	Beth Israel Deaconess Medical Center	MA/USA
Ryan Rood	Institutional/Associate	Clinical Engineer	ABM Healthcare	
Tom Caballero	Institutional/Associate	Executive Director	Kaiser Permanente	CA/USA
Francisco Oms	Institutional/Associate	Manager, Clinical Engineering	Nicklaus Children's Hospital	FL/USA
Edwit Tironi	Institutional/Associate	Director, Clinical Engineering	Nicklaus Children's Hospital	FL/USA
Ivan Toyos	Institutional/Associate	Manager, Technical Support	Nicklaus Children's Hospital	FL/USA
Nitin Bharadwaj	Corporate/Associate	Vice President	AMTZ	India
Ashutosh Mittal	Corporate/Associate	Assistant Director	AMTZ	India
Kingshuk Poddar	Corporate/Associate	Assistant Director	AMTZ	India
Anburajan Mariamichael	Corporate/Associate	Senior Manager	AMTZ	India
Srinivasa Reddy	Corporate/Associate	Senior Manager	AMTZ	India
Santhosh Kumar	Corporate/Associate	Senior Manager	AMTZ	India
Venkatatamana Bhagavati	Corporate/Associate	Manager	AMTZ	India
Sandeep Patnaik	Corporate/Associate	Manager	AMTZ	India
Avinash Chunduri	Corporate/Associate	Manager	AMTZ	India

(Continued on page [10](#))

Welcome New Members (Continued)

(Continued from page 2)

Congratulations to the following members who upgraded to individual member status:

Name	Job Title	Organization	Country
John Moore, Jr.	Clinical System Engineer	Universal Consulting Services	MD/USA
Katrina Jacobs, CCE	Biomedical Engineer	VA, National Center for Patient Safety	MI/USA
Hannah Frank	Clinical Engineer	Brigham and Women's Hospital	MA/USA
Juuso Leinonen	Senior Project Engineer	ECRI Institute	PA/USA

Welcome to our newest Institutional Members:

Nicklaus Children's Hospital

Andhra Pradesh MedTech Zone (AMTZ) - India



**Nicklaus Children's
Health System**



Congratulations to our Newest Fellow Member: Colleen Ward, CCE, FACCE



Fellow status in the ACCE is a unique honor which recognizes distinguished service to the profession or achievement in the field of Clinical Engineering. We are pleased to welcome our newest Fellow Member: Colleen Ward, MBA, CCE, FACCE.

“You have made significant contributions over the span of more than two decades. I particularly admire your long and distinguished work on the ACCE Board where you held several key positions including Secretary, Treasurer and Vice President. Additionally, you played a significant role as a member of several ACCE Committees and chair of BOK Committee. Additionally, you made important contributions to Clinical Engineering through presentations and lectures.” said Arif Subhan, ACCE President.

Journal of Clinical Engineering Subscriptions for ACCE Members

The Journal of Clinical Engineering is a compilation of articles, papers, and extensive manuscripts relevant to clinical/biomedical engineering or biomedical technology. Subject matter directly relates to the engineering or technology involved in patient care and treatment or technology in the broad field of health care delivery.

ACCE members receive a discounted subscription to the [Journal of Clinical Engineering](#) for only \$99! (Originally \$265). You must [login](#) to the ACCE website to view the code. Then visit [LWW.com](#) to enter code.



2018 Members Meeting/Awards Reception

Date/Time: June 2, 2018, 7:30pm – 10:00pm

Location: Hyatt Regency Long Beach, Regency Ballroom D/E/F

Join us for yearly update! Network with your peers and congratulate the 2018 Awards recipients and the 2018 Clinical Engineering HOF inductees. **RSVP TODAY!** to be entered to the evening Raffle.

For more on ACCE events during AAMI 2018, please go to: <http://accenet.org/NewsEvents/Pages/AAMI18.aspx>

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2018 ACCE Body of Knowledge Survey

Please take the ACCE [Body of Knowledge \(BOK\) Survey](#), which is open now through **June 18, 2018**. The survey will assist the American College of Clinical Engineering (ACCE) with developing the scope of practice and knowledge base of clinical engineers. The results will be compiled and analyzed by ACCE for use by the United States and Canadian Board of Examiners for Certification in Clinical Engineering in designing the Certification in Clinical Engineering (CCE) exam.

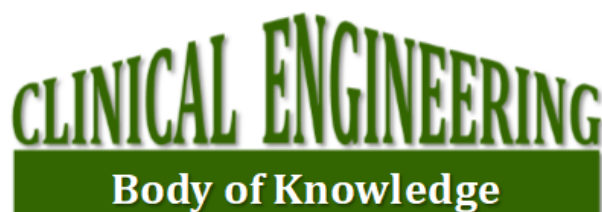
Please assist ACCE with developing the current scope of practice and knowledge base of clinical engineers by taking this survey today!

This survey will take no more than 15 minutes of your time. In exchange for your valuable time, you will be entered into a drawing to win one of 3 prizes:

- One-year complimentary ACCE membership (new or renewal)
- \$30.00 Amazon Gift Certificate
- \$30.00 Amazon Gift Certificate

To complete the survey, please [click here](#).

Winners of the drawing will be notified by June 22, 2018.



2018 Body of Knowledge Survey



Book Review: Healthcare Technology Management Systems

Clark, T., Rivas, R., & Voigt, H. F. (July 2017). Fostering CE & HTM in Developing Countries: Alignment and Effectiveness in Peruvian Health Sector. *IFMBE*.

Vilcahuamán, L., & Rivas, R. (2017). *Healthcare Technology Management Systems: Towards a New Organizational Model for Health Services* (T. Clark Reviewer). Elsevier.



In their recently published book - “**Healthcare Technology Management (HTM) Systems**”, and accompanying article - ***Fostering CE & HTM in Developing Countries: Alignment and Effectiveness in Peruvian Health Sector***, Rossana Rivas and Luis Vilcahuamán outline a roadmap for a Health Technology Management Programs. Although their focus is Peru, both developing and developed programs can benefit from the concepts and methods outlined in the book.

Rossana Rivas and Luis Vilcahuamán are esteemed and honored CE colleagues, and earlier co-winners of the ACCE/HTF's Organizational Award for their co-led CENGETS Peruvian Ministry of Health-MoH CE-HTM Unit initiatives.

No Health Technology Management library should be without the Healthcare Technology Management Systems book. The book is available at: <https://www.elsevier.com/books/healthcare-technology-management-systems/vilcahuaman/978-0-12-811431-5>.

The book as well as Luis' and Rossanna's publications and presentations are providing a blueprint for Clinical Engineering -Health Technology Management development not only for Peru but also for other developing countries in the Latin American & Caribbean (LA&C) region and beyond.

Peru's health sector is stepping up their demand for CE and HTM interventions with increasing country-wide impact. Recent examples include: (1) the call by MoH and the government's Ombudsman Office (watchdog agency) to be in charge of a 2018 Training Program aimed to assess the health technology of several hundred MoH hospitals in the country, the objective of which is to provide information to MoH to support change; and (2) the Peruvian National Institute of Health-NIH Public Laboratory Director asking CENGETS to support the Institute's plan for maintenance of health technology and also to provide training for their staff.

In 2016-2017, the MoH and Peru's Social Security System-EsSalud have implemented interventions highlighting health technology's (HT) key role. MoH implemented a TeleHealth System, a platform that is mainly aimed to the rural population. And EsSalud developed a 3-year plan for HT projects about: Adverse Events, Risk Management and Patient Safety (Biosecurity and Biosafety in the hospital). EsSalud requires training and education in Clinical Engineering, HTM, and HT Policy to accomplish this plan; CENGETS and partner University of Vermont- also PAHO/WHO Collaborating Center for Health Technology Management, and Boston University were called to define activities in this regard.

How can other countries follow Peru's path? First, understand your healthcare 'C-Suite' priorities. Rossana notes that the Peruvian MoH has identified two key overall improvement drivers for their health system: (a) achieving an efficient management of health system services; and (b) to have a modern and interconnected health infrastructure. Their gap in access to health services is due to some of the following factors: (i) human resources, (ii) infrastructural and equipment (HT) limitations, (iii) health investment weaknesses, and (iv) user's continuing dissatisfaction with the quality of health services. CE-HTM can assist the MoH in addressing these concerns.

The article and book assist in several ways:

1. Clearly defines HT and CE-HTM terms and scope of practice (Chapter 1 of book)
2. Identifies a framework of HT assessment and management through HT regulation and policy (Chapter 2)
3. Defines different CE-HTM roles and approaches for building necessary human resource capacity (Chapter 3)
4. Demonstrates how to measure necessary HT program implementation with indicators for success, improved safety and quality.

In summary, the HTM Systems book provides timely guidance and recommendations on the essential elements for establishing and managing an effective program all levels, and we are highly recommending it. We bought copies.

Thank you.

George Panagiotopoulos, MS
Senior Manager, Clinical Technology
Kaiser Permanente, Oakland, CA



Tom Judd, MS, CCE
IFMBE Clinical Engineering Division (CEDGlobal.org) Secretary,
Atlanta, GA



AAMI Update

AAMI Annual Conference to Address Top Trends, Challenges in Health Technology

Approximately 50 education sessions and workshops will be held during the AAMI 2018 Conference & Expo in Long Beach, CA, June 1–4. The conference is considered the premier event for healthcare technology management (HTM) professionals. Each year it attracts nearly 3,000 biomedical equipment technicians, biomedical and clinical engineers, clinicians, faculty, students, and others who manage or support medical devices each year.

“The Annual Conference Planning Committee sorted through hundreds of session proposals to deliver a diverse lineup of workshops, events, and education sessions to help HTM professionals gain insight into the innovations and trends in health technology, tackle pressing challenges facing the field, and advance their careers,” said Sherrie Schulte, AAMI’s senior director of certification and the annual conference.

Here are a few session highlights:

FDA Action on Device Service: What You Need to Know and Do

Binseng Wang, director of quality and regulatory affairs at WRP32 Management, Inc. & Greenwood Marketing, LLC

The Food and Drug Administration (FDA) Reauthorization Act of 2017 required the agency to draft a report for Congress and the public “on the continued quality, safety, and effectiveness of devices ... with respect to servicing.” That report is due May 15. After submitting the report, the FDA may issue an Advance Notice of Proposed Rulemaking on how it plans to regulate all device servicing, affecting both manufacturers and third parties (including in-house teams). During this session, attendees will hear from an FDA representative about its report and plan, and will gain analyses and insights from other panelists.

How to Prepare for a Successful Joint Commission Survey

Arif Subhan, chief biomedical engineer at the VA Greater Los Angeles Healthcare System



Get information about Joint Commission standards, the process, and the documentation and records needed to prepare effectively for a survey. Learn how participating in a Joint Commission readiness team can help HTM professionals become more organized and better prepared to answer questions. Get valuable tips, including how to network with other facilities that went through a recent survey to glean insights on any “hot topics” that may arise.

Mediating between Suppliers and Facilities for Cybersecurity Management

Juuso Leinonen, senior project engineer at ECRI Institute

Although we’ve been told repeatedly that cybersecurity is a “shared responsibility” between facilities and suppliers, sharing isn’t always easy. ECRI Institute has the unique perspective of working with its member hospitals and medical device suppliers in the course of evaluations, problem reports, and accident investigations. Through this process, it has learned a lot about what each side wishes the other would “just take care of already” and the assumptions, miscommunications, and unspoken expectations that can leave big gaps in the management of overall security. This presentation will describe problematic situations from a postmortem approach: what happened, how did it get there, and what can be done to avoid a similar situation the next time?

A Biomed’s Guide to the IT World

Roman Szewczyk, biomedical technician III at New York-Presbyterian Hospital

Healthcare systems and devices are becoming more integrated with the hospital network, so it’s vital that HTM professionals develop a better understanding of information technology (IT) and forge stronger relationships with their IT peers. During this presentation, Szewczyk will discuss important networking tools that can support successful collaboration between biomed and IT professionals, including PsExec, PingGUI, Putty, Wireshark, System Internals, and Nmap.

How to Use Artificial Intelligence to Reduce Your Workload

Amaury Jose Agoncillo, president of Morigon Technologies, LLC

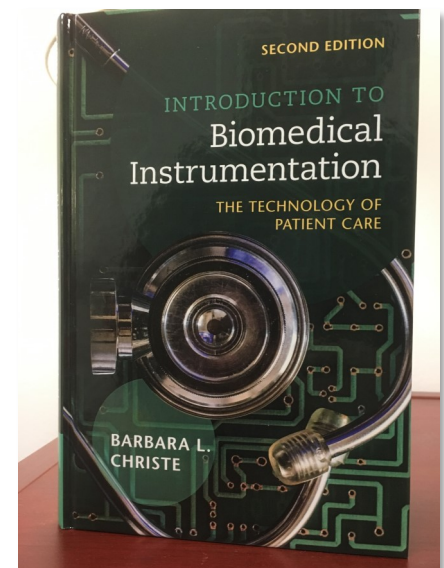
Artificial intelligence, or AI, can play a valuable role in the maintenance and service of medical equipment. As the amount of equipment and technology that HTM professionals manage increases, AI or web bots can help tackle basic tasks. AI also can serve as a first responder to a customer in need, giving HTM more time to tackle other high-priority tasks.

A full list of education sessions is available at www.aami.org/ac.

Biomedical Instrumentation Textbook Gets an Update

Students, recent grads, or hardened veterans who want to brush up on their biomed basics now have a new resource to learn the fundamentals of healthcare technology. AAMI is now offering an updated, second edition of the *Introduction to Biomedical Instrumentation* textbook written by Barbara L. Christie, the program director of healthcare engineering technology management and an associate professor with the Engineering Technology Department at Purdue School of Engineering & Technology at Indiana University–Purdue University Indianapolis.

The book provides accessible information to those looking to develop a career as a biomedical equipment technician.



(Continued on page 15)

ACCE Calendar

May 10, 2018, 12-1PM

ACCE Webinar: Patient Safety and Managing Recalls

[More Info](#)

May 31—June 1, 2018, 8AM-5PM

ACCE/HTCC CCE Oral Examination
Long Beach, CA

[More info](#)

May 31—June 1, 2018, 8AM-5PM

Clinical Engineering & CCE Review Course
Hyatt Regency, Seaview B, Long Beach, CA

[Registration form](#)

June 1—June 4, 2018

AAMI 2018 Annual Conference & Expo
Long Beach Convention Center, Long Beach, CA

[More info](#)

June 1, 2018

Global Forum by AAMI/ACCE/IFMBE-CED: Global leadership and support in the development, management and use of safe and effective healthcare technology
Long Beach, CA

[More info](#)

June 1, 2018, 7-10PM

Board Meeting at AAMI
Long Beach, CA

June 2, 2018, 7:30-10PM

28th ACCE Members Meeting & Awards Reception
Hyatt Regency Long Beach, Regency Ballroom D/E/F

[RSVP](#)

June 3—8, 2018

IUPESM Prague 2018—World Congress on Medical Physics & Biomedical Engineering
Prague Congress Center (PCC), Prague, Czech Republic

[Program at a Glance](#)

June 3, 2018, 7-10:30AM

Clinical Engineering Symposium by ACCE: Managing and Securing Medical Devices in the Home and Non-traditional Environments
Long Beach Convention Center

[More info](#)

June 14, 2018, 12-1PM

ACCE Webinar: Personnel Management

[More Info](#)

June 18, 2018

Deadline for 2018 BOK Survey Submission

[Click here to complete survey](#)

AAMI Update (Continued)

(Continued from page 14)

“This fully updated second edition provides readers with all they need to understand the use of medical technology in patient care,” Christe said. “It is designed for readers with a fundamental understanding of anatomy, physiology, and medical terminology, as well as electronic concepts.”

The update—the first since 2009—incorporates the most recent changes in healthcare, regulations, standards, and technology, and includes new sections on device testing and the interface of medical devices with electronic medical records.

This book and other HTM resources are available in the AAMI Store, www.aami.org/store.

AAMI Staff

ACCE

AMERICAN COLLEGE OF CLINICAL ENGINEERING

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