# APIC 2019

**46TH ANNUAL CONFERENCE**
JUNE 12 – 14 | PHILADELPHIA

# REAL WORLD

## INFECTION PREVENTION SOLUTIONS

APIC 2019 is the must-attend event for unparalleled infection prevention and control learning and networking. Learn from leaders in your field, and access practical solutions to reduce risk and advance safety at your facility. Network with thousands of your colleagues, get access to the world's largest exhibit hall dedicated to infection prevention, and be a part of our vision of healthcare without infection.

## FULL SESSION LISTING

**Plan your program online at apic.org/apic2019**

# TUESDAY, JUNE 11

## PRE-CONFERENCE WORKSHOPS

Join us a day early and increase your learning, and CE's, with one of our popular pre-conference workshops. There is a separate fee required for the programs, and these sessions can be added to your full conference registration or purchased separately.

## 8-4:30 PM

Session #901

### CIC® Certification Preparatory Course

Increasing the number of IPs with the CIC credential is a central goal of APIC's Strategic Plan. This interactive overview course includes the following:

- A mix of presentations, application/practice activities, and question/answer opportunities led by highly experienced faculty.
- Opportunities to build community with your peers who are also preparing for the exam.
- Access to a variety of resources to help you prepare, including additional online CIC preparation presentations, a practice test, frequently asked questions resource, and test preparation tips and strategies
- Practice exam.

Registrants for this course will also receive discounts to purchase APIC's Certification Study Guide.

Please note: This class will not teach the basics of IPC. It will help attendees develop familiarity with the exam's content and structure, and will help develop confidence in taking the exam.

## 8 AM-4:30 PM

Session #902

### Survey Readiness: How to Prepare for Success

Few things cause more stress for IPs than finding out that surveyors are coming to their facility. This interactive workshop will shed light on the survey process, including providing:

- Presentations and a Q/A panel with surveyors and IPC experts from various accrediting and regulatory bodies representing diverse IPC settings
- Practical strategies and tips from experienced IPs
- Discussion and skill-building opportunities for participants to enhance their survey readiness and confidence to lead in their facilities.

Attendees will be able to share their areas of concern and reflect on effective practice with diverse experts. Participants are encouraged to bring their IPC program plan and policies related to risk assessment and survey readiness to refer to, discuss, and build on throughout the workshop.

This program will be of interest to IPs from across the continuum of care, including acute care, long-term care, and ambulatory, which is a growing area of vulnerability for many networks. It will also benefit surveyors who want to enhance their understanding of IPC from the IP perspective.

## 8:30-11:30 AM

Session #903

### Consulting 101: How to Get Started Now

Join us for an informative session to learn how to become a consultant and the advantages of working with a consulting firm like APIC Consulting Services. Led by CIC®-certified consultants and the Executive Director of APIC Consulting, this session will provide an overview of IPC consulting in various practice settings, how to begin consulting when you are working full-time, the types of consulting work are available, and the expectations of clients.

Attendees will have dedicated time to ask questions of panelists and APIC Consulting staff. There will be opportunity for Q&A with faculty following the presentation

# WEDNESDAY, JUNE 12

## 8:30-10:30 AM

## KEYNOTE SESSION WITH DANIEL KRAFT, MD

Session #1000
### The Future of Health & Medicine: Where Can Technology Take Us?

From the perspective of a leading physician, scientist, inventor and innovator this presentation examines rapidly emerging, game changing and convergent technology trends and how they are and will be leveraged to change the face of healthcare and the practice of medicine in the next decade.

Daniel Kraft offers a fast-paced look at the next few years of innovations in medicine, powered by new tools, tests and apps that bring diagnostic information right to the patient's bedside.

A deep dive into where emergent fields such as low cost personal genomics, the digitization of health records, crowd sourced data, molecular imaging, wearable devices and mobile health, synthetic biology, systems medicine, robotics, artificial intelligence, nanotechnology, 3D printing and regenerative medicine are transforming healthcare, and have the potential to enable clinicians, empower patients, and deliver better care and outcomes at lower cost.

## 1:30-2:30 PM
## 30/30 SESSIONS

Session #1202
### Unit-Led Just-in-Time Coaching: Part of a Winning Strategy to Improve Hand Hygiene
Education, Training, and Competencies
All Career Stages
Lori Moore

It is well-recognized that hand hygiene is one of the most effective measures for preventing the spread of infection within healthcare facilities. Despite this, compliance remains low, and IPs need strategies to change the hand hygiene behaviors of healthcare personnel (HCP). Just-in-Time (JIT) coaching is one effective strategy; however,

this valuable on-the-spot coaching by IPs occurs only sporadically.

Considering the many opportunities for hand hygiene, IP-led JIT coaching isn't providing HCP with the consistent, immediate feedback they need to make hand hygiene a ritual, automatic behavior. Recognizing that unit leadership and frontline HCP are closest to the patient, who better to speak up and provide immediate reminders when hand hygiene opportunities are missed?

This session will help IPs build an effective unit-led JIT coaching program in their facilities. Participants will discuss the critical steps for success including garnering leadership support, choosing the best unit to pilot the program, creating a coachable environment, important qualities and traits for choosing JIT coaches, developing metrics and goals, evaluating progress, and growing and expanding the program.

Session #1202
### Clinical Microbiology: What's Bugging You?
Education, Training, and Competencies
Early Career/Novice
Tanushree Soni

Although often preventable, HAIs account for nearly 650,000 infections and cost billions of dollars annually. The high burden of HAIs associated with increased mortality and morbidity has resulted in IPC programs as a standard in healthcare systems.
The goal of an IPC program is to identify and control risks that may be responsible in the spread of HAIs, and one of the most critical is the detection of clinically relevant, transmissible infections.

Clinical microbiology laboratories are the first line of defense for accurate identification and susceptibility testing of infectious organisms responsible for various HAIs. Understanding the key concepts of clinical microbiology is critical for the core competency of an IP, and can help increase their proficiency in surveillance, antibiotic stewardship, outbreak detection, and the management and institution of prevention measures. In addition to strengthened competencies, these learnings can help the IP prepare for the CIC® exam.

## Win, Lose, or Draw: Observations from a Novice IP

Leadership and Professional Development
Early/Novice - Mid-Career/Proficient
Trent MacAllister

IPs are tasked with creating, defending, and enforcing policies or practices which can occasionally be unpopular with the departments affected. Often, these policies have few supporting data and are rooted in theoretical risk for transmission and/or expert opinion. In order to promote compliance and future collaboration, IPs must negotiate, educate, and compromise with hospital leaders and staff.

This session will discuss the wins, losses, and draws of IPC battles from the perspective of a novice IP in an acute care setting. Everything from operating room attire and a *Staphylococcus aureus* screening protocol to MDRO isolation precautions and interdepartmental dynamics will be explored. This session is intended to provide an interactive platform for IPs to discuss successes and failures of collaboration with hospital staff.

Session #1206

## Building a Career Ladder for IPs

Leadership and Professional Development
All Career Stages
Tawanna McInnis-Cole

As IPs advance in their careers, they often find that there is limited opportunity for advancement in title within the IPC program at their organization. This can be frustrating for mid-career IPs and can lead to retention challenges as ambitious IPs move to new organizations or shift into different roles, making sustainable IPC principles and processes difficult. Organizations that develop a clearly defined career ladder for IPs can avoid these challenges while positively impacting IP retention, career development or advancement, and patient safety.

This session will share the efforts of a multi-facility system to create defined paths and build a career ladder for the IP role, and will share strategies and ideas for retention and professional development.

Participants will learn how to use existing practice

standards and development resources available from APIC and other organizations to advocate for and develop IP career progressions that are focused on the needs of the healthcare organization.

## CONCURRENT SESSIONS

Session #1201

## Using Agile Implementation to Reduce Adverse Outcomes

Implementation Science and Research
Mid-Career/Proficient
Kristen Kelley

As hospitals seek to reduce harm events, they are often faced with other complex challenges, such as improving patient care and overall health, lowering costs, and increasing employee engagement. Addressing these issues concurrently can prove a daunting task and can require significant effort.

An urban academic health center (AHC) created a robust quality management system to reduce the incidence of harm events and other adverse outcomes, such as CLABSI, CAUTI, *C. diff*, and SSIs, while simultaneously creating a culture of continuous learning within the health system.

This AHC used the Agile Implementation (AI) model to identify, implement, and sustain an evidence-based solution to reduce harm events. The AI model involves several steps:

1. Identify potential opportunities and verify that leadership is willing to allocate time and resources to address the opportunity, and that the stakeholders are engaged in solving the problem.
2. Identify the best available evidence-based healthcare solutions using published studies and topic guidelines or recommendations
3. Develop the evaluation strategy including appropriate measures and milestones, plus criteria for halting the intervention if unsuccessful and details how that is done and by whom.
4. Assemble an interdisciplinary team to test, evaluate, and then fully implement the solution.

The AHC experienced impressive results, including a 78% reduction in harm events over a 3-year period while also

gaining a deeper understanding of the healthcare delivery system.

Session #1204

## PPE: Then and Now

Healthcare Worker Safety and Occupational Health
All Career Stages
Sarah Deming

This session is a lighthearted look through history at the humorous, unlikely, and sometimes absurd ways that people have tried to protect themselves from infectious diseases. Participants will learn about one medieval treatment for the Bubonic plague was the Vicary Method, which involved removing the feathers from the bottom of a live hen, which was then strapped to the swollen lymph nodes of an individual who was suffering from the plague. When the chicken got sick, it was thought to have drawn out the illness. The chicken was then washed and reapplied. This process continued until either the chicken or the patient was dead, which leads to the question: Should chickens be considered PPE?

The discussion will then move from antiquity into the dawn of a new age of science. Participants will learn the ways that our understanding of disease transmission, practices, and PPE have evolved since the advent of germ theory. This session will discuss the new challenges that continue to present themselves in emerging infectious diseases, and highlight how more science, resources, and technology hasn't changed misconceptions about the origins of disease or how to protect ourselves from them.

This session touch on the widespread misconceptions and public fear related to the AIDS epidemic in the 1980s and 90s and the modern struggle to eliminate the ancient disease of tuberculosis. The session concludes with a discussion about the development and evolution of body substance isolation, universal, and standard precautions.

Session #1205

## Medical Device Investigations: Federal Partner Perspectives

CDC
Julia Marders

Medical products, such as devices and drugs, play a crucial role in the treatment and diagnosis of illness and disease. However, patient infections can occur when a medical product is contaminated or misused.

This session will provide an overview of the regulatory and public health response framework for managing medical device investigations, emphasizing the essential contributions made by IPs and other healthcare partners.

Session #1207

## Interrater Reliability Applied to NHSN Definitions Across an 8-Hospital System

Surveillance and Technology
All Career Stages
Beth Wallace

Consistent HAI reporting is essential for public reporting. Additionally, CMS' pay for performance programs, hospitals are subject to quality measure validation including HAI reported through the NHSN. Validation may result in loss of funds if a lack of appropriate HAI reporting is identified. NHSN HAI surveillance definitions require interpretation of clinical documentation by IPs, which can lead to inconsistent HAI reporting.

This session will describe how an 8-hospital system, ranging in size from 185-1,100 beds, prepares for CMS audits—having recently experienced four HAI validations with 100% compliance, uses an inter-rater reliability (IRR) process to overread 100% of NHSN reported events, and shares learnings with all IPs across our system.

This session will share the process for preparing for external entity validation and will explain how they performed IRR, how they reached consensus on accurate reporting and consistent interpretation of NHSN definitions, and how they disseminated NHSN guidance across our system. Finally, we will describe how we leverage technology to stay connected at our multiple sites and to engage IPs in learning.

Session #1208

## Zero Heroes: Knocking Out HAIs In the Medical Surgical ICU

Quality Assurance and Performance Improvement
Mid-Career/Proficient
Maureen Lansing

Achieving zero infections in a medical surgical ICU is a complex challenge with easily achievable solutions. This session covers the example of an MSICU that implemented an IPC program that culminated in an impressive 594-day HAI-free streak.

Participants will cover the tactics employed including:

- HAI review, including CLABSI, CAUTI, C. diff, and Ventilator-Associated Events;
- Internal communication mechanisms used, including a "Day Since last Infection" posting in the unit;
- Increased transparency around infections and hand hygiene with better information sharing with both leaders and frontline staff; and
- An optimized mandatory skills fair, which transitioned from poster presentations to hands-on review and return demonstrations.

This session will discuss how the MSICU team's commitment to patient safety led to the creation of several actionable tactics such as the development of a transfer checklist, two-person dressing changes, and Foley inserts, voluntary hand hygiene "policing" on every shift, staff peri care training, and increased physician buy-in.

Participants will explore how these interventions led to sustainable, long-lasting success, especially once the goal of zero infections was achieved. This session will discuss how the implementation team of nursing, IPC, and leadership was able to change belief through experiences to promote compliance and will share strategies, changes in practice, and lessons learned throughout this project.

Session #1209

## How Good is Your Data? How to Use the NHSN Internal Validation Toolkit

NHSN
Mid-Career/Proficient
Suparna Bagchi

Members from the NHSN Validation and Methods and Analytics Team will provide IPs and NHSN users with best practices and helpful tools to conduct facility-level data quality analysis on HAI data.

The session will highlight the data quality checkpoints that are strongly recommended by the NHSN team at CDC, and provide an overview of the data quality analytic efforts that are made by the group.

## 3-4 PM
## 30/30 SESSIONS

Session #1301

## Do I Report That? The NHSN Case Study Coordinator as a Statewide Resource

Education, Training, and Competencies
All Career Stages
Lisa Hesse

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Session #1301

## Collaboration is Key for the IP in the Sterile Clean Room

Quality Assurance and Performance Improvement
Early/Novice - Mid-Career/Proficient
Pamela Harazim

IPs are involved in many diverse areas of a healthcare system and ensuring patient safety requires that they collaborate with many departments and understand the work that each department does—and how it impacts IPC.

This session covers the experience of a healthcare system that, out of necessity and as the result of a routine licensure visit by their state department of public health, developed a collaborative relationship between their pharmacy and their IPC team. Participants will learn the steps this community hospital took to strengthen the IP's role in the pharmacy, particularly around compounding activities in the clean room.

The action plan, formulated by the quality and infection prevention departments, to provide better quality safe patient care included:

- Address deficiencies related to the IP's knowledge of sterile compounding activities.
- Communicating with the pharmacy and optimizing monthly reporting to the Infection Control Committee, including a monthly environmental rounding using a tool tailored for the pharmacy
- Educating staff on best practices including USP 797, clean room observations, policy review, and monthly clean room sampling.
- Identifying barriers to compliance, gathering staff feedback, evaluating changes, and benchmarking against measures.

By strengthening the relationship between the pharmacy and IPC, this facility was able to identify and implement sustainable process and physical changes and evaluate their impact on microbial colony counts.

Session #1306
## IPC During Infrastructure Repairs in Semi-Restricted Areas of the Hospital
Environment of Care, Construction and Remediation
All Career Stages
Sarah Clock

Catastrophic failures to major hospital infrastructure require immediate attention and necessitate extensive construction efforts and urgent timelines to complete repairs. The risks are amplified when the site of the failure and/or repair is in high-risk areas of the hospital, and the role of the IP is paramount to ensuring patient safety and in responding to the unique challenges to maintaining clinical operations during major repairs to critical systems.

This session will feature a case study of the emergency repair of the main sanitary line located underneath the surgical suite in a 196-bed hospital, which involved re-routing of sewage, full-scale excavation, and re-design of plumbing systems within the semi-restricted corridor, all while keeping operating rooms on both sides active.

Participants will get a toolkit and strategies to successfully engage in interdisciplinary collaboration as a member of the response team and maintain safety during emergency repairs to critical hospital infrastructure. Essential components this session include:

- Elements of the IP's role including engagement from the beginning, development of an IPC risk assessment and dust protection plan, participation in meetings and calls, and review of proposed designs.
- A description of the special considerations for work in semi-restricted areas such as compliance with required PPE and routes and times for supply delivery and debris removal. Especially important are IP approval of placement, proper installation, and maintenance of dust control barriers and sources of negative pressure.
- Tools for routine monitoring of the work site include a differential pressure gauge (air pressure relationships) and a particle counter (air monitoring).

Session #1306
## Construction and Infection Prevention: Using the Tools to Your Advantage
Environment of Care, Construction and Remediation
All Career Stages
Leon Young

As hospitals and LTC facilities age or seek ways to improve their patient care capabilities, there is often an increase in construction and maintenance activities. During these projects, the IP must remain focused on patience safety and the Infection Control Risk Assessment (ICRA).

This session will cover policies and procedures that are essential to assuring patient safety during construction and maintenance activities. Procedures to be discussed will include everything from completing an ICRA permit to how to conduct project rounding to determining when to allow the removal of ICRA containment.

This session will also cover the use of specific tools that will benefit the IP during a construction project, including a construction monitoring tool, particle counters, handheld differential manometers, digital pressure manometer, and an aerosol dust monitor. Discussions will revolve around how all four of these instruments can be used to enhance construction project rounding and monitoring.

## CONCURRENT SESSIONS

Session #1304

### Dental Infection Control: Oral Environment Characteristics That Drive a Modified Approach
Surveillance and Technology
Joshua Ulibarri

While accreditation focus is increasing in dental infection control, there is uncertainty in the scientific literature regarding how the oral environment affects infection and how appropriate controls may differ from controls in a sterile clinical environment. In particular, dental HAI has not been clearly defined and differs from clinical definitions that include breach of sterile tissue as a fundamental requirement for most parenteral infections. The oral environment, on the other hand, has gradations of mucosal tissue abrasions and breaches, where there is no clear breach of sterile tissue. Further, saliva has known immunological properties as well as physical-chemical properties that exert a protective effect against infection.

Oral environment characteristics should drive a different approach for HAI surveillance and follow-up protocols, but there is little guidance on how surveillance in the dental environment should be conducted, or how follow-up protocols should be standardized. This session will focus on considerations IPs must give when addressing IPC issues in the dental environment and provide an overview of the implications for patient safety and IPC.

Session #1305

### LTC Infection Prevention: Home Sweet Infection-Free Home
Education, Training, and Competencies
Steven Schweon

The need for nursing home care continues to increase in the U.S. as the aging population requires skilled nursing care. As a result, LTC's are becoming an integral part of the evolving healthcare continuum for both short- and long-term resident placement. Residents do not live in the facility; Healthcare personnel (HCP) work in the resident's "home."

The LTC population is at risk for pathogen acquisition and infection due to numerous factors. Many of the residents are frail with multiple comorbidities such as diabetes and respiratory disease that can predispose them to infection. Close to 90% of the residents are aged 65 and older, with senescence negatively impacting the immune system functionality. Cognitive impairments, decreased skin integrity, bowel and bladder incontinence, and nutritional alterations can also increase susceptibility to infection.

Additional infection risk factors include indwelling catheters and devices such as urinary catheters and feeding tubes, functional impairment, and frequent care transitions. Infections in this population can result in morbidity, re-hospitalization, and considerably increased healthcare expenditures. Low hand hygiene adherence, antimicrobial overuse, emerging MDROs, inadequate environmental hygiene, under-utilization of vaccination by both HCP and residents, insufficient process and outcome surveillance programs, and staffing challenges will all test the IPC program's effectiveness.

This session will discuss recommended actions for preventing infection, best practices to promote resident and staff safety, and workflow processes to ensure regulatory compliance for the IPC in the LTC setting.

Session #1307

### Using Health Behavior Theory to Increase Efficacy of IPC
Implementation Science and Research
All Career Stages
Stephanie Stroever

IPs are frequently tasked with the development and implementation of performance improvement (PI) initiatives to encourage healthcare practices that prevent or interrupt the spread of infection. These initiatives often seek to increase knowledge and implement policy, with the assumption that behavior change will follow. However, evidence shows that knowledge is necessary but not enough

for behavior change.

Behavioral theory suggests behavior is driven by determinants at multiple levels of the ecological model, including personal, interpersonal, organizational, and societal. These determinants may include attitudes, perceived norms, self-efficacy, an enabling environment, the balance between benefits and barriers, and positive peer and leadership support.

In order to design and implement effective interventions, IPs must understand the determinants of behavior change and learn how to apply these evidence-based changed methods to build successful PI initiatives. This session provides tools and strategies that can be for quality improvement and will help participants understand key insights into the drivers of behavior among healthcare staff and patients for improved safety.

Session #1308
## The Changing Landscape of IPC and Quality Improvement in Home Healthcare
Quality Assurance and Performance Improvement
All Career Stages
Ashley Chastain

Home healthcare (HHC) agencies are providing increasingly complex care and serve as a critical link between acute care and independent residential living. The landscape in which HHC agencies operate is changing due to the development of several value-based purchasing (VBP) initiatives by HHS, changes in the CMS' Home Health Conditions of Participation, and The Joint Commission's focus on IPC as a national patient safety goal for HHC.

This session will help IPs to understand and prepare for the changing landscape by:
- Presenting a research agenda to identify best practices for IPC and quality improvement in HHC;
- Describing trends in the HHC Quality of Patient Care Star Ratings (QoPC) data; and
- Reporting results from a survey and qualitative interviews of HHC personnel
- Describing the challenges to IPC and quality improvement in HHC and lessons learned

## 3-5:30 PM
## WORKSHOPS

Session #1400
## De-escalate and Resolve Conflict
Leadership and Professional Development
All Career Stages
Terri Bogue

The complex, high stress, and emotionally laden environment of healthcare frequently leads to conflict, and while conflict is common, there may be times when the conflict escalates and becomes critical. In critical conflicts, emotions can run high and getting to a solution can be difficult. This session will give participants the tools they need to first de-escalate the conflict, then build understanding, and finally create solutions.

This session will demonstrate why emotions—grounded in reality or not—must be addressed first and how to work with each individuals' emotions in a meaningful and professional way. Participants will learn how to identify the real cause of conflict and get proven techniques for understanding the constituent parts of conflict, including the perspectives and values which lead to conflict in the first place.

Participants will practice breaking down the conflict and understanding perspectives to help them create workable solutions that can resolve conflict even in the most difficult of situations.

Session #1401
## Finding Your Voice: Advocating for IPC
Education, Training, and Competencies
Sarah Smathers

As the amount of legislation and regulation governing the practice of IPC increases, it becomes more important for policymakers to hear from experts to help guide them and provide advice on evidence-based practices that lead to increased patient safety without overburdening providers. IPs have always advocated on behalf of their patients to ensure safety and prevent the spread of infection. As experts, we understand how to utilize scientific evidence to drive safe clinical practice.

Policymakers and regulators are also focused on patient

safety and need input from subject matter experts to best inform legislation and regulations. By relying on the skills we use in our everyday practice, such as influence and relationship building, IPs can guide policymakers to make thoughtful and educated decisions regarding IPC-related legislation.

This session will use the APIC public policy agenda to build advocacy skills, and review the tools and resources currently available to APIC members. Participants will hear from members about their lobbying experiences and will engage in practice and role-playing experiences to prepare them to meet with legislators and their staff.

Participants will get tools and resources to promote IPC policies and learn how to integrate advocacy into their practices.

Session #1402
## NHSN CLABSI Protocol and Analysis PDW
NHSN
Prachi Patel

This presentation is designed for IPs, healthcare epidemiologists, quality improvement staff, and others who wish to gain additional understanding and insight into the accurate identification of CLABSIs for NHSN reporting and the analytic options that are available for use in improving the quality of patient care in their facilities.

## 4:30-5:30 PM
## 30/30 SESSIONS

Session #1501
## Eliminating Isolation Precautions by Objectively Measuring Criteria on Current Risks and Observations
Implementation Science and Research
Mid-Career/Proficient - Advanced/Expert
Roy Boukidjian

Over the years, hospitals and health systems have removed or maintained isolation precautions for MDROs due to lack of clarity and consistency in guidelines and literature. Some hospitals have performed an internal study of MDRO transmission after isolation removal to prove that isolation is not needed, but widespread adoption has been difficult

to accomplish. Many hospitals have shown resistance to randomly performing a similar study at their facility due to the risk of patient hard via MDRO transmission.

This session will present a measurable risk assessment that was performed at a 38-facility system that allowed a majority of their facilities to eliminate isolation precautions. This risk assessment allowed the system to present objective data to their committees and leadership for review and adoption, and include four categories:

- Standard precautions
- Environmental controls
- Antimicrobial stewardship
- Miscellaneous considerations

Session #1501
## From Board to Bedside: Using Data to Reduce Preventable Harm
Implementation Science and Research
Mid-Career/Proficient - Advanced/Expert
Julia Sammons

Preventing HAIs and healthcare-associated conditions in a quaternary, pediatric academic medical center requires a streamlined and comprehensive strategy. This session will cover how one pediatric academic medical center used data to prevent HAIs across their system.

Participants will explore the steps undertaken by this facility to create a Harm Prevention Program, including:

- An assessment of the challenges in the existing harm prevention work, including inconsistent communications, ill-defined roles and responsibilities, under-optimized data infrastructure, and highly variable organizational and local engagement.
- A comprehensive Harm Prevention Program launch focused on nine key harm indicators, including five HAIs.
- Developing a structure that leveraged both a macro- and microsystem perspective to influence engagement at both an enterprise and unit level.
- Tactical interventions such as streamlining communications from the board to bedside; clarifying roles and responsibilities and optimizing resources where necessary; embedding high reliability principles through

minimizing variation, preoccupation with failure, and deference to expertise; and

- optimizing data infrastructure to support real-time standardized data displays that enable targeted improvement at both the enterprise and unit levels.

Overall, this work resulted in statistically significant reductions in rate of harm in five of the nine key harm indicators since the program's inception and a reduction in overall rate of harm (harm index) by nearly 10%. By targeting a prioritized set of interventions across the continuum from macro- to microsystems, the Harm Prevention Program implemented the structure necessary to drive culture change and improve outcomes for patients. This session will help participants understand how to translate this program in their own facility to reduce preventable harm.

Session #1506

## Applying Human Factors to Assess Hand Hygiene Observation Applications

Quality Assurance and Performance Improvement
All Career Stages
Amanda Sivek

Effective clinician hand hygiene is known to decrease the incidence of HAIs and helps slow the rate of antibiotic resistance, but hand hygiene compliance (HHC) rates among clinicians are often low. Currently the gold standard in HHC monitoring is direct observation, which is a resource-intensive process that includes many chances for human error. Hand hygiene observation applications (HHOAs) can help to reduce this burden by making data collection easier, potentially reducing errors and boosting observer efficiency.

This session will discuss a form of analysis known as heuristic evaluation an established human factors method where trained experts use best practices, or heuristics, to identify usability issues, assess HHOAs, and identify data analysis web portals. This session will articulate a set of five assessment heuristics that can contribute to the successful evaluation of software user interfaces and mobile-based health apps.

Participants will take a deep dive into these evaluation methods and learn how to apply these strategies for use in their care environment.

Session #1506

## Quality Improvement Increases Hand Hygiene Compliance in the Neonatal Intensive Care Unit

Quality Assurance and Performance Improvement
Early Career/Novice
Elizabeth Marrero

Quality improvement science is central to the success of an IPC program and is particularly key for novice IPs. This session will learn the steps to developing a quality improvement program and how to implement these steps using an example IPC project on family and visitor hand hygiene in the NICU.

This interactive session will give participants an opportunity to devise their own plan for developing quality improvement projects at their own facility, walking them through the steps to plan, implement, and sustain these programs for improved efficiency, patient safety, and clinical outcomes.

This session will use the specific example of the NICO and help participants understand how to generalize these quality improvement strategies and techniques for any practice setting.

## CONCURRENT SESSIONS

Session #1502

## The Legal Side of Waterborne Pathogen Risk Management: Minimizing Exposure When CMS Arrives!

Environment of Care, Construction and Remediation
All Career Stages
Russell Nassof

Preparing for a CMS and/or The Joint Commission inspection now includes a review of your facility's water management program (WMP) and most facilities are currently struggling with preparing programs and documents that will satisfy these new requirements.

This session is directed at the IP familiar with waterborne pathogens, including *Legionella*, Acinetobacter, Pseudomonas, nontuberculous mycobacteria (NTM), and will focus specifically on the rapidly changing risk and liability landscape on this growing problem for healthcare facilities.

This session will examine the legal requirements to meet the evidence-based standard of care pertaining to control of waterborne pathogens and the necessity to incorporate technologies proven to prevent contamination into a WMP. Participants will identify key elements which must be addressed in their WMP to meet CMS or The Joint Commission requirements, including a discussion of legally defensible risk containment in the event of a documented outbreak.

Controversial issues such as water testing for Legionella and developing IPC strategies to reduce risk and liability for patient exposure to waterborne pathogens from heater/cooler devices will also be addressed.

Session #1504

## Hospital Mattresses as a Source of HAIs: Current Recommendations for Disinfection
Antisepsis, Disinfection and Sterilization
All Career Stages
Edmond Hooker

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Session #1507

## A Tale of Two Sustainability Tools: Leadership Rounds and K Cards
Implementation Science and Research
All Career Stages
Mary Jo Knobloch

Implementation researchers have defined sustainability and outlined sustainability approaches for healthcare. Most of the literature, however, is focused on theory—with little guidance for frontline practitioners who are tasked with sustaining best practice. Defining sustainability and facility-level approaches, although important, does not lead to real-world application at the unit level.

This session provides an overview of sustainability literature related to HAI, facilitation used in the implementation process, and the role of leadership to sustain best practices. We will highlight two tools: Kamishibai Cards (K Cards) and Leadership Rounds.

The word kamishibai means "paper drama" and is an ancient Japanese art form practiced in Buddhist temples which is now used as a management tool known as K Cards; monks use this storytelling art form to convey moral lessons. Leadership Rounds are a practical tool to sustain evidence-based practice. Both tools have been used in manufacturing and now in healthcare, and both can facilitate interaction between leaders and frontline staff.

This session will be framed using the Consolidated Framework for Implementation Research (CFIR) – prompting participants to recognize the importance of looking closely at the inner settings of a facility – including unit and facility culture, learning climate, psychological safety of frontline staff members, readiness for change, and leadership engagement.

Session #1508

## You've Got a Friend in Me: IPC and Occupational Health Partnering to Decrease Risk

Healthcare Worker Safety and Occupational Health
All Career Stages
Christopher Blank

IPC and occupational health (OH) are essential to protecting patients, visitors, and healthcare personnel (HCP) from communicable disease. Although methods and priorities differ, each can be a strong ally for preventing infections within healthcare facilities. Realizing the potential strength of this partnership is essential for a streamlined, efficient, and cohesive strategy to manage many potential HAIs and exposures to bloodborne pathogens, influenza, tuberculosis, meningitis, pertussis, MDROs, and emerging infectious diseases such as Ebola.

Because these diseases pose risks to both patients and HCP, lines are often blurred between IP and OH responsibilities. Development of a strong relationship between these disciplines is critical to building a robust prevention and response process while avoiding duplication of efforts.

This session will provide a method for establishing and maintaining this strong and will describe how daily work and incident responses can be organized to maximize cohesion and prevent disease transmission to patients, visitors, and staff.

Two IPs, each from a large healthcare system, will lead this session, highlighting their real-life experience with recent incidents in which cross-disciplinary coordination helped to prevent exposures to and transmission of epidemiologically important pathogens within the organization. Lastly, they will identify opportunities for IPs to provide leadership and support while assisting OH to improve its approach to surveillance, data collection, education, and policy development.

Session #1509

## Sepsis: Systemic Immune Assault in the Waning Years of Antibiotic Effectiveness

Antimicrobial Stewardship, Resistance and Emerging Pathogens
All Career Stages
Wava Truscott

In the U.S., there are more than 1.6 million cases of sepsis annually resulting in over 250,000 deaths; sepsis is the cause of 1 of 3 deaths in U.S. hospitals. Globally, sepsis affects more than 26 million people each year and is the largest killer of children worldwide. Although many survivors recover completely after weeks or months of recuperation, others suffer from life-long organ damage, limb loss, and/or cognitive damage. No matter how you measure it, sepsis is a medical emergency where every minute counts.

In the current atmosphere of tightly controlled antibiotic stewardship, it is often difficult to decide whether antibiotics should be prescribed for a case of possible sepsis. New rapid diagnostics are now informing those decisions, as is the recognition that error on the side of sepsis prevention is an overriding determinant.

This session will use case studies to explore the causes of sepsis, identify patients at greatest risk, and delve into its pathological course. Participants will explore the sterile systemic inflammatory conditions that mimic infectious sepsis, identify causes, describe the pathological progression, and list several recommendations for prevention. Highlights of specific actions shown to impact patient outcomes will be described along with the actions of hospital sepsis programs that have been successfully implemented. Updated information from the CDC, WHO, and the FDA will be noted.

# THURSDAY, JUNE 13

## 8:30-10 AM

## KEYNOTE SESSION WITH PAUL OFFIT, MD

Session #2000
### The Vaccine Wars

There's a silent, dangerous war going on out there. On one side are parents, bombarded with stories about the dangers of vaccines, now wary of immunizing their sons and daughters. On the other side are doctors, scared to send kids out of their offices vulnerable to illnesses like whooping cough and measles—the diseases of their grandparents. How did anyone come to view vaccines with horror? The answer is rooted in one of the most powerful citizen activist movements in our nation's history. Infectious disease expert Paul Offit relates the shocking story of anti-vaccine America—its origins, leaders, influences, and impact. Offering strategies to keep us from returning to an era when children routinely died from infections, Offit will provide a vigorous and definitive rebuttal of the powerful anti-vaccine movement.

## 10:15-11:15 AM

## 30/30 SESSIONS

Session #2101
### Who Cleans What? Improving Cleanliness of the Hospital Environment
Environment of Care, Construction and Remediation
All Career Stages
Caroline Haggerty

The Joint Commission Standard Infection Control 02.01.01 recommends hospital IPC plans be collaborative, which can lead to the question: Who cleans what? This 700-bed hospital was able to answer that question by creating a multidisciplinary shared accountability model for cleaning the patient environment and equipment. This session will cover the steps they undertook to ensure environments and equipment were clean, staff could speak to the cleaning process, and overall cleanliness was improved, including:

- Development of a strategy to engage an interdisciplinary team to identify and address potential vulnerabilities in cleaning processes.
- An education and awareness campaign centered around the catchphrase "Who Cleans What?"
- Design of a visual grid so staff could quickly and easily identify which team members hold primary accountability for maintaining clean equipment and frequency of cleaning.
- Development an educational tool kit, posters, huddles, and clean equipment signage to communicate accountability.

Participants will learn how effective this program was by measuring the data before the "Who Cleans What?" campaign against the outcomes after implementation, including increased cleanliness and better results.

Session #2101
### The Handwash Station: Friend and Foe?
Environment of Care, Construction and Remediation
Michael Weinbren

Despite handwashing being the single most important barrier to cross infection, the design and use of handwash stations leave a lot to be desired.

Using the example of the 2011 the neonatal *Pseudomonas* outbreak in Belfast, a turning point in water management in UK hospitals, this session will cover the factors that must be considered in the design, placement, and use of handwash stations to ensure patient safety. Participants will learn how poor handwash station design and use can lead to undetected patient transmission.

Participants will explore the relationship between water and sewage systems and will review emerging evidence of the role of drains in acting as a reservoir or organisms that can lead to cross-infection. This session will cover the reports linking the transmission of carbapenemase-producing organisms to water systems and understand the impact this has had on critical care units and their water services.

This session will cover the current practices around water systems and the impact on waterborne infections and will discuss possible improvements that must be made to ensure patient safety.

## Preparing for Certification in an ASC

Leadership and Professional Development
Mid-Career/Proficient - Advanced/Expert
Lori Groven

Evolving regulatory standards for ambulatory settings requires a thorough education and complete understanding of the challenges that ASCs face in preparing for and maintaining regulatory certification. This session will cover the roles that IPC must play in order for as ASC to achieve their initial certification or maintain their standards between surveys.

Participants will learn the tools and resources they will need and will help IPs at ASCs to ensure a safe environment for their patients and staff. This session will discuss the challenges that may be faced throughout the certification process and will provide tips to overcome them.

## Filling the Need: An IPC Training Program to Build Your Bench

Leadership and Professional Development
Mid-Career/Proficient
Julie Duran Mullica

Every IPC program is faced with the never-ending challenge of staffing. From filling empty positions or covering for maternity and other medical leaves, keeping your program on track can be difficult. With many IPs in the field retiring, healthcare systems need to actively prepare for more vacant positions and create innovative solutions to manage staffing uncertainties.

This session will provide a detailed example of how one healthcare system invested in training five current full-time associates, ranging from RNs to laboratory professionals to an exercise physiologist, to become novice IPs in a 20-week training program. Based on the APIC Roadmap, the training program was constructed to provide an in-depth, hands-on experience for each trainee.

These new IPs helped establish a pool of professionals that are then able to flex their hours to meet the IPC needs throughout the system. This program also laid the foundation for a stronger, more resilient IPC program at participating care sites. As a result, care sites doubled their IPC workforce with their trainees taking the knowledge and experience they gained in the program back to their units to lead IPC initiatives.

## Wisconsin's Outpatient Antibiotic Stewardship: Advancing from 12 to 100% in 12 Months

Antimicrobial Stewardship, Resistance and Emerging Pathogens
Early/Novice - Mid-Career/Proficient
DeAnn Richards

The CDC released the Core Elements of Outpatient Antibiotic Stewardship in November 2016. Most organizations were hesitant to address this location until the inpatient setting met all seven core elements. CMS requested the Quality Innovation Network-Quality Improvement Organizations (QIN-QIO) support the implementation of four core elements including commitment, the action for policy and practice, tracking and reporting, and education and expertise without requesting reimbursement for the service.

This session describes how Wisconsin developed and implemented a plan to achieve these goals. Participants will learn the strategies and techniques used throughout the implementation process, including:

- Recruiting 90 outpatient locations that ranged from emergency services, urgent care centers, physician clinics, and community pharmacies to implement least one item per core element by December 2018.
- Communication tactics to ensure success, including one-on-one teleconferences for project and goal review and evaluation.
- Implementation of quarterly reviews and the provision of technical assistance and tools based on identified gaps.
- Remediation strategies for facilities who had not their goals within the first nine months

In July 2017, 11 of the 90 locations had all core elements in place. This increased to 73 locations by December and 81 in May of 2018. All sites had at least one item for each core element in place by July 2018. The most difficult core element to implement was tracking and reporting due to

limitations in the electronic health records. Success was attributed to a social media campaign with on-demand video on each subject and the creation of toolkit and supporting documents based upon best practice. Participants will explore how these tactics helped support the program and achieve a 100% success rate.

## Antibiotic Stewardship Programs with Limited Resources

Antimicrobial Stewardship, Resistance and Emerging Pathogens
Early Career/Novice
Nikki Ripplinger

This session focuses on a critical-access hospital's journey as it worked to create an Antibiotic Stewardship Program with limited funds, to increase our patient care safety and improve patient satisfaction surveys.  Though this facility recognized the importance of ASP they did not have the capacity or resources to implement the desired program.

This session will cover how the hospital devised solutions to fund the proposed plan, the low-cost resources used to design and maintain the plan, and a review of their approach for team goal-setting.

# CONCURRENT SESSIONS

## Peripheral Vascular Access Device Infection: An Urgent Patient Safety Issue

Implementation Science and Research
Marcia Ryder

The success of most medical acute and chronic life-sustaining therapies across all ages and patient populations is dependent on reliable vascular access. Though critical to the provision of life-saving medical therapies, vascular access devices (VADs) are associated with significant risk. Under-reported, under-recognized, and most often ignored, are the infections associated with peripheral vascular access devices (PVADs), such as short peripheral catheters (SPC) and midline catheters (MC).

From 2008 to 2011, hospitals across the nation made significant progress in preventing CLABSI, achieving ~50%

reduction in those three years. However, national SIRs have remained relatively unchanged between 2011 and 2016 despite concerted efforts. HHS expects that hospitals will decrease CLABSI rates by an additional 50% by the year 2020. If IPs cannot identify unrecognized risk factors such as PVAD-BSI that contribute to the flat line in progress, this task may be insurmountable.

Consider the answers to these questions: Do you know your institution's PVAD incidence rate for BSI? How many of your CLABSI are PVAD-BSI? How do you diagnose PVAD-BSI? Will clinically indicated SPC site changes increase the risk for SPC-BSI and what are the legal implications? Have you considered that non-sterile insertion of SPCs may increase BSI risk? Have you considered the lack of sterile SPC insertion as a legal liability when all other VADs are inserted with sterile technique? Do we want to continue to ignore the risk of perpetuating antibiotic resistance by the increasing need to treat the very devices we use to treat non-device related infections? Is the use of MCs to avoid CLABSI in the best interest of the patient?

The answers to these questions and more will be addressed in this session by two experienced presenters: a vascular access researcher and an attorney with specialization in vascular access litigation.

## Understanding and Preventing Periprosthetic Infections

Quality Assurance and Performance Improvement
All Career Stages
Wava Truscott

Our aging population is escalating the need for orthopedic surgeries to replace injured and worn out knees, hips, and shoulders. Although many advancements in surgical techniques, implant designs, and improved material biocompatibility have reduced infection percentages over the years, the increase in prosthetic surgeries multiplies the number of patients at risk for serious infection. The alteration of the entire implant site, bacterial defense strategies, and protective actions along with the patient's distracted immune defense reactions have only recently been better understood.

This session will discuss why only a few bacteria are needed to start an infection in the periprosthetic site, how the microbial invaders evade the patient's immune defenses, and how they set up pathogen reservoirs to feed lingering or recurring infections. Participants will learn how better risk reduction practices for the patient before, during, and after surgery can reduce infections, readmissions, morbidity, and mortality.

Participants will hear a first-hand account from a patient who was affected by this issue, and who will relate his experience after several recurrences of periprosthetic infection following his hip replacement surgery. This real-life example will help emphasize how critical this issue is, particularly as facilities face escalating numbers of at-risk elderly patients requiring implant surgery while expanding antimicrobial resistance and pay-for-performance financial vulnerability increase the demand for more effective IPC.

We'll also discuss new information on microcolony mutant surviving bacteria, the understanding of the role of treatments encouraging mutant strains and biofilm formation, hampered treatment efficacy due to tissue encapsulation, and how to prevent the progression to post-surgical complications. The need for adjustments in specimen processing techniques will be addressed, as will the critical role of device reprocessing.

Case studies will also be presented to help us relate with those living through the consequences of infections described in this course and to identify causes that could have been avoided.

Session #2105

## Water-Associated Outbreaks and Facility Water Management Plans

CDC

All Career Stages

Matthew Arduino

This session focuses on water-associated outbreaks, drawing on such data sources PRB outbreak consultations about water-associated outbreaks, and NHSN annual facility survey data for hospitals and nursing homes about current status of water management plans and control activities.

Session #2108

## The Neverending Story: IP's Responsibility for Surveillance System Development

Surveillance and Technology

All Career Stages

Rebecca Ragar

All IPC programs require comprehensive surveillance for HAIs and epidemiologically significant organisms. Many healthcare systems have transitioned, or are transitioning, from traditional surveillance methods to electronic surveillance systems to reduce IP surveillance workload. Electronic surveillance system structures vary across healthcare systems due to endless combinations of electronic medical record systems, electronic surveillance systems, customizations, upgrade versions, and resources. Customization of electronic surveillance systems, which is necessary for most healthcare systems, potentially leads to decreased data integrity if validation processes are not in place and maintained. Surveillance data integrity is critical, and the lack thereof may have serious patient care, public health, and financial implications.

This session will provide details on how one healthcare system implemented and validated an electronic surveillance system and will describe the responsibilities of IPs for the development and maintenance of these systems.

Participants will learn the key steps after implementation, including additional maintenance and validation processes. These processes include, but are not limited to, defining and validating: report logic, data sources, automated surveillance algorithms, alerts, and data exports. This session will cover the review, selection, and validation of features, and discuss process standardization to ensure accurate data retrieval.

## 2:15-3:15 PM
## 30/30 SESSIONS

Session #2201

## CRE Collaborative: A Regional Approach to Prevention

Quality Assurance and Performance Improvement

Mid-Career/Proficient - Advanced/Expert

Justine Celli

According to the CDC, at least 2 million people are infected with antibiotic-resistant bacteria and at least 23,000 people die as a result of these infections each year in the U.S. In 2013, the CDC published a report outlining the top drug-resistant threats in the country. Carbapenem-resistant Enterobacteriaceae (CRE) was identified as one of three urgent threats.

Florida has several geographic regions that are serviced by multiple healthcare systems, facilities, and types of healthcare providers. CRE burden in metropolitan areas of Florida is a growing concern, given the population of travelers and part-time residents from places with endemic and high-burden CRE prevalence. To address this problem, a regional collaborative was established to prevent transmission and raise awareness of CRE infections in Florida.

Activities for the collaborative included:

- monthly webinar trainings
- pre- and post-assessment questionnaires
- monthly reporting of CRE data
- bi-monthly conference calls
- a site visit conducted by the Department of Health, and
- implementation of best practices based on site visit reviews.

Participants will walk through all aspects of the collaborative from start to finish, learning more about CRE and its burden in the U.S. and Florida, outlining the process of forming a regional collaborative to address CRE, examining the data received during the collaborative, and getting an overview of lessons learned.

Session #2201
## Statewide Implementation of a Colon Bundle: Turn Challenges into Successes
Quality Assurance and Performance Improvement
Mid-Career/Proficient - Advanced/Expert
Mary Catanzaro

Colon SSIs are among the leading preventable infections in the presenter's state. To reduce colon SSIs, hospitals joined a collaborative and worked to implement a colon bundle. Over an 18-month period, the collaborative realized a 42%

reduction in the colon SIR.

During this time, project leaders provided hospitals with toolkits, coaching calls, webinars, one-on-one calls, and evidence-based literature. Interventions operationalized by the hospitals included:

- CHG bathing before surgery;
- CHG bathing in the pre-operative area;
- use of an alcohol-based skin preparation;
- perioperative glucose monitoring of all patients;
- perioperative temperature monitoring; increased oxygenation of patients;
- use of weight-based antibiotics; and,
- change of gloves before closure.

Participating hospitals were asked to submit process measures each month directly into the data portal. Outcome data for hospitals was pulled from the NHSN. Audits showed that some previously adopted evidence-based strategies, such as weight-based dosing, preoperative CHG bathing, and normothermia were not as well established as had been assumed. Major challenges noted during the initiative were two-fold: designating individuals to measure and treat intraoperative glucose levels and the continual need to educate surgical staff about the importance of changing gloves before closure.

The session will discuss the interventions used during the collaborative, describe how the two major challenges in implementing the bundle were overcome by team work, and review the importance of reducing patient harm while improving hospital reimbursement.

Session #2206
## On the Frontline: Preparing Your Healthcare System for the Next High-Consequence Infectious Disease
Outbreak Investigation, Public Health and Health Policy
All Career Stages
Marie Wilson

There is little room for error in the detection and treatment of patients with high-consequence infectious diseases from the standpoints of patient and staff safety and public relations. IPs and public health officials are heavily relied upon for

answers during these high-stress times.

This session will discuss the strategies a facility must use to enhance their capacity to competently recognize and respond to at-risk patients. Methods discussed will focus on the IPs need to work with a multi-disciplinary team to assess current response strategies, providing an example of one healthcare system's experience planning, executing, and following up on opportunities for improvement in their preparedness.

Participants will learn about a valuable tool that can be used for this assessment: full-scale exercises. Full-scale exercises guide after-action work, including policy and procedure development and refinement. Discussed in this session will be publicly available tools to assist in the design and implementation of the exercise, opportunities to maximize readiness assessment through a split drill between live and table-top portions, and key internal and external partners to include for a successful drill. This healthcare system's exercise objectives and outcomes will be reviewed, as well as, subsequent after-action responses that included changes to policies and procedures as a result.

Session #2206

## Invasive Group A Streptococcal Infections in Pennsylvania LTC Residents

Outbreak Investigation, Public Health and Health Policy
Mid-Career/Proficient - Advanced/Expert
JoAnn Adkins

Invasive group A streptococcus (iGAS) can cause severe, life-threatening illness among the elderly, particularly LTC residents. iGAS infection may present as pharyngitis or skin infection, including impetigo or cellulitis, and can cause severe infection including pneumonia and bacteremia.

iGAS is spread by droplet or contact transmission with an infected person. In LTC settings, healthcare workers with active streptococcal skin infections, pharyngitis, or asymptomatic carriage have been known to transmit the bacteria to residents. Because of the potential severity of illness, even a single case of iGAS requires action. Effective surveillance, monitoring, and adherence to IPC practices can help identify cases early and help prevent outbreaks.

The session will discuss the manifestations of infection in the elderly and IPC strategies to be implemented when even a single case of iGAS infection is identified. Participants will learn how to the techniques and strategies for better surveillance, and the IPC solutions required after a case is identified.

## CONCURRENT SESSIONS

Session #2202

## IPC in Home Healthcare: Findings from a Multi-Method Study

Implementation Science and Research
Advanced/Expert
David Russell

Home healthcare (HHC) is the fastest growing healthcare sector, and infection is one of the leading reasons for hospitalization among HHC patients. IPC in HHC poses special challenges due to the uncontrolled home environment and limited resources available to staff.

In this interactive panel session, participants will learn about the findings from a multi-method study, including:

1. Describe home care nurses' infection control knowledge, attitudes, and compliance with IPC practices derived from a survey of home care nurses;
2. Identify the challenges home care nurses face in IPC practice based on observations and interviews with home care nurses;
3. Describe an innovative risk prediction model derived from routinely collected data that can be used to facilitate effective infection control in a home care setting.

Study findings will be used to facilitate a discussion of the challenges faced by home care nurses with regard to IPC and potential improvements for IPC programs in HHC.

Session #2204

## The Journey to Dream More, Learn More, Do More, and Become More

Leadership and Professional Development
All Career Stages
Amanda Gart

This session focuses on the lessons learned from the complete transformation of an IPC department at a large academic medical center. A team that was once merely surviving the day to day tasks of the department is now thriving, achieving organizational goals, and serving as an effective team of skilled and gracious partners in the health system's pursuit of zero patient harm.

In the beginning, staff morale was at an all-time low. The team did not trust one another, they were not seen as credible resources, they were unable to participate in quality improvement work to reduce HAIs, and they felt overworked and undervalued. Over the past five years, a new vision was established, and a strategic plan was developed with short and long-term goals. Team members were provided with professional development opportunities focused on collaboration, conflict management, communication, and resiliency. The team has since developed meaningful relationships with partners throughout the health system and are now seen as credible experts. The team is actively involved in over 15 interdisciplinary patient safety improvement teams and successfully supports over 85 departments in the inpatient and outpatient setting. All seven of the eligible nurses are now certified in infection prevention and control. Employee engagement scores are incredibly high, ranking in the top decile on all but three survey questions.

This session will highlight the building blocks of a transformational leadership style, examine the value of developing trust and displaying vulnerability to inspire others, and provide learners with practical strategies for meaningful collaboration, team building, effective communication, self-awareness, and influencing others. Whether you are a member of a small infection control department or participating in an interdisciplinary team focused on reducing HAIs, this presentation will help you become a great team member.

Session #2205

## NHSN Neonatal Late-Onset Sepsis

NHSN
Jonathan Edwards

This session will provide an overview of the new NHSN NICU Component. The first protocol to be available will be Late Onset Sepsis and Meningitis. The protocol was developed in collaboratioon with the Vermont Oxford Network and NHSN. This new protocol will be available for use in 2020.

Session #2207

## Bed Bugs: The IP's Role in Integrated Pest Management

Quality Assurance and Performance Improvement
All Career Stages
Jill Hardy

In 2007, the EPA and CDC officially declared bed bugs a public health pest as a response to the resurgence of bed bugs in the U.S. Bed bugs are not known for spreading disease, but they still have a significant impact on the day-to-day work of an IP. Management of these pests is a complex issue in the healthcare setting and the lack of a standardized approach to identification of bed bugs causes confusion, inconsistencies, and delayed patient care. The IP has a unique role in mitigating the risk for bed bug infestation and eliminating the negative social stigma for those affected.

This session shares a personal story of witnessing negative patient outcomes caused by bed bugs in the healthcare setting, and how this motivated the implementation of an integrated pest management (IPM) program. This session will focus on the IP's perspective in the implementation of this program, and cover the key components, which include:

- implementing a policy and procedure reflecting best practices;
- education planning for staff to eliminate social stigma of bed bugs and how to recognize bed bugs;
- cultivating partnerships with key stakeholders within the organization and community; and
- embracing proactive vigilance as the number one defense against bed bugs.

Finally, we will share results of an IPM including impact of patient care, financial benefit, and efficient utilization of pest

control services.

Session #2208

## Achieving Excellence in IPC Through the Core Competencies

Education, Training, and Competencies
All Career Stages
Angel Mueller

The ever-changing landscape of healthcare and the increasing focus on patient safety and quality outcomes requires knowledgeable and competent IPs. Core competencies are defined by the Certification Board of Infection Control and Epidemiology (CBIC) and represent the basic knowledge, skills, and attributes that IPs working in any healthcare setting should strive to achieve and need to become certified and advance from novice to proficient.

The use of the CBIC core competencies when creating IP job descriptions, determining the best fit when hiring, and developing orientation plans helps to provide a successful foundation for IPs. These core competencies also help in performance reviews, self-evaluations, and the creation of professional development plans allows IPs to discover and focus on areas of growth to ensure continuous knowledge attainment and skill refinement.

This session will provide IPs in all practice settings, and those managing IPC programs, with a methodology and tools for using CBIC core competencies when hiring and guiding IPs along their career paths.

Session #2209

## Interpreting the Results of Microbial Cultures and Biochemical Tests for Residual Contamination on Flexible Endoscopes

Antisepsis, Disinfection and Sterilization
Mid-Career/Proficient - Advanced/Expert
Cori Ofstead

Current guidelines from several professional associations recommend routine monitoring of endoscope reprocessing effectiveness. Many institutions have begun performing biochemical tests to assess the amount of organic soil remaining after manual cleaning. Some facilities are also conducting microbial cultures to detect bioburden remaining on endoscopes after HLD or sterilization. The results of these tests are frequently surprising, and IPs may be called upon to

interpret the findings and evaluate the risk of infection after substantial soil, high colony counts, or potential pathogens are found.

This session will provide an overview of practical methods that can be used to monitor endoscope reprocessing effectiveness, with an emphasis on rigorous methods of sample collection and testing that address the potential for built-up difficult-to-detect biofilm. Participants will hear real-world data illustrating the results for cultures, hemoglobin, protein, and adenosine triphosphate (ATP) tests done on various components of colonoscopes, gastroscopes, duodenoscopes, bronchoscopes, and ureteroscopes.

Case studies will be used to demonstrate the impact of multiple factors on test results, including endoscope age and condition, procedural length and complexity, and methods used for reprocessing. Since tests for organic soil are intended to identify endoscopes that require additional cleaning before HLD or sterilization, case studies will be used to demonstrate the impact of repeated reprocessing. Participants will explore associations between organic soil levels and results of microbial culture and will explain why ATP levels may not correlate with colony counts. The origin and utility of benchmarks will be explained, along with the benefits of conducting positive and negative control tests to contextualize findings.

To support the successful implementation of data-driven quality improvement initiatives, the session will include strategies for interpreting data, assessing risk, and responding to adverse test results to reduce risk and improve outcomes.

## 2:15-4:45 PM
## WORKSHOPS

Session #2301

## Another SSI? What Now?

Education, Training, and Competencies
Early/Novice - Mid-Career/Proficient
Carole Leone

This session will provide education and guidance on how to conduct an SSI outbreak investigation. The actions needed to identify and control an outbreak related to

SSIs are very specific. Novice IPs may struggle with some components of the investigative workflow, which could lead to misidentifying the underlying problem(s) contributing to the SSIs.

IPs will be guided through an in-depth review of the 10 key components of an investigative workflow for a cluster of SSIs. The key components are:

1. Recognize that an outbreak is occurring.
2. Write a situation, background, assessment, recommendation (SBAR) communication and collaborate with the IPC medical director.
3. Define a case and write a case definition.
4. Perform a literature review and develop a line list of potential cases.
5. Conduct environmental and OR observations
6. Create an epidemic (epi) curve and present the data.
7. Identify potential sources of the outbreak.
8. Develop, implement, and document control measures.
9. Communicate with key stakeholders and facility leadership.
10. Close the investigation.

Session #2302
### NHSN SSI Case Studies
NHSN
Victoria Russo
During this session, learn how to accurately identify SSIs utilizing case studies.

## 3:45-4:45 PM
## 30/30 SESSIONS

Session #2401
### A System-wide Approach to Validation of Electronic Denominator Data
Surveillance and Technology
All Career Stages
Kristen Metzger
The NHSN requires the electronic denominator data must match manually collected data within +/- 5% for three consecutive months; however, accurately capturing and validating patient, central line, Foley catheter, and ventilator denominator data is an operationally challenging task

that healthcare facilities often struggle to accomplish. Successfully and accurately capturing this data is essential for the calculation of HAIs and device utilization metrics.

This session will summarize a system-wide, scalable approach to electronic denominator validation that was developed as a collaborative effort between the IPC and analytics departments at a large healthcare system.

Participants will get a brief presentation on NHSN denominator data collection methods plus a description of the validation process concurrently implemented at five acute care hospitals and one critical access hospital. Specifically, this process includes:

- development of a report to capture electronic denominator data,
- nursing education,
- utilization of a shared webpage for manual data entry, and
- the application of analytical tools designed to facilitate the comparison of manual and electronic data and drill-down discrepancies at the patient level.

Potential factors that impede the validation process will be reviewed, including errors related to manual data collection, electronic report logic, nursing documentation, and data entry.

### Session #2401
### Using App-Based Programs to Rethink Hand Hygiene
Surveillance and Technology
Mid-Career/Proficient - Advanced/Expert
Marko Predic
Traditional ways of performing hand hygiene observations have been handwritten observations or expensive hand hygiene electronic monitoring. A new approach is the use of application-based surveillance, on both smartphones and computers, which provides advantages over traditional methods.

Benefits of using app-based observation tools include:

- Reduced bias due to increased participation from all employees which can mitigate favor between groups;

- Adaptability for use by IPs of all career levels in any facility;
- Demonstrable metrics which can be presented to senior leadership to highlight the financial, regulatory, and safety advantages of more efficient hand hygiene observation;
- The ability to monitor PPE more effectively; and
- Rapid time-to-implement the use of the app across the facility, particularly where staff is already technologically-savvy and familiar with app-based programs.

Participants will learn from the real-life experiences of the presenters' facility that demonstrate the advantages of adopting an app-based surveillance system.

Session #2406

## When Two Worlds Collide: Leading IPC and Sterile Processing

Leadership and Professional Development
Mid-Career/Proficient - Advanced/Expert
Melissa Morgan

Managing IPC programs has become increasingly complex, growing from a single practitioner to an IP needing to lead multiple hospitals spread across multiple states. Even as IPC has evolved, challenges still exist in reducing risk to patients, especially related to HAIs associated with medical equipment, device, and supplies. With improperly sterilized or disinfected equipment accounting for nearly 75% of all immediate threat-to life-declarations by The Joint Commission, many IPs are asking themselves how to appropriately lead and manage this operational space.

This session covers the example of one health system that took an out-of-the-box approach to historical reporting structures to improve patient safety. Though sterile processing departments have typically reported to operative services or materials management, this structure can present challenges in understanding how IPC is related to these roles. Participants will learn how this health system matched one of the most cited infection control standards and placed this operational space under the leadership of IPC. This unique structure offers a different view of a historically operational service line and highlights the importance that quality has in sterile processing

departments.

Session #2406

## Implementing a Low-Cost, Escalation-Driven Sampling Protocol for Water Management

Surveillance and Technology
All Career Stages
Terry Stange

Since the CMS directive to implement a legionella risk-reduction program for healthcare water systems was launched in June 2017, many IPs are still confused about certain aspects of the directive; in particular, whether facilities are required to perform water quality sampling as part of the directive and what tests should be performed and how frequently.

While CMS does not specifically require testing, many IP's see the value of water sampling but must justify sampling protocols to facilities management or administrators. With no standards and little guidance around sampling protocols, it can be difficult for an IP to convince management of sampling benefits. This leads to a range of outcomes from no sampling to over-sampling. Without the right sampling strategy, water testing can be a costly waste of time and diminish the value of a water management program.

This session presents an approach for implementing a water sampling plan built upon a thorough facility risk assessment and leveraging the support of the municipal water supplier. Low-cost, real-time monitoring methods that can be used to build a water quality foundation are described along with an escalation pyramid approach to additional testing. Data generated from an appropriate sampling protocol can also be used to implement evidence-based maintenance programs that reduce the burden on facilities personnel.

Whether trying to meet the CMS directive or simply augmenting an IPC program to include water-borne pathogens, the IP will learn the benefits of water quality measurement and how to create an appropriate sampling protocol specific to their facility and situation.

# CONCURRENT SESSIONS

Session #2400
## Outbreak Investigation: Hepatitis C Infection Related to Drug Diversion
Outbreak Investigation, Public Health and Health Policy
All Career Stages
Patricia Montgomery

In the last decade, there have been increasing reports of outbreaks of bloodborne pathogens (BBP) and other infections due to healthcare worker diversion of injectable controlled substances. The prevalence of hepatitis C virus (HCV) in the community is increasing in lockstep with the opioid epidemic which has increased drug misuse and addiction in all communities, including among healthcare workers, but the risk of disease transmission as a result of drug diversion remains under-recognized and under-addressed.

In Pierce County, Washington, an outbreak of HCV linked to one emergency department employee has, so far, resulted in the identification of 12 healthcare-associated HCV cases. The likely cause of infection is HCV contamination of drugs intended for patients via unsafe injection practices during drug diversion by the implicated employee.

This session will present an overview of HCV infection and diagnostics; understanding the natural history of infection and laboratory diagnostics is critical for IPs. Participants will gain an understanding of the potential infectious risk from drug diversion and how they can prevent and identify drug diversion, assess the risk to patients, and investigate an outbreak of healthcare-associated HCV.

Participants will get:
• A description of the lessons learned throughout the process and proposed system improvements.
• An overview of the important of collaboration between agencies, such as public health, regulatory agencies, the Nursing Quality Assurance Commission, and law enforcement.
• Tools and resources to perform facility assessments, unique case interview forms, and an improved

communication algorithm.

Session #2402
## Making a Case for an Ambulatory IPC Program
Leadership and Professional Development
Advanced/Expert
Lori Handy

The majority of patients interact with healthcare through ambulatory settings, such as primary care and subspecialty offices, but IPC practices tend to be focused more on inpatient. Healthcare systems often find it challenging to dedicate IPC resources to ambulatory settings because of historical precedence, regulatory needs, and perceived benefit.

This session demonstrates how a pediatric network of 30 primary care sites, 13 specialty care sites, and 4 ASCs developed a comprehensive IPC program. Before the structured ambulatory IPC program, IPs in their system had portfolios of both inpatient and ambulatory responsibilities, in addition to site visits, skills fairs, and on-call available. Processes were individualized to each facility, limiting efficiency.

In the development of the structured ambulatory IPC program, this system increased the accessibility of relevant procedural and educational materials, provided consistent messaging among IPs, and developed streamlined methods of communication between our department and ambulatory sites.

Participants will learn details about the multi-year program implementation, including resource management, department restructuring, and assessment tools. Specific tactics, such as increasing use of respiratory etiquette stations and improving communication with IPC for pertussis exposures, will be discussed. This session will provide insider into how this new program improved communication, grew key partnerships, and provided targeted support elevating the importance of IPC in the expanding ambulatory setting.

Session #2404

## Bridging the Gap Between Implementation Science and Integration of Best Practice: A Practical Approach

Implementation Science and Research
All Career Stages
Sharon Bradley

Healthcare facilities may fall short of goals to improve compliance with IPC practices if improvement is reliant solely on education, policies, and compliance with regulatory and professional standards and guidelines. To develop a successful and credible IPC program, systems must also incorporate implementation science, which examines healthcare worker behavior, and an understanding of workflow to truly change behavior.

Changing behavior is not easy. Available theories and models of behavior change stop short of practical strategies to address barriers and design sustainable implementation strategies.

This session will provide interventions to assess behavioral challenges affecting implementation of evidence-based practice that are applicable to all aspects of IPC. Participants will discuss specific methods for characterizing beliefs that affect the healthcare worker behavior and intention to integrate stewardship tasks into everyday practice. This session provides several examples of how to link behavioral interventions to the targeted behavior and to select appropriate high impact improvement strategies.

Session #2405

## Importance of Infection Surveillance in Long-Term Care Facilities

NHSN
All Career Stages
Angela Anttila

This session is designed for IPs, healthcare epidemiologists, quality improvement staff, state health departments, HAI coordinators, and others who wish to gain understanding and insight into the changing landscape of post-acute care, with a focus on infection surveillance and prevention in nursing homes and skilled nursing facilities.

Session #2407

## Championing to Reduce HAIs by Promoting Ingenuity

Education, Training, and Competencies
Mid-Career/Proficient
Susanne Jacobson

This session draws on the experiences of the speakers, an IP and an IPC Champion, and details the strategies they used to reduce HAIs in their health system. The system being discussed consists of four main campuses: A Level 2 trauma center (808 beds), a smaller acute care hospital (76-beds), a rehabilitation hospital (62-beds), a skilled nursing facility (160-beds), and numerous urgent care centers, employing more than 6,000 care providers. The staff of 7 IPs were faced with the challenge of communicating to the thousands of workers across the system; a challenge that was overcome using "Infection Prevention Champions."

Participants will learn about the process of developing and implementing the IPC Champion team program, discuss the positive impact this plan has had on their system, and explore their strategies for maintaining momentum. Participants will get tools and resources to help create and sustain a similar program. This session will cover the real numbers behind the Champion's success, including a 25% reduction in CLABSIs and 33% in HAIs.

Session #2408

## Expanding Horizons: IPC in the Outpatient Setting

Quality Assurance and Performance Improvement
All Career Stages
Mary Jane Dunn

Far more Americans receive medical care in outpatient physician offices than in inpatient settings, yet most of the focus on IPC has been on hospital care. Shifts in insurance coverage and access to care are increasing outpatient physician office visits, and outpatient service areas are providing both basic and advanced care to patients. Breaches in IPC practices in the outpatient setting continue to cause outbreaks.

As a result, regulatory and accrediting agencies are placing more emphasis on outpatient IPC. As frequently overworked

IPs move from hospital-based programs to the myriad of different settings in which outpatient care is provided, they may be faced with an enormous set of challenges.

This session will describe how to implement and sustain an effective IPC program in outpatient settings, including outpatient surgery centers, endoscopy centers, primary care offices, specialty practices, and dental offices. Components of an outpatient IPC program will be described, as well as approaches that can be taken to optimize implementation. Several program resources, areas of high focus during regulatory surveys, and proactive approaches will be discussed. Participants will learn how to perform a baseline risk assessment, gap analysis, and the development of strategies to address areas of opportunity in the outpatient setting.

Session #2409

### A Norovirus Outbreak on an Acute Care Behavioral Health Unit: Lessons Learned

Outbreak Investigation, Public Health and Health Policy
Early/Novice - Mid-Career/Proficient
Jennifer Dowling

A norovirus outbreak on a behavioral health unit, or milieu, results in multiple challenges for the patients, healthcare personnel (HCP), and the behavioral health IP. In some instances, norovirus control guidelines may not be completely applicable in the behavioral health setting. Patients may have behavioral or cognitive impairments that may interfere with implementing evidence-based practices to thwart additional pathogen transmission. The acute care IP may potentially face a multitude of challenges not commonly encountered in their setting. Examples include:

- The wearing of procedural masks, (without a metal band), by either HCP and/or, patients, may induce paranoia feelings in patients.
- Personal protective equipment (e.g., gloves), cannot be left at the bedside due to the potential ligature risk.
- Norovirus sporicidal products may not be accessible to the patients due to the risk of ingestion.
  HCP may not honestly disclose their personal health status, resulting in presenteeism and potential additional transmission.

An outbreak can create a plethora of reactions and emotions, some unexpected, from both the patients and staff. This session discusses a specific norovirus outbreak in a behavioral health hospital and discusses the multitude of interventions that led to its cessation.

## FRIDAY, JUNE 14

### 8-9 AM
### 30/30 SESSIONS

Session #3001

### Using Lean Methodology to Decrease Hospital-Onset *C. diff* Infections

Implementation Science and Research
All Career Stages
Anna Baker

*C. diff* is a gastrointestinal pathogen that causes severe diarrheal disease and leads to almost half a million illnesses and 15,000 deaths per year. *C. diff* can be acquired and spread in a hospital setting, and though hospitals across the country struggle to contain *C. diff* infections, they frequently see an increase in their rates.

This session covers the real-life experiences of a hospital that saw a stark rise in hospital-onset C. diff in Q3 of 2016, potentially due to drifting practices and pressure from increasing cases in the community. This session will review the facility's journey of decreasing these infections and describe how they an A3 tool as a roadmap for performance improvement. LEAN methodology and enhanced engagement of nurses, physicians, and support services were used to raise awareness and improve practices. These efforts resulted in a statistically significant (p-value of 0.0176) reduction in C. diff SIR of 36% in a year-to-year comparison (from an SIR of 1.017 to 0.651).

This session will showcase the LEAN management tools used to achieve success, such as A3 thinking, learning from defect studies, plan-do-study-act cycles, application of standardized work, and Pareto charts. Participants will discuss the C. diff reduction campaign, which included the

implementation of a new testing algorithm, stewardship methodologies, and an education campaign.

## The Patient Satisfaction vs. Patient Safety Conundrum

Implementation Science and Research
Mid-Career/Proficient - Advanced/Expert
Christine Greene

Despite extensive precautions and interventions championed by the IPC department, HAIs continue to persist. This session discusses how IP efforts can be strengthened by aligning IPC with a facility's Environmental Services (EVS) department.

As with all hospital departments, EVS is rated on their scores from the Hospital Consumer Assessment of Healthcare Providers and Systems Hospitals Surveys (HCAHPS), used to calculate value-based incentive payments in the Hospital Value-Based Purchasing program. This places pressure on EVS to have high HCAHPS scores, but the score does not reflect the expectation placed on EVS to minimize environmental contamination. Rather, it reflects metrics such as noise level and the patient perception of cleanliness. As a result, EVS staff are often forced to balance patient satisfaction against patient safety.
This session covers a case study wherein a facility conducted an ethnographic study to evaluate how EVS department processes can be improved to ensure outcomes that satisfy both patient satisfaction and patient safety needs. Participants will learn the ethnographic methods used, including direct observation, interviews and a formal survey to evaluate six key areas: job pressures, communication, job control, process consistency, attitudes and perceptions, and accountability.

This session will provide insight on how to address common issues faced by ES departments as they strive to satisfy the competing pressures of achieving high HCAHPS scores and minimizing environmental contamination. IPs and EVS staff will learn ways to improve accountability that concurrently serves to improve employee attitudes and perceptions. Common auditing mechanisms will be reviewed with suggestions on how to draw from the benefits of each to maximize accountability, cleanliness, and decontamination

goals.

## Urinary Drainage Leg Bags: The Good, the Bad, and the Ugly!

Implementation Science and Research
Mid-Career/Proficient
Sharon Bradley

Reusable urinary drainage leg bags are often used in post-acute care settings and in LTC facilities for residents who are mobile and have chronic indwelling urinary catheters. A major concern in their use is the risk of pathogenic organisms entering the bladder through a breach in the closed drainage system during frequent connecting and disconnecting from the large drainage bag system, combined with the lack of understanding of aseptic technique in the use of these devices.

IPs are instrumental in assessing the impact of the use of urinary leg bags on the frequency of UTIs and coordinating safe care of residents with indwelling urinary catheters. Clinical expertise in their appropriate use has been hindered by scant evidence-based guidance on use and handling of these devices, increasing risk.

This course will highlight the methods and results of a national multidisciplinary workgroup of LTC physicians and IPs and provide the consensus and rationale for current best practices on the usage, benefits, and risks associated with urinary draining leg bags. Participants will also cover regulatory requirements regarding their use, and the impact of urinary drainage leg bags on CAUTIs. A comprehensive actionable and practical list of best practices based on expert consensus, key recommendations, and evidence for safe use will be shared as well.

## Multidisciplinary Team Activities in the Reduction of CAUTI

Implementation Science and Research
Mid-Career/Proficient - Advanced/Expert
Susan Bleasdale

CAUTI account for a large percentage of HAIs, and to date, the application of prevention bundles and unit engagement have been the mainstay in the prevention of CAUTIs. In order to further decrease CAUTI, facilities must use additional

interventions using multidisciplinary teams.

Multidisciplinary teams are central to the success in the reduction of CAUTI, and engaging team members from the physicians, laboratory, purchasing and stewardship teams can significantly impact patient and employee safety. This session will cover some of the initiatives and team members that can be leveraged to improve CAUTI, including evaluating and selecting devices and diagnostic testing, and using elements from the ABM's "Choosing Wisely" campaign.

## CONCURRENT SESSIONS

### Session #3002
### Breaches in Dental Infection Prevention-Could This Be Your Practice?
Quality Assurance and Performance Improvement
All Career Stages
Phenelle Segal

This session discusses a detailed description of findings related to onsite observations at dental practices and oral surgery centers across the continuum of care. Practices were reviewed against the CDC Guidelines for Infection Control and Dental Health-Care Settings and Basic Expectations for Safe Care and current FDA and American Dental Association (ADA) guidelines. Examples of review metrics include but are not limited to cold chemical sterilization, instrument sterilization, dental unit waterlines, safe injection practices, use of PPE, operatory room turnover, and tips about table top sterilizers.

These onsite observations showed that individual practices consistently fall out of compliance, putting patients and employees at risk from the lack of effective disinfection, sterilization, and knowledge of IPC best practices.

This topic is important and much needed since the dental community, including oral surgery, is often overlooked and the risk of blood-borne pathogens from lack of effective disinfection and sterilization is of concern. This concern is well-founded as there have several documented outbreaks of hepatitis and bacterial infections in patients.

Participants will understand the various risk factors that are specific to dental practices and oral surgery centers

and learn the steps necessary to remediate deficiencies. In addition, we will address a written dental IPC program and essential resources to enhance best practices.

### Session #3004
### Antibiotic Stewardship for Nurses; It's Not Just Another Webinar
Antimicrobial Stewardship, Resistance and Emerging Pathogens
All Career Stages
Linda Greene

Recently, increased attention has been paid to the nurse's pivotal role in antibiotic stewardship (AS), but unfortunately, many nurses do not have the skills or training necessary to effectively contribute to AS efforts. To overcome this, we need to provide better training and education to help nurses advance their stewardship skills. Moreover, this training must include more than just webinars and presentations, but an assessment of the impact this training has on patient care processes and outcomes.

This session will highlight the development and presentation of a structured course used to enhance nursing skills in AS. Specific course content includes a microbiology overview, collection and interpretation of microbiology data, the role of nurses in optimizing medications, culturing stewardship and strategies to effectively engage physicians and pharmacists. The establishment of outcome and process data used to assess and evaluate the impact of the course will also be discussed.

Participants will also compare a traditional one-hour long online training curriculum to the enhancement course presented in this session to help evaluate the benefits of moving to this training and development model.

### Session #3005
### Diagnostic Stewardship: Addressing the Knowledge Gaps Associated with Urine and Blood Culturing Practices
Quality Assurance and Performance Improvement
Robert Garcia

Diagnostic stewardship (DS) involves modifying the ordering, collection, and timely reporting of diagnostic tests to improve treatment of infectious conditions. Suboptimal

culturing practices adversely impact patient safety, quality of care, institutional financial outcomes, and may lead to reporting of false-positive urinary tract and bloodstream infections. The enhancement of DS efforts in partnership with antimicrobial stewardship (AS) programs promotes the right interpretation of the test result, selection of the right antimicrobial, administered at the right time.

Recent reviews and surveys of urine and blood culturing practices have identified significant knowledge gaps associated with culturing processes and unacceptable rates of contamination. Inappropriate collection of these cultures may lead to the wrong diagnosis and expose patients to unnecessary testing and treatments. Historically, procedural documents for accurate collection of these cultures have been microbiology laboratory-based practice guidelines, which are likely not included in formal education of the clinicians responsible for obtaining the specimens.

Although ensuring proper urine and blood culturing techniques is recommended as a nurse-driven AS practice by the CDC and the American Nursing Association, nurses' knowledge of proper technique is largely gained informally through experience in a see-one, do-one, and teach-one approach.

This session will help participants better understand the relationship between DS and AS and will review the "why" behind proper culturing techniques and the implications of false positive results for patients. Participants will learn how to create standardized practice guidelines to optimize patient safety and affect true behavioral change.

Session #3007

### The Journey Towards Compliance with Point of Care Pre-cleaning: Developing a Standard Work Document

Antisepsis, Disinfection and Sterilization
Early/Novice - Mid-Career/Proficient
Lucas Starnes

Pre-cleaning is described as the removal of visible gross blood, body fluids, and/or bio-burden in order to prevent hardening of debris or the development of biofilms on instruments due to processing delays. Pre-cleaning, at the point of use, is required when soiled items may not be

immediately transported to a decontamination area. For pre-cleaning to be effective, items must remain moist while awaiting transport.

This session will cover the experiences of two separate facilities within one healthcare organization where it was determined that pre-cleaning was not being performed up to the expectations of The Joint Commission. In response to the identified gap, standard work documents (SWD) were developed to provide staff education and increase compliance with the safety requirements.

An IP from a large pediatric, academic hospital and an IP from a small community hospital will present their standard work documents and will discuss differences between the rollout at each facility. Implementation of the SWD at the larger facility relied heavily upon nurse educator groups for dissemination with the IP providing support when needed. In addition, the data analytics department built a smartphone-based audit tool that helped nursing unit management and IPs monitor compliance.

In contrast, the community hospital collaborated with an educator to develop education and ensured completion of education hospital-wide. Paper audit tools were established for the central sterile department to monitor process compliance. In both situations, there were similar struggles pertaining to staff compliance and maintaining the standard work.

Developing interventions is a key part of IPC, but the roll-out and execution of the intervention may require an even greater amount of time and effort. This session will help participants understand how to create an SWD that will positively impact pre-cleaning across their system.

Session #3009

### IPC Assessment Tools: Acute Care and LTC

CDC
All Career Stages
Bola Ogundimu

The Infection Control Assessment Tools were developed by CDC for awardees under the Epidemiology and Laboratory Capacity (ELC) Infection Control Assessment and Response (ICAR) Program to assist health departments in

assessing infection prevention practices and guide quality improvement activities (e.g., by addressing identified gaps).

This session will provide a national overview of ICAR data and gaps identified in the acute care and long term care settings.

## CDC IPC Interactive Training Tools for Healthcare Professionals
### CDC
### Erica Tindall

Healthcare workers (HCWs) are the first line of defense against healthcare-associated infections and the cross-transmission of germs in healthcare settings. These trainings empower healthcare workers (HCWs) to better identify and mitigate healthcare-associated infection risks and occupational exposures. The new training tools include a graphic novel for EVS professionals, illustrating the important role of EVS personnel in the prevention of HAIs, and an interactive training tool specifically for clinical staff (nurses, medical assistants, health educators, etc.). The training for clinicians focuses on risk recognition and breaking the chain of infection in a busy healthcare setting.

## 8-10:30 AM
## WORKSHOPS

## Beyond the Particle Counter: Interpreting Industrial Hygiene Reports and Unlocking the Meaning of Environmental Sampling
### Environment of Care, Construction and Remediation
### All Career Stages
### Roberta Smith

IPs may use industrial hygienists (IH) to help them with environmental or exposure sampling. Whether it be mold sampling for a water intrusion event, employee exposure monitoring, construction project, or routine water sampling, what do those reports mean when an IP receives the results and what should be done next?

While IHs have similar missions as IPs concerning patient and employee safety, IPs may not fully understand all the ways in which they can work with an IH, what to expect

in an industrial hygiene report, and how to interpret and use the results. This session will highlight the roles of the IH in IPC and how to better understand environment sampling impacts the IP. Participants will leave with a better understanding of the IH role and have greater clarify on how to use their reports to protect patients and employees.

## Quality Management Programs for Endoscope Reprocessing: Essential Tools and Skills for IPs
### Antisepsis, Disinfection and Sterilization
### All Career Stages
### Cori Ofstead

Scientific studies have established that endoscopes commonly harbor organic soil and viable microbes after reprocessing has been completed. Outbreaks of infection have been linked to all types of flexible endoscopes, and suboptimal reprocessing practices are often identified only after a major breach or outbreak has been reported.
IPs need to be familiar with endoscopes, reprocessing equipment and materials, and guidelines for various types of endoscopes to play a critical role in developing and strengthening quality management programs. This session introduces endoscope reprocessing, with an emphasis on steps that are critically important for reducing the risk of harboring potential pathogens.

Participants will:
- Learn the approaches and tools that can be used to evaluate reprocessing practices, including competency tests, unannounced audits, and reviewing administrative records.
- Learn the importance of routine monitoring of reprocessing effectiveness, using real-world data to understand the impact of rigorous sampling and testing methods when performing cleaning verification tests or microbial cultures.
- Review case studies and photographs highlighting areas and equipment deficiencies that could contribute to infection or injury risk.
- Share their perspectives about the nature and impact of breaches and participate in a discussion about strategies for measuring reprocessing effectiveness and responding to audit findings

- Receive information about educational programs and tools that can support their development and implementation of quality management programs for endoscope reprocessing.

## 9:30–10:30 AM
## 30/30 SESSIONS

Session #3201

### Seize the Day: Aligning with Healthcare Reform and C-Suite Initiatives to Improve Patient Outcomes

Leadership and Professional Development
All Career Stages
Mark Dixon

Leadership in IPC is needed now more than ever. This session will explore advice on how to increase your effectiveness with your C-suite leaders by describing how IPC and the Triple Aim of Healthcare Reform interrelate. Participants will learn how to engage their C-suite to elevate the role of IPC in your facility.

This session is led by a health system CEO/COO, giving participants a first-person overview of how to be an effective leader in their organizations.

This session will include a discussion about:

- The major changes in healthcare reform and the impact on providers
- Macroeconomic drivers of the U.S. economy and of healthcare that are driving significant change
- What is health reform, and how has it transformed the landscape for U.S. healthcare

This session will also provide the Integrated Delivery Network/C-suite perspective with implications for Integrated Delivery Networks and their hospitals' priorities along with Accountable Care Organizations—a deeper dive on how the integrated systems are responding at present. Lastly, this session will describe the implications for IPs, offering a checklist for effective strategies to elevate IPC initiatives to the C-suite to gain approval and buy-in.

Session #3201

### Flex Your Leadership Muscle: Becoming a Competitive Board of Directors Candidate

Leadership and Professional Development
Mary Lou Manning

IPs must take responsibility for their professional growth and seek opportunities to develop and exercise leadership skills. Many IPs desire—and are qualified—to seek a position on the APIC Board of Directors. If IPs are to successfully run for and assume a board position, they must know and develop the competencies and skills required to govern a non-profit organization. Leadership and board skills take time and effort to develop, often by investing in an issue, enhancing skills, and building connections.

This session, presented by APIC past presidents, will explore the knowledge, skills, characteristics, and behaviors essential to successful board service.

Session #3206

### Opening a New Hospital: The IP's Role in Design, Program Implementation, and Patient Readiness

Environment of Care, Construction and Remediation
All Career Stages
Christy Wisdom

Designing, constructing, and opening a new pediatric hospital facility is a daunting task and requires extensive planning, research, collaboration, and input from knowledgeable content experts. Although an IP's involvement and knowledge during a hospital's design and commissioning are often undervalued, their input and recommendations are increasingly important to ensure patient safety and meet regulatory requirements. This can be especially challenging while building a pediatric facility as kid-friendly designs and features often compete with IPC principles. Moreover, keeping administrators, leaders, and frontline staff engaged during the process can be challenging due to competing priorities.

This session helps guide IPs through all steps in the design and construction phase, program implementation, and transition to patient care while engaging staff and leadership. Resources for regulatory compliance and best practice implementation will be identified along

with strategies to facilitate effective collaboration when competing interpretations of requirements occurs. Barriers to success and methods for preparing and executing an effective IP program will be discussed.

Participants will also learn what works well and get customizable tools for a successful transitioning of the environment that will help the new hospital be survey ready.

Session #3206

## Construction Challenges: Getting from Here to There

Environment of Care, Construction and Remediation
Mid-Career/Proficient - Advanced/Expert
Charles Ash

Construction and renovation of healthcare facilities can present unique IPC risks even in short, simple projects. IPs play an important role on the construction team in assessing projects and overseeing mitigation practices to reduce the risk of infection in patients and staff. Despite this, construction and renovation are not areas in which most IPs have training, with only 4.9% of respondents in the 2015 APIC MegaSurvey reporting formal education related to the environment of care.

IPs involved in construction and renovation projects may find themselves as an ignored consultant on one hand, or as an unexpected project manager on the other. This session will provide an overview of what the IP's role should be in construction projects, and help participants learn how they can become valued members of a multidisciplinary team in any healthcare setting.

Session topics include:

• Reviewing key players within the healthcare organization that the IP should know before any construction project begins.
• The language used by these players and their goals and ways an IP can bring these various roles together.
• Conflict management and relationship building techniques that can be used when issues inevitably show up.

Throughout the session, participants will get resources

that all IPs can use to help build a strong, successful multidisciplinary team to increase patient and employee safety in any facility.

# CONCURRENT SESSIONS

Session #3202

## Oh Baby! Addressing IPC Concerns in the Perinatal Setting

Education, Training, and Competencies
Patti Kieffer

Preventing infections in the perinatal setting can be challenging and complex. Infections in the perinatal arena can have a significant impact on both the newborn and mother, and implementing isolation precautions while maintaining close baby-parental contact is difficult. Nursery designs often do not facilitate staff adherence to isolation precautions and challenges arise for families visiting multiple siblings.

A large healthcare system developed a document to meet two objectives:

1. Help guide the IP when making decisions about isolation of the mother and baby;
2. Help establish standardized approaches to isolation in facilities with labor and delivery units, nurseries, and NICU
3. Expert recommendations from the CDC were utilized, when available, to help guide decisions about isolation

This session will discuss the epidemiology, isolation recommendations, and impact on the family unit for many diseases that typically present in the perinatal setting including cytomegalovirus, herpes simplex virus, varicella, influenza, pertussis, and MRSA. Several different scenarios will be explored that will help guide the IP in making decisions about isolation that both foster family bonding and support the principles of IPC.

Session #3204

## Is the Probe a Critical Device? Determining Ultrasound Probe and Puncture Site Contact Frequency in Invasive Procedures

Antisepsis, Disinfection and Sterilization
All Career Stages
Ruth Carrico

Ultrasound is used throughout healthcare departments to guide a variety of percutaneous interventions such as biopsies and injections. Federal guidelines from the FDA and CDC are based on the Spaulding criteria. Where medical devices contact or enter sterile tissue or the vascular system, these are classed as being critical devices and require sterilization, or a minimum of HLD with use of a sterile sheath. Some ultrasound probes may contact sterile tissue and therefore may be classified as critical devices.

A recent survey of IPs has revealed a variety of disinfection and use practices for ultrasound probes. This session will review the frequency of contact between the ultrasound probe, needle, and puncture site in a range of typical percutaneous procedures, revealing a high rate of contact. This suggests that these probes should be classified as critical devices in many cases. Such findings support a need for facilities to identify which departments are using ultrasound for interventions, and observe the procedures carried out by the range of end users to determine their Spaulding classification and appropriate level of reprocessing.

Tools developed by a group of IPs will be presented to help facilities survey and risk assess their practices and policies during these procedures to ensure patient safety.

Session #3205

## NHSN Pediatric VAE Surveillance

NHSN
Cindy Gross

During this session, learn about the use of the newly introduced NHSN event: Pediattric Ventilator-Associated Event (PedVAE).

Session #3207

## Disentangling Disinfectants: Considerations for

## Selecting or Changing Disinfecting Wipes

Antisepsis, Disinfection and Sterilization
Early/Novice - Mid-Career/Proficient
Lewis Johnson

Disinfecting wipes are ubiquitous in the healthcare environment, but how much thought have you given to them lately? It is difficult to keep staff trained and correctly using over a dozen different disinfectant wipe products, all with varying instructions for use and contact times.

This session will review the categories of disinfectant wipe chemistries and discuss compatibility issues related to equipment and furnishings in the healthcare environment.

Participants will learn about one system's experiences reducing the number of approved disinfecting wipes from more than a dozen to four. This session will cover the benefits realized by this change, such as reduced storage space and more efficient pricing due to higher volume. Participants will also learn about the challenges involved in making such a comprehensive change and will explore how to engage all key stakeholders, such as environmental services, bioengineering, plant operations, and each clinical department, in the process.

Session #3209

## IPC Assessment Tools: Dialysis and Other Outpatient Facilities

CDC
Janet Glowicz

The Infection Control Assessment Tools were developed by CDC for awardees under the Epidemiology and Laboratory Capacity (ELC) Infection Control Assessment and Response (ICAR) Program to assist health departments in assessing infection prevention practices and guide quality improvement activities (e.g., by addressing identified gaps). This session will provide a national overview of ICAR data and gaps identified in the dialysis setting and in other outpatient settings.

Session #3103

## Top Outbreaks of 2018: CDC HAI Outbreak Responses

CDC

All Career Stages

Kathleen Hartnett

This session presents a discussion of recent HAI outbreaks in which the CDC assisted, as well as the lessons learned from these investigations, which will be targeted toward healthcare facilities and health departments.

# 1:15-3:45 PM
# WORKSHOPS

Session #3401

## Analytical Methods for Assessing Intervention Effectiveness

NHSN

Jonathan Edwards

This session is designed for IPs, healthcare epidemiologists, quality improvement staff, and others who wish to gain additional understanding and insight in the principles of epidemiology and statistical methods.

Session #3402

## The Role of the Healthcare Environment in Transmission of Pathogens

CDC

Sujan Reddy

This session will focus on prevention of environmentally transmitted pathogens and how to approach investigating transmission of pathogens potentially associated with the healthcare environment.

Attendees will learn about the hierarchy of controls to preventing infection, and strategies and tools to investigate incidence/outbreaks of pathogens transmitted from fomites and environmental reservoirs..

Discussions will include:
- Stations for Environmental Sampling
- Demonstration Surface Sampling
- Hand/Glove Sampling
- Air Sampling

- Water Sampling (sink area and P-trap demo)

# 1:30-2:30 PM
# 30/30 SESSIONS

Session #3301

## Novel Technology to Prevent UTIs and Incontinence-Associated Dermatitis in LTC Residents

Implementation Science and Research

Early Career/Novice

Linda Behan

UTIs are one of the top infections reported in LTC and represent 30–50% of all antibiotic use. Residents are frequently prescribed antibiotics, even when they are asymptomatic. This practice leads to increased rates of adverse drug effects and recurrent infections with drug-resistant bacteria. Up to 70% of all LTC residents have incontinence (fecal, urine or mixed). Between 5.6–50% of residents will develop incontinence associated dermatitis which can lead to aggressive skin breakdown and ulcers. Prevention of UTIs is difficult due to the physiological changes that occur during aging and comorbidities, and traditional methods of have not always proven to be successful interventions for many residents.

This session presents a pilot novel skin technology that lowers the skin's pH which enhances the natural antimicrobial action of the skin and supports the microbiome of healthy skin. Participants will learn more about how this skin technology works and will discuss outcomes of this pilot such as the reduction of the prevalence of UTIs and incontinence-associated dermatitis, decreased antibiotic use, and lower overall costs.

Session #3301

## CHG: To Bathe or Not to Bathe

Implementation Science and Research

All Career Stages

Celeste Chandonnet

Chlorhexidine Gluconate (CHG) has become a widely used skin antiseptic for patients of all ages. CHG has been cleared for use with care in patients less than two months of age by the CDC, despite the lack of research supporting the safety of its use in this population. Focused attention on decreasing the risk of HAIs, CLABSIs in particular, has resulted in a well-

document increase in the use of CHG for patients of all ages. This session will review the results of a pilot study which was undertaken by the facilitators as an attempt to study the effect of CHG exposure on patients less than 2two months of age. Participants will also learn about a concurrent national survey that studied the impact of CHG on this vulnerable population. In reviewing the results, participants will learn more about the implications for all clinicians when considering the use of CHG to reduce HAIs when caring for infants less than two months of age.

Session #3306

## Reducing Risk of Readmissions for SSI: Photo at Discharge Scheme

Quality Assurance and Performance Improvement
Mid-Career/Proficient - Advanced/Expert
Melissa Rochon

SSIs are a devastating and costly post-operative complication. The risk of SSIs is well-known from high-quality studies and prospective surveillance, with approximately 1 in 25 patients affected following cardiac surgery. In the U.K., the national surveillance service reported a significant reduction in SSIs in this particular patient group over the last five years. However, in contrast to this trend, the report found that cardiac SSIs detected on readmission have increased slightly (1.3% to 1.8%) over the same period.

Reducing avoidable, non-emergency SSI readmissions is high on the national agenda; however, studies demonstrating successful patient-centered interventions for use in the transition between healthcare settings are limited.

This session will introduce colleagues interested in SSI prevention strategies to the photo at discharge (PaD) scheme to reduce the risk of SSI readmission. PaD is an award-winning, innovative, simple (not simplistic) idea with outstanding patient impact. Providing surgical patients with a color photo of their own surgical wound on the day of discharge improves the patient experience, and links wound information shared between acute and community settings. PaD associated with a significant reduction in risk of readmission for SSI, attributable bed days and SSI costs. In turn, capacity is released for elective admissions and associated revenue for hospitals using the low-cost PaD scheme.

Participants will explore how a PaD can positively influence readmission rates at their facility and get strategies and techniques for implementing this scheme at the facility.

Session #3306

## Choose Zero: A Monthly Blitz for Proactive Prevention

Quality Assurance and Performance Improvement
All Career Stages
Megan Crosser

This session will discuss the journey toward zero infections that was undertaken by a large healthcare system. In this session, participants will learn how to implement a program known as a "monthly bundle blitz" as a proactive approach to prevent infections.

The monthly bundle blitz includes three components:

- an education tool that is distributed to leaders and staff,
- an audit tool on a specific topic, and
- data analysis reporting of the findings.

Specific elements of the program will be discussed, and participants will learn how different area of IPC is addressed each month, including the prevention of CLABSIs, CAUTIs, SSIs, as well as hand hygiene, standard and transmission-based precautions. Participants will also learn the program techniques for specific gap analysis to idea key areas for process improvement.

Over the one-year intervention period, there was a 16% reduction of CLABSI, 13% reduction in CAUTIs, 7% decrease in SSIs, 14% decrease in C. diff infections and 6% decrease in MRSA bacteremia. This program has been highlighted as best practice by The Joint Commission and has emphasized the importance of IPC within one of the country's largest non-profit healthcare organizations.

Session #3309

## Bringing Best Practice to Point of Care: Pre-cleaning of Instruments Outside of the OR
Antisepsis, Disinfection and Sterilization
Mid-Career/Proficient
Cheryl Wright

Bedside cleaning and transportation of Instruments used outside of the operating room pose significant risk of contamination and transmission of bloodborne pathogens. Using standards and regulations set forth by AAMI, AORN, OSHA, and APIC, a comprehensive program was created at an acute care hospital to overcome these risk factors.

This session will highlight the strategies undertaken by a multidisciplinary team to remove barriers and align best practices to standardize instrument processing throughout the entire agency, removing variability and improving patient and employee safety. Participants will learn the steps taken, including:

- completing a gap analysis,
- defining standardized work,
- examining necessary financial provisions,
- assessing learner requirements,
- surveying preferred learning styles,
- selecting education and training processes, and
- exploring sustainability and defining quality measures.

Session #3309

## I'm Sorry, Did You Say…Prions?
Antisepsis, Disinfection and Sterilization
Aaron Vanderboegh

This session will provide a high-level overview of prion-related illnesses and their implications on IPC practices in an operative setting. Topics that will be covered include:

1. Overview of an incident involving a Creutzfeldt-Jakob Disease patient,
2. lessons learned from the incident,
3. the importance of a prion management plan, and
4. pertinent information to the creation of a plan.

This topic is important for all IPs whose facilities perform surgical procedures, especially neurosurgery, and corneal graft implants. Given the low incidence of prion-related diseases, many IPs will have had little to no experience with prions. As these diseases have a 100% mortality rate and the potential for iatrogenic transmission, it is paramount that IPs are aware of the dangers and familiar with proper prevention measures.

# CONCURRENT SESSIONS

Session #3302

## Unveiling the Shroud of IPC Ethics-Let's Talk About It!
Education, Training, and Competencies
All Career Stages
Deva Rea

Ethics in healthcare is a topic that is too often ignored or not discussed, and the implications for IPC requires deep examination and exploration. This session will focus on how ethics is part of the daily functions of an IP and will teach participants to understand their role in ethical situations in their settings.

This interactive session will cover a number of issues, including:

- The impact of ethics on good patient outcomes.
- How to objectively rule out HAIs objectively
- Consulting medical providers in device utilization, laboratory testing, antimicrobial stewardship, and other IPC needs.
- Family and visitor IPC situations including service animals.
- Providing objective IPC services to patients that may elicit judgment reactions such as the frequent flyer, drug abuser, and others.
- Employee health considerations.
- The ethics of isolation precautions.

Participants will use evidence to review some practical tools and methods that can be utilized to address ethical IPC issues. This session will include a discussion of scenarios requiring ethical considerations and will teach strategies to empower the IPC team and enhance their decision-making skills when they encounter ethical issues.

Session #3304

## Biofilms: Development, Transmission, Removal, and Disinfection

Antisepsis, Disinfection and Sterilization
All Career Stages
Karen Vickery

The presence of biofilm containing MDROs has been confirmed contaminating 70–100% of dry hospital surfaces in Great Britain, Saudi Arabia, Brazil, and Australia. Biofilms in endoscopes have been responsible for many of the outbreaks associated with carbapenem resistant organisms and biofilms have been identified on surgical instruments subjected to heat sterilization.

Participants will learn about the types of surfaces contaminated and the number of bacteria present in biofilms. They will gain an understanding of the nature of biofilms and how they differ from planktonic organisms. This session will help participants appreciate how this difference leads to the reduced efficacy of biocides against biofilm and the impact on IPC; biocide efficiency testing will also be discussed.

The dangers of biofilms and planktonic bacteria will be discussed, and participants will learn more about the current cleaning and disinfecting agents that are highly effective against planktonic bacteria. Registration of hospital grade disinfectants requires testing against planktonic organisms in solution and most disinfectants can hurdle this low bar. Even for instrument grade disinfectants, pre-registration testing only requires minimal testing against traditional hydrated biofilm.

Session #3307

## Reprocessing Best Practices Can Be Operationalized in Outpatient Clinics-Here's How!

Antisepsis, Disinfection and Sterilization
All Career Stages
Lydia Grimes

Outpatient clinics and ambulatory care settings provide healthcare services to an increasing number and patients and the complexity of medical procedures conducted here has also grown. Many of these venues have taken on the task of independently managing complex reprocessing of semi-

critical and critical instruments and devices. Clinics face a variety of challenges maintaining compliance including:

- high volume of patient visits
- competing demands and priorities
- frequent staff turnover
- lack of formal and/or inconsistent education and training
- inadequate resources, and
- insufficient space or configuring.

Adherence to the best practices around HLD and sterilization is of utmost importance to ensure patient safety and reduce the risk of infection risk from the use of reusable instruments.

Using our university-affiliated outpatient clinics as an example, participants will get foundational learning for reprocessing best practices for staff who perform HLD and/or sterilization of semi-critical and critical devices. The session will consist of an overview of best practices, methods to operationalize them, and a Q&A session. Participants will learn real-life approaches to developing standard work, engaging and educating staff, and verifying compliance through auditing and data reporting for more than 60 outpatient clinics.

Session #3308

## SSI Monitoring and Prevention in Low- and Middle-income Settings

CDC
Mid-Career/Proficient
Matthew Westercamp

SSIs are among the most common HAIs globally. In this session, experts will describe experiences and novel strategies for monitoring and prevention of SSI in a variety of low- and middle-income settings.

## 1:30-3:45 PM
## WORKSHOPS

Session #3400

### Veinglish: Understanding the Language of Vascular Access to Promote Better Patient Outcomes
Education, Training, and Competencies
All Career Stages
Christie Chapman

IPs may sometimes feel that vascular access meetings or vascular access clinicians are speaking a totally different language? Central lines, midlines, extended dwell peripheral intravenous catheters, intra-osseous access, vascular bed, ultrasound-guided, catheter-to-vein ratio, and vein preservation are all part of the language of devices and concepts surrounding vascular access with which IPs may not feel entirely well-versed or comfortable.

Working knowledge of the language of vascular access can assist the IP as they work with vascular access clinicians to develop interventions that assure the best clinical outcome for patients with the resources available. Vascular access is not a one-size-fits-all discipline and should be tailored to the presentation of the patient. A robust toolkit is essential.

In this session, participants will review the risks for patients around all types of vascular access and explore the types available to assist the IP in intervention and product guidance. This hands-on session will review sterile and procedural technique to enhance the IP's knowledge and allow for assessment and competency checks of vascular access personnel. Participants will review key concepts of vascular access that can assure each patient will have the right line at the right time.

## 2:45-3:45 PM
## 30/30 SESSIONS

Session #3501

### Clean 4 You Promise Package-A Horizontal Approach to Preventing Infections
Implementation Science and Research
Early/Novice - Mid-Career/Proficient

Jenay Beshears

This session covers a proven, successful technique for substantive IPC in any facility: The Clean 4 You Promise Package. Launched in this case study facility as an all-encompassing reference tool which staff could reference for any questions regarding the best practice initiatives, it includes metric definitions and goals, best practice summaries, and links to support the initiatives, electronic medical record documentation guides regarding changes made, dashboard guides, visuals, scripting to ease barriers, an escalation process, and staff roles.

Participants will learn more about the collaborative team that help create the Clean 4 You Promise package, which included quality improvement specialists, IPs, clinical managers, environmental services, a clinical nurse specialist, a physician champion, and an executive champion. This team defined four best practice opportunities in preventing HAIs: daily linen changes, daily baths, proper hand hygiene, and quality testing for discharge room cleans. Implementing these initiatives has had an impact on reducing MRSA, CLABSIs, and C. diff.

In addition to defining the process metrics and goals that aligned with the best practice initiatives, the Clean 4 You Promise Package uses a dashboard to monitor progress and compliance data on a system, facility, unit, or patient level.

Staff may be able to understand best practices, and even attempt to follow newly implemented policies and procedures to prevent infections, but the key to sustainment is providing them with the proper tools and data to do the right thing. This session will show participants how to combine best practices with metrics and data to help reduce HAIs.

Session #3501

### Reducing HAIs Through Creation and Implementation of a Promise Package
Implementation Science and Research
Mid-Career/Proficient - Advanced/Expert
Shalom Hernandez Patel

Sustaining improvement through standardized work is essential to a healthcare system's success. Standardization ensures operational consistency while providing staff with

the opportunity to enhance patient-centric care that is focused on promoting safety, reducing harm, and improving outcomes. This session will discuss the concept of the promise package (PP) tool developed to promote a high-reliability culture in the case study health system. This one-stop solution is a comprehensive resource containing policy and procedures, educational materials, performance tracking, alternatives for treatment, and potential barriers for staff.

Prior to the development of the PP, the organization experienced localized but unsustainable improvement, prompting the creation of methodology to improve system-wide sustainability and reduce errors/waste. The CAUTI Prevention PP, the first of its kind in this system, launched in September 2016. Post-implementation, the system saw a statistically significant improvement in the completion of the CAUTI maintenance bundle and a decrease in catheter utilization. Most notably, the organization saw a 50% reduction in CAUTIs events in a 6-month period, showcasing the intervention's incredible success. Usage of the PP, in conjunction with staff accountability and engagement, generates a collaborative environment where clinical staff, management, and quality improvement staff, which includes IPC, work together to improve patient outcomes.

The rapid success of the PP was a breakthrough in standardizing operations in the system; this model exemplifies the organization's commitment to achieving zero harm in HAIs and creating a culture of safety and reliability. Additionally, the CAUTI Prevention PP has sustained a positive impact on patients' outcomes. A 52% reduction in CAUTIs was observed in the first fiscal year (20 CAUTIs compared to 42) and in the latest fiscal year, an additional 55% reduction was noted—only 9 total CAUTIs within a large healthcare system.

Participants will learn how to implement a CAUTI Prevention PP in their organization to improve patient safety and get a toolkit comprised of goals, bundles, policies, procedures, education, and dashboard to facilitate improvement.

Session #3506

## A Collaborative Response to a Statewide Outbreak of Hepatitis A
Outbreak Investigation, Public Health and Health Policy
All Career Stages
Sarah Bishop

In November 2017, a statewide outbreak of hepatitis A virus (HAV) was declared, primarily centered around the homeless and/or illicit drug users (IDUs). As of November 2018, over 2,700 cases of HAV have been identified. Initially, most of these cases occurred in a single county with over 635 confirmed cases. Collaboration between that county's local public health department (LDH) and an acute care facility was critical in identification and response to the outbreak.

Communication between the acute care facility and the LHD began even before the official outbreak declaration and continued throughout the outbreak. The hospital's IPC department served as the point of contact for the health department. Interventions were developed and implemented to support:

- more active HAV surveillance and epidemiological response through phone notification to the health department of suspected HAV cases,
- the forwarding of laboratory specimens to the state and CDC laboratories for further genotype testing,
- enact additional infection control measures and education in the context of this outbreak,
- advocating for healthcare personnel (HCP) vaccination
- response to HCPs diagnosed with HAV.

Session #3506

## Outbreak of *Elizabethkingia anophelis* in a Pediatric Long-term Acute Care Facility
Outbreak Investigation, Public Health and Health Policy
All Career Stages
Jolianne Stone Tocco

This session will discuss the first reported outbreak of a multi-drug resistant strain of *Elizabethkingia anophelis* in a pediatric long-term acute care facility in the U.S. Participants will learn more about the investigation, which included chart review of case-patients, assessment of facility

infection control practices and environmental cleaning protocols, environmental sampling, and genetic analysis of human and environmental isolates through whole genome sequencing (WGS).

*E. anophelis* was isolated from hand hygiene sinks, soiled room sinks, shower heads, shower trolley beds, and shower drains. WGS showed all environmental isolates of *E. anophelis* were highly-related to the human isolates indicating environmental contamination of the outbreak strain. These outcomes illustrate the potential risk of E. anophelis as an HAI among high-risk pediatric populations.

This outbreak highlights the importance of environmental contamination with water pathogens. Participants will explore the nature of this outbreak and the implications these pathogens could have on high-risk populations in healthcare settings.

## CONCURRENT SESSIONS

Session #3502

### Sterilization and Disinfection Troubleshooting for the IP

Antisepsis, Disinfection and Sterilization
All Career Stages
Craig Wallace

Effective disinfection or sterilization of medical devices is a critical element of a comprehensive IPC program. The sterilization processes used by medical device manufacturers for sterile single-use medical devices are tightly controlled and regulated. Device reprocessing in the healthcare facility, however, is a complex task performed in a challenging environment and is more susceptible to variability due to system, equipment, and human factors. Reprocessing failures can, and do, occur as documented in the literature.

This session will provide the participants with an understanding of the key factors that can affect the efficacy of the most common HLD and terminal sterilization processes used in healthcare facilities. The quality management system and quality control tools described in current industry standards and recommended practices (AAMI, CDC, APIC, AORN, SGNA) will be reviewed to provide

guidance on how to develop an effective quality control program based on risk analysis for device reprocessing in the IP's healthcare facility.

Finally, case studies of HLD and terminal sterilization process failures will be discussed, with recommendations on how to use available tools to investigate and resolve a device reprocessing failure.

Session #3504

### Onboarding New IPs: A Structured Approach

Education, Training, and Competencies
Early/Novice - Mid-Career/Proficient
Jocelyn Thomas

For many novices, the constantly changing field of IPC can be an intimidating world to enter for a number of reasons: new IPs may not have an academic background or prior experience in IPC, they may lack formal training, and they may be expected to perform at an advanced level without direction. To overcome these challenges, many IPs are forced to self-train, create their own duties or roles, or seek other solutions for training which can lead to knowledge gaps and uninformed practices.

Participants will learn strategies and approaches from the IP training program at a multi-facility healthcare system that has been identified as a best practice by regulatory and accreditation bodies. This session will focus on the benefits and importance of having a structured and standardized approach for orienting new IPs to their role and to the field of IPC. Having this formalized new IP orientation checklists helps to ensure each IP has the basic training needed to function independently and successfully in their new role. Strategies for organizing and scheduling training sessions will be provided.

Session #3507

### Wash, Dry, Repeat: Is This Enough for Healthcare Linen Reprocessing?

Environment of Care, Construction and Remediation
Rachael Snyders

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Session #3508

## IPC Tools and Training Approaches in Low- and Middle-Income Countries

CDC

Jamine Weiss

IPC in low-and middle-income countries (LMICs) is a critical first step to controlling the spread of AMR.

In this session, speakers will discuss IPC assessment tools and innovative training approaches to address IPC challenges and gaps.

Session #3509

## NHSN Antimicrobial Use Option

NHSN

Amy Webb

During this session, learn about the NHSN Antimicrobial Use (AU) Option. Participants will cover a number of discussion points including:

- what data are submitted
- approaches for data validation, and
- how to compare a hospital's antimicrobial use to the national aggregate.