# ACCE News

Newsletter of the American College of Clinical Engineering

**In this issue**

## President's Message

Kim Greenwood, President,

I hope all of you were able to take some time off over the holiday season to spend time with your loved ones. Now that we are back from our break, the volunteers that keep the ACCE moving forward are back at work whether through committee work or planning education programs for our professional community.

For example, our Education Committee and the task force are is hard at work planning our next annual symposiums for the HIMSS24 conference in Orlando this March and the AAMI eXchange 2024 in Phoenix this June. At the same time the Education Committee is planning our monthly webinars. The next monthly ACCE webinar is on February 8th when Herman McKenzie will be giving everyone an update on what changes to expect from the Joint Commission during 2024. It is difficult for many of us to routinely attend conferences to find out about new advances in our field and so the outstanding efforts of this committee help all of us to keep up to date with the fast-paced changes in today's healthcare environment. A big thanks to this dedicated group of individuals.

In an effort to expand visibility across our professional community, ACCE will be participating in additional regional conferences in 2024. This month ACCE had a booth at the California Medical Instrumentation Association (CMIA 2024) conference in Anaheim from January 18th to 20th. Visibility at conferences around North America gives us a great opportunity to connect with people that are entering our field and let them know how the ACCE can support them in broadening their professional skills.

I want to also make mention that the ACCE strives to recognize outstanding achievement in our peer community whether it be a newcomer to our field or individuals that have made substantial contributions to our field over many years. These bright stars deserve our accolades! I recommend taking a moment to nominate a deserving colleague for acknowledgment through the ACCE Awards program. If someone has achieved exceptional career milestones, please also consider nominating them for the ACCE Hall of Fame. Our Hall of Fame committee is now accepting nominations until February 11th. The newly selected members of our Hall of Fame for 2024 will be officially inducted during the ACCE Members reception in June at the AAMI eXchange 2024 in Phoenix.

The 2024 Mario Castañeda Scholarship competition is underway and closing on February 16th. If you are working with a student, please refer this opportunity to them.

I hope 2024 will be prosperous and healthy for all of you. I would like to take this opportunity to wish everyone a Happy New Year!

Kim Greenwood, President
American College of Clinical Engineering
greenwood@cheo.on.ca

ACCE
AMERICAN COLLEGE OF CLINICAL ENGINEERING

# From the Education Committee Desk

The 2023-2024 Educational Webinar Series will continue with Session #6 on February 8th, 2024 with Herman McKenzie to share the Joint Commission Updates for 2024.

ACCE Members (in good standing) and our collaborators, click here to register for Session #6.



And Session #7 will be held on March 21, 2024 with Shelly Leacock and Tom Toczylowski to share Recall Management Best Practices.

ACCE Members (in good standing) and our collaborators, click here to register for Session #7.

These two sessions will be followed by 3 more sessions (10 total) that will dig deeper into topics that Clinical Engineering Departments experience globally. Stay tuned as we have a great line-up of speakers.

If you have not renewed your 2024 membership yet, or need to catchup with your 2023 membership, please renew it via PayPal here, or contact us at



secretariat@accenet.org to request an e-invoice for online payment via QuickBooks.

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 these sessions **here**.

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# Join ACCE at HIMSS 2024 in Orlando

## ACCE is an official Collaborator of HIMSS24

As such, our members receive the HIMSS member rate to attend. To register, visit HIMSS24 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 HIMSS24 Pass and enter ACCE as the Referring Collaborator Organization and code: **H24ACCE** to receive the HIMSS member rate on registration.

## 2024 ACCE CE-IT Symposium (pre-HIMSS24) - Complimentary

**Topic:** Implementing Emerging AI Tools and Medical Device Technologies in Healthcare
**Date/Time:** Monday, March 11, 2024 / 8:45am - 4:15pm
**Location:** Hyatt Regency Orlando / Manatee Spring I
**Registration required (FREE)** Click here to register

- ✓ **AI Needs You! A Call to action for clinical engineering**
  **Speaker:** Erin Sparnon, M. Eng., Senior Engineering Manager, ECRI
- ✓ **Advancing Organizational AI Maturity: Strategies for Cultivating a Culture of Innovation and Collaboration**
  **Speakers:** Mark Nielsen, MLOps Engineer, Intermountain Health-Canyons & Olivia Sanders, Intermountain Health
- ✓ **Modernizing HTM Using Predictive AI and Machine Learning**
  **Speaker:** Thomas Stanford, CEO, Nuvolo
- ✓ **Frontline Perspectives from the MedTech Industry: The Future of AI's Adoption in Radiology**
  **Speakers:** Peter Shen, Head of Digital & Automation, North America & Rita Risto, Digital Solutions & Automation Sales Specialist, Siemens Healthineers
- ✓ **Is radiology the gatewy to your enterprise AI? Key use cases and lessons learnt**
  **Speaker:** Jamie Chow, Clinical Lead, Blackford Analysis
- ✓ **Panel Discussion: Partnership of CE, IT, and Clinical Teams in Implementing AI Technologies in Healthcare**
  **Moderator:** Phil Englert, H-ISAC
  **Panelists:** Mark Nielsen, Intermountain Health; Tom Stanford, Nuvolo; Keith Whitby, Mayo Clinic; Peter Shen, Siemens Healthineer; Kevin Littlefield, NCCoE

**Click here for Schedule at a glance**
**Click here to REGISTER** for HIMSS Conference and pre-conference symposium
Book your Room in the HIMSS Block

# 2023 HTM Salary Survey in the United States

ACCE Secretary Michele Manzoli, Manager of Clinical Engineering at Cedars-Sinai in Los Angeles, launched a Salary Survey for HTM Professionals at the end of 2023.

Back in 2020, he conducted a similar analysis, and published the results in the Journal of Clinical Engineering. Compared to the well-known 24x7 magazine salary survey, the intent was to provide more granularity into the Clinical Engineer and Clinical Systems Engineer positions in the United States.

This time, total participation was 50% higher than three years ago, but it was still not sufficient for all job titles that were initially included. The roles for which enough responses were received were: Clinical Engineer, Senior Clinical Engineer, Clinical Systems Engineer, Manager, and Director.

Responses were received from the whole country, and anonymity was guaranteed by asking participants to indicate neither their City nor State, but instead a Location Group that encompassed metropolitan areas with similar cost of living. For example, San Francisco and New York were in a different Location Group than Seattle and Denver, which were again separate from Arizona and Maine.

For the Clinical Engineer position, we saw a median salary of $101,000, well above the value captured in 2020 ($87,500).

For the Clinical Systems Engineer role, the median salary was in line with what was observed previously ($101,000).

The Senior Clinical Engineer also increased from a median salary of $125,000 to $131,000.

Clinical Engineering Managers shared a higher salary as well ($131,000) compared to the median value calculated in 2020 ($111,500).

Finally, Directors' salaries jumped from $133,500 to $165,000 in median terms.

Below are the salary ranges resulting from the responses received:

| Title | 25th perc. | Median | 75th perc. |
|---|---|---|---|
| Director / Senior Director / Executive Director / VP | 146,000 | 165,000 | 193,000 |
| Supervisor / Manager / Senior Manager / Associate Director | 108,000 | 131,000 | 155,000 |
| Senior / Lead / Principal Clinical Engineer | 120,000 | 131,000 | 152,000 |
| Clinical Engineer (I, II) | 89,000 | 101,000 | 108,000 |
| Clinical Systems or Device Integration Engineer (I, II) | 90,000 | 101,000 | 110,000 |

Interestingly, higher salaries did not always correspond with Location Groups that had a higher cost of living, especially for the Clinical Engineer and Senior Clinical Engineer titles. Moreover, we noticed that "green" professionals were reporting salaries comparable with more "seasoned" workers in the same job position.

 The whole report is accessible on the ACCE website and on LinkedIn (ACCE page).

From the Executive Board
Michele Manzoli
michele.manzoli@cshs.org

# ACCE at California Medical Instrumentation Association's (CMIA) Connect 2024 in Anaheim

Jennifer Nichols (CMIA Connect 2024 conference chair and ACCE BOK Committee chair) kicked off the conference at the opening breakfast with a warm welcome to all the attendees and provided a brief overview of the education sessions.  She went on to introduce the breakfast keynote speakers Blake Beltramea, Strategic Account Executive, AWS and Andrew Maksimovich, Sr. Healthcare Tech Business Developer at JWO who spoke about *AWS for Health Solutions for Healthcare Providers, Payors and Health Technology Companies*. The lunch keynote was delivered by Derek Hills, Manager, Product Management, TRIMEDX whose talk was entitled *Medical Device Cybersecurity: What we all need to know!*  Finishing off the evening was the dinner keynote by Binseng Wang, VP, Program Management, SODEXO with his talk on *Evidence-Based Maintenance of Medical Equipment.*

The ACCE booth was well attended and acted as a great networking spot to reconnect with old colleagues and make new friends. We had many inquiries and many new applications to join ACCE! A big thank you to members who volunteered to help staff the booth: Jennifer Jackson, Lindsay Pristou, Michele Manzoli, and Max Sayah.

A stellar line-up of ACCE members spoke at the conference; here are just a few:

**Paul Kelley** educated attendees on the topic: *Environmental Sustainability and Healthcare Green Initiatives*.



Background L-R: Suly Chi and Phil Englert
Foreground L-R: Max Sayah, Izabella Gieras, Jennifer Jackson, Michele Manzoli

**Scott Skinner**, shared his expertise in *The Capital Process: Demystified for HTM Professionals*

**Marlene Davis, Eric Burge & Mark van der Eb** shared with attendees the *Challenges of Providing Remote Support Outside of a Hospital Setting?*

ACCE thanks Jenn Nichols and the CMIA leadership for the opportunity to collaborate.

*Suly Chi, ACCE Secretariat*
*secretariat@accenet.org*




Jenn Nichols and Suly Chi


Binseng Wang delivered the keynote and awards dinner talk entitled "Evidence-Based Maintenance of Medical Equipment"

# More Pictures From CMIA Connect 2024


Donald Armstrong and Izabella Gieras: Why We Love the HTM Field!


L-R: Paul Kelley, Bhaskar Iduri, Arif Subhan




Izabella Gieras and Michele Manzoli shared with attendees: "All You Need to Know to Submit a Successful Title 22 Program Flexibility Request"


Jennifer Jackson shared with attendees the "Wonders of Wearables in Healthcare"


Arif Subhan, Bhaskar Iduri and Lindsay Pristou presented a session on The Joint Commission Survey Preparation


CMIA Connect 2024: Looking Cool in California

# 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 | State/Country |
|---|---|---|---|---|
| Karla Brish | Institutional/Individual | Section Head | Mayo Clinic | MN/USA |
| Elizabeth Sayles | Institutional/Individual | Manager of Quality, Safety, Education and Training | Brigham and Women's Hospital | MA/USA |
| Arthur Zenian | Individual | CEO and Founder | enBio, Corp | CA/USA |
| Jeffrey Ruiz | Institutional/Individual | Technology Manager | TRIMEDX | IN/USA |
| Riad Farah | Institutional/Individual | Senior Area Manager | SODEXO | MA/USA |
| David Franklin | Institutional/Individual | VP Operations | SODEXO | TN/USA |
| Robertas Senkevicius | Institutional/Individual | Client Executive | SODEXO | TN/USA |
| Steve Erdosy | Institutional/Individual | Manager, Quality Regulatory Compliance Analysis and Systems | TRIMEDX | IN/USA |
| Joe Littles | Institutional/Individual | HTM Unit Head | Mayo Clinic | MN/USA |
| Dan Larson | Institutional/Associate | HTM Unit Head | Mayo Clinic | MN/USA |
| Doug Marlow | Institutional/Associate | Senior Director, Quality Management Systems | TRIMEDX | IN/USA |
| Austin Hwang | Institutional/Associate | Project Officer | ECRI | GA/USA |
| Hannah Thomson | Institutional/Associate | Clinical Engineer (In Training) | CHEO | ON/Canada |
| Lama Yassin Kassab | Institutional/Associate | Clinical Engineer | CHEO | ON/Canada |
| Eleanor Gerson | Institutional/Associate | Clinical Engineer | CHEO | ON/Canada |
| Carlos Matias Santamaria | Institutional/Associate | Clinical Engineer I | CHOP | PA/USA |
| Kristen Casella | Institutional/Associate | Clinical Engineer I | CHOP | PA/USA |
| Lorenzo Villecco | Institutional/Associate | Senior Clinical Engineer | CHOP | PA/USA |
| Niousha Aflatouni | Associate | Clinical Engineer Masters | Shared Health Manitoba | MB/Canada |
| Ajay Kamaraju | Institutional/Associate | System Manager – App Manager | CHOP | PA/USA |
| Nathan Petts | Institutional/Associate | Laboratory Division Supervisor - BMET | CCHMC | OH/USA |
| Lindsay Pristou | Institutional/Associate | Staff Biomedical Engineer | VA Great LA | CA/USA |
| Max Sayah | Institutional/Associate | Clinical Engineer | Cedars-Sinai | CA/USA |

## Welcome to our newest Corporate Member:

TRIMEDX



Amy Klemm, MS, CCE
Membership Committee Chair
Amy.s.klemm@gmail.com

# ACCE Membership Renewal

Thank you for being an ACCE member! It's time to renew your membership for 2024.

To renew your membership online via PayPal, please click here or go to https://accenet.org/Members/Pages/Default.aspx?from=renewals

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

**Save the Date:** June 14-17, 2024

ACCE is a Contributing Organization for AAMI eXchange 2024. ACCE members are eligible to register for the conference at AAMI member discounted rates. Join us for four days where the field of HTM/CE comes together to learn about advances in health technology and connect with peers! We look forward to seeing you in Phoenix.

Please use the downloadable pdf registration form to register at the discounted rate for ACCE members. Register by April 5th to take advantage of the Early Bird rate of USD $799.

Stay tuned as more on ACCE activities will be posted to ACCE News March/April issue.

For more information and to register, click here.

# Congratulations to Pat Lynch, Winner of Tech Choice Lifetime Achievement Award

Congratulations to ACCE Fellow member Patrick "Pat" Lynch, CHTM, CBET, CCE, MBA, CPHIMS, FACCE who was recently awarded the inaugural Tech Choice Lifetime Achievement Award by TechNation magazine. He was nominated by Indiana Biomedical Society Vice President Kelly VanDeWalker and voted on by the his peers in the HTM community.

The award is sponsored by Tri-Imaging Solutions.

Click here to read more accolades about Pat.



Patrick "Pat" Lynch, CHTM, CBET, CCE, MBA, CPHIMS, FACCE
Recipient of Tech Choice Lifetime Achievement Award

# 2024 Mario Castañeda Scholarship

**The ACCE Student Scholarship is now the Mario Castañeda Scholarship**. A tribute to ACCE past president Mario Castañeda, the scholarship furthers his legacy to promote the profession and encourage eligible students to pursue a health technology/clinical engineering/biomedical engineering career path.

The American College of Clinical Engineering will award one $1,500 scholarship to a student studying to become a clinical engineer. An additional travel stipend of up to $1,000 will be provided for the student's travel expenses to attend the annual conference and the ACCE awards reception. The scholarship will be awarded at the annual members meeting in June.

For more information please visit:

https://accenet.org/about/Pages/StudentScholarship.aspx

For the application form click here.

Click here to contribute to Mario Castañeda Scholarship Fund

We appreciate and are grateful to those who have already contributed to the 2024 Scholarship Fund!



**Apply by Feb 16th**

The American College of Clinical Engineering will award one $1,500 scholarship to a student studying to become a clinical engineer. And additional travel stipend of up to $1,000 will be provided for the student travel expenses to attend the annual conference and the ACCE awards reception.

Applicants must be a current (beginning in the fall of 2024), full time, third year or above undergraduate or recent graduates accepted into a related graduate program, seeking a career in a clinical engineering/biomedical engineering/health systems engineering profession at an accredited college or university.

2024 Mario Castañeda Scholarship

# AAMI Update

## Rise of AI Demonstrates the Importance of Standards Development

According to Dr. David Classen, professor of medicine at the University of Utah and Chief Medical Information Officer at Pascal Metrics, patient safety is one of the more pressing issues in the American medical system. But with the help of new tools like artificial intelligence (AI) and the adoption of new industry standards, there may be light at the end of the proverbial tunnel.

In a recent conversation with AAMI President and CEO, Pamela Arora, Classen stated that patient safety has been top-of-mind for decades. The COVID-19 pandemic rolled back recent progress and the "latest studies suggest we're still injuring one in four patients in hospitals." However, Classen found reasons for optimism during the *Augmented Ingenuity: AI for Patient Safety* conference held in Salt Lake City, Utah. AI and other forms of advanced analytics can be leveraged to improve patient safety and prevent healthcare-associated infections.

The event's attendees were diverse, with Classen describing the in-person collaboration as "intentionally cross-cutting." It brought together various associations, healthcare providers, regulators like CDC and FDA, researchers, vendors, and patient advocates. According to Classen and Arora, the event demonstrated the real need for the role of organizations like AAMI in the development, adoption, and application of standards for AI-enabled medical devices.
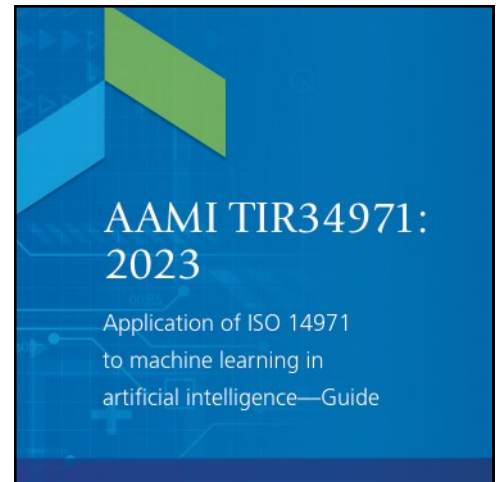
First, Classen stated that there is a clear need for industry standards related to information technology (IT) and software that apply to AI. Unlike in the relatively nuanced case of electronic health records (EHR), there is notable public appetite for the development of AI standards.

Second, Classen indicated that AAMI is very well suited to fill this need. AAMI's long history of standards development and engagement with important stakeholders means that the organization is "very well attuned to being able to create standards that are relevant here and to involve all the necessary stakeholders." And AAMI's reach is important, since "any company around the world that is creating any sort of regulated device is involved with AAMI."

Last, Arora turned to the [ANSI/AAMI HIT-1000 series](#) of standards, which provide a framework for managing the safety and effectiveness of health IT software and systems. Classen co-chairs the committee responsible for ANSI/AAMI HIT-1000 alongside Jesse Ehrenfeld, president of the American Medical Association. Of note, he believes the standards series has the potential to springboard the development of new standards of AI because of their applicability to EHRs. Previously, EHRs were not subject to software standards that both EHR users and vendors could leverage. The new standards also accommodate for the fact that many EHR users customize vendor software. The solution? A novel set of standards that operate on a "shared responsibility" model to guide vendors and users as they test and utilize EHRs in different situations. Both Classen and Arora agreed that standards for AI would require a similar approach, as AI-enabled tools are likely to be adopted in site-specific ways.

Fortunately, there has already been some movement on the AI standards front for the medical field. AAMI's own AI standards development committee remains hard at work developing the next in a series of standards dedicated specifically to the application of artificial intelligence in medical devices. In 2023, [AAMI and BSI jointly published](#) technical Information Report [(TIR) 34971:2023, *Application of ISO 14971 to machine learning in artificial intelligence – Guide*](#) for the U.S. and U.K.

The first-of-its-kind document derives from a 2022 AAMI consensus report that the [U.S. Food and Drug Administration recognized](#) as "appropriate for meeting requirements for medical devices under the Federal Food, Drug, and Cosmetic Act." In the near future, AAMI and BSI are planning to propose TIR34971 as an international standard through International Organization for Standardization (ISO) Technical Committee (TC) 210, Quality management and corresponding general aspects for products with a health purpose including medical devices, and IEC (International Electrotechnical Commission) Subcommittee (SC) 62A/Common aspects of medical equipment, software, and systems.

Additionally, the *Augmented Ingenuity: AI for Patient Safety* conference will return in the future. The latest iteration was generously funded by Robert Wood Johnson, but future funding will be provided by institutions including the University of Utah, the University of California San Diego, Carnegie Mellon University, and University of Pittsburgh.

## AAMI Publishes Leadership Development Guide for HTM Professionals

As the healthcare technology management (HTM) field faces record staffing shortages and an ever-increasing de-

# AAMI Update Continued

mand for new skills and specializations, promoting a department's best and brightest remains one of the most effective ways to ensure a health system or service provider is ready for tomorrow. That's why AAMI is pleased to announce its publication of a practical guide for HTM professionals who are interested in advancing their careers or the careers of their staff into new leadership roles.

The *Leadership Development Guide: A Resource for Healthcare Technology Management Professionals* provides comprehensive tips, best practices, and exercises for HTM staff seeking professional advancement and supervisors seeking to train employees for leadership roles.

The document was produced by the AAMI's Technology Management Council (TMC). Danielle McGeary, AAMI Vice President of HTM said, "This guide was created to give HTM Professionals a roadmap for career advancement. It provides guidance for those looking to move into Leadership roles."

The guide features various sections, including:

- *Getting Started* — A step-by-step process to creating your own career plan.

**LEADERSHIP DEVELOPMENT GUIDE**

A Resource for Healthcare Technology Management Professionals

**AAMI**
Advancing Safety in Health Technology

PREPARED BY AAMI'S
Technology Management Council

- *Toolkit* – A career progressions graphic and leadership progression grid for HTM professionals, alongside planning worksheets on advancement and corporate structure.

- *Career Planning Opportunities* — Sources on development opportunities for each of the skill and knowledge domains on the HTM leadership progression grid. These include leadership, equipment expertise, financial management, and much more.

- *Communicating Your Plans* — A 'how to' for working with your HR department and organizational

leadership, including meeting guidelines and sample agendas for communicating your career goals and plans.

- *Interviewing for Leadership Positions* — Tips and techniques for senior level interviewing, including key dos and don'ts.

- *FAQs* — Answers to the most frequently asked questions about career planning, taking on leadership roles, continuing education, and more!

In short, the document is an excellent resource for HTM professionals looking to move into the next stage of their career and for professionals who are uncertain but would like more information. AAMI's new guide has you covered and can set you up for success.

The document is free for AAMI members but can be purchased à la carte in the AAMI store. Questions? Reach out to htm@aami.org.

AAMI Staff
Dan Visnovsky
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# Help Wanted: ACCE News Co-Editor

ACCE News is published six times a year (every other month) and each edition is 10-20 pages long.

The 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
- Editing photos and graphics
- Editing newsletter pages so that the articles fit on the page
- Writing headlines and sub-headings

- Submitting 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.

It takes approximately 10-20 hours per issue to complete the above-mentioned editor tasks.

If interested, please contact editor@accenet.org

## Empowering Patient Involvement in Design and Evaluation of Medical Devices

A paradigm shift towards patient-centricity is gaining prominence in the ever-evolving healthcare technology landscape. Recognizing the patients' crucial role in their care, there is a growing interest in involving them directly in medical device design and evaluation processes. This approach aims to enhance the usability and effectiveness of healthcare technologies and ensure that they align closely with patients' needs and preferences. Some relevant aspects shape the patient-centric approaches in the design of medical devices:

### Empathy and Principles in the User-Centered Designing Process

Patient-centric healthcare technology begins with understanding individuals' unique experiences, challenges, and preferences navigating their health journeys. Incorporating empathy into the design process enables engineers and designers to create medical devices that resonate with patients' daily lives and diverse needs. The closeness of the patients' points of view will provide a better understanding of implementing the technical characteristics with a friendly design. The adoption of user-centered design principles is fundamental to this approach. Engaging patients in the early stages of design allows for iterative feedback loops, ensuring that medical devices are intuitive, accessible, and tailored to the specific requirements of end users. Collaborative workshops, interviews, and usability testing become integral components of the design journey. To accomplish this task, it is necessary to provide enough clear information concerning the intended use of the prospective medical device to a selected audience of potential users, not only to the patients in need.

### Accessibility, Inclusivity, and Transparency as Key Strategies

Patient involvement in the design and evaluation of medical devices contributes to creating solutions that are effective and accessible to a broad spectrum of users. Considering diverse demographics, cultural backgrounds, and abilities becomes a priority, fostering inclusivity in healthcare technology. The technical and design experience in developing a medical device is enhanced with the contribution of the different profiles of users in aspects as important as functionality. For example, the capability of changing the language of the instructions for use may avoid risks that could cause potential incidents. As an additional result, the technologies are more likely to align with real-world needs, improving patient adherence to treatment plans and fostering a sense of ownership and empowerment in managing their health. A complementary result is that the pa-

tient, previously seen as an end user, is now an active participant in the decision-making process; in this scenario, the informed choice about the design features and functionalities contributes to a more collaborative and respectful patient-provider relationship.

The trajectory of patient-centric healthcare technology lies in ongoing collaboration, evolving user experience research, and the integration of emerging technologies for enhanced personalization and optimization of medical devices. The paradigm shift towards patient-centric healthcare marks a new era. By actively engaging patients in the design and evaluation of medical devices, the healthcare industry is advancing towards delivering solutions that meet clinical standards and deeply resonate with the diverse lived experiences of those they aim to serve.

Fabiola Martinez, MS, PhD
Chair, IFMBE/CED
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# Hello From ECRI!

Hello and Happy New Year from ECRI, where we're looking forward to exceeding our New Year's resolutions, distributing our Top Ten Technology Hazards list, and celebrating all the ways our members are making patients safer.

1. Have opinions? We love that! ECRI is always looking for a few good clinical reviewers for our hands-on evaluations and guidance articles. Reviewers get a sneak peek at our test methods and findings, and can help weigh in on the merits of the technologies under study. If this sounds like your kind of activity, reach out to me at esparnon@ecri.org and I'll connect you with the right investigators. Technologies under study at this time include:
   a. Large volume, PCA, and syringe infusion pumps
   b. Steam Sterilizers
   c. Isolation Gowns
   d. Next Generation Anesthesia
   e. Defibrillators
   f. EHR Usability

2. Recognizing Patient Safety Excellence. Congratulations to AdventHealth Zephyrhills and Dade City hospitals in Florida for winning ECRI's 2023 Safety Excellence Award. ECRI staff travelled down South to personally recognize their leadership and clinical teams for launching an intervention that successfully reduced incidents of patients falling. They created a Patient Falls Bootcamp that enhanced patient safety through intensive training that shook up the traditional approach to strategy sessions, resulting in an overall 33% reduction in patient falls that has been sustained across all units.

3. ECRI Engineers in the Spotlight! Our staff have been spending some quality time with our YouTube Channel, TechNation, and the Boston Globe, sharing their expertise and knowledge.
   a. Single Use Bronchoscopes. The market for single-use bronchoscopes has exploded, largely driven by the reduced risk of cross-contamination compared to reusable devices. ECRI Principal Project Engineer, Mairead Smith, explored some of the trade-offs, weighed the environmental costs of single-use devices against the costs and infrastructure needed for reprocessing reusable scopes, and explained ECRI's considerations for when to select each type of device.
   b. Stockpile Ventilators. To prepare for a future pandemic or emergency, some hospitals stockpile transport ventilators. Senior Project Engineer Brad Bonette evaluated transport ventilators and discovered many of the ventilator models that are designed specifically for pandemic and stockpiling applications would be virtually useless if they were ever called into service. Via TechNation: ECRI's Key Considerations When Stockpiling Ventilators for Future Crises.
   c. Pulse-oximetry based baby monitors. Following last year's FDA clearance of the Owlet home-based infant monitoring system, Engineering Director Chris Lavanchy followed up on our research on baby-worn monitoring systems with the Boston Globe.

4. Innovation Brief on AI-based virtual health assistants. Apps that use generative AI are being integrated into healthcare as virtual health assistants with the aim of improving patient engagement and health outcomes. Virtual health assistants could improve care by reminding patients to take medications, managing prescription refills, monitoring vital signs, providing personalized health guidance, and facilitating communication with care teams. This may alleviate pressure on care providers by reducing hospital admissions or readmissions due to medication nonadherence.

5. Hot off the press: Top Ten Hazards! Reducing preventable harm is at the core of ECRI's mission, and has been for more than 50 years. Since the publication of the first issue of the Health Devices journal in 1971, ECRI has served as an information clearinghouse for hazards and deficiencies in medical devices. We collect and analyze reports of device-related problems, identify root causes, and develop practical recommendations to prevent future occurrences and prevent harm. ECRI's annual Top 10 Health Technology Hazards report is one tool we develop to help members of the healthcare community participate in that mission. The report informs frontline healthcare workers, administrators, clinical engineers, IT professionals, medical device manufacturers, patients, regulatory bodies, and others about device-related hazards, and it empowers them to address those issues to make healthcare safer. Take a look at the newly-released 2024 Top Ten Technology Hazards .

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

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

## Congratulations to the 2024 ACCE-HIMSS Excellence in CE-IT Synergies award recipient: Christopher Falkner

Chris Falkner is the Senior Director, Digital Strategy & Cybersecurity with SODEXO, and is an adjunct professor at UCONN for the Clinical Engineering Program. He has previously served as co-chair for the ACCE Education Committee where he led a task force for planning of the CE-IT Symposium pre-HIMSS and CE Symposium at AAMI conferences. Additionally, he served on the CCE Board of Examiners - US.

He was also one of the invited speakers at 2021 ACCE CE-IT Symposium covering the topic: Getting Ahead of Cybersecurity Risk with Contract Language. With over 15 years of experience in the healthcare technology industry, Chris is a passionate and innovative leader who creates meaningful human experiences with technology.

This award recognizes his contributions and commitment to the integration of Clinical Engineering and Information Technology and patient safety.

**Christopher Falkner, MS, CCE**

**Join us on March 11th at Hyatt Regency Orlando to congratulate Chris Falkner**

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## ACCE CALENDAR

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

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| 08 - 11 Feb 2024 | Florida Biomedical Society 2024 Symposium<br>Click here for more information |
| 08 Feb 2024<br>12:00 PM -<br>1:00 PM | ACCE 2023-2024 Educational Webinar Series<br>Session#6: TJC Updates 2024<br>Faculty: Herman McKenzie/TJC |
| 11 - 15 Mar 2023 | HIMSS24 - Orlando<br>Click here for more information |
| 11 March 2024<br>8:45 AM<br>- 4:15 PM | 2024 ACCE CE-IT Symposium (pre-HIMSS24): Implementing Emerging AI Tools and Medical Device Technologies in Healthcare<br>Click here to register |
| 21 March 2024<br>12:00 PM -<br>1:00 PM | ACCE 2023-2024 Educational Webinar Series<br>Session#7: Recall Management Best Practices |
| 07 April 2024 -<br>09 April 2024 | MD Expo -Spring 2024<br>Location: M Resort Spa Casino, Las Vegas |
| 11 April 2024<br>12:00 PM -<br>1:00 PM | ACCE 2023-2024 Educational Webinar Series<br>Session#8: Medical Equipment Planning for Healthcare Organizations |
| 09 May 2024<br>12:00 PM -<br>1:00 PM | ACCE 2023-2024 Educational Webinar Series<br>Session#9: New Technologies for Surgery |
| 28 May 2024-<br>30 May 2024 | CMBEC46 / CESO 2024 Joint Conference<br>Location: Doubletree by Hilton, Toronto, Ontario<br>Click here for more information |

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