

TUESDAY, MAY 16

PRECONFERENCE SESSION 8:00 AM - 1:00 PM

HEALTHCARE PLASTICS RECYCLING: IT'S NOT ALL RAINBOWS AND UNICORNS

While hospitals have been champions of plastics recycling for decades, efforts have largely focused on food service and administrative functional areas and not on patient care settings (including critical care and isolation rooms) where many health care plastic materials are generated. Successfully integrating recycling practices into patient care settings can be challenging and requires understanding the economic, regulatory, resourcing and infrastructure nuances that come with it.

This session provides a forum for hospitals to come together for a day of dialogue designed to deliver applicable insights and actionable strategies around healthcare plastics recycling. From sustainable procurement and how to engage key stakeholders to understanding what is and isn't recyclable (and why!) and how to manage infection prevention, transport/storage, contamination and removal. An intimate small group format maximizes sharing and learning.

Don't miss this unique opportunity to:

- Share your hospitals plastics recycling successes and challenges
- Learn best practices in healthcare plastics resource recycling
- Participate in an interactive plastics product and packaging session
- Provide feedback to medical product and packaging manufacturers
- Hear from recyclers and end-users looking for plastic feedstock

Attendees are encouraged to bring samples of health care plastics that they are currently recycling or would like to be able to recycle.

Speakers

Andy Kragness, Environmental Compliance Tech, Gundersen Health System
Glen Goodsell, Recycling Coordinator, Mayo Clinic
Angie Dalenberg, Waste and Recycling Education Coordinator, Mayo Clinic
Samantha McKeough, Sustainability Coordinator, HealthPartners

WEDNESDAY, MAY 17

A BREAKOUT SESSIONS 9:00 AM - 10:00 AM

A1 - CHANGING PRODUCT DESIGN THROUGH PURCHASING: A GREENHEALTH EXCHANGE CASE STUDY LEADERSHIP | GREENING THE SUPPLY CHAIN

CEU: ACHE

Supply chain collaboration can lead to unexpected results and innovations in the marketplace. This session will describe some surprising discoveries uncovered by a group of health systems engaged in group contracting and how those discoveries are leading to changes in product design to eliminate harmful chemicals. The discussion will cover the process of determining the product categories, identifying potential suppliers, establishing desired attributes, and working with suppliers on product redesign. Presenters will discuss specific product categories, including compostable food service ware and office supplies, and describe their collaboration with suppliers to test and evaluate product alternatives when existing products do not meet desired standards.

Speakers

Mary Starr, Vice President, Customer Care, Greenhealth Exchange
Alicia Culver, Executive Director, Responsible Purchasing Network
Christine Naughton, Sustainability and Communications for Dignity Supply Chain Division, Dignity Health

A3 - CHANGING WHAT COUNTS AS HEALTH CARE - THE WHY: ADDRESSING SOCIAL NEEDS AS A STRATEGY TO BUILD HEALTHY COMMUNITIES

SOCIAL DETERMINANTS OF HEALTH | LEADERSHIP

CEU: ACHE, CME, ANCC

Do health care institutions have a responsibility to address issues related to social needs? Increasingly, sector leaders and market momentum says, YES. Even as clear evidence demonstrates the link between social determinants of health and medical outcomes, health system leaders struggle to articulate why this work is a strategic priority. This session will lay out frameworks to help leaders create their own narrative around the value of this work. Using real data and stories from creative industry leaders across

multiple sectors we will explore how both the social determinants of health and environmental health are closely linked core issues impacting individuals. This session will be led by two of the health care sector's most innovative leaders who have helped change the way health systems identifies what counts as health care.

Speakers

Rebecca Onie, CEO/Co-Founder, Health Leads
Gary Cohen, President and Co-Founder, Health Care Without Harm
Jeff Thompson, Executive Advisor, Gunderson Health System

A4 - PROACTIVE APPROACH TO SAMPLING AND TESTING FOR LEAD IN DRINKING WATER: A HEALTH SYSTEM CASE STUDY

WATER

CEU: ACHE

After the recent lead contamination crisis in Flint, Michigan, various reports which followed indicated lead in municipal drinking water is a wide spread issue. Exposure to lead is a significant health concern, especially for young children and infants whose bodies absorb more lead than the average adult. Lead generally gets into drinking water through contact with plumbing materials containing lead. The only way to be certain that lead is not a problem in facilities is to test various drinking water outlets and take corrective action as necessary.

Henry Ford Health System (HFHS) proactively initiated screening level water sampling at 28 locations to ensure safe drinking water for patients, employees and visitors. The primary objective was to develop a protocol for monitoring that ensures credible sampling results that are representative of the HFHS facilities, yet capture the highest risk areas.

HFHS identified specific units and fixtures to test (ICUs and Pediatric center sinks) within a facility based on severity as well as other locations (staff lounge ice machines, public drinking fountains) based on high use. Once facility locations were selected, HFHS followed EPA's Lead and Copper Rule sampling procedure for drawing water samples. The collected samples were sent to a certified drinking water laboratory for testing.

A comparison of first-draw samples results and follow-up sample results helped determine if lead is coming from the fixture itself or from the building's interior plumbing. If lead was discovered at any of the locations, then further sampling and/or field investigation was conducted to determine the best long-term remediation plan as well as the best practices in the short term to minimize lead

exposure. Finally, the results were effectively communicated to employees. HFHS presumes by disseminating the experience in developing water assessment protocol, this will help similar institutions in managing water sampling and testing programs.

Speaker
Nicole Chardoul, Resource Recycling Systems

A5 - ENERGY MANAGEMENT AT MAYO CLINIC

ENERGY

CEU: ACHE

This presentation will focus on the development of the energy management program at Mayo Clinic in Rochester, MN. Stewardship is one of the core values of Mayo Clinic and it shows. Mayo Clinic has a history of innovation and it doesn't stop at health care. Mayo Clinic's use of district heating and cogeneration as far back as 1928 was ahead of its time. The presentation will briefly describe how Mayo Clinic supplies energy to all of its buildings in Rochester.

In keeping with the spirit of stewardship and sustainability, Mayo Clinic leadership placed emphasis on reducing the energy intensity of its facilities. This presentation will tell the story of how Mayo committed to reduce energy consumption and how facilities staff have responded to this commitment. The presentation will also discuss the process thus far in working toward the 20 percent reduction goal.

Speaker
Brett Gorden, Section Head - Utility Operations, Energy Management, and Infrastructure Systems Engineering, Mayo Clinic

A6 - DESIGN AND HEALTH: OUTSIDE THE BOX

GREEN DESIGN

CEU: ACHE, AIA, USGBC

The topics of health and wellness are becoming more prevalent in architecture and urban design conversations, especially related to health care facilities. This workshop will start with very brief presentations from an urban designer, a public health researcher, and a health care administrator, which will set the stage for interactive discussions with attendees on how health and wellness concerns impact not only the design of buildings, but also the campuses, neighborhoods, and communities where these facilities are located.

The attendees will then be lead through a facilitated discussion and brainstorming sessions to capture and leverage collective knowledge, experience and vision of all participants.

Requirements of the Affordable Healthcare Act, enhancement of the public realm, cutting edge research on how design influences behavior and decision making, and new operational policies and programs, will be discussed. Participants will leave with transferrable lessons-learned that will impact the health and wellness of their own campus and community.

Speakers
Julie Hiromoto, AIA, Vice President, HKS
Randy Morton, AIA, Urban Design Studio Principal in Charge, HKS
Alison Avedt, MBA, OT/L, Vice President, Operations, ProMedica Toledo Hospital
Michelle Eichinger, President, Planning4Health Solutions

A7 - TRIPLE BOTTOM-LINE BENEFITS OF EPP IN A MISSION-BASED HEALTH SYSTEM

GREENING THE SUPPLY CHAIN

CEU: ACHE

The Ascension Environmental Stewardship Program and The Resource Group, the organization's purchasing and logistics manager, are collaborating to integrate environmentally preferred purchasing (EPP) practices into the procurement process. As a faith-based organization, Ascension has placed a priority on care of the earth and will discuss how EPP practices support their values.

The presentation will review how Ascension draws on knowledge gained from Practice Greenhealth, Health Care Without Harm and the Healthcare Plastics Recycling Council, as well as the EPA Pollution Prevention Program, to select vendor partners with a track record in sustainability and maximize its purchasing power to make the best product selections based on performance, availability and price.

Ascension will review how it participates in health care initiatives such as Less Meat, Better Meat to reduce antibiotics used to raise chicken, pork and beef; and the Safer Chemicals Challenge to reduce the use of harmful chemicals in furnishings and architectural products. The presenters will discuss the Triple Bottom Line benefits of EPP practices including cost avoidance, reducing environmental impact and creating a better physical environment for patients, associates, visitors, and the communities in which Ascension hospitals are located. By doing so, Ascension is demonstrating leadership while leveraging its purchasing power and collaborating with other health systems to achieve shared goals.

Ascension has developed relationships with key vendors that are sustainability leaders for furnishings; food and nutrition services; building operations and maintenance materials; environmental services; office supplies; architectural and engineering services;

and energy procurement and management; to name a few examples. Attendees will learn how Ascension works with vendor partners to support innovation, develop green practices and develop data tracking tools customized for healthcare sustainability, all while maintaining stringent budget requirements.

The presentation will include details about how to include green attributes into proposal and contract language, how to evaluate submittals, track sustainability data and share successes. This interactive session will feature checklists to help users develop RFIs, RFPs and proposals, and evaluate vendor responses. Examples will be provided of real-time data tracking dashboards developed by Ascension vendors for energy, water, waste, food and green cleaning used to establish baselines, set goals and track progress over time.

Speaker
Lois Sechrist, LEED AP, Environmental Sustainability Analyst, Ascension Health
Katrina Scott, Senior Manager, Sustainability and Diversity at The Resource Group, an Ascension subsidiary

A8 - CONSIDERING COMMUNITY SOLAR: A NEW RENEWABLE ENERGY ALTERNATIVE TAKES HOLD

ENERGY | CLIMATE

CEU: ACHE, ACCO

For companies and institutions with the desire to contribute to a cleaner energy future but not the means, community solar is an emerging concept designed to provide a viable alternative. Community solar farms have been introduced in multiple states and have brought many businesses and residents into the solar equation.

The community solar concept is simple. An energy provider builds and maintains a solar facility that local businesses, homeowners and event renters can "subscribe" to – in effect, taking advantage of solar energy without making an investment in solar panels on their roof or property. In this way, the subscriber contributes to the addition of solar energy in their community, receives solar credits on their energy bill and benefits from a stable, predictable energy source.

During this session, NRG's Drew Warshaw will share insights and experiences from his position within the company's community solar group. Those attending the session will gain a firsthand understanding of both the promise and reality of community solar and will also learn how to objectively judge whether the solution is a potential fit for their situation.

Community solar is just one example of the many energy options now available to customers. Others include back-up generation,

on-premise combined heat and power plants and district energy centers. Each of these solutions can work alone or as a package, tailored to meet a customer's unique, scalable energy needs.

Speaker

Drew Warshaw, Vice President of Community Solar, NRG Energy
Raj V. Rajan, PhD, PE, RD&E Vice President, Sustainability, Ecolab, Inc.

A9 - HEALTH EFFECTS OF CLIMATE CHANGE IN THE USA: A PHYSICIAN'S PERSPECTIVE

CLINICIANS | CLIMATE

CEU: ACHE, CME, ANCC, ACCO

The topics to be covered will be heat extremes (particularly mortality from high-heat extremes and including the role of humidity); precipitation extremes (both excess precipitation and drought, including flooding, waterborne illnesses, mold, wildfires and dust storms); insect-borne diseases (including those borne by mosquitoes, ticks and triatomine bugs); pulmonary effects (including asthma and pollen-related allergies); kidney stones; and public health and climate change.

Speaker

John J. Dillon, MD, Associate Professor of Medicine, Mayo Clinic

B BREAKOUT SESSIONS 10:30 AM - 11:30 AM

B1 - ENGAGING STAKEHOLDERS THROUGH MATERIALITY: MANAGING SUSTAINABILITY TOPICS IN HEALTH CARE

LEADERSHIP | SAFER MATERIALS

CEU: ACHE

Cleveland Clinic has been a signatory of the United Nations Global Compact since 2007, and has utilized the Global Reporting Initiative framework to transparently report its sustainability progress since 2013. In 2016, we embarked on the required "materiality" process as part of the new G4 standards to determine what sustainability topics matter most to our stakeholders and where they matter within our organization.

This session will take you through the stakeholder engagement process; from formulating an interview team, to interviewing the c-suite, to engaging our most important external community and vendor partners, to synthesizing the data down into a cohesive meaningful strategy map. The GRI-G4 materiality process is a powerful tool that helps all organizations prioritize what

sustainability topics require the most focus while providing a lens to transparently report their successes and challenges.

Speakers

Jon Utech, Senior Director, Office for a Healthy Environment at Cleveland Clinic
James Evans, Project Manager, Office for a Healthy Environment, Cleveland Clinic

B2 - CHOOSING THE BEST PROTEIN FOR THE PLATE: FROM BURGERS TO PLANT-BASED OPTIONS

FOOD

CEU: ACHE, CDR, CME, ANCC

This session will summarize the current science outlining human health, climate and other environmental impacts of our food choices with emphasis on research comparing impacts of dietary meat with plant-based protein alternatives as components of healthy diets. Opportunities to reduce adverse health and environmental impacts of food production, processing, transport, and consumption are abundant. We will discuss some of the ways in which appropriately designed food-production and purchasing practices can help mitigate the large environmental footprint of the sprawling food value chain. We will also highlight the political, economic, and structural challenges to transforming our food system to one that is more supportive of health.

Speakers will distill the science into core recommendations for institutional procurement and share a case study of one hospital who has implemented a plant-based menu. This case study will offer culinary, menuing and marketing strategies for a comprehensive implementation.

Speakers

Stacia Clinton, RD, LDN., National Director, Healthy Food in Health Care Program, Health Care Without Harm
Ted Schettler, MD, Science Director of the Science and Environmental Health Network and a Science Advisor to Health Care Without Harm

B3 - BUILDING COMMITMENT TO ADDRESSING SOCIAL NEEDS: A DOCUMENTARY FILM

SOCIAL DETERMINANTS OF HEALTH | LEADERSHIP

CEU: ACHE

With healthcare leaders and practitioners bombarded with competing priorities, how can healthcare organizations elevate social health needs as a critical issue to address? A new short documentary film by acclaimed filmmaker Nicole Newnham highlights stories of courageous and forward-thinking leaders from across the country who are working to change "What Counts" as

healthcare. After a screening of the film, this session will focus on helping attendees develop tangible, realistic steps to elevate social needs interventions as a priority with health system leadership, and introduce or progress social needs efforts at their own institutions.

Speaker

Sue McCarron, Principal, Strategic Communications, Health Leads

B4 - CLIMATE CONVERSATIONS: BUILDING CONNECTIONS BY SHARING STORIES

CLIMATE

CEU: ACHE, ACCO

Background. Often called to hold difficult discussions with patients and families, health providers are well-equipped to engage others in talking about climate change. This will be a 90-minute "boot camp" session on hosting Climate Conversations as leaders in health care. A Climate Conversation is a methodology anyone can use to exchange stories, values, and knowledge to foster mutual understanding and serve as a basis for action.

The boot camp involves a detailed description of the conversation format, examples of settings in which the format is appropriate, and a brief Climate Conversation case study of my doctoral work in which I developed a green team in a nurse practitioner-led clinic. The final 60 minutes involve a sample Climate Conversation with the attendees, consisting of a four-part discussion: a) describe stories of one's own personal connection, b) share elements from the stories that reflect personal values c) discuss group members' knowledge and feelings about climate change, and d) talk about ways to take action related to climate change. I as the facilitator will verbally thread topics from each preceding exercise into the next, culminating in a holistic discussion about personal stories, shared values, and climate change.

Climate Conversations are designed to foster collaborative discussion and mutual understanding among participants in the room with the hopes of action plans reaching beyond the conversation setting. During the session, I will provide attendees an opportunity to gain a different perspective about their own professional culture through discussing their values and stories about climate change with those in other disciplines.

Speakers

Shanda Lembeck, University of Minnesota

B5 - HOW TO IMPLEMENT ATTRACTIVE LARGE-SCALE RENEWABLE ENERGY SOLUTIONS

ENERGY | CLIMATE

CEU: ACHE, ACCO

Health care organizations in the U.S. spend more than \$6.5 billion on energy costs every year—a significant share of operating expenses that increased by over 50 percent in the past decade and is forecast to continue rising. While the current focus on energy efficiency measures and lean energy construction can help reduce energy use and cost, the remaining energy consumption exposes health care providers over the long term to cost increases, price risks and harmful carbon emission pollution.

Technology cost reductions and favorable market economics make large-scale renewable energy an increasingly compelling choice for health care organizations to make step-change improvements in their greenhouse gas (GHG) footprint, while reducing long-term cost and risk of electricity procurement. However, successfully securing solutions that are economically attractive and that pass muster with senior decision makers is a non-trivial task. This interactive and action-oriented panel session will share peer experience from health care systems and industry experts on “how” they implemented their projects. This session will run for an extra 15 minutes, until 11:45 a.m.

Panelists

Bob Biggio, Vice President Facilities & Support Services, Boston Medical Center

Ramé Hemstreet, VP for Operations and Chief Sustainable Resources Officer, Kaiser Permanente

Gary Farha, President and CEO, CustomerFirst Renewables

B6 - LEAN & GREEN BOOTCAMP

GREEN DESIGN

CEU: ACHE, AIA, USGBC

Want to know what “lean” is? Curious about how to apply the principles of “lean” in your organization? The Toyota Production System (TPS) or “lean” is being used by sustainability leaders to improve quality, reduce cost, eliminate waste, and lower environmental impact. Join experts from Practice Greenhealth, and Virginia Mason Health System, the first organization to apply TPS to health care, in a dynamic exploration of how “lean and green” can transform the way to deliver the highest quality, sustainable health care. Speakers will end the session

with an interactive exercise that is the most entertaining CleanMed has experienced—well, hopes are high!

Speakers

Iqbal Mian, MSSM, Member Engagement Manager, Practice Greenhealth
Emma (Rislow) Westphal, MBA, Operations Specialist, Gundersen Envision®

B7 - REACHING BIGGER GOALS WITH AN EPP STANDARD FOR HEALTH CARE PRODUCTS

GREENING THE SUPPLY CHAIN

CEU: ACHE

Kaiser Permanente (KP) has established a goal that by 2025, half of all products purchased will meet environmental standards. This session will address why KP set this goal, and the specific environmental preferable purchasing standards that KP is establishing to support the goal. The processes used to develop and implement the standards will also be discussed, including key questions that were considered, and challenges that arose during the process.

Speakers

Joel Sigler, Senior Manager, National Environmental Health & Safety, Kaiser Permanente

Vanessa Blanco, Director, EPP, Kaiser Permanente

B8 - CONNECTING SUPPLY WITH DEMAND: A REGIONAL HEALTHCARE PLASTICS RECYCLING DEMONSTRATION PROJECT

WASTE

CEU: ACHE

It is estimated that upwards of one million tons of non-infectious plastic materials are available for recovery annually from clinical settings among the over 5,000 hospitals in the continental United States. These materials, including products and primary, secondary and tertiary packaging, are in high demand and can provide valuable feedstock to recyclers and other plastic industry stakeholders. Lastly, according to a recent survey, conducted by the Healthcare Plastics Recycling Council and Practice Greenhealth, two-thirds of hospital respondents indicated that they were collecting 40 percent or less of what could be recycled from their facilities, an indication of the tremendous opportunity to increase plastics recovery from our nation’s hospitals.

The Healthcare Plastics Recycling Council, in collaboration with SPI: The Plastics Industry Trade Association, led a multi-hospital plastics recycling project in the Chicago market from 2015 through 2016. Focused on non-infectious plastic packaging and products

collected from clinical areas of the hospitals, the project tested a number of best practice concepts for hospitals and recyclers for recycling health care plastics. For this presentation, we would present the results from the project, lessons learned, data on composition, quantity and market value of common health care plastics, staff training tips, and best practices for engaging with logistics and recycling vendors, along with successes and challenges from different stakeholder perspectives.

Speaker

Peylina Chu, Healthcare Plastics Recycling Council

B9 - GREENING THE PHARMACY THROUGH AN UPSTREAM APPROACH: A WIN-WIN FOR CLINICIANS AND LEADERSHIP

CLINICIANS | WASTE

CEU: ACHE, CME, ANCC

As demand for health care grows at an exponential rate globally, so does the dependency on pharmaceuticals to prevent and treat diseases. The impact of pharmaceuticals on the environment and their cost to society is becoming a critical concern for civic leaders, health care leaders and the general public alike. Current strategies have largely focused on managing pharmaceutical waste to minimize environmental impact. However, significant opportunity exists to address both the environmental impact and escalating cost of health care through an upstream approach toward the use of pharmaceuticals. In this session, we will begin with an overview of economic and environmental impact of pharmaceuticals, present best practices in hospital and outpatient settings through clinical case studies, and conclude with an exploration for future opportunities by clinicians and health care leaders to minimize pharmaceutical waste, reduce environmental harm, and reduce health care cost. Target audience: health care providers and clinicians, pharmacists, health care leadership, health care payers.

Speaker

Ted Shieh, MD, DuPage Medical Group

C BREAKOUT SESSIONS

1:30 PM - 3:00 PM

C1 - CONNECTING THE DOTS: LINKING THE COMMUNITY, HEALTH CARE AND SUSTAINABILITY

LEADERSHIP

CEU: ACHE

HealthPartners award winning rural Wisconsin Critical Access Hospitals all have comprehensive but unique sustainability programs. One aspect they all have in common is that they are all

important leaders and anchors for their respective communities. In this workshop, we will explore what makes each of these hospitals successful in their selected sustainability niche, how and why they selected these areas to focus upon and how by partnering with like-minded, progressive community partners they have all been able to improve the health of their communities by working together. In addition, we will have former National Teacher of the Year, Rachel Sauvola, from New Richmond High School's AgriScience Department discuss how she has leveraged her relationship with these hospitals to teach her students how to work as a team, educate them on community service and build a better place to live all while learning in a fun and supportive environment. The Workshop will use mind mapping software to visually tell the story of the panelist while they speak. We also plan to have a facilitated interactive panel discussion with ample time at the end for a Q&A session with the audience.

Speakers

Dana Slade, Director, Sustaianability Programs, HealthPartners
Sarah Thomson, Manager, Laboratory, Hudson Hospital & Clinic
Samantha Mckeough, Sustainability Coordinator, HealthPartners
Erick Jensen, Facilities Director, Amery Hospital & Clinic
Steven Massey, President & CEO of Westfields Hospital & Clinic

C2 - SUSTAINABLE FOOD 101: ALTERNATIVE PURCHASING STRATEGIES

FOOD | GREENING THE SUPPLY CHAIN

CEU: ACHE, CDR

It has been estimated that it takes 25 percent of demand to 'flip' a market. Through alternative purchasing strategies, several collaborating organizations are aligned in the same goal of bringing sustainability to the food system. In this session, important market standards and analytics will be covered, along with real world case studies of how alternative purchasing is using the power of institutional procurement to 'flip' markets. Lastly, impact assessments are described for measuring the success of purchasing strategies.

Health Care Without Harm works to harness the power of aggregated institutional demand to "flip markets" by serving in an advisory capacity for institutional buyers alliances across the country. The alliances represent various institutional sectors including health care, schools, universities, correctional facilities, and corporate dining and are brought together by a common goal of procuring products that are locally/regionally produced, sustainable, and benefit the communities in which the institutions reside. Coordinated purchasing has

the potential to secure better products for all participants at more affordable prices than they could get individually.

Accordingly, these various institutional sectors are finding points of alignment around product standards and specifications to send a clear message to suppliers about the changes they need to make in their production practices.

This session will educate the audience about the impact of collective purchasing groups and how these can be used as a vehicle for creating powerful market changes. The moral authority of a unified voice from these anchor institutions strategically communicating their concerns about our food system and the health of their constituents, has the potential to educate the public and influence policies that are protective of human and environmental health.

Speakers

Hillary Greenwood, National Procurement Director for Health Care Without Harm's Healthy Food in Health Care Program
Jan Villarante, MS, RD, Director, National Nutrition Services, Enterprise Shares Services, Kaiser Permanente
Nancy Anderson, Vice President, Contracting, Greenhealth Exchange
Jennifer Rengert, Member Coordinator, Fifth Season Cooperative

C3 - CHANGING WHAT COUNTS AS HEALTH CARE - THE HOW: ROADMAP TO INTEGRATING A SUCCESSFUL SOCIAL NEEDS PROGRAM

SOCIAL DETERMINANTS OF HEALTH | LEADERSHIP

CEU: ACHE, CME, ANCC

While many health system leaders are confident in the "why" of addressing social needs, there have been few resources available to define a clear path to the "how." Quite simply, there is no standard framework to define what "good" looks like in addressing social needs. As a result, even the most committed leaders have been operating in the dark, without a sense of where to start or for what to aim over time. The *Roadmap to What Good Looks Like* defines that framework as a benchmarking tool, a platform for this learning community, and call to action to the sector. Building off a set of key activities that health systems should engage in as part of any effort to identify and address individuals' most basic human needs, the Roadmap includes milestones that capture what "good" looks like for organizations that are just getting started as well as for those that have more evolved programs.

Speakers

Chelsea Cooling, MHA, MBA, Planning and Innovation Strategist, CHI Health
Pablo Buitron, MD, Associate Professor of Medicine, Boston Medical Center
Ronald K. Finnan, RN, MBA, FACMPE, Director of Operations, Mercy Clinics, St. Louis

C4 - GREEN EMPLOYEE BENEFITS: ENGAGING EMPLOYEES ON CLIMATE CHANGE SOLUTIONS

CLIMATE | LEADERSHIP

CEU: ACHE

As the Lancet 2015 Commission pointed out, tackling climate change could be the greatest global health opportunity of the 21st century. Health care systems and hospitals can advance their mission of protecting human health by engaging employees and involving them in solutions to address climate change. During this session, we will focus on Practice Greenhealth's "Green Employee Benefit" program, which provide health systems with meaningful opportunities to engage employee's on low cost or no cost strategies to promote climate change solutions.

Providing incentives and programming to employees to improve the health of their homes, families, and friends is a way to extend the "culture of caring" beyond the walls of the organization.

For any hospital or health system interested in creating or expanding their employee engagement program, join us! Learn how your health system can provide employees with:

- Discounts for purchasing and installing solar panels for their homes.
- Access to locally grown fruit and veggies through participation in Community Supported Agriculture (CSA) programs.
- "Green Retirement" options that don't invest in fossil fuels like coal, oil, and gas.
- Discounts for purchasing Electric-bikes.

Speakers

Lauren Koch, Outreach and Engagement Specialist, Practice Greenhealth and Health Care Without Harm
Eric Lerner, Climate and Health Coordinator, Health Care Without Harm
Thresa Patee, Food Program Coordinator, Practice Greenhealth and Health Care Without Harm, US and Canada
Erin Gray, Manager of Marketing and Strategic Analysis, Green Century Capital Management, Inc.
Jimmy Rabal, Sustainability Intern, University Hospitals Health System

C5 - GREEN REVOLVING FUNDS AND DEDICATED CAPITAL POOLS: BEST PRACTICES IN FINANCING SUSTAINABILITY

ENERGY

CEU: ACHE, ACCO

The U.S. Department of Energy estimates that hospitals typically spend one to three percent of their total annual operating budget, or 15 percent of profits on energy, and many industry experts

suggest that hospitals could save 20 percent or more of energy use through cost effective measures. However, tight operating budgets, competing priorities for capital, and the relatively small portion of operating expenses dedicated to energy efficiency mean there is often a lack of dedicated capital for energy efficiency improvements, and reluctance to invest in the high first-costs of equipment. This panel, moderated by Erin Richmond of JDM Associates, will share how Better Buildings Challenge partners Cleveland Clinic and Ascension Health have implemented successful programs to dedicate capital to energy performance improvements and avoided millions of dollars in energy costs.

Speakers

Erin Richmond, Sustainability Consultant, JDM Associates
Jon Utech, Senior Director, Office for a Healthy Environment, Cleveland Clinic
Jim Prince, Energy Manager, Ascension Health

C6 - ACHIEVING PATIENT COMFORT AND RESILIENCY THROUGH HIGH PERFORMANCE DESIGN

GREEN DESIGN

CEU: ACHE, AIA, USGBC

An increased awareness of the impacts of climate change on human health has pushed hospitals to consider new options for energy conservation and resiliency to extreme weather events. At the same time, technological advancements have led to increased choices for hospital building envelopes. The time is right for an overview of the options to inform the health care community.

This panel will provide a framework for the issues and benefits when considering building envelope choices, including the use of frit, tint/coatings, exterior solar shades, operable windows and dynamic glazing systems (electrochromic, thermochromic, glazing cavity blinds). The choice of any of these systems is influenced by the local micro-climate, along with the specific needs of the program being developed. The framework will address these issues, along with a focus on patient safety and comfort, with a consideration for useful daylight, radiant temperatures, air movement, and acoustical issues.

The panel will also identify and demonstrate the use of some design tools for façade analysis, as well as ways for clients to understand how the outputs of these tools influence their facilities. The overall goal for the session is that client leaders and

design team members will leave the session with clarity about the range of current options and their role in hospital design.

Speakers

Duncan Griffin, Sustainable Principal, HDR
Lorie Pella, P.E., Director of Projects and Planning, Humber River Regional Hospital
Deborah Rivers, Senior Healthcare Architect/ Sustainability Leader, HDR
David Burson, Senior Project Manager, Partners HealthCare

C7 - ESSENTIAL TOOLS FOR AN ENVIRONMENTALLY PREFERABLE PURCHASING PROGRAM

GREENING THE SUPPLY CHAIN

CEU: ACHE

What we buy matters, particularly in health care where healthy patient outcomes is critical. To reduce negative health and environmental impacts in health care, procurement programs are scrutinizing the products and services they buy to identify those that have the positive health and environmental impacts compared to competing products. EPP involves looking at the sustainability aspects of goods and services, such as products that use less energy, create less waste and contain safer chemicals. A procurement program that incorporates sustainability considerations can contribute to an organization's sustainability goals and ultimately minimizes health and environmental impacts for a healthier planet.

This session offers essential tools and resources to guide your procurement program in implementing the purchase of environmentally preferable products. Learn where to find product and service specifications to support greening your supply chain and see examples. Hear a case study how hospitals are finding cost savings as a result of using a new cost of ownership calculator. Discover the benefits in using standardized environmental considerations including priority chemicals lists adopted by others. This session will share innovative joint work to standardize procurement considerations between Health Care Without Harm and the United Nations to advance sustainable procurement globally.

Speakers

Matthew Pietro LEED AP BD+C, Sustainability Specialist, University Hospitals
Mary Larsen, Director, Sustainability and Supplier Diversity, Advocate Health Care
Brenda Nissley, Sustainability and Waste Manager, Harborview Medical Center
Lorea Coronado-Garcia, Greening Health Systems Specialist, United Nations Development Programme

C8 - NEW CONSIDERATIONS FOR BUILDING, ADJUSTING, AND SUSTAINING A PHARMACEUTICAL WASTE PROGRAM

WASTE

CEU: ACHE

Using a decision tree, the session's group will vote on which direction to take and "build" a pharmaceutical waste program. Presenters will provide real-time feedback, share experiences, specific choices, and results in hospital and non-acute settings. The tone of the workshop will be interactive: voting, immediate feedback, guided conversation, group discussion, and Q&A.

Presented with input by HCA and WMSS PharmEcology, last year's interactive and highly popular session is refreshed with the current state of rule changes and considerations for building strong teams to support an environmentally conscientious pharmaceutical waste program.

Participants will explore various decision points and key choices for design, implementation and future modification, including preparing for a change from current to proposed rules. Discussion will include: operations, environmental goals, expectations from our communities, EPA, DEA, OSHA, NIOSH, and developing a positive team to make positive change. The group will use a decision tree to "build" a pharmaceutical waste program; strengths, opportunities and examples will be explored. Presenters are experienced in program design, implementation and adjusting for regulatory or market needs.

Speakers

Anna Ward, Sustainability Manager, HCA
Monica Livingston, Senior Implementation Manager, WMSS PharmEcology

C9 - STARTING WITH THE PATIENT: HOW CLINICIANS CAN SUPPORT ACCESS TO FOOD, ENERGY AND MORE

CLINICIANS

CEU: ACHE, CME, ANCC

This CME-aligned "advocacy boot camp" will introduce participants to an emerging competency that reinforces the intersection of greenhealth and SDH (social determinants of health): the unique, critical role played by physicians/clinicians as "gate-keeper" between patients and a host of energy- and food-related resources; and best practices for carrying out those functions in a high-quality, patient-centered way. The presenters will train through the lens of a Massachusetts Health Care Innovation Investment initiative that targets medically complex, high-cost, high-need patients treated in the emergency department at Boston Medical Center, New England's largest safety net hospital. The pilot will deploy

Community Health Advocates, Boston EMS partners, and important will feature “upstream” medical-legal partnership strategies that integrate clinician-oriented SDH tools and templates into ED team-based practice and in data systems including the EHR.

Speakers

Samantha J. Morton, Executive Director, Medical-Legal Partnership Boston
Kalpana Narayan, Emergency Medicine Physician, Boston Medical Center

D BREAKOUT SESSIONS 3:15 PM - 4:30 PM

D1 - THE NATIONAL BIKE CHALLENGE: WE'RE TALKING ABOUT A REVOLUTION (OF YOUR FEET)

LEADERSHIP | CLIMATE

CEU: ACHE

As we address the impacts of climate change, it's imperative that we look at transportation, the fastest growing source of greenhouse gas emissions (GHGe) in the U.S., as an opportunity to reduce carbon emissions. In this session, the presenters will explore how creating a culture that supports bike riding and bike programs can be an important part of the health sector's efforts to reduce carbon emissions.

UCHealth is in its fourth year of participating in the National Bike Challenge and other bicycling related initiatives, including: Bike to Work Day celebrations, Bike Friendly Business designations, and the UCHealth Bike Challenge. During this session, expert speakers from UCHealth and People With Bikes, will provide background on the National Bike Challenge, highlight the benefits from participating in alternative transportation programs, review community engagement opportunities, and explain how attendees can participate within their communities and health systems.

Speaker

John Drigot, Sustainability Coordinator, UCHealth Northern Colorado

D2 - SETTING THE WHOLE TABLE: ENGAGING ACROSS DEPARTMENTS TO SUPPORT HEALTHY FOOD

FOOD

CEU: ACHE, CDR

Health care leaders are on the cutting edge of implementing a systems approach to addressing some of the most pressing health challenges facing the country. This session will explore why and how leading health systems are using this approach to improve food systems and address associated health

challenges. Participants will discuss the intersections between food and departments such as community relations, employee wellness, food service, clinical services and more. Participants will also hear two outstanding examples of how working across departmental silos to address food related issues has inspired creative strategies to improve community health and community wealth. From the Bay Area in Northern CA, we will hear a presentation on the emerging Anchors for Resilient Communities (ARC) project and how hospitals have played a key role and brought their resources to bear to improve community health outcomes and building community wealth. Inspired by a CMS Waiver, LifeBridge Health in Baltimore, MD is building a cross-cutting food team to improve community food access as a strategy to improve population health and reduce costs.

Speakers

Lucia Sayre, Western US Regional Director, Healthy Food in Health Care Program, Health Care Without Harm
Lane Levine, Project Manager, Population Health, LifeBridge Health
Jennifer Obadia, Eastern US Regional Director, Healthy Food in Health Care program, Health Care Without Harm
Jan Villarante, MS, RD, Director, National Nutrition Services, Enterprise Shares Services, Kaiser Permanente

D3 - THE NEXT GENERATION OF COMMUNITY BENEFIT

SOCIAL DETERMINANTS OF HEALTH | LEADERSHIP

CEU: ACHE

Public health research and IRS policies have heightened the need for integrated upstream collaborative action to improve the social determinants of health. New requirements for community health needs assessments have brought hospital, public health and community partners together to identify and address significant community health issues. These changes present opportunities for hospital community benefit policies to consider environmental projects impacts toward community health improvement. This session will provide perspectives from industry pioneers on the emerging issues in hospital community benefit with the consideration of environmental issues and other determinants of health.

Speakers

Terri Scannell, Senior Social Responsibility Director, Vizient
Dora Barilla, Executive Leader, Community Investments, Providence Health and Services
Sarah Havens, MASL, Director, Department of Community & Preventive Care Services Gundersen Health System
Julie Trocchio, Senior Director, Community Benefit & Continuing Care, Catholic Health Association of the United States

D4 - MULTISTAKEHOLDER STORMWATER PLANNING FOR HEALTH AND RESILIENCE

CLIMATE | GREEN DESIGN

CEU: ACHE

Health care facilities play a vital role in protecting and providing for the health of the community in which they serve. Despite the best efforts of modern medicine, communities adjacent to contaminated waterways have an increased risk of illness from bacteria, viruses and parasites which flourish in polluted waters. Rain water and cooling tower condensation may run off buildings and parking lots and ultimately end up in the local waters. Hospitals have an opportunity to improve their environmental footprint and the health of their watershed by developing, implementing, and maintaining effective stormwater management programs.

This interactive session will be divided into two sections. The first will contextualize the need for enhanced management of stormwater through the lens of community health, resilience, and economics. Topics will include stormwater as a resource; the costs of runoff; health effects of polluted stormwater; the evolution of stormwater practices; and examples of best practices.

The second section will be a case study that illustrates a multi stakeholder experience in developing a stormwater master plan. Case study steps include engaging executive leadership; survey and value-based assessment; on-site tour; decision matrix and criteria to rate and compare alternative solutions; and a stormwater master plan.

Speakers

Dr. Joan Plisko, President and Founder of Plisko Sustainable Solutions
Ashley Traut, Senior Manager for Innovative Stormwater Projects, Blue Water Baltimore
Brian Gray, Director Clinical Engineering, MedStar Harbor Hospital

D5 - EVALUATING INTEGRATED MICROGRID SYSTEMS AS THE FUTURE OF ENERGY RESILIENCY IN HEALTH CARE

ENERGY

CEU: ACHE, ACCO

The medical sector is increasingly focused on resiliency due to grid outage concerns that may be exasperated due to the growing impact of climate change. Our presentation addresses the energy side of resiliency by engaging in a discussion on the use of comprehensive Microgrid systems as resilient and efficient energy solutions for the health care sector. Our panel session will present CleanMed attendees with an explanation of an integrated Microgrid solution, a breakdown of an integrated Microgrid's various

components and processes, and an exploration of the benefits these systems offer health care networks, which is cleaner, greener and more resilient energy. We believe Microgrids that compliment regional grid infrastructures are the future of energy resiliency.

Speakers

- John Andersen, Jr., President, Greenleaf Advisors, LLC*
- Daniel L. Doyle, PE, LEED AP O+M, Chairman-Illinois, Grumman/Butkus Associates*
- Aaron Walters, Managing Partner, GreenCity Power*
- Pat Avery, General Manager, Distribution Automation, G&W Electric Company*
- Marc Thrum, Vice President Marketing & Business Development, Intelligent Generation*
- Robert Biggio, Senior Vice President of Facilities & Support Services, Boston Medical Center*

D6 - HELPING PEOPLE LEAD HEALTHY LIVES

GREEN DESIGN

CEU: ACHE, AIA, USGBC

Today's medical community is championing the tremendous potential that exists for preventing health problems by embracing better, healthier choices. To encourage these healthy behaviors, Intermountain developed the LiVe Well Program, a team of physicians, nurses, dietitians and other health care professionals who have come together to help families and communities across Utah make choices that positively impact their health. This program reaches members and employees throughout the 22 hospitals and 185 clinics in the Intermountain Healthcare system.

The session will discuss how Intermountain defined the LiVe Well Program; how it developed the operational and construction standards that guide its development; how it successfully implements the program across its health care facilities; and how it is continually reviewed and updated for improvements. The first part of the session will include research that supports specific program elements. It will present the abilities and prompts that help bring about healthy living, and the environmental relationships with building design that support it. The second portion of the session will discuss the specific environmental and design elements from two case studies – that highlight circulation and stairwell design, views to the exterior, community gardens, active walking paths on-site, places of respite, signage and wayfinding, healthy eating areas and others—that support the program at existing and new facilities under construction.

Speakers

- Jean Hansen, Sustainable Principal, HDR*
- Locke Ettinger, PhD, Intermountain, Director of Health Promotion & Wellness*
- Steven Bergstrom, Intermountain, Dir of Sustainability,*
- Matthew Cunha-Rigby, HDR, Sr Sustainable Consultant*

D7 - ANTIMICROBIALS IN HAND SOAPS: THE CASE FOR ALTERNATIVES AND LESSONS FROM THE FIELD

SAFER MATERIALS

CEU: ACHE, CME, ANCC

Infection prevention and control in health care is of primary importance. However, some common ingredients in hand soaps used in the health care setting, including triclosan and triclocarban, can pose hazards for employees and the environment. Exposures to triclosan are widespread in the general population through both oral and transdermal pathways. A U.S. Centers for Disease Control study found triclosan present in the urine of 75 percent of the people tested. Some triclosan discharged to wastewater passes through wastewater treatment plants and is released in surface water and sludge, where it can persist in the environment and contaminate fish and even food grown in sludge-amended soil. Triclosan is undergoing scrutiny as studies show an increasing number of potentially adverse effects in laboratory animals, wildlife, and humans.

Practice Greenhealth has launched a new challenge to reduce the use of triclosan and triclocarban in the health care setting. In this session, learn how leading hospitals implemented policies to eliminate the use of triclosan and triclocarban in hand soaps, from commitment through implementation. Hospital leaders with direct experience will discuss best practices, steps for overcoming challenges, internal messaging, strategies for achieving the challenges, and key partnerships in the purchase of safer hand soaps.

Speaker

- Ted Schettler, MD, MPH, Science Director, Science and Environmental Health Network*
- Joel Sigler, Senior Manager, National Environmental, Health & Safety, Kaiser Permanente*
- Amanda Holloway, Section Head, Facilities Operations, Section of Waste Management, Recycling and Environmental Services, Mayo Clinic*

D8 - IMPROVING INTRAVENOUS PHARMACEUTICAL MANAGEMENT: PRE-FILLED SYRINGE IMPLICATIONS FOR COST, WASTE AND SAFETY

WASTE | GREENING THE OR

CEU: ACHE, CME

If the United States health sector were a nation itself, it would rank 13th in the world for greenhouse gas emissions. Pharmaceutical pollution contributes significantly to both greenhouse gas and non-greenhouse gas emissions, which

subsequently negatively impact public health. In the United States, health care alone is responsible for 10 percent of the nation's greenhouse gases, of which pharmaceuticals may account for more than 16 percent of this contribution.

This presentation will highlight the perioperative pharmaceutical management analysis at Yale University. The benefits to cost, waste, and safety will be reviewed, and cost savings and reductions in waste will be extrapolated to the national level.

Speakers

- Jodi Sherman, MD, Assistant Professor of Anesthesiology; Environmental Compliance Officer; Affiliated Faculty, Climate Change and Health Initiative, School of Public Health Yale University*
- Elena Bukanova, MD, Assistant Professor; Fellow Yale University*

D9 - GREENING THE LABORATORY CELL BY CELL: A GUIDE TO EMBEDDING SUSTAINABLE PRACTICES INTO YOUR HOSPITAL'S HISTOLOGY AND CYTOPATHOLOGY LABS

CEU: ACHE, CME, ANCC

Laboratories contribute substantially to the environmental footprint of the hospital and generate a bulk of the hazardous materials found in hospitals, which costs thousands of dollars annually to manage and dispose of properly. We will delve into two major lab areas: the histology lab and the cytopathology lab and highlight best environmental practices around solvents, stains and fixatives as well as plastics, paperboard and durable medical equipment such as microscopes. This educational session will review the steps taken to reduce waste, increase recycling, identify hazardous materials, reduce the chemical inventory, and increase staff safety. Expert speakers will also discuss creative approaches to engage key stakeholders, including the medical director of the lab, in reducing the laboratory environmental footprint by using simple, easy strategies and implementation methods. The session will feature a Q&A with the speakers.

CLINICIANS | WASTE

Speakers

- Ilyssa Gordon, MD, PhD, Anatomic & Clinical Pathology, Cleveland Clinic*
- Eric Bashaw, Director of Environmental Compliance, Gunderson Health System*

THURSDAY, MAY 18

E BREAKOUT SESSIONS

9:00 AM - 10:15 AM

E1 - HOSPITALS ALIGNED FOR HEALTHY COMMUNITIES: A TOOLKIT TO ACHIEVE SUSTAINABLE, LOCAL IMPACT

SOCIAL DETERMINANTS OF HEALTH | LEADERSHIP

CEU: ACHE

Historically, hospitals and health systems have focused on quality of care and access to care, but changes included in the healthcare delivery model have created new paths to community engagement and benefit. And a focus on the social determinants of health such as employment, income, education and community safety, thought to account for up to 80 percent of an individual's health, are increasingly important for health systems to address if they are to remain viable in the new healthcare landscape. How can your hospital go beyond their walls to improve the environmental, economic and social conditions that impact the health of your patients, families and community? This session will outline a process for hospitals to tie their mission to their community's health and wealth. The session will feature the Hospitals Aligned for Healthy Communities toolkit series (released Fall 2016) focused on the leading policies and practices that hospitals are adopting in (1) the sourcing of local, minority and women business enterprises; (2) guidelines on community investment; and (3) local hiring and workforce development. Seattle Children's will present the findings of a feasibility study examining Anchor Institutions and Community Wealth Building in Seattle that involves piloting the toolkits. University Hospitals will share the lessons learned from their Vision 2010 program that achieved ambitious goals around hiring of local, women and minority owned businesses, spending locally and leading change for a \$1.2 billion expansion effort. The goal of this session is to connect this work to the sustainability goals of health systems, and equip health systems with the necessary tools for pursuing their own Anchor Mission.

Speakers

David Zuckerman, *Democracy Collaborative*
 Colleen Groll, *Seattle Children's*
 Sarah E. O'Keefe, *University Hospitals*

E2 - COMMUNITY BENEFIT STRATEGIES TO PROMOTE HEALTHY FOOD ACCESS AND HEALTHIER FOOD ENVIRONMENTS

FOOD | SOCIAL DETERMINANTS OF HEALTH

CEU: ACHE, CDR

Several provisions of the Affordable Care Act (ACA) have prompted hospitals to reach beyond their walls to address social, economic, and environmental conditions that contribute to illness in order to improve the health and well-being of their communities. Recent changes under the ACA to IRS regulations governing the community benefit obligations of tax-exempt hospitals have created new opportunities for non-profit hospitals to collaborate with other stakeholders to implement community health improvement plans that address social determinants of health such as housing, environmental and safety conditions, and food insecurity. This session presents innovations for hospitals mobilizing community benefit programming to improve healthy food access and promote healthier food environments. Compelling examples of community engagement demonstrate how hospitals can improve healthy food access and reduce risk of obesity and diet-related disease.

Speakers

Susan Bridle-Fitzpatrick, *Senior Researcher, Healthy Food in Health Care Program, Health Care Without Harm*
 Diana Cutts, MD, *Assistant Chief of Pediatrics, Hennepin County Medical Center*
 Kathryn Brodowski, MD, *Director of Public Health and Research, Greater Boston Food Bank*

E3 - SCREENING FOR SOCIAL NEEDS: PRACTICAL TIPS TO STRENGTHEN POPULATION HEALTH AND SUSTAINABILITY EFFORTS

SOCIAL DETERMINANTS OF HEALTH | LEADERSHIP

CEU: ACHE, CME, ANCC

Screening for social needs prevalence is a critical first step to understanding many of the key factors—like food, heat and shelter—impacting your patients' health. But making sure you ask the right questions—ones that accurately dig into the prevalence and impact of unmet social needs on your unique population and fit the scope of your program—can be challenging. This session will explore key decisions to answer to decide if you are ready to start screening in your institution. Through exploration of several social needs screening approaches

participants will learn what it takes to design a screening tool and integrate this approach into a clinical setting.

Speaker

Aparna Bole, MD, FAAP, *Assistant Professor of Pediatric Medicine, Case Western Reserve University School of Medicine*
 Tigee Hill, *Managing Director of Program, Health Leads*

E4 - BUILDING A GREEN FLEET: A CASE STUDY ON A HOSPITAL-BASED ENVIRONMENTALLY-FRIENDLY AMBULANCE PROGRAM

TRANSPORTATION | CLIMATE

CEU: ACHE

Hospitals of today know that a community's relationship with them does not begin and end in the entryway of the emergency room, but extends into the environment that its patients live. The noise and particle pollution caused by vehicles, especially in high-volume cities, has a negative impact on many initiatives of a health care organization including community health, patient experience, and quality of care. Currently, most ambulances must idle continuously to maintain a steady temperature for the vital medications carried onboard and to ensure the onboard computer systems are charged in order to maintain communication. By upgrading vehicles with green technology, the same medical transportation services can be provided with decreased climate impact and at a fraction of the operational cost.

Using the success of Lenox Hill Hospital (a member of Northwell Health) in starting New York City's first hospital-based, environmentally-friendly ambulance program as a case study, you will learn how an EMS program can improve the environmental impact of their fleet using state-of-the-art green technology. Join us for this panel discussion to see how a commitment to address air pollution at the source by greening ambulances can also reduce your carbon footprint while providing cost-savings on fuel use and vehicle repairs. Our panelists will discuss their experience getting a program approved in New York City, provide suggestions on how to partner with local municipal leaders, and address how and when to unlock the funding required to make your investment. It all starts with reductions in engine idling, but it involves so much more.

Panelists

Joshua Strugatz, *Lenox Hill Hospital Associate Executive Director*
 Scott Barnes, *Vice President of REV Group, Inc.*
 Paul Power, *Director of Workforce Safety Operations*

E5 - TOP TEN LESSONS LEARNED ON THE PATH TO ENERGY INDEPENDENCE

ENERGY

CEU: ACHE

Gundersen Health System set a transformational goal in 2008 when it declared that it would offset its fossil fuel energy use with renewable production that it owned within a six year time-frame. In October 2014, the health system achieved its first day of Energy Independence. Although the undertaking was tremendously successful it was not without its difficulties and obstacles. Learn about “lessons learned” from the journey and discuss potential tips and traps that you can utilize when embarking on an aggressive energy management goal for your organization.

Speaker

Jeff Rich, Executive Director, Gundersen Envision®, Gundersen Health System

E6 - GREEN HOSPITAL PROGRAMS IN KOREA

GREEN DESIGN

CEU: ACHE, AIA, CME, ANCC, USGBC

Yonsei University Health System (YUHS or Severance), located in Seoul, Korea is huge complex of hospitals and medical school. It comprises over 3,500 beds of General hospital, Cancer hospital, Gangnam hospital and other specialized. We have about 12,000 outpatients a day and 3,000 inpatients, 1,600 physicians and 7,000 employees including nurses and working for quality-care of the patients with highly advanced diagnostic and treatment technology.

Since 2010, YUHS started green hospital program firstly in Korea as a leading university hospital. We have established several programs since then as follows: (1) Established TFT comprising each relevant sector for leadership (2) Implement BEMS (Building Energy Management System) based on IT system and set goals to reduce 30 percent energy as early as possible. Significant energy reduction already done (3) Eliminate all mercury-containing medical devices and minimize other toxic chemicals in the hospital (4) Introduce green purchasing guidelines (5) Adequate water and waste treatment and reuse

YUHS conducted a leadership role to establish Korea Society of Green Hospitals in 2013 and provided an opportunity to share our experience with over 20 hospitals in Korea. We convened Asian conference in October 2014 to share experiences in this region with GGHH leaders.

We will present how and how much energy has been saved in our hospital during last five years by introducing

BEMS and other mechanics IT system needed to optimize operation of energy saving system.

Speaker

Dr. Dongchun Shin, Yonsei University College of Medicine

E7 - TACKLING THE HEALTHIER HOSPITALS SAFER CHEMICALS CHALLENGE: SUCCESSES FROM THE FIELD

SAFER MATERIALS

CEU: ACHE

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 and improve public and environmental health. The Healthier Hospitals’ Safer Chemicals Challenge provides tools, resources, case studies, and step-by-step guidance to increase the use of green cleaners, reduce the use of PVC and DEHP-containing medical devices, eliminate mercury, and purchase healthier furnishings. In this session, you’ll learn how leading hospitals implemented the Challenge 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 the goals, and key partnerships. In addition, the session will cover the process for submitting data to document success with one or more of the goals.

Speakers

Brenna Davis, Director of Sustainability, Virginia Mason Health System
Anna Cifranic, Sustainability Specialist, University Hospitals Health System
Kyle Tafuri, Senior Sustainability Advisor for Hackensack Meridian Health

E8 - KICK THE TRASH CAN TO THE CURB: TRANSFORMING HOSPITAL CLINICAL CULTURE BY INCORPORATING WASTE MANAGEMENT AND WELLNESS INITIATIVES

WASTE

CEU: ACHE

Explore the challenges with starting or making changes in a “Greening Initiative” within a non-profit community hospital and in a well-established program at a large urban health care organization. One difficult challenge is attempting to educate

clinicians and others to change the wasteful behaviors while having a positive impact on the organizational culture.

Health care facilities may have the rationalization that past behaviors and actions are the way of future progress. People fear change and will typically fight forward progress.

Recycling is nothing new in most business, it has been around for a while so what can you do to switch it up? You look at what hasn’t been done yet, yes you have put recycle bins in every nook and cranny and asked caregivers to recycle appropriately but why should they when it is so convenient to toss away at ones desk. The next step is to remove the over populated waste basket. Adding recycle bins is fine but if you don’t remove the trash bins the behavior doesn’t change. Learn about an innovative program at the Cleveland Clinic whose plan is to Kick the trash Can to the Curb and create recycle centers in which the caregiver now will have to get up from their desk and make a decision to either recycle or throw away an item while adding some well- deserved steps on their fit-bits as they are counting steps to be a healthier version of themselves.

Any one person can embark on this journey, no matter what position is held within the workplace. Sharing with others the importance of having a strong support system from management is essential for success. You will also hear from a CRNA from the New Hanover Regional Medical Center who discovered challenges and inspiration as she started a greening initiative in her organization. Audience participation is key to this inspirational and innovative presentation.

Speakers

Gabriele Olinchic, Regional Program Coordinator, Cleveland Clinic
Kelly Wells, CRNA, New Hanover Regional Medical Center

E9 - HOW TO ENGAGE CLINICIANS IN SUSTAINABILITY USING NOVEL EDUCATIONAL AND CREATIVE METHODS

CLINICIANS

CEU: ACHE, CME, ANCC

This interactive panel will begin with a short didactic talk reviewing the common barriers to engaging clinicians in sustainability practices. 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, and the “What Can you Buy?” game designed to show clinicians how to translate waste reduction efforts into actual items that could be purchased. Finally, 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

Speakers

Lauren Berkow, University of Florida, Associate Professor
Karin Zuegge, University of Wisconsin
Jodi Sherman, Yale University, Assistant Professor

F BREAKOUT SESSIONS 10:30 AM - 11:45 AM

F1 - ENGAGED LEADERSHIP: APPROACHING AND NURTURING SENIOR LEADERSHIP AND BOARD OF DIRECTORS

LEADERSHIP

CEU: ACHEC

Full, active engagement and support from an organization’s senior leadership and board of directors is critical for the long term success of any sustainability program. In this session Barbara E. Tretheway, senior vice president and general counsel, and executive sponsor of HealthPartners sustainability program; and Janet Howard, director, member engagement at Practice Greenhealth will discuss the different tactics that they have used or seen to get the support and engagement from these two critical groups. The senior leadership is typically largely concerned with the financial and governance impacts of any department, while the board of directors at non-profit health care systems is typically focused on how initiatives affect the mission. HealthPartners culture and approach towards the determinants of health are illustrative of the tact they have taken to engage and seek the support of their senior leadership and board of directors. In 2016, Practice Greenhealth kicked off its consulting offering with senior leadership teams to develop multi stakeholder goal setting and strategic deployment. Taking the time to capture the varying perspectives, connect to overarching goals and strategic priorities and to help connect the dots, further engages leadership so that they are onboard with the work and its various places of intersection. Barbara and Janet will discuss how the tactical approach taken with these two groups are similar and how they are different.

Speakers

Barbara Tretheway, Senior Vice President and General Counsel, HealthPartners
Janet Howard, Director, Member Engagement and Healthier Hospitals, Practice Greenhealth

F2 - SUSTAINABLE FOOD: TRACKING FOR IMPACT

FOOD

CEU: ACHE, CDR

What is the most important piece of data that helps you make the case for sustainable food procurement? By exploring best practices, current challenges, tools and methods for data collection, participants will learn the how and why of collecting valuable data.

Participants will discuss their major concerns around data collection and reporting. Food and data content experts from Health Care without Harm, Practice Greenhealth and a leading health care facility will provide a comprehensive overview of how to accurately collect, track, and report sustainable food spend. A workshop portion of the session will troubleshoot real-time data challenges and share methods of using that data to support robust food programs. This session will help participants maximize data to reinforce and grow their own engagement in local and sustainable food procurement.

Speakers

Theresa Pattee, Food Program Coordinator, Health Care Without Harm, Practice Greenhealth
Chris Bodkin, Data Coordinator Sector Performance & Recognition, Practice Greenhealth
Dan Henroid, Director, Nutrition and Food Services at UCSF Medical Center

F3 - INNOVATIVE APPROACHES TO PRIMARY ASTHMA PREVENTION

SOCIAL DETERMINANTS OF HEALTH | SAFER MATERIALS

CEU: ACHE, ANCC

Massachusetts has embarked on a unique program to address the primary prevention of asthma in the state. The goal is not just to reduce asthma emergency room admissions, but actually prevent asthma from developing in the first place. The innovative approach is based on some evidence that certain interventions can or are likely to reduce the development of asthma. The approach recognizes that social factors, along with many others, have an influence on asthma onset and asthma exacerbation. The primary prevention of asthma has been added to the MA State Asthma Management plan. The plan is developing a multi-pronged set of interventions..... Hear from designers, practitioners and community partners about the innovative program and how you might replicate it in your area.

Speakers

Dr. Polly Hoppin, Coordinator, State Asthma Management Plan, Massachusetts
Ted Schettler, MD, Science Director of the Science and Environmental Health Network and a Science Advisor to Health Care Without Harm
Wendy Brunner, MS, PHD, Asthma Program Manager and Epidemiologist, Minnesota Department of Health

F4 - TAKING IT TO THE STREETS: CLIMATE ACTION IN NEIGHBORHOODS

CLIMATE | SOCIAL DETERMINANTS OF HEALTH

CEU: ACHE

The Cleveland Climate Action Fund is a partnership of health care, nonprofits, the city Cleveland and foundations to promote climate action with the City of Cleveland. Through innovative workshops and grant opportunities community leaders learn how to take climate action in their own neighborhoods. The Cleveland Climate Action Toolkit is a resource for the citizens to create the changes they would like to see in their community. The Fund operates through workshops and by funding projects in communities. To date workshops have been held in six Cleveland neighborhoods: Glenville, Detroit Shoreway, Kinsman, St. Clair Superior, Old Brooklyn and Slavic Village. In 2014/2015 the Fund distributed more than \$80,000 to fifteen projects for community residents to take action in the community. The projects funded ranged from community gardens, to solar installations and recycling efforts.

In 2016, the CCAF partnered with IOBY at the Sustainable Cleveland 2019 Summit to use crowdfunding as a tool to accelerate the adoption of community climate action. The presentation will share stories from this journey and host a discussion on community climate action.

Speaker

Jon Utech, Cleveland Clinic

F5 - SAVING ENERGY AND RESPONDING TO CLIMATE CHANGE

ENERGY | CLIMATE

CEU: ACHE

Learn how hospitals around the world are saving energy and saving money while responding to climate change. Using examples from leading hospitals and health systems in the U.S. and around the world, learn how hospitals are reducing their greenhouse gas emissions, making their facilities resilient to the impacts of climate change and through leadership, expanding these efforts to influence change in the communities they serve. We will also explore how, through participation in the 2020

Healthcare Climate Challenge, these individual health systems/hospitals expand their efforts to have a collective global impact.

Speakers

Scott Slotterback, Global Green and Healthy Hospitals Policy Director
Dr. Dongchun Shin, Yonsei University College of Medicine
Carol Benhe, Project Officer, GGHH Pacific Network, Australia
Gordon C. Howie, Regional Director of Facilities & Construction Services, Mayo Clinic Health System
John Messervy, Corporate Director of Design and Construction, Partners HealthCare, Boston

F6 - HIGH PERFORMANCE DESIGN FROM START TO FINISH

GREEN DESIGN

CEU: ACHE, AIA, USGBC

Achieving high performance health care design requires an integrated approach through all stages of a project's lifecycle. Health care owners don't have to be energy experts to ensure they receive the highest performing building possible by supporting this approach from the very beginning of its inception to the day of completion and beyond. This session will provide health care owners, designers and engineers a framework that covers each stage of the process from the qualification and request for proposal (RFQ / RFP) through design, construction and operations. The presenters will use a range of high performance case studies including hospitals, ambulatory care and medical office projects to highlight best practices at each stage of the process. Lessons learned from the direct experience of completing these projects will provides attendees a deeper understanding of how to address the complex project challenges including budgetary constraints that can arise. At the RFQ and RFP stage, strategies will be shared for incorporating high performance design criteria to inform selection of the design team including architects, engineers and consultants. The emerging trend of energy savings performance contracts that tie the operational performance of the completed project to a portion of design team fees will also be covered. Next, the process for establishing owner's sustainability drivers and how to translate those into specific design goals for the Owner's Project Requirement (OPR) will be reviewed. The session will then review an integrated design process and highlight the key deliverables to require from design teams that provide owners with the most information needed for effective decision making. The presenters will share best practices for commissioning on new construction projects. Insights into dynamic, also known as continuous commissioning will be shared that can provide owners with the highest level of operational performance possible relative to the system design.

Speakers

Breeze Glazer, LEED AP BD+C, Sustainable Design

Leader, Senior Associate, Perkins + Will
Arash Guity, PE, LEED® AP, CEM, Associate Principal, Chief Sustainability Engineer/Team Leader, Mazzetti

F7 - INNOVATIONS IN PVC-FREE MEDICAL PRODUCT DESIGN

SAFER MATERIALS

CEU: ACHE

Many major health systems have made a public commitment to move away from polyvinyl chloride (PVC) because of health and safety concerns throughout the life cycle of the material. Even more systems have been engaged in programs to reduce their use of targeted PVC-containing products. PVC is continuing to be deselected by major manufacturers because of market pressure and lifecycle concerns. In this session, learn from a health system that has made a commitment to move away from PVC products and how they have implemented that commitment throughout their system through standards development and purchasing. This session will also explore the ways leading manufacturers are responding to the demand from hospital systems for PVC-free products, while sharing successes and challenges of developing safe and effective alternatives that move the sector toward greater sustainability.

Speakers

Don Butler, CSP, OHST, Senior Manager, Product Stewardship, Johnson & Johnson
Mary Larsen, Director, Sustainability and Supplier Diversity, Advocate Health Care
Sarah L. Hill, Senior Manager Sustainability, Office of Global Sustainability, BD

F8 - SYSTEMATIC APPROACH TO WASTE REDUCTION AND COST SAVINGS IN THE OR: THE TAVR CASE

WASTE | GREENING THE OR

CEU: ACHE, ANCC

Dr. Andrade has been a leader for Greening the OR efforts at the University of Minnesota Medical Center for the past seven years. Through his work with the OR Green Team, Dr. Andrade has aided in the implementation of on-going pack reviews, blue wrap recycling and a focus on reusable devices. Upon review of pack use and disposal costs, Dr. Andrade and the OR Green Team conducted several waste sorts for the TAVR case, in efforts to reduce staff time, unnecessary waste and improve efficiency. This session will demonstrate the steps to conduct a waste sort in the OR, how to engage physicians

in this work and creating a culture of sustainability in the OR through successful team efforts and a diverse OR green team.

Speakers

Dr. Rafael Andrade, University of Minnesota Medical Center
Kris Roiger, University of Minnesota Medical Center
April Schumacher, Fairview Health Services

F9 - THE MINNEAPOLIS VA HEALTH CARE SYSTEM'S EXPERIENCE WITH GREENING THE OR

GREENING THE OR

CEU: ACHE, ANCC

The Minneapolis Veterans Administration Healthcare System (MVAHCS) operating room (OR) staff began a journey of focused waste reduction and improved recycling in 2012. Initial inspection and waste removal by the GEMS Program Manager indicated the OR was producing far more hazardous waste than was appropriate. This began a personal project to track OR waste production, including multiple waste audits of all the operating room suites. We achieved steep declines in OR hazardous waste production in the first year of implementation. These early successes inspired staff creativity and the desire to go further with Greening the OR. MVAHCS identified changes they began to implement, and requested further guidance. Waste streams studied were trash, recycling, blue wrap recycling, regulated medical waste, sharps containers, and hazardous waste. Practice Greenhealth has developed the Greening the OR initiative that includes case studies and tools to assist hospitals in implementing any or all of these sustainable practices within their surgical/anesthesia departments. During this journey we discovered the value of resources provided by Practice Greenhealth, including the Greenhealth Tracker, Greening the OR Symposiums and a number documents from the Greening the OR Toolkit.

The challenge involved getting staff at a federal medical facility to adopt this methodology to our unique circumstances. The ideas and the methods recommended by private hospitals did not exactly fit the VA environment. MVAHCS borrowed heavily from the Practice Greenhealth materials in designing our GOR program. We began to implementation of as many of these practices as possible over the course of our five year journey.

Speakers

George Edwin Johnson, GEMS Program Manager, MVAHCS
Wanda Teply, Chief Anesthetist, MVAHCS
Jane Dirnberger, Operating Room Nurse, MVAHCS
Steve Waisbren, Staff Surgeon, MVAHCS
Kristen Bastug, University of Minnesota Medical School