

Monday, May 7

A Breakout Sessions

3:30 pm - 4:45 pm

(A-1) Hospital Preparedness in a Changing Climate: Lessons from Extreme Weather Events

CLIMATE | GREEN DESIGN | LEADERSHIP

CEU: ACHE, ANCC, CME

As global temperatures rise, storms are becoming more frequent and more severe. Similarly, droughts and wildfires will increasingly threaten communities in Western states. This panel will share the experiences of hospitals and health systems that have recently “weathered the storm,” including the threats from Hurricanes Harvey and Irma along with last fall’s devastating fires in California. Learn how health systems and hospitals planned and prepared for these events, including both emergency preparedness efforts in the days leading up to and during the event as well as longer-term investments in infrastructure. Panelists will share their specific experiences and recommendations for best practices for creating climate-smart hospitals as anchors for resilient communities.

Presenters

Lance Mendiola, CHSP, CHFM, Vice President, Facilities Management and Construction, CHRISTUS Health

Mitch Saruwatari, Director, Emergency Management, Kaiser Permanente
Robin Guenther, FAIA, LEED AP, Sustainable Healthcare Design Leader, Perkins + Will and Senior Advisor to Health Care Without Harm

(A-2) Healthy for People and the Planet: Reducing Meat and Making Plant-based Menus Popular

FOOD | SOCIAL DETERMINANTS OF HEALTH

CEU: ANCC, CME

Studies indicate plant-based foods can address diet-related diseases and reduce carbon emissions. Additionally, there is an increasing demand for plant-based foods among health care employees, members, and the broader community. This session will discuss the trend and highlight culinary strategies championed by the Culinary Institute of America and Harvard School of Public Health to reduce meat on the menu. The session will feature a case study of operationalizing plant-based menus in Kaiser Permanente cafeterias and patient food service to work

toward their Vision 2025 to support human and environmental health by providing healthy and sustainable food access to employees, members, and communities. The case study will highlight challenges and opportunities for increasing plant-based options on menus, techniques for gathering customer feedback regarding plant-based menus, and innovative strategies for promoting consumption of plant-based foods.

Presenters

Kathleen Reed, Sustainable Food Program Manager, Kaiser Foundation Health Plan

Arlin Wasserman, Partner, Changing Tastes

(A-3) Improving Health Through Building Inclusive and Sustainable Local Economies

ANCHOR | SOCIAL DETERMINANTS OF HEALTH

CEU: ACHE, ANCC, CME

Health systems are examining how they can have meaningful impact on upstream factors like employment, income, education, and community safety, which are thought to account for up to eighty percent of an individual’s health. A growing number of health systems are adopting an “Anchor Mission” approach – seeking to strategically improve community health and well-being by leveraging all of their institutional assets, including hiring, purchasing, and investing.

This panel will include two health systems that have adopted an Anchor Mission framework. Rush will share key processes and provide insights from their Anchor Mission Playbook on how others can start and accelerate this journey. ProMedica has deepened its approach to addressing social determinants of health, increasingly integrating economic inclusion strategies as part of its Anchor Mission.

ProMedica and Rush are two of eleven co-founding members of The Democracy Collaborative coordinated Healthcare Anchor Network: a growing national collaboration of more than 30 leading health care systems building more inclusive and sustainable local economies. The Democracy Collaborative will share more about the network as well its Hospitals Aligned for Healthy Communities toolkit series, which focuses on the leading policies and practices hospitals are adopting around inclusive, local sourcing and hiring, and place-based investment.

Presenters

David Zuckerman, Manager, Healthcare

Engagement, Democracy Collaborative

Shweta A. Ubhayakar, Manager for Anchor Mission Initiatives, Rush University in Chicago

Anthony Goodwin, Director, Ebeid Neighborhood Promise at ProMedica

(A-4) Demystifying Greenhouse Gas Tracking and Goal-setting in Health Care

CLIMATE | ENERGY

CEU: ACCO, ANCC, CME

Nine out of ten *Fortune 500* companies are reporting greenhouse gas emissions (GHG), and half of *Fortune 500* companies have set a GHG reduction goal. In order to meet global emissions reduction goals, health care needs to join the ranks of those companies. Join global and national experts to participate in an interactive session about greenhouse gas emissions – why they matter, how to set goals towards reduction, and tools to help measure success. Get ready to roll up your sleeves and learn about tracking the full scopes. Review the draft resources and have the opportunity to give Practice Greenhealth feedback on what is needed to move this work. Presenters will share their own experiences including factors that led them to start tracking and set goals, and how they’re making progress.

Presenters

Jonas Age Saide Schwartzman, Environmental Engineer, SPDM Affiliated Institutions

Jon Utech, LEED-AP, Senior Director of the Office for a Healthy Environment, Cleveland Clinic

Michael Waller, PhD, Director of Sustainability, Rochester Regional Health

(A-5) Resiliency through Cogeneration and Microgrids

CLIMATE | ENERGY

CEU: ACCO, ANCC, CME

The medical sector is increasingly focused on resiliency due to grid outage concerns that may be exacerbated due to the growing impact of climate change. Building resilient systems can provide electricity to critical operations that benefits the safety and security of patients during inclement weather or grid outages. This session addresses the energy side of resiliency through a discussion on the use of comprehensive microgrid systems, including cogeneration, as resilient and efficient energy solutions for the health care sector. Energy industry leaders with microgrid and cogeneration experience

will present the benefits of microgrid services for resiliency, energy efficiency, storage, and renewable energy.

John Andersen will moderate this panel discussion which will include insights from G&W Electric, GreenCity Power, Engie, and Intelligent Generation.

This panel discussion will focus on the design, financing, benefits, and performance of intelligent microgrid and combined heat and power systems. Panelists will present case studies on the performance of resilient systems during the 2017 storm season. Health care representatives will outline their insights into microgrid solutions as part of a resilient energy strategy for the health care sector.

Presenters

John Andersen, Jr., President, Greenleaf Advisors

Aaron Walters, Managing Partner, GreenCity Power

Marc Thrum, Vice President Marketing & Business Development, Intelligent Generation

Santanu Khan, Head of B2T Development, ENGIE North America

Kate Cummings, Product Manager, Distribution Automation, G&W Electric

(A-6) Tunable LED Lighting Systems for Energy-Efficiency and Circadian Support in Health Care

ENERGY | GREEN DESIGN

CEU: AIA, ANCC, CME, USGBC

Lighting in U.S. health care facilities accounts for forty-three percent of electricity use, leading many managers to incorporate LED lighting in their energy efficiency programs. However, few are fully leveraging this technology to benefit patients, families, and staff. Features such as directionality, dimming, zoning, and color changing can improve experiences in health care facilities for all occupants. Implementing advanced lighting systems to provide behavioral cues, meet best practices for circadian design, and deliver the quantity of light where it is needed can enhance environments to support healing for patients, while accounting for the wellness of staff. This educational session will explain our current understanding of how light affects not only the ability to perform visual tasks, but also affects circadian functioning and overall mood and well-being. As part of the session, tunable LED lighting will be demonstrated, allowing participants to experience the types of variations in spectrum and intensity these systems can provide. After explaining the underlying principles and demonstrating the technology, a series of case studies will be presented, illustrating real-world examples of installations of tunable lighting systems. The presenters include an architectural design analyst and U.S. Department of Energy national lab researchers who have

collaborated with multiple organizations on these case study projects, including a senior care center in Sacramento, Calif., a behavioral health unit in a hospital in Seattle, Wash. and a behavioral medical unit in a children's hospital in Philadelphia, Pa. The session will also explain the results of a patient room lighting survey completed by 252 nurses at four hospitals.

Presenters

Robert Davis, PhD, FIES, Senior Staff Lighting Engineer,

Pacific Northwest National Laboratory

Edward Clark, Director and Healthy Building Designer, Circa Dies

(A-7) Supply Chain: Next Generation Strategies in Sustainable and Equity-based Procurement in Health Care

GREENING THE SUPPLY CHAIN | SAFER CHEMICALS

CEU: AHRMM, ANCC, CME

As health systems more fully adopt their "anchor mission," they are increasingly realizing they can use their purchasing clout to create both community health and wealth in their communities. In this rapidly evolving space, health systems are linking their sustainability goals with health equity and business development. This broader vision of purchasing has the potential of creating a powerful bridge in health care organizations between sustainability, community health and workforce development initiatives.

Join thought leaders as they share their strategies on what this new integrated strategy in health care looks like. Procurement is a key strategy for reaching many sustainability goals in health care and driving market transformation. Hear how leaders in the sector create a supply chain culture that values sustainability and community level economic development, how they measure and assess progress, and the best ways to engage suppliers and to engage their own teams.

Presenters

Keith Callahan, Senior Vice President, Supply & Service Resource Management, Dignity Health and Chief Executive Officer, Dignity Health Purchasing Network, LLC

Carlos Aguilar, Vice President, B2P, National Sourcing, Kaiser Permanente

(A-8) Pharmaceutical Waste Management Success – Key Stakeholder Panel

WASTE

CEU: ANCC, CME

Doing the "right thing" for pharmaceutical waste management is a big challenge for healthcare facilities. Environmental and

pharmacy managers and administrators must balance regulatory requirements with safety and environmental responsibility.

Learn how to maximize your resources to establish a robust pharmaceutical waste management program that will comply with the new and upcoming EPA Subpart P standards.

Understand resources available from local regulators, waste vendors, and consultants for a collective effort for success.

Presenters

Leatta Dahlhoff, Toxics Reduction Specialist,

WA State Department of Ecology

Bob Spurgin, President and Owner, Spurgin & Associates

Jenny Yoo, Toxics Reduction Engineer, WA State Department of Ecology

Cara Simaga, CHMM, Director, Regulatory Affairs, Stericycle

(A-10) Climate Change is a Nursing Issue: How Engaging Nurses Can Help Meet Your Organization's Climate Goals

Nurses, as front-line caregivers to patients, families and communities, are seeing increasing harms to human health as a result of warming temperatures, worsening storms and more virulent wildfires resulting from a changing climate. At the same time, the healthcare industry is responsible for 10% of U.S. greenhouse gases, which is further exacerbating this issue. Nursing, as the largest professional group in U.S. healthcare, has a unique opportunity to bring innovative insight and leadership to address this growing health concern.

As trusted health professionals, nurses are well-positioned to address this challenge and shift the trajectory of the health sector from one that worsens the problem to one that is leading in climate solutions. Come hear about three different ways nurses are working to reduce the health impacts of climate change inside and outside their facilities. You'll also learn about an exciting new campaign that will provide nurses with the tools and resources they need to be leaders in climate action.

CEU: ANCC, CME

Presenters

Katie Huffling, RN, MS, CNM, Executive Director, Alliance of Nurses for Healthy Environments

Cara Cook, MSN, RN, AHN-BC, Climate Change Program Coordinator, Alliance of Nurses for Healthy Environment

Beth Schenk, PhD, MHI, RN-BC, Nurse Scientist/ Sustainability Coordinator, Providence-WSU

Shanda Demorest, DNP, RN-BC, PHN, Clinical Assistant Professor, University of Minnesota School of Nursing

Tuesday, May 8

B Breakout Sessions

10:15 am - 11:30 am

(B-1) The C-Suite Door is Stuck: Janet and Iqbal to the Rescue with WD40 and You

LEADERSHIP

CEU: ACE, ANCC, CME

Most health care environmental stewardship programs start with a spark from a few passionate volunteers. How do you garner leadership attention? What is the ask? How do you create a firm foundation for continuous improvement? Join Practice Greenhealth's Janet Howard and Iqbal Mian for an energetic exchange and sharing of information to overcome painful obstacles. Door slammed? Foot stepped on? We'll share the give and take of delicately dancing in the complex health care landscape. Participate in this interactive session, and bring those pain points for fruitful dialogue to further the sustainability framework at your organization.

Presenters

Janet Howard, Director, Member Engagement, Practice Greenhealth
 Iqbal Mian, MSSM, Member Engagement Manager, Practice Greenhealth

(B-2) Widening the Hospital & Community Team to Expand Access to Healthy, Sustainable Food: Resources and Success Stories

ANCHOR | FOOD | SOCIAL DETERMINANTS OF HEALTH

CEU: ANCC, CME

Hospitals are increasingly adopting creative strategies to improve the health and well-being of their patients, staff, and communities. Food is a key component of a healthy life and an important economic driver to support a healthy community. At the same time, industrial food systems are one of the largest contributors to greenhouse gases and environmental degradation. In this session, Health Care Without Harm and Practice Greenhealth present three new sets of resources to support hospital-community collaborations to promote healthy food access and support sustainable and equitable community food systems. We examine how clinicians, as well as foodservice, sustainability, employee wellness, and community benefit staff, can utilize these resources to collaborate across departments and with community partners to increase the reach and impact of healthy food initiatives.

Representatives from the Farm at St. Joe's (St. Joseph Mercy Health) and Healthy Roots Collaborative (Northwestern Medical

Center) will discuss their innovative work to build bridges between community benefit, food service, and employee wellness departments. They will also highlight their collaborations with local food producers and other community partners to support a local, sustainable food system and healthy eating. Ample time will be provided for discussion of best practices and lessons learned.

Presenters

Thresa Pattee, Member Engagement Manager, Practice Greenhealth
 Susan Bridle-Fitzpatrick, PhD, Senior Researcher, Health Care Without Harm, Healthy Food in Health Care Program
 Amanda Sweetman, Project Manager, Farm at St. Joseph Mercy Health System

(B-3) Changing the Hearts & Minds of Health Care Leaders: Creating the Business Case for Addressing Social Needs

ANCHOR | LEADERSHIP | SOCIAL DETERMINANTS OF HEALTH

CEU: ACE, ANCC, CME

Health care leaders and practitioners are bombarded with competing spending priorities. How can champions elevate social needs as a critical priority in that environment? This session will lay out frameworks to help leaders create their own narrative around the value of addressing essential human needs. Pulling from the recently revealed Social Needs Roadmap, this session will focus on the leadership and change management domain by providing real data and stories of creative industry leaders who made the business case for addressing social needs in their institutions.

Presenters

Veronica L. Gunn, MD, MPH, Vice President, Population Health Management and Payment Innovation at Children's Hospital of Wisconsin
 Katy Bazylewicz, Vice President Marketing, Cottage Health System
 Sonia Sarkar, Former Chief Policy and Engagement Officer, Baltimore City Health Department and Fellow, New America and Johns Hopkins Center for a Livable Future

(B-4) Become a Clinician Climate Advocate: Use Your Trusted Voice for Change

CLIMATE | NURSES | PHYSICIANS

CEU: ACCO, ANCC, CME

As trusted messengers, physicians and nurses have an opportunity to influence public opinion about climate change, as well as climate policy at the local, state, and federal levels. This interactive workshop will provide clinicians with the skills and resources needed to influence policy makers, communicate effectively, and engage the media. Participants will learn from the advocacy experiences of the facilitators, as well as work in small groups to practice communication strategies

and meeting with an elected representative. Participants will also learn essential skills for amplifying their trusted voice in the media. At the end of the workshop, physicians and nurses will be empowered and equipped to protect the health of their patients through effective climate action.

Presenters

Katie Huffling, RN, MS, CNM, Executive Director, Alliance of Nurses for Healthy Environments
 Elizabeth Del Buono, MD, Surgical Pathologist, Co-chair of Citizens' Climate Lobby & Munson Healthcare
 Cara Cook, MSN, RN, AHN-BC, Climate Change Program Coordinator, Alliance of Nurses for Healthy Environment
 Lori Byron, MD, Pediatrician, St. Vincent's Healthcare | Citizens' Climate Lobby
 Rob Byron, MD, MPH, Citizens' Climate Lobby & Hardin Memorial Hospital
 Lee Ballance, MD, Group Leader, Citizens' Climate Lobby & Adjunct Faculty, Primary Care Department, Touro University School of Osteopathic Medicine
 Jessica Wolff, U.S. Director of Climate and Health, Health Care Without Harm and Practice Greenhealth

(B-5) Delivering a Healthy, Energy-Frugal Facility with Real-Time Data and HVAC Retrocommissioning

ENERGY

CEU: ACCO, ANCC, CME

Learn how retro-commissioning combined with data analytics can provide and sustain better building performance to benefit patients, personnel, and the bottom line in existing health care facilities. Real world examples will show how HVAC system retro-commissioning (RCx) optimizes existing equipment to improve overall facility energy efficiency at a low cost while delivering non-energy benefits. Take away simple ways to identify if your facility is a good candidate for RCx and how to assemble a successful team. Real-time data analytics and fault detection can instantly alert operations staff to emerging problems and prove how compliant, comfortable, and cost-effective your building is. Use both of these tools to visualize, prioritize, and improve the most pressing, lucrative opportunities.

Presenters

Walker Calderwood, Engineer, Cx Associates
 Brett Green, PE, Manager, Remote Operations, Medxcel Facilities Management / Ascension
 Lois Sechrist, LEED AP, Environmental Stewardship Manager, Medxcel Facilities Management / Ascension

(B-6) Low Energy to Net Zero: The New Normal

ENERGY | GREEN DESIGN

CEU: AIA, ANCC, CME, USGBC

A new generation of health care buildings are demonstrating that a universal net zero, carbon-neutral future can be a cost-effective reality today. This session will connect attendees with case studies from some of most energy efficient health care projects in North America, as presented by the involved architecture and engineering firms, as well as the facilities director for a California academic medical center with a 2025 carbon neutrality goal. The projects span the acute care and ambulatory environments and incorporate the technologies and energy strategies needed to meet the level of energy performance required for net zero and carbon-neutral design.

Attendees will leave the session with a better understanding of the state of the market and a greater confidence they're able to achieve a deeper level of energy efficiency and carbon reduction today.

Presenters

Breeze Glazer, LEED AP, BD+C, Sustainable Healthcare Leader, Senior Associate, Perkins+Will
Arash Guity, PE LEED AP BD+C CEM, Associate Principal, Sustainability & Mechanical Engineer, Mazzetti
Joel Swift, Architect AIA LEED AP, Director, Facilities Planning & Development, UC Davis Health

(B-7) Making Environmental Purchasing a Priority in Value Analysis

GREENING THE SUPPLY CHAIN | SAFER CHEMICALS

CEU: AHRMM, ANCC, CME

Value analysis is a process that considers a number of issues of importance to health care organizations including patient health, safety, efficacy, and value. For organizations embarking on their sustainability journey, environmental purchasing is key to reaching sustainability goals on waste reduction, energy efficiency, safer chemicals, healthier food and more. Some organizations struggle to add another priority in the process while others have embedded sustainability into their culture and purchasing processes as standard.

In this session, learn how hospitals and health systems are making environmental criteria a key part of the systematic procurement approach in reviewing healthcare products, equipment, technology and services. Hear how environmental considerations are elevated in their organizations and how the attributes are selected and weighed. Understand

how they are selecting environmental attributes, engaging stakeholders, and weighting priorities. Find out what type of role the sustainability lead has in supporting supply chain.

Presenters

Pam DeVries, RN, System Value Analysis Manager, Rochester Regional Health
Michael Waller, PhD, Director of Sustainability, Rochester Regional Health
Colleen Groll, MSN, LEED AP, Manager, Sustainability Programs, Seattle Children's
Elise Nagowski, Perioperative Services Product Line Administrator, Dignity Health

(B-8) Choose Wisely: How NYU Langone and UVM Medical Center Carefully Partner with Material Recycling/Waste Vendors for Maximum Value

WASTE

CEU: ANCC, CME

Join University of Vermont Medical Center and NYU Langone Health for an up and close look at two cost saving waste reduction strategies in the operating room setting – blue wrap recycling and single use device reprocessing. University of VT Medical Center will share details of their grass-roots blue wrap recycling that was started after realizing that they purchased six tons of blue wrap annually and wanted to do something about it! The cross-disciplinary presentation will offer attendees clinical, EVS, and waste hauler perspectives and insight and demonstrating the importance of strong vendor partnerships. NYU Langone will share their single use device reprocessing journey and how a strong partnership increased engagement and environmental impact. Learn about incentives to maximize device collection and reprocessing, staff training and the role of data collection. NYU will also share how Earth Week has been a successful means of engaging employees in responsible electronics recycling. NYU Langone will stress how finding the right partner can become an important extension of your sustainability team when resources are tight.

Presenters

Monique Citro, Operating Room Communications Specialist, University of Vermont Medical Center
Jenna Agins, Energy and Sustainability Specialist, NYU Langone Health
Jennifer Bergeron, Environmental Services Supervisor, The University of Vermont Medical Center
Erin Broeske, Senior Director of Marketing, Stryker Sustainability Solutions

(B-9) Perioperative Sustainability at UCSF: Baby Steps, Big Goals

GREENING THE OR | PHYSICIANS

CEU: ANCC, CME

A staggering 1/3 of hospital waste is generated from the operating room and leaders at University of California, San Francisco (UCSF) Medical Center have initiated baby steps to minimize that impact every case, everyday. Using data and clinician engagement, these 'baby steps' are central to UCSF's broader pledge toward carbon neutrality by 2025. Join this discussion to learn more about the multidisciplinary, physician led approach to incorporate sustainability into resident education, research and daily clinical practice. Clinician leaders will present case studies highlighting opportunities to reduce waste, energy, and greenhouse gas emissions, while also saving the organization financial resources, including reducing fresh gas flow rates during anesthesia, analyzing reusable vs. disposable vs. reprocessable devices, and optimizing energy efficiency in the operating rooms.

Presenters

Seema Gandhi, MD, Associate Clinical Professor of Anesthesiology, University of California, San Francisco
Gail Lee, Sustainability Director, UC San Francisco and UCSF Health

(B-10) Nurses as Inspired Change Makers: Exemplars in Sustainable Foods

FOOD | NURSES

CEU: ANCC, CME

While most nurses have taken a nutrition course, little is typically included about the human and ecological health impacts of our current agricultural practices and the resulting food quality. Nurses value nutrition for strong bodies, bright minds, and healthy communities. They are in an ideal position to help influence decisions, policies, and behaviors related to food as they change their own dietary behaviors, teach these concepts to patients and families, and advocate for healthier foods in workplaces, schools, and markets. In this session, we will discuss how nurses can help ensure our most vulnerable populations receive foods that are healthy, nutrient dense, and produced in a way that is also safe for the environment. Topics will include the use of hormones and non-therapeutic antibiotics in livestock production, the use of pesticides in plant production, and the ecological damage caused by industrial

farming. Online apps will be introduced to investigate levels of pesticide residues on produce and levels of mercury in fish.

Presenters

Barbara Sattler, DrPH, RN, FAAN, Professor, Public Health Program, University of San Francisco
Lorraine Thiebaud, RN, Retired Trauma Nurse, Master Gardener

C Breakout Sessions

1:45 pm - 2:45 pm

(C-1) Making the Case for Sustainability

LEADERSHIP

CEU: ACHE, ANCC, CME

In today's health care environment, it is increasingly important to align sustainability programs with a clear business case – it's an expectation of today's health care leaders. The development of the business case is sometimes messy and not always clear-cut. Learn from health care sustainability leaders who have waded through the muck to create meaningful metrics and stories to build successful business cases. We'll discuss a variety of approaches, the challenges, as well as the successes. This will be an interactive sharing session where attendees will have the opportunity to share their own experiences with developing and sharing the business case within their own organizations.

Presenters

Amanda Holloway, Sustainability Project Leader, Mayo Clinic
Cecilia DeLoach Lynn, Director, Sector Performance & Recognition, Practice Greenhealth

(C-2) Changing Menus, Changing Lives: How Hospitals are Raising the Bar for Sustainable Meat

FOOD

CEU: AHRMM, ANCC, CME

With the science clear on the impending public health impact of climate change and the absence of national policies to protect us from further progression, hospitals, and health professionals are using the tools they have at their disposal to protect our future. They are allocating their purchases to support systems that are judicious with our natural resources and, in the case of local food purchases, improve the economic stability of our nation's communities. Hospitals are removing meat, particularly meat raised conventionally, from the center of the plate and are implementing creative strategies to purchase sustainable meat as well as strategies for "menuing" that reduce meat purchased overall. In this session, attendees will hear from a sustainable and humane farmer about their production methods and will learn

how they address human and environmental health concerns – from antibiotics to sustainable grazing practices and the impact on farm viability and rural economies. Additionally, attendees will hear from a CA hospital that is using innovative strategies to purchase and menu sustainable meat that is affordable and how they are addressing the environmental impacts associated with conventional meat production by purchasing better meat.

Presenters

Dan Henroid, Director, Nutrition & Food Services, UCSF Health
Cindy Madsen, Farmer, Madsen Stock Farm

(C-3) Staying Healthy: Hospitals Partnering with Community Organizations to Maintain Patient Well-Being

ANCHOR | SOCIAL DETERMINANTS OF HEALTH

CEU: ACHE, ANCC, CME

Addressing the essential human needs of your patients will integrate health care operations with your community in entirely new ways that create shared opportunities and risks. This session will explore how to understand the resource landscape in your community and work collaboratively with key resource providers to offer and improve services that your patients need to be and stay healthy.

Presenters

Scott Orsey, Director, Operations and Strategy, Office for Community Child Health, Connecticut Children's Medical Center
Karis Grounds, Director of Health and Partner Integration, 2-1-1

(C-4) Safe Haven in the Storm: Protecting Lives and Margins with Climate-Smart Health Care

CLIMATE

CEU: ACCO, ANCC, CME

How can you use Health Care Without Harm's new business case for climate-smart action by hospitals to inspire your organization and community? Come hear from PricewaterhouseCoopers, Health Care Without Harm, and a health system as they summarize the report's key findings. Participants and panelists will then discuss how to build executive buy-in for investment in climate mitigation and resilience initiatives to protect both patients and margins in the face of extreme weather and a challenging financial environment.

Presenters

Paul Lipke, Senior Advisor Energy and Buildings, Health Care Without Harm
Natalie Allan Teear, Director of US Sustainability, PricewaterhouseCoopers Advisory Services
Travis English, PE, CEM, LEED-AP, Chief Design Engineer,

Director of Engineering, Kaiser Permanente

(C-5) Teaming Up for Impact: Aggregating Demand to Shape Large, Customer-Facing Renewable Energy Deals

ENERGY

CEU: ACCO

This session will provide an overview of the state of play of demand aggregation for large-scale renewable energy. The session will be designed as an interactive discussion between the panelists and the attendees to maximize insights and learning for the audience. Industry experts will discuss available on- and offsite solutions as well as their economic and strategic value potential. Peers from two health systems will share their lessons learned from aggregations within their organizations and beyond, and provide participants with practical insights into respective motivations, goals, approaches, and solutions. Documented in a new white paper by Practice Greenhealth, opportunities will be presented on how health systems can create impact through renewable energy as an anchor for their community.

Presenters

Gary Farha, President and CEO, CustomerFirst Renewables
Robert Biggio, Senior Vice President Facilities and Support Services, Boston Medical Center
Dana Slade, CHMM, Director of Sustainability Programs, HealthPartners

(C-6) Reimagining Hospital Delivery in a Net Zero Economy

GREEN DESIGN

CEU: AIA, ANCC, CME, USGBC

Intermountain Healthcare has built a culture of support for sustainable strategies among their project managers and leadership. In partnership with HDR's design team, strategies have been developed to provide comfort while striving to achieve energy reduction goals. Design teams have adopted digital tools to measure characteristics of comfort and wellness, as well as tools that provide early feedback, so the process can be guided by key metrics. One example of such a design is a façade where the peak solar load is kept below a threshold, which can successfully reduce capacity of the mechanical system. When measured on a recent large hospital project, proper façade protection reduced the first costs by \$6 per square foot net.

These strategies only work when there is a partnership between owner and design team that supports this type of opportunity. Aggregated strategies can be assembled to deliver designs which achieve remarkable goals, including net-zero energy facilities. The particular strategies will be different for every facility as every hospital project has a unique program and location.

This session will describe the strategies for a specific hospital on the pathway to achieving net zero energy operation at its site.

Presenters

Duncan Griffin, AIA, LEED AP BD+C, Sustainable Principal, HDR
Steven Bergstrom, Director, Officer of Sustainability, Intermountain Healthcare

(C-7) Chemical Footprint of Products Used in Pediatric Care

GREENING THE SUPPLY CHAIN | SAFER CHEMICALS

CEU: AHRMM, ANCC, CME

Hazardous chemicals in products and supply chains are catalyzing health care organizations, retailers, and other businesses to ask their suppliers whether their products and manufacturing operations use these chemicals and whether safer alternatives are available. This panel will present the findings from the first-ever study designed to assess the chemical footprint of products commonly found in a hospital pediatrics room. Pediatrics was chosen for evaluation because of the well-recognized greater sensitivity of children to exposure to toxic chemicals than adults.

The panel will present chemical footprint data collected on over 350 products commonly found in a pediatrics patient's room. The data comes from a survey sent to over 60 suppliers requesting information on the potential presence of almost 1,000 inherently hazardous chemicals in products. This study provides both an example of how to chemical footprint products in the health care setting and how chemical footprinting can be used to inform purchasing decisions in health care.

The panel style will be a mixture of formal presentation of chemical footprint survey method and findings, cross-panel dialogue, and audience engagement.

Presenters

Mark Rossi, PhD, Executive Director, Clean Production Action
Mary Ellen Leciejewski, Vice President for Corporate Responsibility, Dignity Health
Kyle Tafuri, Director of Sustainability, Hackensack-Meridian Health

(C-8) Clinical Recycling at Stanford Health Care: Building Shared Solutions to Global Recycling Challenges

WASTE

CEU: ANCC, CME

Before 2017, a five-year effort by Stanford Health Care had steadily built an extensive clinical recycling program which was active in every clinical department of the hospital, diverted 150

tons of material from landfill per year, and included 165 volunteer recycling champions. In early 2017, a new import policy enacted specific restrictions on a number of clinical recyclables. These sudden restrictions impacted the entire operation, requiring Stanford Health Care to pause the program and develop new solutions. As a result, during Earth Week 2017, the waste reduction team at Stanford Health Care was on a somber mission: to remove every recycling bin from all clinical settings in the hospital.

Luckily, because of tremendous support from hospital staff and department leadership, this setback was not the end of the program. Moreover, external partners like the City of Palo Alto and waste hauling companies saw Stanford Health Care as a key partner in meeting ambitious city zero waste targets. Working together, they refined the existing clinical recycling program.

Stanford Health Care's work in 2017 and 2018 includes piloting new solutions, estimating impact, and taking the new program to scale. As the Silicon Valley and San Francisco Bay Area are at the forefront of national zero waste efforts, Stanford Health Care's challenges represent an early example of coming restrictions on health care recyclables. In this session, they will share their story and their progress so far.

Presenters

Terry Duffina, Director, Sustainability, Energy & Resource Management, Stanford Health Care
Erika Kimball, RN, Waste Reduction Program Manager, Sustainability and Energy, Stanford Health Care

(C-9) Engaging Clinicians in Sustainability Using Novel and Creative Methods

GREENING THE OR | PHYSICIANS

CEU: ANCC, CME

This interactive panel will begin with a short didactic talk reviewing the common barriers to engaging clinicians in sustainability practices. A new app will be demonstrated in an interactive fashion that teaches clinicians how to "gas greener" by educating and allowing participants to track inhalational anesthetic usage and reduce wastage. The remainder of the panel will be an interactive demonstration of novel methods to engage clinicians. Examples include the use of a "Price is Right" style game to educate clinicians on the costs of items to increase awareness, the "What Can you Buy?" game designed to show clinicians how to translate waste reduction efforts into actual items that could be purchased, and how to turn collected vial caps into artwork. Attendees will have the opportunity to create their own vial cap art during the session.

Presenters

Lauren Berkow, MD, Associate Professor, University

of Florida College of Medicine

Karin Zuegge, MD, Associate Professor, University of Wisconsin School of Medicine

Jodi Sherman, MD, Associate Professor, Yale School of Medicine

Dr. Meghan Warren, DO, Assistant Professor, University of Wisconsin School of Medicine

Amanda Kron, Art Coordinator, UWHealth

(C-10) How Supplier Diversity and Sustainable Procurement Drives Positive Impact on Community Health

ANCHOR | GREENING THE SUPPLY CHAIN

CEU: AHRMM, ANCC, CME

Does your sustainability strategy include social impacts? Did you know that 50 percent of human health is impacted by environmental and social determinants? How does your program or strategy measure up? In this session learn how Kaiser Permanente addresses public health through its purchasing power, in what Kaiser Permanente refers to as Total Health. We will illustrate the methods and tools for developing and executing a strategy that leverages existing assets/techniques/channels to increase economic and environmental impacts, as well highlight the social significance of supplier diversity. Participants will learn the significance of driving Affordability – cost savings, Environmental Sustainability – through Environmentally Preferable Purchasing, and Economic Impact – through supplier diversity spend. Participants will leave this one hour interactive session with strategies and approaches on how to reshape their own efforts, how to engage internal stakeholders and external partners, and how to measure impacts. Be part of the change, knowing and understanding the new requirements for sustainable procurement.

Presenters

Tommy Smith, Manager, Economic Impact, Kaiser Permanente
David Zuckerman, Manager, Healthcare Engagement, Democracy Collaborative

D Breakout Sessions

3:00 pm - 4:00 pm

(D-1) Engaging Senior Leadership: Struggles and Suggestions

LEADERSHIP | PHYSICIANS

CEU: ACHE, ANCC, CME

Great passion with no follow through is not healthy. Many staff across all sectors of health care list sustainability and a healthy

environment as important components of their core values. But the reality is that often in their department, their organization, and their community, they struggle to get traction, have their voice heard, or make a palpable difference. This session will be an open town hall meeting that will provide a framework for discussion while also leaving attendees with a sense of community and a path forward. Presented content will be limited but used as a baseline to stimulate discussion. Insights from a front line sustainability coordinator, a clinician in a large system, a former CEO, and a current advisor to CEOs will provide breadth and balance to both the presented comments and the dialogue.

Presenters

Jeff Thompson, MD, Executive Advisor and Chief Executive Officer Emeritus, Gundersen Health System

Aparna Bole, MD, FAAP, Division Chief, General Academic Pediatrics & Adolescent Medicine, UH Rainbow Babies & Children's Hospital

Mary Larsen, Director, Sustainability and Supplier Diversity, Advocate Health Care

(D-2) Seafood and the Blue Economy: Why “Local” Matters

FOOD | GREENING THE SUPPLY CHAIN

CEU: AHRMM, ANCC, CME

More than 90 percent of seafood consumed in the United States is imported, and the majority of seafood fished in U.S. waters goes overseas for processing and packaging. Only about 2 percent of seafood imports to the United States are inspected. In 2014, two-thirds of the seafood consumed in the United States came from six foreign countries where human rights abuses, illegal fishing and species depletion, and environmental destruction are commonplace. Health care facilities serve seafood as a source of lean protein, but do they know where the seafood they buy comes from? Is it safe and free from contaminants? Is it harvested in a way that protects the ocean's ecosystems and our future supply of seafood? Wild seafood caught by industrial-scale vessels can extract too many fish and threaten ecosystem health. Farmed fish, or aquaculture, can also threaten ecosystems and contribute to antibiotic resistance. Our reliance on imported seafood exposes us to chemicals and antibiotic-resistant bacteria and supports labor and environmental practices inconsistent with the values of the health care sector.

This session will educate the audience about the laws and agencies governing fishing and aquaculture and provide an overview of the issues and concerns with the global seafood trade. Attendees will learn how strengthening connections to local seafood producers and sources of diverse seafood can improve human health and wellness, environmental stewardship, and awareness of the economic and cultural importance of

coastal livelihoods. As large volume buyers, hospitals can make purchasing decisions that help protect our ocean ecosystems and support local fishing economies. Attendees will also receive guidance that will support them in transitioning their menus to include more values-driven seafood purchasing.

Presenters

Cindy Quinonez, Food Service Manager, Prime Healthcare

John Stoddard, Healthy Food in Health Care Coordinator, Health Care Without Harm

(D-3) Saving Energy, Saving Money, Improving Community Health

ENERGY

CEU: ACCO, ANCC, CME

Hospitals in the US, and around the world, are saving money and improving the health of their communities by saving energy. By implementing energy efficiency strategies, air pollution monitoring and outreach, as well as other “healthy energy” measures, hospitals help reduce harmful pollution from power plants, protect air quality, and contribute to climate action – all of which yield health dividends now and into the future. Through presentations and a panel discussion, participants will learn about the health benefits that come from saving energy, ways to reduce energy consumption, and ways to link the human health impacts of energy savings to their hospital's core mission.

Presenters

Jennifer Wang, Global Coordinator, Healthy Energy Initiative, Health Care Without Harm

Scott Slotterback, International Technical Director for Climate Change, Health Care Without Harm

Sara Hayes, Program Manager, Health and Environment, ACEEE

Travis English, PE, CEM, LEED-AP, Chief Design Engineer, Director of Engineering, Kaiser Permanente

(D-4) Health Care Energy/Carbon Roadmaps for Non-Geeks

ENERGY

CEU: ACCO, ANCC, CME

This session will present a framework for developing a carbon/energy roadmap through a panelist discussion. Understanding many organizations' master plans are continuously changing and being updated, an effective roadmap should be developed that is flexible and can be dynamically modified. A case study will be presented of an energy/carbon roadmap for UC Davis Medical

Center that was developed to help meet the UC systems' goal of carbon neutrality by 2025. UC Davis Medical Center has taken a leadership position in the system in being proactive in addressing this imperative through methodical evaluation.

An interactive web-based platform will be introduced that serves as the framework and evaluation tool for the roadmap. Though this approach, UC Davis Medical center can evaluate various scenarios which helps inform decision making through gamification.

The panel will consist of the engineering/architecture team (Mazzetti/Perkins+Will) that worked with UC Davis Medical Center to develop the roadmap as well as the software/application developer that helped build the interactive platform. The panel will also include the Director of Facilities Planning & Development for UC Davis Medical Center that spearheaded the effort for the organization.

Presenters

Breeze Glazer, LEED AP, BD+C, Sustainable Healthcare Leader, Senior Associate, Perkins+Will

Arash Guity, PE LEED AP BD+C CEM, Associate Principal, Sustainability & Mechanical Engineer, Mazzetti

Brendan Collins, CTO, Parietal LLC

Joel Swift, Architect AIA LEED AP, Director, Facilities Planning & Development, UC Davis Health

(D-5) Save More Together: Greater Energy Efficiency through Strategic Collaboration

ENERGY

CEU: ACCO, ANCC, CME

The U.S. Department of Energy estimates that hospitals spend one to three percent of their total annual operating budget, or 15 percent of profits, on energy. Many industry experts suggest hospitals could save 20 percent or more of energy use through cost effective measures. However, between tight budgets and competing priorities, it can be difficult to establish and execute energy-efficiency improvements. Additionally, building system technology is rapidly evolving, challenging hospital engineering and maintenance teams who do not have the time or capability to effectively evaluate all of the options and opportunities available. This panel, moderated by Erin Richmond of JDM Associates, will share how Better Buildings Challenge partners Hackensack-Meridian Health and UW Health have collaborated with utilities and third-party engineering firms to

enact innovative solutions to energy efficiency challenges, easing the burden of up-front costs and bridging gaps in expertise.

The Better Buildings Challenge is a Department of Energy initiative that assists commercial building owners, including hospital and health care systems, in improving energy and water performance by at least 20 percent over 10 years. Partners like Hackensack-Meridian Health and UW Health share successful strategies for overcoming barriers to sustainability like the ones described in this panel via the Better Buildings Solution Center.

Presenters

Kyle Tafuri, Director of Sustainability, Hackensack-Meridian Health
Mary Evers Statz, Director Energy Management & Sustainability, UW Health
Samantha Stafford, Associate Manager, RE Tech Advisors

(D-6) Achieving 20 % Reductions in Energy and Water by 2020: A Strategic Plan by Seattle Children’s Hospital

ENERGY | GREEN DESIGN | WATER

CEU: AIA, ANCC, CME, USGBC

Seattle Children’s Hospital is embarking on an effort to substantially reduce energy and water consumption in the oldest sections of its 1.3 million square foot campus. Using an infrastructure asset risk analysis as a foundation for this effort, the team was able to tie environmental goals to organizational stabilization goals. Called the “2020 Plan,” the hospital solidified goals of reducing both energy and water consumption by 20 percent from 2012 levels by the year 2020. Through partnership with the University of Washington Integrated Design Lab and SOLARC Energy Group, the hospital initiated a process to better understand its current energy use and develop an action plan for realizing success toward their energy and water goals.

The team’s approach for developing the strategic plan included analysis of existing information, detailed interviews with facility staff and consultants familiar with the campus, several in-depth group working sessions, site visits and walkthroughs, analysis of energy, water and trend-log data, and deep feedback from hospital stakeholders.

This panel presentation will outline the hospital’s motivations and goal toward realizing energy and water goals, walk through the process and results of the strategic plan for meeting 20 percent energy and water reduction by the year 2020, progress on the goal since 2012, and opportunities and obstacles that this process has uncovered.

Presenters

Heather Burpee, Research Associate Professor, University of Washington Integrated Design Lab

Colleen Groll, MSN, LEED AP, Manager, Sustainability Programs, Seattle Children’s

Jeff Grinzel, PE, CEM, CHC, Program Manager for Sustainability, Seattle Children’s Hospital in Washington State

(D-7) Kaiser Permanente’s EPP Standards: A New Paradigm in Sustainable Procurement in Health Care

GREENING THE SUPPLY CHAIN

CEU: AHRMM, ANCC, CME

This session takes a look at a new paradigm in sustainable procurement. Kaiser Permanente (KP) has established a goal that by 2025, half of all products purchased will meet its environmental standards. To meet this ambitious goal, KP has and continues to develop environmentally preferable purchasing (EPP) Standards that define what characteristics a product category should have. Find out how they are developing these standards and what process changes are needed in order to utilize these standards to reach their goals. The session will explore what it takes to ensure these lofty goals can be met. KP will share how they are implementing the overarching EPP for health care products. Participants will hear their lessons learned thus far and what successful product areas are meeting the EPP standard, as well as product areas presenting a challenge. KP will share the metrics used to measure progress and the contracting strategies used to support reaching their goals. KP will also reveal its newest EPP Product-specific standards; namely for furnishings and fabrics and the process for implementation. Learn how they have prioritized product categories under consideration and what categories are targeted.

Presenter

Joel Sigler, National Environmental Program Leader, Kaiser Permanente

(D-8) A Case Study of UCLA Health’s Drive Toward Zero Waste Management

WASTE

CEU: ANCC, CME

This session will be a review of UCLA Health’s journey toward zero waste: a target that was set by the University of California (UC) system. As a start, in an effort to better understand and manage their data, UCLA Health partnered with Waste Management Sustainability to manage all their invoices and upload all waste data into a comprehensive reporting software that includes blue wrap, confidential documents, donations, hazardous pharmaceuticals, hazardous waste,

metal, non-hazardous pharmaceuticals, organics, reusable sharps containers, RMW, single stream recycling, single use medical device reprocessing, trace chemotherapy, trash, universal waste, pathology, pallets, and cardboard.

Recently UCLA Health drove up their diversion rate by rolling out reusable isolation gowns, zero waste dining facilities, OR recycling, patient room recycling, single use device reprocessing expansion, a Green Unit Checklist, a redesigned loading dock, and more.

UCLA Health also focused on inefficiencies in waste flows and higher than necessary costs, resulting in reexamining all regulated waste processes (sharps, RCRA).

Presenters

Victor Mitry, Assistant Director, Materials Management, UCLA Health
Mike Spicer, Sustainability Program Manager, WM Healthcare Solutions
Sara Lindenfeld, Sustainability Programs Manager, UCLA Health

(D-9) Physician Engagement is Vital to Health Care Sustainability

GREENING THE OR | PHYSICIANS

CEU: ACHE, CME, ANCC

Clinician engagement is paramount to the success of any health care sustainability initiative. For over a decade, Cleveland Clinic, a 1400-bed academic medical center, has fostered clinician and physician passion for environmental awareness and succeeded in waste and energy reduction programs across its enterprise.

One targeted area for improved environmental efficiency in hospitals is in the operating room (OR) which accounts for 20-40 percent of hospital waste. With its 101 operating rooms, Cleveland Clinic is committed to greening the OR practices, with accomplishments including energy conservation through OR setbacks, a 60 percent energy decrease with LED lighting, and elimination of desflurane, resulting in a 1 percent carbon footprint reduction. All this would not have been possible without leveraging clinicians as major stakeholders partnering with multidisciplinary teams in this pursuit.

In this interactive panel format, Cleveland Clinic will give a broad overview of their OR sustainability programs over the past five years and highlight the Ken Lee Memorial Fellowship Program which has created a legacy of sustainability in multi-generations of physicians. Additionally, they will discuss strategies for achieving support from the top ranks of administration and strategies for engaging clinicians at all levels and stages of their careers, emphasizing the use of evidence-based medicine. They will close by highlighting their team approach to clinician engagement and

greening the OR. These strategies can be used in facilitating greening the OR programs at other institutions and can also be extrapolated for many other facets in achieving greener hospitals. The session will close with questions from the audience.

Presenters

Sofya Asfaw, MD, Trauma and Critical Care Surgeon

Voranaddha (Bim) Vacharathit, MD, General Surgery Resident, Cleveland Clinic

R. Matthew Walsh, MD, General Surgeon, Cleveland Clinic

Jon Utech, LEED-AP, Senior Director of the Office for a Healthy Environment, Cleveland Clinic

(D-10) Employer-and Community-based Solutions to Employee Commute Challenges

PHYSICIANS

CEU:

Many hospitals and other health care organizations face commute-specific business challenges or regulatory pressures that necessitate changes to employee commuting and parking programs. While health care organizations often struggle with evolving commute programs, successfully addressing commute challenges can result in decreased operations costs, improved employee attraction and retention, achieved sustainability goals, and improved patient access.

This session will highlight both employer-based and community-based solutions and technologies which address employee commute challenges. Sustainability and human resource leaders from Kaiser Permanente in Seattle and Delta Dental of Washington will share employer-based strategies and available tools and resources. Cleveland Clinic will discuss their community-based solution, GOhio – a municipal/regional transit network – and available tools and resources. Speakers will present case study examples of their employee commute programs, the challenges they have faced, and the commute and business operations successes they are experiencing. Following the case study presentations, a discussion session will allow audience members to share commuting challenges at their own health care organization and provide interaction with the speakers to leverage their experiences.

Presenters

Karen Aliabadi, Chief Human Resource Strategist, Delta Dental of Washington

James Evans, Project Manager, Sustainability, Cleveland Clinic

Maria Berardo, HR Business Partner, Kaiser Permanente

Wednesday, May 9

E Beakout Sessions

9:15 am - 10:30 am

(E-1) Integrating Sustainability and Wellness at Inova

LEADERSHIP

CEU: ACHE, ANCC, CME

The goal of this workshop is for participants to learn how Inova is using the intersection between sustainability and wellness as a strategic driver to move both the organization and the community toward improved health outcomes. The workshop will be broken out into four modules – introduction to the problem or the issue; what Inova is doing programmatically to address the issue; discussion about wins, losses, opportunities, and next steps at Inova; and how to integrate these strategies into your own organization based on priorities, resources, leadership, etc. This will be an interactive discussion that allows participants to develop the beginnings of an action plan appropriate for their sites. Specific examples of what was done at Inova will serve as discussion points and ideas.

Presenter

Seema Wadhwa, Assistant Vice President, Sustainability and Wellness, Inova

(E-2) Sustainable Food Service Operation: Ask an Expert

FOOD

CEU: AHRMM, ANCC, CME

Which sustainable food service activities should a hospital start with in order to achieve the biggest impact? What are some tips for identifying and sourcing sustainable foods through the health care supply chain and beyond? Which methods get patients and retail customers to choose or eat healthy, sustainable foods? When or how do hospitals engage leadership to support their efforts? Attendees will participate in a live poll at the beginning of the session and choose topics and questions that both the experts and audience members will discuss. The Practice Greenhealth 2017 Sustainability Benchmark Report will also be referenced to illustrate the broader progress and trends across the health care sector. A significant amount of time will also be an open Q&A format, so prepare your questions, and come ready to share your approaches and advice.

Presenters

Cindy Parkey, Senior Manager of Food Services, Virginia Mason Memorial Anthony Verona, Culinary Director, UH Health System, Sodexo Healthcare
Chris McCracken, RD, Director of Nutrition Services,

University of California San Diego Health System

(E-3) Supporting Families and Community with the Greenest, Healthiest Building in Our System

ANCHOR | GREEN DESIGN | SOCIAL DETERMINANTS OF HEALTH

CEU: ACHE, AIA, ANCC, CME, USGBC

As Robin Guenther, AIA, has asked: what if the delivery of health care created nothing but health? What would our facilities look like, and how would our model of care be different than it is today? This case study and educational session will explore the design, construction, and approach to community-based care by the new University Hospitals Rainbow Center for Women & Children. The design of the new center began in 2016 with completion scheduled for 2018. It will serve as the new site for University Hospital's primary care pediatrics and women's health practices, and it is designed for the integration of care for social, environmental, and economic determinants of health into the clinical care model. The facility itself was designed through an integrative process to be the system's healthiest, greenest, and highest performing facility yet.

Presenters

Aparna Bole, MD, FAAP, Division Chief, General Academic Pediatrics & Adolescent Medicine, UH Rainbow Babies & Children's Hospital

Robin Guenther, FAIA, LEED AP, Sustainable Healthcare Design Leader, Perkins+Will and Senior Advisor to Health Care Without Harm

(E-4) Climate Change and Emergency Medicine: A Specialty on the Frontline

CLIMATE | PHYSICIANS

CEU: ACCO, ANCC, CME

Climate change presents broad ethical and practical challenges for the house of medicine. Those of us in health care walk a difficult line as we contribute substantial greenhouse gas emissions through our clinical practice environments while also witnessing the adverse health impacts from climate change. This session, led by emergency medicine physicians at the forefront of the intersection of climate change and health, will outline the current and predicted impacts of climate change on emergency departments. A special emphasis will be placed on recent natural disasters as a case study for these impacts and emergency medicine roles. There is currently a significant gap in the literature to provide an evidence-based platform for these impacts, so this discussion will highlight the opportunities that exist for research and educational imperatives. A discussion on emergency department preparedness and resilience strategies will follow, as well as current approaches that exist for climate

change mitigation, such as greening emergency department operations. Lastly, emergency medicine's role in climate change leadership and advocacy will be highlighted. Overall, this session will highlight the role of emergency medicine in managing health impacts from climate change with tangible application to the wider spectrum of health care systems.

Presenters

Renee N. Salas, MD, MPH, Clinical Instructor of Emergency Medicine, Massachusetts General Hospital/Harvard Medical School

Jay Lemery, MD, Associate Professor of Emergency Medicine Chief Section of Wilderness and Environmental Medicine, University of Colorado School of Medicine

Jonathan Slutzman, MD, Clinical Instructor of Emergency Medicine, Massachusetts General Hospital/Harvard Medical School

(E-5) Assessing Energy Efficiency and Total Cost of Ownership with Medical Diagnostic Imaging Equipment

ENERGY | GREENING THE SUPPLY CHAIN

CEU: ACCO, ANCC, CME

Learn how a case study from Intermountain Healthcare and results from a European joint-industry initiative on green procurement can unlock your opportunity to save money and energy when purchasing and using medical diagnostic imaging equipment, such as MRI, CT, X-ray, and ultrasound in hospitals. Based on life cycle assessment, total cost of ownership, and smart usage protocols, you can reduce their energy consumption and environmental impact. Understand the industry benchmarks available and total costs, not just of the equipment, but the related infrastructure, and the opportunities to optimize lower energy modes. How do you get buy-in from clinicians, technicians, purchasing departments, and other key stakeholders? How can you make diagnostic imaging energy use patterns visible and motivating? Factoring these into purchasing, training, and operating decisions, health care organizations can achieve energy and energy cost savings from 20-60% to invest in further energy progress and/or better patient care.

Presenters

Steven Bergstrom, Director, Officer of Sustainability, Intermountain Healthcare

Hans van der Wel, Director, Ecodesign and Sustainability, Philips Healthcare

Luc Lenaerts, Senior Director, Sustainability, Royal Philips

Beth Eckl, Director of Environmental Purchasing Program, Practice Greenhealth

(E-6) Healing Gardens and Green Roofs: The Reinvention of Patient Care

GREEN DESIGN

CEU: AIA, ANCC, CME, USGBC

Health care facilities are increasingly including green roofs and healing gardens on their buildings. This program will explore how green roofs can bring measurable benefits to the health and wellness of their staff, patients, and visitors. Learn about the financial and environmental benefits green roofs can bring to long-term building owners, both in the short and long term. A deeper look will be provided through a case study of Washington D.C.'s Sibley Memorial Hospital. A member of Johns Hopkins Medicine, Sibley Memorial has made green roof installation a priority on not only their new hospital expansion, but also on their existing structures. Learn how another health care facility is utilizing Leslie's Healing Garden – a green roof on top of the Fred & Pamela Buffett Cancer Center at the University of Nebraska Medical Center – to successfully marry design principles that promote improved patient outcomes outside of traditional delivery of patient care. Understand the 14 patterns of biophilic design and how it can improve the patients and staff health and well-being when designed into health care facilities. Understand how green roofs aid in healing not solely patients, but also the environment by reducing the heat island effect, managing stormwater, and improving air quality. The presentation will highlight the important elements in establishing a healthy green roof for long-term performance and maximizing stormwater retention. Leave with a better understanding of why hospitals have determined healing requires more than treating a patient medically, and how features such as a green roof or healing garden can inspire hope and offer an escape from the sterile atmosphere of a hospital.

Presenters

Colin Rohlffing, AIA, LEED AP, Vice President, Director of Sustainable Development, HDR, Inc.

Vanessa Keitges, CEO, Columbia Green Technologies

Robert Adams, ASLA, Principal, Halvorson Design Partnership

Blair Sadler, Senior Fellow, Institute for Healthcare Improvement

(E-7) Tackling Safer Chemicals and Materials in Health Care: Lessons from the Field

GREENING THE SUPPLY CHAIN | SAFER CHEMICALS | GREENING THE SUPPLY CHAIN

CEU: AHRMM, ANCC, CME

Purchasing safer chemicals and materials in your facility is a critical component of any sustainability initiative because it can

help reduce patient and employee exposure to hazardous substances, improve indoor air quality, and improve public and environmental health. Practice Greenhealth's Safer Chemicals Challenge provides tools, resources, case studies, and step-by-step guidance to reduce the use of PVC and DEHP-containing medical devices, increase the use of green cleaners, eliminate harmful antimicrobials from hand hygiene products, and purchase healthier furnishings, among other goals. In this session, you'll learn how leading hospitals have worked to implement these goals from commitment through implementation and data tracking. Hospital leaders with direct experience will discuss best practices, steps for overcoming challenges, internal messaging, strategies for achieving goals, and key partnerships.

Presenters

James Evans, Project Manager, Sustainability, Cleveland Clinic

Jenna Agins, Energy and Sustainability Specialist, NYU Langone Health

Jennifer Eno, Senior Interior Designer, NYU Langone Health

(E-8) Maximizing End of Lifecycle Value with Cleveland Clinic and Advocate Health

WASTE

CEU: ANCC, CME

Join Cleveland Clinic, Advocate Health Care, and their business partners as they share their stories on end of life management for equipment and supplies. In developing countries around the world, patients do not receive the highest standard of care due to the lack of supplies and equipment. Medical surplus recovery organizations collect excess supplies and retired equipment for beneficial use in under-resourced communities around the globe.

In 2016 Advocate Health Care diverted over 70 tons of medical supplies from landfills for reuse in developing countries where supplies are limited. Advocate Health Care and its partners – Project CURE, AMITA and Medline – launched a surplus material recovery program in 2016. The joint project has a dual social and environmental mission to divert products from landfills and get them into the hands of people that need them most.

Cleveland Clinic designed and implemented a Centralized Asset Management solution to assist with excess equipment and supplies. Cleveland Clinic minimizes wasted shipping and stores items for repurposing or sale. Utilizing a user friendly app, information is entered about clinical equipment when it is determined to be no longer required to support patient care. Through a central service, users can identify and enter items into the system. Based on a determined time frame by asset class, items are either repurposed, sold, donated, recycled, or as a last measure, landfilled. This system increases the efficiency and

reuse of items within the system, optimizes the value externally, maximizes recycling, and ensures proper disposal if appropriate.

Presenters

- Francesca Olivier, Manager, Corporate Social Responsibility, Medline*
- Elizabeth Olsen, Manager of National Procurement, Project C.U.R.E.*
- Ilyssa Gordon, MD, PhD, Medical Director for Laboratory Sustainability, Cleveland Clinic*
- Kyle Green, Founder and CEO at Healthcare Asset Network*
- Leilani Barkan, IIDA, Interior Designer at Cleveland Clinic*
- Katie Wickman, RN, CIC., Manager of Sustainability, Advocate Illinois Masonic Medical Center*

(E-9) Moving Beyond Barriers to a Culture of Sustainability and Less Waste in the OR

GREENING THE OR | WASTE | PHYSICIANS

CEU: ANCC, CME

It is said that a journey of 1000 miles begins with the first step, and the process of changing attitudes and behaviors regarding waste in the environment of an academic, level-one trauma center's operating rooms can seem like a 1000-mile journey on foot. This session will examine common barriers to recycling and waste reduction in the perioperative environment, as well as the strategic education, engagement, surveys, effective auditing and qualitative and quantitative measuring needed to overcome those challenges. Speakers from the University of Wisconsin School of Medicine and Mayo Clinic will share specific strategies and describe their processes and results, as well as lead attendees through interactive exercises.

Presenters

- Peter Pallagi, Sustainability Officer, Mayo Clinic*
- Karin Zuegge, MD, Associate Professor, University of Wisconsin School of Medicine*
- Shannon Bunsen, Sustainability Project Manager, Mazzetti+GBA*
- Alanna Rebecca, MD, Staff Physician, Department of Plastic and Reconstructive Surgery, Mayo Clinic*
- Alanna Rebecca, MD, Staff Physician, Department of Plastic and Reconstructive Surgery, Mayo Clinic*

(E-10) Leveraging Transportation to Unleash Your Health Care Organization's Potential

TRANSPORTATION

CEU:

Parking problems? Traffic and congestion? Poor air quality? Employee retention issues? Plans to grow? Community health needs? Reframing transportation as a solution to hospital

challenges is one of the key success factors to be shared by sustainability leaders at Nebraska Medicine and the University of Nebraska Medical Center's "TravelSmart" transportation program, and Inova Health's "Car-Free Challenge" campaign. Attendees will learn the why, how, and program success of the TravelSmart program, and the specific education, communication strategies, and program results of the Car-Free Challenge. The session will conclude with an open discussion, so bring your transportation questions and challenges, and leave with the tools you need to begin designing your complete active commuting solution.

Presenters

- Melanie Stewart, MPA, Sustainability Manager, Nebraska Medicine and University of Nebraska Medical Center*
- Chip Goyette, Sustainability Director, Inova Health System*
- Sally Hopley, Sustainability Analyst, Verdis Group*

F Breakout Sessions

10:45 am - 11:45 am

(F-1) Don't Let It Do a Number on You: Lessons Learned from Building a Utility and Sustainability Management Platform

LEADERSHIP

CEU: ACHE, ANCC, CME

In May 2015, Pope Francis issued his encyclical Laudato Si' (On Care for our Common Home), as a worldwide wake-up call for all individuals, businesses, and nations to care for the planet that we have inherited, after decades of environmental degradation. With hospitals being the second most energy intensive commercial space type in the U.S., and caregivers mandated to "first, do no harm," health care organizations can make an enormous impact on the Pope's call to action. As the second largest non-profit health care organization following its recent merger, Providence St. Joseph Health recognized that its new size and scale meant a significant environmental footprint and the need to understand and reduce it. As a Catholic health care organization with over 50 hospitals, 800 clinics, and 100,000 caregivers, this was no small undertaking.

A panel of key players in this effort will discuss the vision, path, lessons learned, and progress toward the development of a comprehensive world-class utility and sustainability management software platform that tracks and reports enterprise-wide energy, water, waste, business travel, food,

supply chain, emissions, and supply-side utility management. After all, if you can't measure it, you can't manage it.

Presenters

- Richard Beam, Chief Environmental Officer, Providence St. Joseph Health*
- Beth Schenk, PhD, MHI, RN-BC, Nurse Scientist/ Sustainability Coordinator, Providence-WSU*
- Jean Garris Hand, Principal and Founder, Capital Energy Associates, LLC*
- David Bonn, Senior Vice President Sustainability and Strategic Sourcing, Schneider Electric*
- Maria Murphy, Director of Client Management, Schneider Electric*

(F-2) Equity and Food Systems: Opportunities for Health Care through Purchasing, Programs and Investments

ANCHOR | FOOD | GREENING THE SUPPLY CHAIN

CEU: AHRMM, ANCC, CME

Health Care Without Harm's food program staff will present their resilient communities framework and highlight key partnerships that exemplify how hospitals can build a more equitable food system through their purchasing, programs, and investments. Participants will learn about three regional programs: ARC in the Bay area, the Meyer Project in Portland, Oregon, and the Baraka Store in New England. These three projects highlight different roles and different levels of investments hospitals can contribute to equity-building projects. Participants will leave with clear examples of projects and innovative strategies that can be implemented at the hospital, community, or regional level to dismantle inequities.

Presenters

- Yesenia Gallardo, Northwest Community Food Systems Coordinator, Health Care Without Harm, Healthy Food in Health Care Program*
- Jan Villarante, MS, RDN, Director, National Nutrition Services, Enterprise Shared Services, Kaiser Permanente*

(F-3) Improving Community Health with Proper Medication Management at HealthPartners

ANCHOR | SOCIAL DETERMINANTS OF HEALTH

CEU: ACHE, ANCC, CME

Improper management of medications has profound health, safety, and environmental implications. To help address these societal impacts, HealthPartners opened their first medication take-back location at their clinic in Sartell, Minnesota in November 2011. Since that time, the program has expanded to 26 locations throughout their hospitals and clinics in Minnesota and Wisconsin. HealthPartners mission is to improve health and well-being in partnership with their members, patients, and community. In this session, Dana Slade and Charles DeYoung

of HealthPartners will discuss how the medicine take-back program supports their mission and why it's an important initiative within their comprehensive set of sustainability programs. The many experiences from six years of operating a medication take-back program will be shared to increase understanding of the many regulatory, logistical, and operational issues that must be considered and carefully implemented when starting a public medication take-back program.

Presenters

Dana Slade, CHMM, Director of Sustainability Programs, HealthPartners
Charles DeYoung, Manager Pharmacy Operations, HealthPartners

(F-4) Call to Action for California: Advancing Climate-Smart Health Care

CLIMATE | ENERGY

CEU: ACCO, ANCC, CME

California has ambitious greenhouse gas emission reduction goals – 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. Health care makes up 12.6 percent of the California state economy and accounts for nearly 10 percent of greenhouse gas emissions in the United States. Many health systems in California are aggressively implementing low-carbon strategies and reframing climate change as a public health issue. California state policies are generally supportive of low-carbon initiatives but sometimes policies or regulations can make it difficult for climate mitigation and resilience strategies to be broadly adopted by the health care sector.

What would the impact be on GHG emissions reduction and the associated health and economic benefits if these best-in-class, low-carbon strategies were adopted by all hospitals in California? How can health systems work with the state to help support the changes in public policies and regulations needed to make that happen? Come learn about the findings from the recently released paper, Building a Climate-Smart Healthcare System for California, and talk with a leading health system representative and state regulator about how they are trying to make it happen. Take the learnings back to your health system and state.

Presenters

Rame Hemstreet, Vice President of Operations and Chief Sustainable Resources Officer, National Facilities Services, Kaiser Permanente
Ken Alex, Director of the California Governor's Office of Planning and Research
Jessica Wolff, U.S. Director of Climate and Health, Health Care Without Harm and Practice Greenhealth

(F-5) Community Resilience from the Ground Up

SOCIAL DETERMINANTS OF HEALTH | GREENING THE SUPPLY CHAIN

CEU: ANCC, AHRMM, CME

As health care institutions move upstream to address the social and environmental conditions that impact health, they need to develop equitable partnerships with community based organizations that already have community buy in and solutions that need to be raised up and supported. This session will highlight two community based organizations that have developed powerful models for community resilience and the opportunities they are presenting to hospital systems to partner for broader community wellness and resilience. This session is designed for hospital systems that are on the path to become anchors in their communities and want to explore how to build strong partnerships with NGOs on the ground.

Presenters

Diane Takvorian, Executive Director, Environmental Health Coalition, San Diego, California
Raheem Baraka, Founder and Executive Director, Baraka Community Wellness
Gary Cohen, President and Co-Founder, Health Care Without Harm and Practice Greenhealth

(F-6) Design as Medicine: The Health Benefits of Building Green

GREEN DESIGN | SOCIAL DETERMINANTS OF HEALTH | PHYSICIANS

CEU: AIA, ANCC, CME, USGBC

Environmental factors are the greatest contributors to illnesses and diseases. What role does the built environment play in the health of our patients, our communities, and our planet? Through an interactive session, participants will explore this question and recognize how building green can improve patient outcomes, transform patient care, and play a critical role in the health of the community. The presenters will share success stories demonstrating what can happen when clinicians, architects, and leadership collaborate to design built environments focused on the wellbeing of patients, health care workers, and beyond. In one case study, we will examine how a community hospital placed patient wellness at the forefront of design and built a new state-of-the-art ICU using technologies such as electrochromatic glazing and folding glass walls to design for health.

Presenters

Ted Shieh, MD, Emergency Physician, DuPage Medical Group, Clinical Instructor in Emergency Medicine, RUSH Medical College
Laura Herbert, AIA, Senior Healthcare Architect, TRO

(F-7) Working Together with EPP Data to Drive End-to-End Value

GREENING THE SUPPLY CHAIN | GREENING THE SUPPLY CHAIN

CEU: AHRMM, ANCC, CME

PVC, BPA, phthalates, and other materials are widely used in many medical products. While many companies are actively working to remove these materials from their products, health systems have struggled with how to reduce staff, patient, and community exposure risk by identifying and choosing products free of these chemicals of concern. This session will address all four perspectives from the value chain – explaining why these data are important to the industry, what it means to the supplier, the GPO, and the health system, and how a third-party vendor can help all stakeholders reach their goals related to environmentally preferable purchasing. It will explain the opportunities and the challenges to meeting these goals and highlight a case study to show how one health system (Mercy) was able to partner with its GPO (Premier) and a third-party vendor (MindClick) to use the data gathered from suppliers to purchase products with more sustainable profiles.

Presenters

Noah Dunlap, Vice President Supply Chain Logistics and Procurement, Mercy Health
Zoe Beck, Manager, Environmentally Preferable Products Program, Premier, Inc.
JoAnna Abrams, CEO, MindClick Group
Sarah Chang, World Wide Director, Sustainability, Johnson & Johnson

(F-8) Creating a Circular Economy with OR Waste

WASTE | GREENING THE OR

CEU: ANCC, CME

This panel discussion will be a high level education on how to create a circular economy with OR waste. Topics will include the current state of the recycling market, recyclers perception of OR waste programs, the type of programs available that have the best chance of success, clean collection techniques, and circular economy opportunities. We have a great panel that will help you understand this exciting process, including recycling consultant Dan Constant, Eva Parenti of Halyard Health, Sister Mary Ellen Leciejewski of Dignity Health, John Love of CareLine, and Nancy Anderson of Greenhealth Exchange.

Panelists

Daniel Constant, Consultant, Sustainable Solutions, LLC
Mary Ellen Leciejewski, Vice President for Corporate Responsibility, Dignity Health

Nancy Anderson, Vice President, Contracting, Greenhealth Exchange
Eva Parenti, Marketing Product Manager, Halyard Health
John Love, President, Care Line

(F-9) Reducing the Environmental Impact of Pharmaceutical Waste in the OR

GREENING THE OR | WASTE | PHYSICIANS

CEU: ANCC, CME

It's no surprise, the operating room generates a lot of waste. The NYU School of Medicine found 99% of surgical eye drops are thrown out during cataract surgeries, resulting in nearly \$170,000 wasted drugs per year at a single facility. Accessible emergency drugs are necessary to have at the ready when performing surgery, but if clinicians carefully consider the shelf life of medications drawn up outside the pharmacy, examine strategies to reduce pharmaceutical waste at the source, and properly dispose of medications; they can help minimize the migration of pharmaceuticals into ground water, as well as minimize the footprint of their organizations and help save valuable financial resources.

Join the researchers from NYU School of Medicine and assistant professor of Anesthesiology from Cincinnati Children's Hospital Medical Center to discuss sources of pharmaceutical waste in the OR, methods to measure and quantify pharmaceutical waste for accurate tracking, and strategies to minimize pharmaceutical waste in the OR.

Presenters

Cassandra Thiel, PhD, Assistant Professor, Department of Population Health and Department of Ophthalmology, NYU School of Medicine

Diane Gordon, MD, Assistant Professor of Anesthesiology, Cincinnati Children's Hospital Medical Center

Sean McGarry, MD, Private Practice Anesthesiologist, Oregon Anesthesia Group

(F-10) Reducing Antimicrobial Resistance: How Health Professionals Can Help

SAFER CHEMICALS | PHYSICIANS | FOOD

CEU: ANCC, CME

Rising rates of antimicrobial resistance threaten the ability of clinicians to treat even the most basic infections. Evidence has demonstrated that hospital-based antibiotic stewardship programs (ASPs) significantly reduce hospital rates of antibiotic resistant infections however most existing ASPs fail to address the upstream causes of community exposure to antibiotic resistant bacteria caused by pharmaceutical pollution and the misuse of antibiotics outside the hospital. An estimate of 70%

of overall tonnage of antimicrobial agents sold in the US are distributed for use in food-producing animals. Recent studies have proven that antibiotic waste from manufacturing sites doesn't just pollute the environment, but is also a reservoir of resistant microbes. While isolating patients with resistant infections and maintaining a high level of hygiene are priorities for health professionals, there are additional opportunities for clinicians to broaden their antibiotic stewardship.

Driven by clinician leadership, Health Care Without Harm US and Europe are championing a comprehensive approach to antimicrobial stewardship through hospital policies and operations to curb pharmaceutical waste and reduce the purchase of meat raised with routine antibiotics. Speakers will detail strategies spearheaded by the US Clinician Champions in Comprehensive Antibiotic Stewardship (CCAS) Collaborative and Health Care Without Harm Europe's Safer Pharma campaign. This session will provide health professionals with practical tools, strategies, and case studies to tackle AMR in their daily practice as well as through institutional and international policy.

Presenters

Adela Maghear, Pharm PhD, Pharmaceuticals Policy Officer, Health Care Without Harm Europe

Aparna Bole, MD, FAAP, Division Chief, General Academic Pediatrics & Adolescent Medicine, UH Rainbow Babies & Children's Hospital

Stacia Clinton, RD, LDN, National Program Director, Healthy Food in Health Care Program, Health Care Without Harm