



ACCE News

Newsletter of the American College of Clinical Engineering

November—December 2022

Volume 32 Issue 6

In this issue

CCE Prep Questions [3](#)

Welcome New Members! [4](#)

ECRI Perspectives [5](#)

International Committee Report [6](#)

AAMI Update [7](#)

A tribute to Mario Castaneda [10](#)

Free HTM e-modules from Durham College [11](#)

Education Committee Report [12](#)

IFMBE—CED Update [14](#)

Call for CE Hall of Fame 2023 Nominations [15](#)

President's Message



Dear ACCE Community,

I hope you are all doing well and are excited for the holiday season. 2022 flew by really fast and it still surprises me that we “sort-of” overcame the 2-year struggle with the pandemic! I hope each and every one of you are safe and healthy, and are preparing for end of year commitments and enjoyment. Another food for thought as we approach the holiday season - we spend more than 1/3rd of our day at work and many of us take work back home, it’s so critical to maintain a balance and avoid burn-out. So please take time off to relax, rewind, and enjoy time with yourself and loved ones!

We celebrated Veteran’s Day last month and I would like to express my sincere gratitude and admiration to each of you that has served in the United States Armed Forces. Our community is comprised of many veterans and you carry your selfless service from the field to patient care delivery.

Please accept my heartfelt thank you for the sacrifices you and your loved ones have made to serve the country and keep us all safe!

I also want to take this opportunity to wish you all a belated Happy Thanksgiving! Thank you for all for your engagement with ACCE and your support over the years. It helps me and the numerous experts that volunteer their time to help maintain the professional community and standard of excellence among clinical engineers.

I have a few updates I would like to share with you all. The 2022-2023 Board is active and we’ve had a few discussions about ongoing events for the remainder of 2022 and events upcoming in 2023. A major effort in progress is the revamp of the CCE certification process. I’m very grateful to have Board members, Board of Examiners, and other experts who have received and reviewed recommendations from our auditors and are planning improvement actions. This effort is critical to help individuals continue maintaining a competitive edge in the field of clinical engineering. Many thanks to our Board Member, Katherine Navarro, for coordinating these efforts between these groups on behalf of the ACCE Board.

We have a few more educational and complimentary webinars to be hosted by the Education Committee for the rest of this year. Through feedback received from our members, we’ve constantly evolved our content delivery to meet the needs of the community and ensuring we’re keeping up with new trends.

There are two calls for awards I’d like to share with you all. We are receiving nominations for the 2023 Advocacy Awards until December 12th and submissions for the 2023 Student Paper Competition until January 31st. I encourage you and your team members to nominate anyone you or they think is well-deserving of these recognitions. If you have any questions about the submissions, feel free to reach out to us.

We are a member comprised community and always welcome blogs, articles, and insights in our publications. If you have content to share, please contact Suly Chi (secretariat@accenet.org).

Again, I thank you all for your efforts in HTM/CE, and look forward to wrapping up 2022 and having a prosperous start to 2023!

Priya Upendra, President

American College of Clinical Engineering

president@accenet.org

ACCE Membership Renewal

Thank you for being an ACCE member! It's time to renew your membership. If you have not yet renewed for 2023, renewal is due now!

To renew your 2023 membership online with PayPal, please [click here](#) or go to <https://accenet.org/Members/Pages/default.aspx?from=login>.

To renew by postal mail, please remit your renewal check to:

ACCE
2880 Bicentennial Pkwy, Ste 100 #249
Henderson, NV 89044

If you need an e-invoice, please contact ACCE Secretariat at secretariat@accenet.org

ACCE News

ACCE News is the official newsletter of the American College of Clinical Engineering (ACCE).

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2023

We wish all of you a Joyous Holiday and a Happy New Year!

Jim Keller, Ted Cohen, Ismael Cordero, Suly Chi

The ACCE News Editorial and Circulation Team

CCE Exam Prep: Dialysis

In this column we are providing sample questions and information regarding preparation for the CCE exam.

The sample questions are based on topics from the ACCE Body of Knowledge survey and the CCE Study Guide, version 11. Note that the instructors for the ACCE CCE Prep courses, and the writers for this column, do NOT have any affiliation with the CCE Board of Examiners and have no access to the actual exam questions.

If you have specific topics you would like us cover please contact editor@accenet.org.

1. What is the primary technology used for treating water to meet the AAMI water quality standard for hemodialysis use?

- A. Water softeners
- B. Sedimentation filters
- C. Reverse osmosis systems
- D. Deionization systems

Correct answer: C

Explanation: Reverse osmosis is the primary method for treating water for hemodialysis. It removes bacteria, metals, contaminants, and other potentially harmful materials from drinking water. The other systems listed may be used to pretreat the water, but the reverse osmosis system is the “heart” of almost all modern water treatment systems for hemodialysis.

2. Which of the following are waste products removed from the blood during hemodialysis?

- A. Hemoglobin
- B. Urea
- C. Creatinine

- D. Sodium
- E. B and C

Correct answer: E.

Explanation: Creatinine and Urea are two of the waste products removed by hemodialysis. In hemodialysis, blood is passed through a semipermeable membrane (artificial kidney) that is bathed in a dialysate solution typically consisting of water, sugars, calcium, magnesium, potassium and sodium as prescribed in order to correctly balance electrolytes, remove waste and remove excess water. Osmotic pressure forces the removal of the toxins urea, creatinine and uric acid into the dialysate solution. The cleaned blood is then returned to the body.

3. Which of the following alarms are part of a typical hemodialysis machine?

- A. Temperature
- B. Conductivity
- C. Blood leak
- D. Trans-membrane pressure
- E. All of the above

Correct answer: E

Explanation: All of the above. Dialysate temperature and blood temperature are monitored to keep the temperature of the blood going back into the body at body temperature. Conductivity is measured in the dialysate to make sure electrolytes are as prescribed. The blood leak detector makes sure there is no blood leak in the extracorporeal circuit. The trans-membrane pressure measurement is used to make sure that the semi-permeable membrane (aka artificial kidney) is working correctly (e.g., is not getting clogged) and

does not need to be replaced.

4. In peritoneal dialysis which is NOT part of a typical peritoneal dialysis procedure:

- A. Dialysate solution
- B. Blood pump
- C. The membrane lining the abdominal cavity
- D. Timer
- E. All of the above are part of typical peritoneal dialysis

Correct answer: B

Explanation: There is no extracorporeal blood circulating in peritoneal dialysis, and therefore, no reason for a blood pump to be used. In peritoneal dialysis, a dialysate solution is gravity fed or pumped into the abdominal cavity where the peritoneum acts as a semi-permeable membrane to filter waste products from the blood. The dialysate content, and the amount of time (dwell time) required for the dialysate to sit in the peritoneal cavity, determine the prescribed treatment.

Ted Cohen

ACCE News co-editor

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Welcome New ACCE Members!

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

Name	Class	Job Title	Organization	Country/ State
Brian Ogle	Institutional/Associate	Biomedical Equipment Support Specialist	Baltimore VA Medical Center	MD/USA
Diana Davila	Institutional/Associate	Supervisor, Biomedical Engineering	Dept of Veterans Affairs, VA Caribbean Healthcare System	PR/USA
Huma Abdul Rauf	Institutional/Associate	Biomedical Engineer	VHA	MA/USA
Karli D. Thornton	Associate	Clinical Engineer	Dartmouth Health	NH/USA
Cooper Schwabe	Institutional/Associate	Clinical Engineer	Veterans Affairs – Connecticut	CT/USA
Arslan Raza Firdousi	Individual	Sr. Sales and Application Engineer	Abu Dhabi International Medical Services	UAE/Pakistan
Christopher Stringer	Institutional/Associate	Supervisor Biomedical Equipment Support Specialist	US Depart. of Veterans Affairs	WA/USA
Yahira Ulloa	Institutional/Associate	Biomedical Equipment Support Specialist	US Depart. of Veterans Affairs	CA/USA
Cecilia McAlear	Institutional/Associate	Biomedical Engineer	Department of Veterans Affairs	AL/ USA
Robyn Candell	Associate	Nurse Informaticist	Island Health	Canada
Tyler Langdon	Institutional/Associate	Biomedical Equipment Support Specialist	Biomedical Equipment Support Specialist	FL/USA
Italiano D. Scott	Institutional/Associate	Imaging Biomedical Equipment Support Specialist	Charles George VA Medical Center	NC/USA
Edward Reyes	Institutional/Associate	Biomedical Equipment Support Specialist	Department of Veterans Affairs	FL/USA
Jackson Holland	Institutional/Associate	Staff Biomedical Engineer	G.V. Sonny Montgomery VAMC	MS/USA
Jonathan Sears	Institutional/Associate	Biomedical Equipment IT Specialist	Baltimore VA Medical Center	MD/USA

Congratulations to the following member who was upgraded to Individual Level:

Syed I. Ali, Sr. Medical Equipment Planner at Sidra Medicine

ECRI Perspectives



Hello from ECRI!

We're looking forward to the start of Holiday Season in scenic Plymouth Meeting, and continuing our support of healthcare facilities both inside the US and also globally. At the top of our radar:

- **Dialysis Safety:** ECRI engineer and ACCE newsletter co-editor Ismael Cordero worked with a New York Times reporter for four months on [a story about home dialysis](#), alerting readers to the potential dangers of moving dialysis into the home. Chief among these risks is undetected blood leakage due to either venous needle dislodgement (VND) at the vascular access point or access-bloodline separation (ABLS) of a central venous catheter (CVC). A dialysis machine's venous pressure monitor may detect the large pressure change associated with a disconnection between the venous line and the venous line needle. However, in dialysis blood circuits, the venous line pressure develops primarily between the blood pump outlet and the needle inlet. Blood pressure within the vessel contributes very little to the venous line pressure. For this reason, the venous line pressure monitoring is insensitive to needle location. Similarly, an ABLS may not trigger an alarm. Setting very tight venous pressure alarm limits to detect venous line dislodgement is likely to produce nuisance alarms. For more background and mitigations, see our [Alert](#).

Unintended Consequences of Connectivity: ECRI security engineer Chad Waters [alerted](#) hospitals about the cybersecurity risks associated with the use of third-party analytics tools such as Meta

Pixel, Adobe Analytics, and Google Analytics. In June 2022, a [report](#) published by The Markup disclosed that patient portals were exposing patient data to Meta (Facebook) tracking. Specifically, appointment scheduling information was exposed to Meta when some healthcare organizations installed Meta Pixel within MyChart patient portals. This raises two challenges. First, third-party analytics providers may use this information to target medical-related advertisements, which, if marketing unproven alternative or natural remedies, redirect patients from appropriate care. Second, healthcare providers that expose Protected Health Information (PHI) to third-party analytics providers without a Business Associate Agreement may be in violation of the HIPAA Privacy Rule. Read more in [MedCity News](#).

- **Making a Difference in Sticky Situations:** A few years ago ECRI sounded the alarm about mattress contamination, an under-recognized and potentially serious infection risk, in one of the best-titled Top Ten topics of all time: [“Clean” Mattresses Can Ooze Body Fluids onto Patients](#). As a result, our awareness campaign kick-started the invention of a new launderable and reusable bed barrier to help prevent infection spread. Recently FDA cleared as a Level 3 barrier per AAMI Standard PB70 (similar to other protective equipment such as protective apparel and drapes intended for use in healthcare facilities), the barrier allows

for laundering that meets AMMI TIR 12 acceptance criteria for high-level disinfection plus spore removal (99.9999%) using a rigorous commercial healthcare laundry method. Read more [here](#).

- **Celebrating Excellence in Patient Safety:** In November, ECRI and ISMP Patient Safety Organization [named](#) Monument Health of Rapid City, SD, winner of the 2022 Safety Excellence Award. Monument Health is recognized for exceeding organization-wide safety goals of reducing harm and errors by improving culture of safety and event reporting. Monument Health, a community-based health system, set a strategic goal to improve culture of safety, increase incident and near miss event reporting, and increase and enrich discussions about safety throughout the organization. Their efforts, which included implementation of a multi-prong safety culture program of tiered huddles, good catch reporting, and patient safety coaches, resulted in a 334% increase of near-miss reporting.

If you're ever in the neighborhood, we'd love to show you around our gorgeous new laboratory space. But, in the meantime, wash your hands, keep on excelling, and, as always, tell us what you're seeing.

*Erin Sparnon,
Senior Engineering Manager,
Device Evaluation, ECRI
esparnon@ecri.org*

International Committee Report

The International Committee (IC) held its sixth 2022 bimonthly meeting on November 18, 2022. Prior to our November meeting, IC members made several presentations to the members of our collaborating associations around the world. The first one was a webinar on Medical Equipment Planning presented by Dr. Avinash Konkani and Lou Schonder to the Peruvian association La Asociación Peruana de Ingenieros Clínicos (ASPIC) on September 29th. The second was an in-person presentation entitled Evidence-Based Maintenance for Medical Equipment made by Binseng Wang to the Brazilian association ABEClin on October 7th in Sao Paulo, Brazil. Finally, Binseng Wang presented a webinar on October 25th on the Right to Repair at the 2022 CLAIB-CBEB conference jointly organized by the Consejo Regional de Ingeniería Biomédica para América Latina (CORAL) and the Sociedade Brasileira de Engenharia Biomédica (SBEB), with support from the International Federation of Medical and Biological Engineering (IFMBE) and the Universidade Federal de Santa Catarina (UFSC).

In 2023, ACCE will be offering several webinars to national CE associations with which ACCE has signed collaboration agreement, as well as possibly a joint session with the Japanese Society

of Medical Instrumentation during the 2023 AAMI eXchange in Long Beach, CA. With the gradual reduction of travel restrictions caused by the COVID-19 pandemic, it is possible that some in-person presentations will also be made in foreign countries.

The current list of webinars being offered is available on the ACCE's website: <https://accenet.org/International/Pages/Webinars.aspx>. This list is not all inclusive and limited to IC members only. ACCE members who are not IC members are welcome to consider offering webinars they believe are of potential interest to our international colleagues. Interested persons should contact one of the IC members (see list on <https://accenet.org/International/Pages/Default.aspx>) and provide a short description similar to what is available on the ACCE webpage. Potential presenters are reminded that such activities are strictly voluntary and does not involve any honorarium or coverage of travel expense by ACCE.

Binseng Wang, IC Chair

International.chair@acceet.org



Join American College of Clinical Engineering
at HIMSS 2023
Member discount available!

ACCE is an official Collaborator of [HIMSS23](#)

Our members receive the HIMSS member rate to attend. To register, visit [HIMSS23 General Registration](#) and sign in. Once on the General Registration page, select the Chapter or Collaborator tab on the left-hand side. Select your preferred HIMSS23 Pass and enter ACCE as the Referring Collaborator Organization to receive the HIMSS member rate on registration.

[Book Your Room in the HIMSS Block](#)

AAMI Update

Shades of Gray: New AAMI Report Offers Guidance for Medical Equipment Service Responsibilities

When a fetal monitoring system goes down in the middle of the night, who do you call? Too often, no one knows for sure. That's why AAMI's Technology Management Council (TMC) recently strove to help healthcare technology management (HTM) leaders resolve confusion regarding the 'gray areas' of responsibility for hospital devices.

"In the 40 years that I've been in the industry, medical equipment gray areas have been a topic of discussion and an area of confusion," said Mike Busdicker, CHTM, FACHE, system director, clinical engineering at Intermountain Healthcare. "The TMC Committee saw this as an opportunity to shed light on existing practices and provide baseline guidance."

To help healthcare facilities define the scope of inspection, testing, and maintenance responsibilities for various medical products, the TMC surveyed leadership representing nearly 200 HTM departments across North America to understand where equipment service responsibilities commonly lie. The results of the survey were [compiled into a comprehensive report](#).

"Service responsibility has shifted between HTM, IT, and facilities as technology has become more complex," Busdicker added. "Devices that used to be considered furniture or non-medical equipment have become clinical devices or equipment."

Hospital beds, for example, now connect to electronic medical record systems and contain integrated sensors and software to

monitor patients' movement, weight, and other data. In years past, few HTM departments would have serviced hospital beds. Today, about 60% of HTM departments take responsibility for this evolving example of medical equipment, according to the survey.

Patient Safety and Compliance Concerns

Regardless of the reason for the gray areas, lack of clarity around equipment service can cause confusion, frustration, and wasted time among busy clinicians. Depending on the product at issue, "passing the buck" potentially extends downtime, which leads to patient safety, regulatory compliance, incident response, and inventory control issues.

"A malfunctioning desk printer may not cause an adverse outcome, but if a patient lift isn't working properly, and you have a patient in that room, the malfunction could result in clinicians not mobilizing or rotating that patient at the right time," said AAMI's Vice President of HTM Danielle

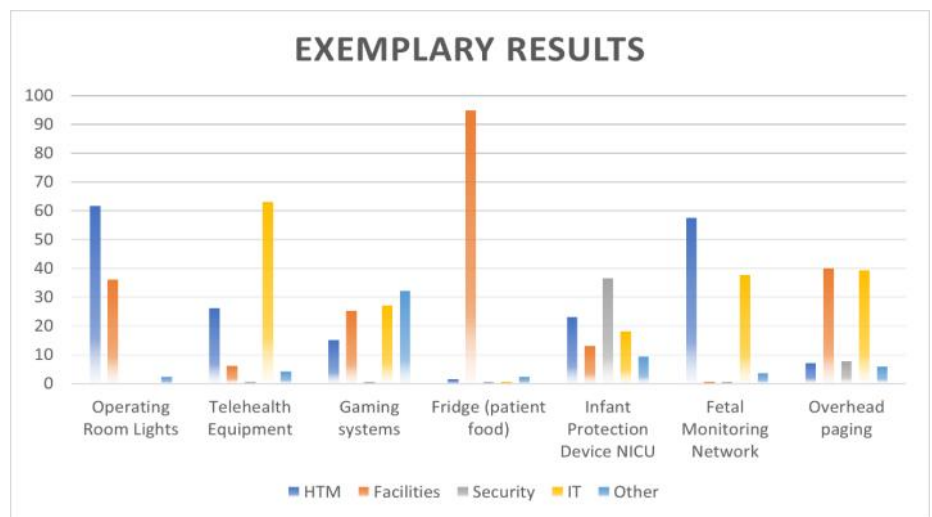
McGeary, CHTM. "That's one reason responsibility needs to be clearly defined and documented—so we're not spending precious time figuring this out."

Because medical equipment falls under mandates of the US federal agency the Centers for Medicare & Medicaid Services (CMS), extended downtime of this equipment could affect accreditation. During an audit on behalf of CMS, the Joint Commission (TJC) reviews responsibility agreements and other documentation related to equipment service.

"At the end of the day we're here for the patient," said McGeary. "If equipment breaks on Christmas morning, facilities should have a documented plan in place that identifies who should come in and service that equipment."

What the Results Show

The TMC compiled a list of more than 45 types of medical and non-medical equipment that tend to fall into gray areas. The committee then asked HTM leaders surveyed to select the department responsi-



Health technology responsibilities can vary wildly depending on the health system and type of equipment, as exemplified by this sampling of results from a new AAMI white paper.

(Continued on [page 8](#))

AAMI Update (continued)

(Continued from page 7)

ble for these products. Respondents also had the opportunity to list additional equipment excluded from the list.

Some results came as no surprise. For example, more than 80% of those surveyed reported freezers and refrigerators for patient food are strictly within the court of the facilities department. Other equipment, however, was more contentious. Both hospital nursery cameras and gaming systems for patient use, for instance, were notably split between HTM, facilities, IT, security, or other departments.

With help from the Joint Commission, the TMC also classified each type of equipment into medical equipment, utility, and other categories. “It was helpful for TJC to provide standardized nomenclature and terminology to the report, specifically within the medical equipment and utility components chapters, which address direct links to Joint Commission standards and elements of performance,” said Her-

man McKenzie, director of TJC’s Department of Engineering in the Standards Interpretation Group. “The document will help healthcare technology management (HTM) professionals become better aware of how healthcare equipment fixtures and devices are managed by health care organizations.”

How HTM Leaders Can Use the Report

The TMC committee developed the report as a resource for the HTM industry and not as a recommendation of service responsibilities. It serves as a guide to help HTM, facilities, and other healthcare leaders standardize their own processes. It may also help [resource-strapped](#) HTM departments take the lead in redefining responsibilities if they choose.

“The report may help them justify what they should and shouldn’t be servicing,” said McGeary. “The survey results give them data to back their claim.”

The report makes clear that written documentation of equipment service responsi-

bility is essential to ensure patient safety and compliance. Regardless of how healthcare facilities allocate responsibility,

The TMC committee also recommends healthcare facilities review and update their equipment service responsibility document periodically. To help inform those updates, the TMC committee intends to conduct more gray area surveys in the future.

“We intend to resurvey the field to see how things change over time,” said McGeary. “Depending on the response, it may trigger another project. We’d also like to hear success stories on how HTM leaders have used this information to structure equipment responsibilities. We’ve had a lot of interest from the field so far and anticipate this report will be welcomed by the field.”

Members of AAMI can [download Gray Areas of Equipment Service in HTM](#) for free from AAMI ARRAY.

Apply for 2023 ACCE Student Scholarship

The ACCE Student Scholarship is designed to promote the profession and encourage eligible students to pursue a clinical engineering career path. It will be awarded at the annual members meeting in June.

The American College of Clinical Engineering will award one \$1,500 scholarship to a student studying to become a clinical engineer.

Requirements and Criteria:

- ACCE membership is NOT required
- Applicants must be a current (beginning in the fall of 2023), full-time, third-year or above undergraduate or recent graduates accepted into a related graduate program, seeking a career in clinical engineering/biomedical engineering/health systems engineering profession at an accredited college or university

Apply by March 01, 2023, at <https://www.surveymonkey.com/r/2023Scholarship>

Past scholarship winners: <https://accenet.org/about/Pages/StudentScholarship.aspx>



ACCE
AMERICAN COLLEGE OF CLINICAL ENGINEERING

2023 ACCE SCHOLARSHIP COMPETITION

The American College of Clinical Engineering will award one scholarship to a student studying to become a **CLINICAL ENGINEER**.
The Scholarship of \$1,500 will be awarded at 2023 ACCE members meeting/Awards reception in June 2023, in Long Beach, CA.

Apply by March 01, 2023.

To enter the competition, go to
<https://www.surveymonkey.com/r/2023Scholarship>
or scan the QR code





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March-April 2022

Volume 32 Issue 3

In this issue

International Committee	2
WHO Collaborating Center for HTM	3
Advocacy Committee	4
ACCE at AAMI Exchange 2022	4
UCORNI Clinical Engineering Internship Program	6
Critical first step for securing your IoT/MT devices	7
Welcome New ACCE Members	8
ECRI Perspectives	9
AAMI Update	10
Commit To Your Success	11
CCE Prep Questions	14
Education Committee	15
The Global Clinical Engineering Alliance (GCEA) Update	17

President's Message



Dear ACCE Community,

I trust that each of you continue to be safe and healthy! Healthcare technology management/clinical engineering (HTM/CE) needs you to be so that we can continue to grow rapidly. Professional development in our field is necessary to remain current with the growing technology and human resource management trends. Our education committee hosted several thought-provoking sessions this past quarter focusing on challenges with connected medical devices, regulatory compliance and Joint Commission updates, and managing policies and procedures in HTM/CE. Webinars are scheduled every month and can be viewed here: <https://www.acenet.org/News/Events/Pages/Webinars.aspx>

Our Education Committee co-chair Nader Hammoud is presenting to the Japanese Association of Clinical Engineering on May 15th on clinical engineering experiences during COVID-19 response activities. This presentation speaks to the collaboration our International Committee has set up with clinical engineering communities around the world that allow us to share practices and advance professional development.

Our International Committee, led by Binsing Wang, is making great progress exploring collaboration opportunities with the United Nations Office for Project Services (UNOPS). Another collaborative and assistive agreement is being put together with the German Clinical Engineering Association (Fachverband Biomedizinische Technik e.V. - FBMT) and Lebanese Clinical Engineering Association (HTMA Lebanon) that will strengthen ties in our community in the form of education seminars, remote internship and job prospects, and mentoring in academic institutions. International Committee-organized webinars can be seen here: <https://www.acenet.org/International/Pages/Webinars.aspx>. If there is a topic that you would like to present to our international members, please contact Binsing Wang.

I'm thankful for the ACCE members that joined U.S. Senator Ron Wyden of Oregon on January 27th to discuss Right to Repair. PRA focus on ensuring continuous care delivery, maintaining medical devices with the least downtime, and facilitating access to all services, this topic is crucial to our industry. As medical device servicers, it is important for our community to voice our opinions at the state legislature level, build a coalition, and increase awareness on timely care delivery.

Our efforts to review and revamp the clinical engineering certification (CCE) and its process has taken full effect. On behalf of the ACCE Board, I am thankful for the expert advice from our auditors and collaboration with the HTCC, US and Canadian Board of Examiners. This revamp will allow our certification process to accommodate US domestic and international applicants and allow us to incorporate current exam-taking practices.

In closing, I want to thank all ACCE Board members, committee chairs, and members for tirelessly working to support patient care delivery and ensuring professional development in our ACCE community.

Priya Upendra, President
American College of Clinical Engineering
president@acenet.org



Volunteer Opportunity!

WE NEED News Co-Editor!

Each edition of the ACCE News is 10-20 pages, and published 6 times a year (every 2 months). ~10-20 hours work per edition

ACCE News co-editor is responsible for editing 3 of these newsletters each year and those duties include the following:

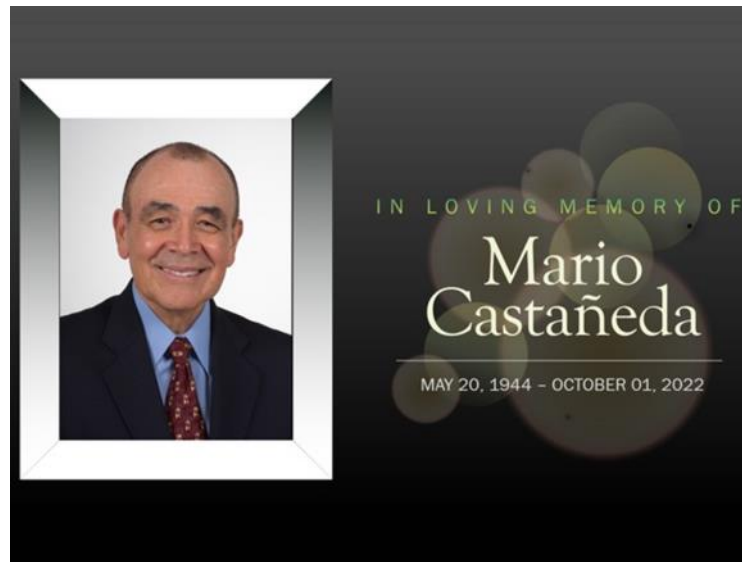
- Notifying regular article contributors of the upcoming edition's submission deadlines
- Editing submitted articles
- Follow up with authors about turning in submissions and corrections and clarifications
- Editing photos and graphics
- Editing newsletter pages so that the articles fit on the page
- Writing headlines and sub-heads
- Submission of draft Newsletter for subsequent review and edit suggestions by the ACCE Secretariat, ACCE President, ACCE Co-editor, and ACCE Managing Editor
- Completing final editing for submission for publishing
- The co-editor may also on occasion write articles

Currently the software used for this process is Microsoft Publisher.

Please contact Ted Cohen, or Ismael Cordero  editor@acenet.org

A tribute to Mario Castaneda, ACCE President, 2010-2012

ACCE has collected many thoughts and memories about Mario Castaneda coming from friends and colleagues. These can be found on our [website](#), along with a [tribute slide show](#).



Mario's Celebration of Life took place on November 12, 2022 at Unity In Marin, Novato, California



Eulogy delivered by long-time friend Carla Gallegos

We have the honor to share [the video of Mario's Celebration of Life](#) on November 11th.

Thank you Mario for all you did and contributed to ACCE and the CE/HTM community. Thank you for your friendship. We love you Mario. **RIP Mario!**

Free e-modules to facilitate the acquisition of knowledge and skills in HTM practice and to share best practices in HT acquisition and utilization

This course was developed by Professors Abdelbaset Khalaf, Richard Tidman, and Marko Costic.

The main objective of this course is to create a common background and understanding of health technology management among stakeholders involved in healthcare service delivery and share best practices in the acquisition and utilization of health technology.

In response to the Province of Ontario-Canada, virtual learning strategy, Durham College and the professors of Health Care Technology Management (HCTM) program have developed the digital content that is openly available for use and redistribution across Ontario Colleges, Universities, and health care institutions.

Durham College is a pioneer and leader in Health Care Technology Management (HCTM). Beyond being the first degree of its kind in Canada and globally, it addresses a gap in the health care industry which has existed for some time.

Healthcare is entering a period of unprecedented change with breakthroughs in biotechnology, pharmaceuticals, genomics,



artificial intelligence enabled health technology, nanotechnology, etc., revolutionize care delivery.

With change comes opportunity for new leadership. Leadership with skills in business, life sciences, and health technology have emerged as those needed to keep the organization on course as it transforms to harness the maximum benefits from science and technology. This new adaptive leader is the HCTM, an interdisciplinary specialist with the skills, and vision to lead health care into the future.

These modules are free to the public.

[Click here to learn more and access each of the 9 e-modules](#)

1. Health technology planning & medical equipment replacement
2. Health technology assessment

3. Health technology acquisition
4. Good management practice and medical equipment
5. Human resource management
6. Risk management
7. Health technology performance indicators
8. Asset management
9. Medical equipment audits

Baset Khalaf
Professor, Durham College/
ACCE International committee member
Abdelbaset.Khalaf@durhamcollege.ca

ACCE Website Job Postings

For posting job opportunities,
please contact Dave Smith at

advertising@accenet.org

Education Committee Report

In this edition of the ACCE News, the Education Committee would like to take some time to thank our 2022-2023 webinar co-sponsors. Thank you for your continuous support to the ACCE community and supporting the profession, your generous sponsorship allows us to bring the most updated education to our community at no charge helping our members and collaborators to advance the Clinical Engineering profession. – THANK YOU!



The 2022-2023 Educational Webinar Series will continue with session #4 on December 8, 2022, with Hank Stankiewicz and Shelly Leacock sharing the topic *Clinical Engineering and Risk Management Associated with Medical Device Incident Investigations in the VA Healthcare System*.

2022-2023 Educational Webinar Series

CE and Risk Management Associated with Medical Device Incident Investigations in the VA Healthcare System

Thursday, December 8, 2022; 12 pm - 1pm (EST)

FREE
for
MEMBERS

This session will discuss:

- How the VA investigates the medical device incidents - the VA Incident Investigation Guidebook
- How the VA communicates the information across the enterprise; Brief description of the Alert and Recall System
- Review the data trends from 10 years of formal incident investigations
- Future directions and activities
- How this whole process involved Risk Management department with HTM, how such collaboration is shaped, who does what in such incidents?

Henry Stankiewicz, Jr.
Consultant
Sigma Healthcare Consulting

Shelly Leacock
Biomedical Engineer
VA Center for Engineering & Occupational Safety and Health

And join us for session #5 on Jan 12, 2023, with Keith Whitby and Eric Aring. Keith and Eric will discuss the many ways that Virtual care is being implemented at Mayo Clinic and how can HTM support the needs to these technology intense programs.

2022-2023 Educational Webinar Series

Virtual Care - HTMs Role in Video Telemedicine

Thursday, January 12, 2023; 12 pm - 1pm (EST)

FREE
for
MEMBERS

Growing staffing shortages, and geographical challenges provide opportunities to utilize the increased scope of Telemedicine.

Join us to discuss the many ways Virtual care is being implemented at Mayo Clinic and how can HTM support the needs to these technology intense programs.

Keith Whitby, MBA
Section Head of HTM
Cybersecurity and Operations
Mayo Clinic

Eric C. Aring, MBA
Asset Administrator
HTM systems support
Mayo Clinic

(Continued on page 13)

Education Committee Report (continued)

(Continued from page 12)

These sessions will be followed by 5 more sessions (10 total) that will dig deeper into topics that Clinical Engineering Departments experience globally. Register today for session #4 and #5 and stay tuned as we have a great line-up of speakers this year building on the previous years' successes.

ACCE Members (in good standing), [Click here to register for session #4](#) or [Click here to register for session #5](#).

If you have not renewed your 2023 membership yet, please renew it via PayPal [here](#), or contact us at secretariat@accenet.org to request an e-invoice.

If you are not an ACCE member yet, please join us today! Just complete the [membership application form](#) and submit it to secretariat@accenet.org. Or if you prefer to register as a non-member, please complete registration for this session [here](#).

If you missed the live session of the October complimentary webinar, The Changing Landscape of Connected Medical Devices, by Nick Sturgeon/IU Health and Ty Greenhalgh/Medigiate, you may now review the on-demand recording. [Click here for the on-demand webinar](#)



If you missed the November complimentary webinar, "Left to our own Devices – Will we follow best practices?", you may review the on-demand recording [here](#)



Tony Cody & Nader Hammoud
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Webinar coordinator
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IFMBE–CED Update- The 2022 Global Week of Clinical Engineering

A few weeks ago, we celebrated the Global Day of Clinical Engineering. The enthusiasm it caused among the collaborators was such that the planning of events was extended to a week, so that in 2022 we had the Global Clinical Engineering Week (GCEW). During this week, we had the participation of many organizations including the College of Biomedical Engineers of Mexico, the Peruvian Association of Clinical Engineers, the Brazilian Association of Clinical Engineering, the Clinical Engineering Association of South Africa, the Chinese Society of Clinical Engineering, the Brazilian Society of Biomedical Engineering, the Regional Council of Biomedical Engineering for Latin America, and of course the Clinical Engineering Division of the IFMBE, and the Global Clinical Engineering Alliance.

Throughout this week, we were able to appreciate the contributions in the field of clinical engineering from different perspectives. The events "It's time for Clinical Engineering" and the Latin American Congress of Clinical Engineering showed how the Americas region has addressed the challenges and has achieved positive results along the way. A series of conferences on Clinical Engineering and its Interfaces was given in Brazil. The global day of clinical engineering (October 21) was celebrated in Mexico with the signing of a document of intent for creating the College of Biomedical Engineers of Nuevo Leon, a northeastern state of Mexico. In South Africa, a webinar was presented by our former CED chair that talked about Universal Challenges that affect clinical engineers, and our colleagues from China celebrated the Global CE Week World Kick-off, which, as has become a tradition, officially starts the celebrations. In parallel, the Latin American Congress of Biomedical Engineering (CLAIB) was held in Brazil. Both the CED and the GCEA participated in roundtables and symposia on the situation in the region regarding Clinical Engineering and possible alliances with IFMBE Health Technology Assessment Division (HTAD).

Among the events that the CED and the GCEA organized were the town halls on the projects developed throughout the year. These are Capacity Building, Impact Measurement, Credentialing, and Policy. In these meetings, we heard the different communities points of view, and questions of interest were raised for the follow-up to these projects. The GCEA had its members' meet-

ing, where we learned how diversity enriches teamwork. The meeting also announced the winners of GCEA's awards.

The CED had two webinars where we addressed the topics of welcoming the IFMBE to the African Region and women in Clinical Engineering. Prominent participants from engineering societies in the region participated in the first webinar, where we heard their views on the challenges they face every day. The second webinar featured prominent clinical engineers who shared their points of view regarding women's situation when practicing in this profession and the complexity involved in balancing the different aspects of our lives.

This week had various events that showed us that we are a large group with elements to maintain a high level of quality in our performances. We hope that the trend will allow us to have the Global Month of Clinical Engineering in future years, and why not the Global Year of Clinical Engineering.

Fabiola Martínez, Board Chair
IFMBE Clinical Engineering Division (CED)
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IFMBE
Clinical Engineering Division

CALL FOR NOMINATIONS!

CLINICAL ENGINEERING HALL OF FAME, CLASS OF 2023



Nomination form: <https://www.surveymonkey.com/r/2023CE-HOF>

Deadline: February 12, 2023

The Clinical Engineering Hall of Fame is a recognition program and virtual museum established by ACCE with the purpose of celebrating the application of engineering and managerial skills to support and advance patient care through technology and honoring the individuals who made extraordinary contributions to this effort.

We encourage you to take time to nominate individuals who have made outstanding and notable contributions to the evolution and advancement of Clinical Engineering. Please be as detailed as possible and include supporting information, documents, and justifications.

See the [eligibility requirements](#) and [nomination form](#) and email your completed nomination package to CE-HOF@accenet.org, or use this [online nomination form](#), by February 12, 2023.

Inductions to the CE Hall of Fame will be on June 17, 2023 at the ACCE Members Meeting/Awards reception in Long Beach, California.

Mark Bruley, FACCE
CE-HOF Nominations Review Committee Chair
CE-HOF@accenet.org

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 \$366). You must [login](#) to the ACCE website to view the code. Then visit [LWW.com](#) to enter code.



ACCE CALENDAR

<https://accenet.org/NewsEvents/Pages/Calendar.aspx>

08 December 2022, 12:00 PM-1:00 PM Educational Webinar session #4: CE and Risk Management Associated with Medical Device Incident Investigations in the VA Healthcare System.

12 January 2023, 12:00 PM-1:00 PM Educational Webinar session #5: Virtual Care - HTMs Role in Video Telemedicine

09 February 2023, 12:00 PM-1:00 PM Educational webinar session #6: 2023 TJC Updates

09 March 2023, 12:00 PM-1:00 PM Educational Webinar session #7: Staffing Models and Justification to Management

06 April 2023, 12:00 PM-1:00 PM AAMI/ACCE joint Webinar: Adopting the AAMI Failure Code White Paper

17-21 April 2023 HIMSS 2023 Location: McCormick Place, Chicago, IL

27 April 2023, 12:00 PM-1:00 PM Educational Webinar session #8: KPI - Above and Beyond Regulatory Compliance

11 May 2023, 12:00 PM-1:00 PM Educational Webinar session #9: Lessons Learned: CE-IT Symposium @HIMSS23

ACCE

AMERICAN COLLEGE OF CLINICAL ENGINEERING

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