KY & IN HIMSS 2020 Annual Conference Presentations

[Care Coordination, Culture of Care, Population Health & SDOH 2](#_Toc32510461)

[Endocrinology Embedded Diabetes Educator 2](#_Toc32510462)

[Care Collaboration for Comorbid Conditions 2](#_Toc32510463)

[An SDOH Success Story: Asking the Tough Questions 3](#_Toc32510464)

[Acute & Post-acute Data Sharing to Improve Ops 4](#_Toc32510465)

[Clinical Informatics & Clinical Engagement 5](#_Toc32510466)

[Team-based Measures of Health Information Exchange 5](#_Toc32510467)

[Lessons Learned: Workflow & Adoption Strategies 5](#_Toc32510468)

[Daily Discharge Check Decreases Length of Stay 6](#_Toc32510469)

[Virtual Health Care Options, ROI & Benefits 7](#_Toc32510470)

[Data Analytics/Clinical & Business Intelligence 8](#_Toc32510471)

[Creating a Streamlined wRVU Forecasting Process 8](#_Toc32510472)

[Using Data Analytics to Ask & Answer Why 8](#_Toc32510473)

[Information Governance 9](#_Toc32510474)

[A New (Digital) World: Navigating Info Blocking 9](#_Toc32510475)

[Innovation in the Universe of Healthcare 10](#_Toc32510476)

[Patient Safety in the Era of Wearables & HIoT 10](#_Toc32510477)

[Building a Composable EHR System on FHIR Resources 10](#_Toc32510478)

[Distributed Agents in Pathology Informatics 11](#_Toc32510479)

[Interoperability/Adaptability 12](#_Toc32510480)

[Solving Cloud Data Visibility Problems With Integrated Monitoring Framework (IMF) 12](#_Toc32510481)

[Process Improvement/Workflow/Change Mgt. 12](#_Toc32510482)

[Order Set Change Review: An Integrated Process 12](#_Toc32510483)

[Security 13](#_Toc32510484)

[Panel Discussion: Medical Device Security 13](#_Toc32510485)

[Managing Insider Threats in Healthcare 14](#_Toc32510486)

[People Centric Security and Threat Landscape 14](#_Toc32510487)

[Value-based Care/Population Health 15](#_Toc32510488)

[Moving Beyond Interoperability to Data Integration 15](#_Toc32510489)

# Care Coordination, Culture of Care, Population Health & SDOH

## Endocrinology Embedded Diabetes Educator

**Chad Shirar,** MS, MBA, Parkview Health

**David Franks,** Parkview Health

**Emily Schroeder,** MD, Ph.D., Parkview Health

Diabetes self-management education and support (DSMES) are associated with improved diabetes knowledge and self-care behaviors, better diabetes measures, and reduced health care costs. Nationally, fewer than 10% of persons eligible for diabetes education ever receive it. Barriers include lack of awareness, lack of patient-centeredness, cost, and inconvenience due to location or timing. In 2018, the Parkview Physicians Group Endocrinology Department embedded a certified diabetes educator (CDE) within the department, to attempt to address some of these issues and provide DSMES services at the same time and location as an endocrinology visit at no additional cost to the patient. The pilot program’s results were analyzed using a Python platform, Jupyter Notebook. Results showed a strong correlation between CDE contact and A1C improvement. This improvement outperformed patients who saw endocrinology for diabetes but did not see the CDE.

**Objective 1:** Learn about the proposed need for this role and how the person was chosen to fill the diabetes services gap.

**Objective 2:** Learn how the role is leveraged in the practice setting, as well as the key workflow findings.

**Objective 3:** Review data and outcome metrics attributed to this innovative care delivery intervention to assist persons with diabetes in being empowered to manage their condition.

 Chad Shirar, MS, MBA, is director of Diabetes Care Strategy for Parkview Health in Fort Wayne, Indiana. His background includes leading strategic initiatives and teams in the areas of population health, primary and secondary disease prevention, wellness program design, and lifestyle, and behavior management.

## Care Collaboration for Comorbid Conditions

**Deanna Parker,** MBA, RN, Hardin Memorial Hospital

Hardin Memorial Health is an integrated system of providers and facilities serving approximately 400,000 residents over 10 central Kentucky counties. Before turning to a care collaboration network, care coordination was incredibly tricky to navigate with insufficient data, scarce insights, and poor workflow integrations. Because Hardin serves a massive patient population, it does not have the resources to help some of their most vulnerable patients, especially those with complex or comorbid conditions. This presentation will detail how Hardin began to leverage care insights from a recently integrated care collaboration network. Through this process and collaboration tool, Hardin has been able to quickly identify which of their patients are at high-risk and which could be served in a different care setting, improving both patient outcomes, workplace violence prevention, and ED optimization.

**Objective 1:** Learn about the impact care collaboration tools have on complex and interrelated care coordination issues.

**Objective 2:** Learn to leverage care collaboration to optimize ED use, improve behavioral health and substance use disorder coordination, and prevent workplace violence.

**Objective 3:** Learn how to implement care coordination strategies using case studies, anecdotal stories, and other supplemental materials.

 Deanna Parker, MBA, MHA, BSN, RN, is the assistant vice president of emergency services at Hardin Memorial Health. In this role, she is responsible for overseeing operations of the ED, which sees more than 73,000 patients a year. She is also responsible for managing the Sexual Assault Nurse Examiner (SANE) program.

## An SDOH Success Story: Asking the Tough Questions

**Jeanette Ball**, RN, PCMH, CTG

**Dana Bensinger**,RN-BC, CTG

Screening patients for SDOH like food and housing insecurity and substance and physical abuse can be uncomfortable for both clinical staff and patients. It also tends to fall outside the typical clinical workflow. Yet studies have shown that addressing these issues upfront helps improve health outcomes and patient engagement and reduce costs. Akron Children’s Hospital was able to successfully incorporate SDOH screening into everyday clinician workflows and use provider education to overcome clinicians’ initial discomfort in asking these difficult questions. Through this effort, they have raised the average number of patients screened from 71% to nearly 80% in one year across thirty practices. We'll discuss the mechanisms put in place to help collect SDOH data, including ways to incorporate clinician-collected and patient-entered data into the Electronic Health Records (EHR), and engaging community partners, such as social workers, to address underlying barriers to health.

**Objective 1:** Assess the readiness of their organizations to take meaningful steps toward performing SDOH screening across all practices or departments.

**Objective 2:** Discuss ways of integrating SDOH into their EHR(s).

**Objective 3:** Identify metrics to measure the success of their SDOH screening programs and how they can be presented to providers to drive further compliance.

 Jeanette Ball, BSN RN, PCMH, CCE, is an outpatient optimization specialist and PCMH and population health expert with over 30 years’ experience in healthcare. She is an expert in outpatient medical center executive administration, clinical application design, population health strategies, and outpatient advisory and optimization management.

## Acute & Post-acute Data Sharing to Improve Ops

**Robert Latz,** PT, DPT, Trinity Rehabilitation Services

**Maria D. Moen,** HIMSS LTPAC Committee

Data. Clinical Care. Operations. Workflow. What is needed? What is wanted? How can data be shared now? We will discuss several current projects and provide a cross-map of data elements from these projects. Data sharing between acute care and post-acute care is becoming even more important every day. With the new payment models of PDPM and PDGM, understanding and coding for all co-morbidities bring correct revenue to the post-acute provider. This requires timely and accurate information. Also, rehospitalization penalties for both acute and post-acute providers all depend on improving these transitions of care from one setting to another. Data sharing helps in this process. New discharge requirements for acute care require that patients’ medical records follow the patient at the time of discharge. Setting up electronic processes to minimize the burden of meeting this requirement could be helpful. Most important of all is the care provided to the person being transferred.

**Objective 1:** Discuss the current state of electronic data sharing between acute and post-acute care.

**Objective 2:** State at least 2 significant activities making interoperability during transitions of care one of the hottest topics in healthcare.

**Objective 3:** Identify at least one step they can do upon returning to their worksite to move this process forward.

 Robert Latz, PT, DPT, CHCIO, is the only physical therapist at Trinity Rehabilitation Services with the HealthCare CIO certification from CHIME. He is a board member of the APTA Health Policy and Administration Section and the president of the Technology SIG. He is also a member of the LTPAC Health IT Collaborative, the LTPAC CIO Consortium, and the HIMSS LTPAC committee.

Maria Moen is a highly-accomplished Healthcare IT Strategy and Operations Executive, Speaker and Published Author, with 25+ years of experience.  She is a member of the HIMSS LTPAC Committee, the AHIMA LTPAC Practice Council, the AALNA Advisory Council, the American College of Healthcare Executives, the Nashville Technology Council, and is a past NASL Board Member and IT Committee Co-Chair. Maria is a passionate advocate for the use of Health Information Technology to improve the quality of care for the consumer, the providers who support and care for them, and our healthcare system as a whole.

# Clinical Informatics & Clinical Engagement

## Team-based Measures of Health Information Exchange

**Nate Apathy,** Ph.D. Candidate, Indiana University Richard M. Fairbanks School of Public Health

Primary care providers operate in complex information environments. They often encounter missing or incomplete patient data and engage in information retrieval workflows that use tools like HIE. Despite common team-based primary care workflows and complex information needs, we understand little about the nature of team-based use of HIE in primary care. This session will cover a study that constructed measures of team-based use of HIE in primary care leveraging usage log data from primary care users of a large query-portal HIE. Five dimensions of team HIE use were measured: frequency of team-based use team size, team composition, physician team membership, and intensity of HIE use. This study is innovative in that these measures can be used to further our understanding of the benefits from different types of HIE use; in this case, HIE use among primary care teams.

**Objective 1:** Quantify the prevalence of team-based HIE use in primary care.

**Objective 2:** Identify the patient and visit characteristics associated with team-based use of HIE in primary care.

**Objective 3:** Identify 5 dimensions of team-based use of HIE in primary care and methods for measuring those use dimensions via HIE log files.

 Nate Apathy is a Ph.D. candidate in health policy and management at the Richard M. Fairbanks School of Public Health at Indiana University. He is also a predoctoral fellow in population and public health Informatics at the Regenstrief Institute under the National Library of Medicine T15 training program in Biomedical Informatics.

## Lessons Learned: Workflow & Adoption Strategies

**Scott Smiser,** MBA, FACHE, FHIMSS, Visum Healthcare Solutions

Clinician fatigue and burnout are at all-time highs in the healthcare industry. Technology initiatives meant to improve and empower the delivery of patient care can be met with resistance and often fall short with user expectations. The fast-paced world of clinical initiatives often dictates an implementation based on a timeline and date with little regard as to how that initiative will impact a clinician’s daily operating routine in the delivery of patient care. Have you ever analyzed current state and future state workflows before implementing a solution or change? Have you implemented a solution and are experiencing clinical adoption issues? Learn techniques and strategies around workflow analysis and clinical engagement that can be transformative in your technology initiatives.

**Objective 1:** Learn techniques of how to properly engage leaders and clinicians to ensure the successful adoption of their technology initiatives.

**Objective 2:** Learn concepts of how to approach current and future state analysis through workgroups, documentation, and dialogue before a technology solution being introduced to the patient care environment.

**Objective 3:** Learn how to adapt the SSCC (Start, Stop, Continue, Change) workflow framework model and how the results can be incorporated into clinical training, activation, and onboarding of future staff.

 Scott Smiser is the chief strategy officer and founder of Visum Healthcare Solutions with twenty-seven years of healthcare technology experience. He is a Fellow of HIMSS (FHIMSS) and the American College of Healthcare Executives (FACHE), who holds an Executive MBA from Bellarmine University and a bachelor’s from the University of Louisville Precision Medicine and the Promise of Genomics.

## Daily Discharge Check Decreases Length of Stay

**Lisa Woody**, MD, Baptist Health

**Adam Cummings,** RN

The Baptist Health Epic team and its clinical nurse partners built a Discharge Readiness tool that has become part of daily documentation to evaluate how ready patients are for discharge. This efficient 10-click checklist encourages nurses to think about what is keeping the patient in the hospital before the day of discharge. It checks for ongoing IV medication needs, oxygen requirements, and bowel status, which are common reasons patients remain in the hospital. Plus, it encourages constant communication with the provider to reduce delays for discharge. The readiness score is delivered to providers on their patient lists, which allows them to sort by readiness for discharge, prioritizing their daily workflow. The tool has led to decreased lengths of stay across the system.

**Objective 1:** Show how an electronic tool can make end users apply their clicks to measurable clinical outcomes.

**Objective 2:** Learn how practical experience can be translated into electronic tools with ease of adoption and application.

**Objective 3:** Discuss an electronic tool that encourages communication between staff and reduces patients’ time in the hospital.

Lisa Woody, MD, is a board-certified internal medicine hospitalist and Epic-certified Physician Builder with Baptist Health.

## Virtual Health Care Options, ROI & Benefits

**Maximilian Maile,** MBA, Parkview Health System

**Laura Dubay,** Parkview Health System

Parkview Health System in Ft. Wayne, Indiana, has built a telemedicine program providing eVisits, retail video visits, MyChart visits, NICU video sessions, and eConsults to outlying hospitals. By using Epic and Vidyo, Parkview continues to transform the care delivery options that are available to both providers and patients. Parkview’s virtual health team would look forward to sharing information about the technology that was chosen, how they integrated the technology to their EMR, and highlight barriers and wins throughout the projects. This presentation will focus on how Parkview has lowered costs with telecardiology (eConsult) services; how Parkview is planning on reducing expansion costs of exam rooms; how retail video visits can be a better investment than in-person visits; and NICU video visits can be created at a low cost, with high patient rewards.

**Objective 1:** Identify the benefits of using eConsult services compared to a transfer of the patient to another medical center, for the same level of care, to achieve a consult. The specific study referenced will use the cardiology consult.

**Objective 2:** Learn how Parkview virtual health is lowering future costs and future investments in brick and mortar through virtual strategies.

**Objective 3:** Attendees will take away information regarding how Parkview set up a low cost, high-value service for connecting its mothers and babies in the NICU program, in conjunction with community hospitals. These services can greatly enhance patient experience a

 Maximilian Maile is the vice president of virtual health at Parkview Health System in Fort Wayne, Indiana. Laura Dubay is the IS manager for virtual health. Together, they started virtual health at Parkview in 2016 and now continue to select technology and platforms to integrate digital options for providers and the health system.

# Data Analytics/Clinical & Business Intelligence

## Creating a Streamlined wRVU Forecasting Process

**Ed McGillis,** Breakpoint Technology

**Mike DeSalvo,** Breakpoint Technology

wRVUs are used to quantify the productivity of healthcare providers and departments, as well as determine financial budgets and make hiring decisions. Unfortunately, the accurate forecasting and tracking of wRVUs across locations, departments, and providers is not a one-size-fits-all process. Variables include not only provider history, but tracking changes in CPT codes, practice pattern assumptions, correctly tracking departing providers and modeling the productivity of incoming providers as well. In this session, attendees will learn how VCU Health has used multiple data pipelines and developed a streamlined and centralized budget and forecasting management system that incorporates these variables and allows for advanced analytics and visualization of the resulting data.

**Objective 1:** Discuss the current barriers to accurate wRVU forecasting.

**Objective 2:** Understand the benefits of true provider modeling beyond historical data.

**Objective 3:** Visualize the results and track forecasting through data-driven dashboards.

 Ed McGillis is a vice president of emerging technologies at Breakpoint Technology, where he focuses on data-driven solutions involving analytics, dashboarding, machine learning, and AI. With Breakpoint Technology’s Microsoft Gold Partner status, Ed has been involved in a variety of healthcare projects and currently holds a PMP certification.

## Using Data Analytics to Ask & Answer Why

**Jon Padfield,** Ph.D., Indiana University

Ralph Waldo Emerson once wrote, “The man who knows how will always have a job; the man who knows why will always be his boss.” *Why* is the key question to ask and answer to acquire the insights needed to improve our processes and achieve better performance. Trends, patterns, and outliers observed through data analysis help us ask better questions about *why* a process is producing the results we are getting. These *why* questions often lead to additional data collection, both qualitative and quantitative, to identify the root cause or contributing factors to a performance problem. Some hospitals only use descriptive analytics to see what is happening. Sometimes this approach is sufficient, but, in many cases, it is necessary to apply predictive and prescriptive analytics to truly answer *why* is it happening. This presentation draws on the speaker’s experience working with hospitals in areas as diverse as the admissions process, discharge process, billing, and collections.

**Objective 1:** Identify and understand 3 levels of data analysis (descriptive, predictive, and prescriptive).

**Objective 2:** Understand the broad application of data collection and analysis across different healthcare departments.

**Objective 3:** Understand and describe the crucial distinction between a “root cause” and a “contributing factor” and why a proper understanding of these terms is so critical to improving operational efficiency and patient safety.

 Jon Padfield, Ph.D., is an assistant professor at Indiana University, where he teaches operations management, supply chain management, Lean Six Sigma, and data analytics. He is also the president of Proffer Brainchild Inc., a training and consulting company dedicated to helping organizations turn people, processes, and data into competitive advantages.

# Information Governance

## A New (Digital) World: Navigating Info Blocking

**Jeffrey Short,** JD, Hall Render Killian Heath & Lyman PC

**Ammon Fillmore,** Esq., Indiana Health Information Exchange

Arising from the 21st Century Cures Act, the proposed federal information blocking and related interoperability regulations aim to dramatically change permitted and compulsory purposes for exchanging access to electronic health information. These rules will apply to all health care providers, health information networks and exchanges, and HIT vendors and carry penalties as much as $1,000,000 per violation. In-house and outside counsel, as well as privacy officers, compliance officers, and risk managers, will be expected to contribute to interoperability and information sharing strategies and create and manage appropriate strategy. It is anticipated that CMS/ONC will have final information blocking regulations before the annual meeting.

**Objective 1:** Learn what interoperability is and why it legally matters.

**Objective 2:** Learn what electronic health information must be made available under the federal information blocking regulations and what enforcement will include and how penalties are determined.

**Objective 3:** Learn that all health providers, health information networks and exchanges, and HIT vendors must have policies to address information blocking.

 Jeffrey W. Short is an attorney concentrating his practice on information technology and privacy issues relating to health care entities, including hospitals, physician groups, and pharmaceutical companies. He routinely assists local and national clients on privacy issues, including HIPAA compliance.

# Innovation in the Universe of Healthcare

## Patient Safety in the Era of Wearables & HIoT

**Richard Staynings,** MBA, Cylera

Most of us now wear some form of fitness tracker, and many providers and insurers are using this personal health data to supplement official provider data in overall healthcare management. The volume of healthcare data on each of us is staggering and critical to our overall well-being as patients. But what happens when that data is compromised, changed, or deleted? Our highly transformative healthcare delivery industry is more reliant upon technology today than ever before to diagnose, treat, manage, and monitor patients. A basic systems outage is enough to bring an entire hospital or clinic to its knees. Just look at what happened in the UK when WannaCry ransomware took down much of the NHS. Since the NHS breach, the number of connected healthcare devices has nearly doubled in most large hospitals. How can we gain greater visibility into what’s happening in our hospitals and become better prepared to defend ourselves from the next inevitable attack?

**Objective 1:** Evaluate the growth of connected devices in our hospitals and clinics, including medical wearables, and consider the implications this presents for data integrity, resiliency, and cybersecurity.

**Objective 2:** Gain a better understanding of the changing enterprise and cybersecurity risks of new disruptive health technologies that foster improvements in value-based care.

**Objective 3:** Learn about new technologies and approaches that may be useful to manage new disruptive health technologies while reducing overall enterprise and cybersecurity risk and patient safety concerns.

 Richard Staynings, MA, MS, MBA, is a globally renowned thought leader, author, public speaker, and advocate for improved cybersecurity across the healthcare and life sciences industry. He has served as a board member of AEHIS and on the International HIMSS Privacy and Cybersecurity Committee assisting health systems with their cybersecurity transformation efforts. Richard is currently a chief security strategist at Cylera.

## Building a Composable EHR System on FHIR Resources

**Bolu Oluwalade,** Indiana University Purdue University Indianapolis

EHR systems have been widely adopted in the U.S. The promise of EHR systems included increased efficiency of clinical workflow and improved patient and physician satisfaction. Despite broad adoption and early positive outcomes, it has become increasingly difficult to ignore some persistent issues with EHR systems. Among these is the low satisfaction with the EHR user interface. EHR vendors have made improvements with varying degrees of success. Another challenge is the lack of interoperability between different EHRs. Recently, the HL7 has developed the FHIR standard as a RESTful API. FHIR is built on endpoints called Resources. In this study, we present a novel way of creating an EHR system that addresses both the usability and interoperability challenges using web components that connect with the REST API of FHIR Resources. This session will demonstrate the latest phase of this study.

**Objective 1:** Learn about the use of FHIR resources as a basis for creating web components.

**Objective 2:** Discuss the EHR interoperability value of the FHIR resource-built web component.

**Objective 3:** Introduce a method of EHR assembly that requires little or no technical skill to help solve user experience challenges.

 Bolu Oluwalade is a second-year health informatics graduate student at IUPUI. He obtained a bachelor’s degree in clinical lab science from Babcock University, Nigeria. Currently, he serves as a graduate assistant at the Fulton lab in the Department of BioHealth Informatics at IUPUI. Bolo’s research interests include EHR interoperability and health data analytics.

## Distributed Agents in Pathology Informatics

**Cody Bumgardner,** Ph.D., University of Kentucky

This session will present the use of agent-based methodologies in support of 3 biomedical pipeline applications within the domains of genomics processing, medical image management, and clinical laboratory analysis. We show how various functions within a genomic processing pipeline can be acquired from sequencers, distributed to public clouds, processing routed across a diverse set of resources, and results reported in a protected environment. Likewise, we show how digital images can be acquired and de-identified at (protected) sources of generation, submitted to remote vendor services for AI interpretation and results merged with clinical systems. Finally, we will show methods for capture, enrichment, and processing of data from mass spectrometer devices, with results routing to laboratory information systems and raw data transferred and aggregated for AI use.

**Objective 1:** Identify potential opportunities to curate data for use by AI within clinical workflows.

**Objective 2:** Identify potential opportunities to protect privacy by processing data in closer proximity to sources of data generation.

**Objective 3:** Identify potential opportunities to make use of distributed agent-based systems to support healthcare.

 Cody Bumgardner, Ph.D., spent the majority of his career in IT, formerly serving as director of enterprise systems and development, chief technology architect, and director of research computing. Currently, he serves as an assistant professor and chief of the Division of Pathology Informatics in the Department of Pathology and Laboratory Medicine in the UK.

# Interoperability/Adaptability

## Solving Cloud Data Visibility Problems With Integrated Monitoring Framework (IMF)

**Jeet Sinha,** Deloitte Consulting LLP

While the health information exchange (HIE) space has made significant progress, one problem persists for a lot of cloud implementation exchanges: there is no easy visibility into the incoming data. This session will cover the IMF. This threefold solution includes a detailed log of everything that comes in, a tool to convert it into accessible dashboards that monitor incoming data quality, and a user-friendly patient-centric portal—all connected to the HIE securely. When data is received, messages are logged in and stored in a cloud DB. A Splunk instance reads this log and creates customized dashboards. A custom utility then provides secure access to this data through multi-factor authentication. This utility is used to monitor data quality as well as identify and analyze any production issues. The portal reads the cloud database to show patient-centric data such as CCD.

**Objective 1:** Learn about a new way to monitor inbound data to the HIEs with cloud implementation.

**Objective 2:** Learn about the patient-centric data display on cloud implementation.

**Objective 3:** Learn how customized dashboards can help monitor system errors in real-time and reduce the amount of response time required.

 Jeet Sinha, BS, PMP, is a product delivery manager at Deloitte Consulting LLP. He has worked in the healthcare interoperability space—commercial and government—for 10 years, both commercial and government. Jeet set up the EDI 278 and 834 processes for commercial health payors as well as state health benefit exchanges. Part of the successful Kynect core team, he has been working on HL7 and Fast Healthcare Interoperability Resources (FHIR) initiatives for the last several years

# Process Improvement/Workflow/Change Mgt.

## Order Set Change Review: An Integrated Process

**Danielle Minutillo,** Baptist Health System KY & IN

**Clay Cox,** Baptist Health KY

This presentation will outline the highly integrated process that Baptist Health uses to regularly review order set content and manage change requests for optimization. We’ll cover automating and integrating the workflow with our predictive change model. This workflow was developed by Baptist Health’s Order Set team and has proven to be an excellent way, outside of Epic, to manage content and verify system standardization practices. Join us to learn how we used our guiding principles to develop and support this process.

**Objective 1:** Understand how to create a change management process from inception to completion.

**Objective 2:** Determine how an automated request workflow can drive effective communication.

**Objective 3:** Learn how to incorporate multidisciplinary resources within a stratified process while maintaining accuracy.

 Danielle Minutillo has been with Baptist Health for 13 years. She moved to IT as an instructional designer during its initial Epic implementation in 2014. Danielle is currently a Certified EpicCare Inpatient Orders lead analyst, managing the order set team.

# Security

## Panel Discussion: Medical Device Security

**Mitchell Parker,** CISSP, MBA, CISO, IU Health

**Cory Brennan,** JD, Hall Render

**Phil Davis,** Community Health Network

There has been significant concern around medical devices as a risk vector for organizations. Attacks such as WannaCry and NotPetya, which targeted unpatched Windows machines used as components in medical devices, have alerted organizations to the risks that they have. However, inexperience on the part of providers, combined with several emergent medical device software companies, has not led to increased security. It led to a lot of confusion. Experts from the medical device security field will provide insights into what needs to happen. We'll discuss how organizations can assess and understand risks using assessments based on common security frameworks such as the NIST Cybersecurity Framework. We'll also cover ways to understand the environment and what they are protecting; and understanding their organization and determine responsibilities, roles, and resources to implement a medical device security program.

**Objective 1:** Understand the steps needed to complete a medical device security risk assessment.

**Objective 2:** Learn how to develop a risk management plan and associated work plans for vulnerable devices.

**Objective 3:** Develop and establish timelines, communication plans, and messaging for senior leadership.

 Mitchell Parker, MBA, CISSP, is the CISO at IU Health. He has 11 years of experience in this role, having established effective organization-wide programs at multiple organizations. Mitch is responsible for providing policy and governance oversight and research, third-party vendor guidance, and proactive vulnerability research.

## Managing Insider Threats in Healthcare

**Daniel Conrad,** One Identity

Insider threats cost healthcare organizations dearly, in dollars, reputation, and stress. Many data breaches are directly tied to insider threats. Some are intentional or malicious, but many are accidental. Attackers will always look for a way to imitate the insider. Whether it’s ransomware that locks critical hospital systems or loss of patient data, insider threats, and the breaches they create are significantly impacting healthcare. A recent estimate of 2019 breaches cost U.S. healthcare alone over $4 billion. This session will focus on mitigating the vulnerability of insider threats by looking at ways attackers have exploited the SysAdmin identities and will discuss ways to reduce or eliminate weaknesses. While these mitigations may seem low-key, they will quickly impact the security posture of healthcare organizations by securing the most critical and impactful identities in healthcare organizations. These steps will provide protections to ensure continuous patient care.

**Objective 1:** Identify the vulnerabilities of SysAdmin identities in healthcare organizations as well as the actual and possible effects of a privilege escalation attack.

**Objective 2:** Learn how to gain control of privileged accounts, both known and unknown.

**Objective 3:** Discuss how SysAdmin knows where everything is and has the permissions to access, configure, and navigate the enterprise.

Dan Conrad is an IAM strategist with One Identity. His experience started in the U.S. Air Force, working in information management. He retired from the Air Force in 2004 and returned to government IT as a SysAdmin for US Army MEDCOM. Dan holds a bachelor’s degree in information systems management, as well as certifications, including CISSP, CEH, MCITP, and MCSE/MCSA.

## People Centric Security and Threat Landscape

**Steve Verrilli,** Proofpoint

Threat actors are becoming more sophisticated these days—from determining who they’ll target to how they’ll implement the attack. This presentation will focus on how companies can better understand who their very attacked people (VAPs) are so they can take adaptive controls to protect them. We’ll take a deep dive into the threat landscape to illustrate a threat actors’ tactics and trends.

**Objective 1:** Identify VAPs and how to change security practices to protect them.

**Objective 2:** Learn how threat actors attack.

**Objective 3:** Understand why VAPs fall prey for attacks.

Steve Verrilli is a senior sales engineer and manager at Proofpoint. In this role, he has helped more than 100 organizations with cybersecurity issues and supported many Fortune 100 companies with advanced security solutions. Steve has spent more than 20 years in the IT product and security field, having previously worked for Trustwave and Vericept.

# Value-based Care/Population Health

## Moving Beyond Interoperability to Data Integration

**Gary Ozanich,** Ph.D. Northern Kentucky University

While there has been progress in the adoption of EHRs that serve as the foundation for an infrastructure supporting population health initiatives, progress requires moving beyond interoperability to the actual integration and use of data. This session examines the state of data integration and the facilitators and barriers to data integration. This includes the interrelationships of HIOs, HISPs, vendor networks, APIs, standard development organizations, and new interoperability rulemakings. Strategies that providers are successfully using to integrate data are examined as well as measurable differences resulting from data integration. Types of information will also be discussed from the context of their ease/difficulty of integration. The research presented is from a study currently in process and funded by the ONC and ASPE.

**Objective 1:** Explain the strategies providers or health systems are employing to successfully integrate and use data received from outside sources and the measurable differences before and after implementation.

**Objective 2:** Appraise the roles of vendors and HIO networks, HISPs, and other entities in enabling (and hindering) the integration of data and how the use of APIs or other technical standards.

**Objective 3:** Identify the types of information (e.g., lab results, a summary of care records) that hospitals or physicians are already able to integrate versus those that are more challenging and describe are the barriers and facilitators to integration.

 Gary Ozanich is director of Northern Kentucky University’s Program in Health Informatics. He is the past national co-chair of the HIMSS Interoperability Community and past national chair of the HIMSS HIE Committee. Gary has conducted extensive funded research and consulting projects on interoperability.