



## **The Global Health and Safety Initiative 2008 Accomplishments**

In October 2007, a new sector-wide initiative to build a social movement in health care to achieve dramatic improvements at the intersection of patient safety, worker safety and environmental sustainability was launched. The Global Health and Safety Initiative (GHSI) brought together 120 people from over 20 major health systems, non-profit organizations, governmental agencies, academic institutions, group purchasing organizations and other stakeholders to stand together and make the commitment for change within the health care sector. One year later, GHSI has seven major health systems as co-founders – Kaiser Permanente, Ascension Health, Catholic Healthcare West, St. Joseph Health System, Hospital Sisters Health System, Partners Healthcare, and MedStar Health – committed to support and fund the GHSI for three years to get the Initiative off the ground. In addition, GHSI has partnered with leading non-profit organizations to lend their expertise, Health Care Without Harm, Practice GreenHealth and the Center for Health Design.

By the end of 2008, GHSI had more than 60 organizations participating, was circulating a monthly GHSI e-newsletter to approximately 600 individuals and had established a website, [www.globalhealthsafety.org](http://www.globalhealthsafety.org), with a wiki function for founding health systems.

GHSI's mission is to significantly improve the safety and environmental sustainability of healthcare. GHSI is organized into five workgroups – Built Environment, Healthy Purchasing, Sustainable Operations, Research, and Corporate Social Responsibility/Public Policy – to help set the agenda and to accelerate the adoption of safer and environmentally smarter healthcare practices and operations.

The following is a summary of GHSI resources and accomplishments for 2008, organized by workgroup.

### **Built Environment**

Until the recent economic downturn, the US healthcare sector was engaged in the largest building boom in forty years for new construction, major additions, and renovations. At the same time, rising and volatile energy costs, looming climate protection regulation, and a growing interest in healthier, energy efficient, high performance building practices is creating the impetus for a transformation of healthcare design, construction, operations and maintenance. The nation's economic difficulties have significantly slowed down new construction, but the need for facility improvements continues to exist.

Working in partnership with the other GHSI workgroups, the Built Environment workplan is designed to organize and develop information, resources and tools to address high priority areas of concern with a focus on integrative health-based design and evidence based design practices. Participating healthcare systems in GHSI have access to an array of tools and best practices to implement strategies that will augment patient safety, workplace safety, and maximize the sector's environmental performance, while reducing healthcare's eco-footprint. Accomplishments and resources developed in 2008 include:

### **Material Fact Sheets**

The toxic contents of building materials are often not known or apparent. To address this gap in knowledge, fact sheets have been developed and posted to the GHSI website. They include:

- [Formaldehyde Fact Sheet](#)  
This fact sheet discusses formaldehyde found in building materials.
- [Product Comparison: No Added Urea Formaldehyde Casework](#)  
Provides a list of commercial medium density fiberboard, particleboard, and wheatboard products currently available on the market with no added urea formaldehyde.
- [Toxicants Fact Sheet](#)  
Provides an overview of toxic chemicals found in building materials for health care organizations.
- [Insulation Fact Sheet](#)  
Provides a list of commercial batt insulation products currently on the market with no added formaldehyde.

### **Guiding Principles for Sourcing Building Products, Finishes and Furnishings**

This [template](#) was created to provide health care systems, architects and design firms with guiding principles in support of healthier building products, furniture and furnishings; can be used wholesale or as a menu of items to be adopted.

### **Ripple Database**

Working with the Center for Health Design (CHD) to construct a “best practices” database for sustainable and evidence based design in healthcare design and construction resulted in the release of the [beta version of RIPPLE](#). This database includes 150-plus design practices that Kaiser Permanente has adopted. RIPPLE is an open source, searchable database, with a formal case study template so that health systems can share information in a consistent format. Plans are in place to include strategies from other organizations in the database, including from CHD’s Pebble Partners and Practice Greenhealth’s Green Guide for Healthcare registered projects. As the database grows, users will be able to compare design decisions made by multiple health systems and see the results of those decisions.

### **Pharos**

Developed by the Healthy Building Network (HBN), [PHAROS](#) is an online tool that allows users to assess building products, furnishings and finishes. The database covers a broad spectrum of building materials and rates products on safety and sustainability criteria throughout their lifecycle. New design and functional elements were added in 2008 to make the database more user-friendly and allow a variety of approaches to the data – from simple comparisons of

products to more in-depth examination of data. For example, a “chemical look-up” feature allows users to screen specific chemicals.

## **Healthy Purchasing**

The Healthy Purchasing work of the GHSI offers one of the most highly leveraged opportunities in the entire Initiative. The goal is to use the collective purchasing power of participating hospital systems and their Group Purchasing Organizations (GPOs) to transform the market for healthcare products and technologies that meet the goals of patient safety, workplace safety and environmental sustainability. In much the same way that Wal-Mart has been able to signal its supply chain that they will reward suppliers providing environmentally superior products, the collaboration of GHSI hospitals will work together to create model specifications for a broad set of safer priority products and technologies and move the entire healthcare supply chain to deliver them at cost competitive prices.

The power of GHSI's Healthy Purchasing Strategy goes beyond any other Environmentally Preferable Purchasing (EPP) program conducted by either a government or other corporate sector because it puts health and safety at the center of a sector-wide purchasing initiative. This component of GHSI has very broad societal benefit since it will leverage manufacturers to offer safer chemicals, products and technologies not only to healthcare, but also to the other markets and the general public — who are increasingly demanding safer products to protect their health and the environment. Accomplishments and resources developed in 2008 include:

### **Environmentally Preferable Purchasing (EPP) Guidance Document for Health Care**

What we buy matters. By selectively choosing the products that health care purchases, demand will be generated for inherently safer products and services for patients, workers, and the environment. The [EPP Guidance Document](#) provides overarching guidance for safer and more sustainable products and technologies and is endorsed by health systems, GPO's and other supporters, signaling their intention to transform the healthcare market's purchasing policies and practices. Endorsers as of 2008 include: Amerinet, Broadlane, Catholic Healthcare West, Consorta, Health Care Without Harm, Health Industry Group Purchasing Association, Kaiser Permanente, MedAssets, Novation, Premier, and St. Joseph Health System.

### **Finalized List of 3 Priority Product Areas**

GHSI has developed a list of priority product areas where safer products need to be available to hospitals at affordable prices. Building on the successes of Kaiser Permanente, Catholic Healthcare West and other GHSI partners to drive the market to meet their demands, GHSI will leverage the collective purchasing power of at least 18 large healthcare systems to transform the market for a targeted set of products, and then harvest lessons learned to expand from the initial list. The finalized list of 3 priority product areas:

- Halogen-free electronics, including televisions and computers
- Recycled paper products, including copy paper, exam room paper, and food service paper
- PVC/DEHP-free medical devices

## **EPP Criteria, Disclosure Questions, and Availability of EPP Products for 6 Paper Products**

One of the common problems facing hospital and GPO purchasing staff is the lack of transparency from vendors about toxic chemicals in their products and other environmental factors involved in their manufacture. After determining that there is no single EPP disclosure form that would fit all product categories, GHSI focused on paper products and developed draft EPP criteria, disclosure questions, and availability of EPP products for 6 paper product categories, including: coated printing paper, newsprint, paper products used in the preparation of food, paper towels and paper napkins, copy paper, and tissue paper. As GHSI member health systems and their GPO's ask the same set of questions, a better understanding of the chemical make-up of products will result, which in turn will lead to the development of safer and more sustainable products.

## **Participation and Commitment of all the Major GPO's**

GHSI's Healthy Purchasing workgroup consists of health systems and their GPO's representing 95% of the collective purchasing power of the health care sector. GPO participation includes: Amerinet, Broadlane, Consorta, MedAssets, Novation, and Premier, Inc.

## **Sustainable Operations**

The Sustainable Operations strategy focuses on the acceleration of best practices for operations among the GHSI partners and the entire healthcare sector. Operations includes nearly every facet of support/ancillary services, including Environmental Services, Engineering, Pharmacy, Laboratory, Hazardous Materials, Dietary/Food Services, Safety, Risk Management, and Environmental Health and Safety. Sustainable Operations makes the link between the daily operating practices of the facility and the health of its patients, workers and the community. From cleaning chemicals and work-related asthma to medical waste minimization and needle sticks to organic, locally grown foods and obesity — the Sustainable Operations group seeks to identify best management practices that will help improve worker and patient safety, save money, increase environmental compliance and create a culture of accountability. This strategy brings together administrators and managers from across the country to help define the most successful sustainable operating practices, develop an appropriate staffing structure to implement and maintain these programs, and benchmark the successes as a means of continuous quality improvement. Accomplishments and resources developed in 2008 include:

## **Priorities for Operations Initiatives: A Tool for Assessing and Addressing Opportunities**

Each health care facility has specific factors that may influence which program areas it pursues, including community culture, enforcement activities, profit margin, leadership and energy security, to name a few. Using the Green Guide to Health Care's Operations Section as a roadmap, the Sustainable Operations workgroup developed an outline of a matrix tool that examines potential initiatives in greater detail, cross-referencing program areas with various attributes, including:

- Ease of implementation
- Regulatory concerns
- Financial/economic factors
- Relevance to worker safety

- Relevance to patient safety
- Significant environmental impact
- Case studies available

The goal is to have this matrix be web accessible and searchable via a database format. Users will be able to look at the matrix by topic, by area of responsibility, by ease of implementation or any of the other attributes listed above.

### **Job Description for Healthcare Sustainability Director**

As environmental sustainability has emerged as an integral part of mainstream business management, organizations have increasingly begun to establish a position in the organizational chart for a role that manages not only environmental sustainability but may also include the organization's corporate social responsibility functions. Historically this role may have been an add-on to an existing position such as Environmental Health and Safety or Facilities Management. But as understanding increased of the multiple skill sets needed to successfully manage a sustainability program that addresses not only sustainable operations — such as waste and chemical management, but also the built environment and new construction, environmentally preferable purchasing and supply chain management, resource conservation and community partnerships (to name a few), executive teams have recognized the need for a new role. This [job description for a healthcare sustainability director](#) was compiled from job descriptions for currently existing roles in leading healthcare organizations, and is a tool intended for executive teams who are discussing the potential to create a dedicated position for a sustainability officer. This job description is a place to start as health care facilities initiate this work.

### **Practice Greenhealth's Eco-Checklist for Operations Tool**

This entry-level assessment tool assists healthcare organizations in identifying which sustainability programs are currently in place at their facility, and what other programs they may want to prioritize as they get their sustainability initiative(s) underway. The Eco-Checklist was also created as an exercise for Green Teams to complete yearly, as a simple way of assessing progress. While developed by Practice Greenhealth, GHSI's Sustainable Operations workgroup provided feedback and suggested revisions in order to ensure it could be used within both the Practice Greenhealth and GHSI communities.

### **Identification of Relevant and Measurable Metrics for the Health Care Sector**

As facilities implement various environmental programs, it is important to measure and benchmark progress; managers want to know whether they are measuring up to the best performing hospitals for different program areas, and they also want to know how they should be capturing data related to different program areas. For example, does one use adjusted patient days as the metric that captures patient volume? And how are waste metrics normalized for different acuity levels? Should facilities with onsite research facilities benchmark differently? The project was designed to identify the most relevant and measurable metrics for the health sector in different program areas based on available measurement tools already on the market, the manner in which healthcare facilities currently track and record data, and the ease of tracking. Metrics allow administrators to determine the success of programs underway, and inform continuous improvement efforts. The workgroup identified metrics including regulated

medical waste, recycling, energy use, food miles, hazardous waste, water use, and greenhouse gas emissions, to name a few.

## **Research**

The primary goal of the Research workgroup is to help the GHSI membership facilitate a broad transformation of the healthcare industry by developing strong, collaborative research evidence in support of innovative design and operational practices that are more sustainable and better equipped for protecting patient and worker health. This work is particularly important as there is currently not an organized and coherent research agenda within healthcare that focuses on the three safeties and practical steps that healthcare executives can take to make significant improvements. Accomplishments and resources developed in 2008 include:

### **Team to Coordinate GHSI Research Activities Assembled**

In July 2008, Dr. Peter Orris and Ms. Rachel Machi at the University of Illinois School of Public Health, Occupational and Environmental Health Institute, were contracted to chair and coordinate the Research workgroup activities. Dr. Orris is a professor at the University of Illinois School of Public Health and Chief of the University's Occupational Health and Safety Institute. Ms. Machi was recruited by the University to coordinate this work and comes from the California Legislature, working on environmental and health policy and legislation.

### **Examination of the Current State of Health Care Research**

In constructing recommendations to the GHSI membership for a research agenda, Dr. Orris and Ms. Machi began conducting meetings with all of the participating health systems and academic institutions to discuss the current state of health care research on safety and sustainability and discuss research priorities to help health systems pursue innovations that are consistent with their goals, missions and visions for the future of their systems. Their findings were summarized in a white paper.

### **Topics for Initial White Papers to be Developed and Released in 2009**

In addition to the research topics that will result from the survey described above, target topics for several white papers have been developed that will lay the groundwork for more extensive research and greater interest around innovations at the intersection of worker, patient and environmental health and safety. The topics of the initial white papers will be:

- **Alternatives to vinyl flooring:** The goal of this project is to document the benefits and challenges with current “green” market alternatives to vinyl resilient flooring, offer in-use experiences to product manufacturers, and to provide an analysis of the case for change – do the benefits over time outweigh any initial cost increase for installing green flooring?
- **Greener cleaners:** There is extensive experience with testing “greener” cleaners in hospital and healthcare settings. However, finding environmentally friendly cleaning products that do not present new health risks to workers and meet the necessary efficacy standards for hospitals has proven to be a challenge. A literature review and analysis is underway and will create a template as well for other product studies in healthcare settings.

- **Pharmaceutical waste:** Pharmaceutical waste disposal continues to be an area of great interest for hospitals, other health care facilities, as well as for federal and state policy makers. A white paper has been commissioned that will outline current disposal systems, options and problems, defines areas where research is needed, and suggests improvements and potential policy solutions.
- **Chemical control banding:** Control banding is a complementary approach to protecting worker health by focusing on resources on exposure controls. A chemical is assigned to a “band” for control measures, based on its hazard classifications, the amount of chemical in use, and its volatility/dustiness. The principle of control banding was first applied to dangerous chemicals, chemical mixtures, and fumes. The control banding process emphasized the controls needed to prevent hazardous substances from causing harm to people at work. Several European nations as well as the National Institute of Occupational Safety and Health (NIOSH) have begun to craft policies developing control banding for industrial and business settings. In the hospital setting, control banding could offer worker and patient health protection benefits. A literature review could be conducted and paper produced that outlines the control banding work done by NIOSH and internationally for industrial chemical use, and makes recommendations for potential next steps for developing control banding policies and potential pilots for hospitals.

### **Partnership with Potential Collaborators to Design Comprehensive Research Agenda**

Building partnerships with governmental agencies that conduct and fund research in this area is key to the Research workgroup. In addition to meeting with the health systems, Dr. Orris and Ms. Machi have begun conducting a series of meetings with potential partners to discuss collaboration opportunities and engage them in compiling the comprehensive research agenda for the Research workgroup including the United States Centers for Disease Control (CDC), the Agency for Toxic Substance Disease Registry (ATSDR), the National Institute of Occupational Safety and Health (NIOSH), the Institutes of Medicine (IOM), and the United Nations World Health Organization (WHO).

### **Corporate Social Responsibility/Public Policy**

Corporate social responsibility (CSR) is the concept of leveraging organizational assets in ways that promote economic, social and environmental health. GHSI provides an avenue to advance CSR concepts by integrating safety and sustainability into members' business strategies and operations. The objective is to redefine the health care sector's perspective in this arena from one focused primarily on providing charity to the poor to one that includes improving health care's impact on worker safety, patient safety, and sustainability. By working together, policies and structures, common language, tools and templates, and public reporting mechanisms can be developed that enhance existing activities and models. The potential for positive change is enormous.

The public policy (PP) component of GHSI allows participants to agree on a collective strategy for pursuing responsible public policy that supports safety and sustainability in health care. The objective is to explore policy opportunities and forward recommendations to the GHSI Advisory Council for action. Examples of the types of policies that will be explored include policies to

reduce greenhouse gas emissions and policies to encourage the development of materials that contain low or nontoxic chemicals. Accomplishments and resources developed in 2008 include:

### **Assessment and Documentation of CSR Activity within Participating Health Systems**

To determine the current level of CSR activity within participating health systems, a survey was crafted and conducted. The information gleaned was used to create a workplan and budget that reflects the interests and needs of the GHSI community. One key finding of the survey was that a significant level of CSR activity was already in place for most of the founding GHSI systems. For example:

- Catholic Healthcare West (CHW) endorses the Ceres Principles, uses the Global Reporting Initiative (GRI) as its framework for CSR reporting and has posted reports on the Corporate Register. More specifically, CHW is in its 12<sup>th</sup> year of environmental reporting, and its 5<sup>th</sup> year of reporting according to GRI standards.
- Catholic Healthcare West, Kaiser Permanente and St. Joseph Health System are members of the California Climate Action Registry, which in turn is a part of The Climate Registry.
- The Cleveland Clinic signed on to the United Nations Global Compact and is undertaking its first effort at GRI reporting.

### **Campaign Around Changes to IRS Schedule H Form 990**

In 2008, the IRS made changes to Schedule H Form 990, which included a limited definition of “Environmental Improvements,” restricting what activities hospitals could report. The CSR/PP workgroup assessed the ramifications of these changes and worked to improve the form by:

- Coordinating a presentation to the GHSI Advisory Committee by an industry expert to explain the ramifications of the changes
- Provided information to all GHSI members for appropriate action
- Supported a letter writing campaign to the IRS in support of an expansion of the Schedule H Form 990’s definition of “Environmental Improvements” based on what were current health care sector best practices

While such improvements were ultimately disallowed by the IRS, the CSR/PP workgroup continues to monitor the situation and will seize opportunities to revisit this in the future.

### **Draft Guidelines on Safe Chemicals, Energy and Climate Change, and Sustainable and Healthy Food**

The CSR/PP workgroup has drafted guidelines on safe chemicals, energy and climate change, and sustainable and healthy food. These guidelines create a foundation from which GHSI can pursue a public policy agenda. The guidelines are currently being communicated within the hospital systems.

### **Letter to President-elect Obama’s Transition Team Outlining Ideas for Supporting Clean Energy in the Health Care Sector**

In response to then President-elect Obama’s interest in clean energy and green jobs, GHSI and partner organizations Health Care Without Harm and Practice Greenealth submitted a letter to

his transition team, outlining ideas for supporting energy efficiency and renewable energy in the health care sector. The ideas were met positively, and GHSI continues to look for ways to insert the health care sector into President Obama's clean energy efforts.

### **Assessment Process to Build Widespread Engagement by Leaders in GHSI Systems**

To build widespread engagement by leaders in the GHSI member systems, the CSR/PP workgroup created an assessment process. This common interview tool enables key leaders within systems to learn about their overall priorities, how GHSI can support their work, and ways in which those leaders want to be personally involved with GHSI.

### **The Eco-Health Footprint Toolkit**

By fully understanding our impacts, GHSI members, partners, and the broader health care sector can better prioritize environmental improvement efforts. To aid in this effort, GHSI began developing an Eco-Health Footprint Toolkit that will measure a health system's carbon emissions/energy use, waste output, water use, toxics output and other aspects of health care's impact on the environment. An overview of footprint resources and tools was undertaken to determine what was needed to capture the full impacts of the health care sector. When complete, this tool will be useful in creating a shared understanding of health care's environmental performance, and in identifying the root causes of the largest impacts. By using a standardized measurement tool for health care, systems and individual facilities will be able to consistently capture, compare and share performance metrics with stakeholders.

### **Information for both Internal and External GHSI Websites**

Information was compiled for use on both internal and external GHSI websites. Internal resources include Power Point presentations and a list of relevant green chemistry resources. External resources include [guidance](#) related to the various CSR paths GHSI members have taken.