Journal of Environmental Stewardship Best Practices

Environmental Stewardship Program

January 2017
ENVIRONMENTAL STEWARDSHIP PROGRAM
VISION STATEMENT

The Ascension Environmental Stewardship Program challenges us to act as stewards of God’s creation and operate at our full potential by identifying and implementing practical solutions to minimize the organization’s impact on the natural environment and the communities we serve.

Environmental stewardship is the pursuit of sustainability, which is defined as the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs.

On the Cover
Top: Dell Seton Medical Center at the University of Texas, Austin, Texas, scheduled to open spring 2017.
Bottom: Women in Agriculture Farm Development Center at Genesys Health Park, Grand Blanc, Michigan
FY16 marks the fifth year of the Ascension Environmental Stewardship Program. In that time we have seen tremendous change in the Ascension organization, in Catholic health care, and in the field of healthcare sustainability. One constant is the moral obligation to care for the earth as we provide healthcare that works, healthcare that is safe, and healthcare that leaves no one behind for patients, associates and the community.

As Pope Francis stated in Laudato Si’, “Climate change is a global problem with grave implications: environmental, social, economic, political and for the distribution of goods. It represents one of the principal challenges facing humanity in our day. If present trends continue, this century may well witness extraordinary climate change and an unprecedented destruction of ecosystems, with serious consequences for all of us.

“Education in environmental responsibility can encourage ways of acting which directly and significantly affect the world around us, such as avoiding the use of plastic and paper, reducing water consumption, separating refuse, cooking only what can reasonably be consumed, showing care for other living beings, using public transport or car-pooling, planting trees, turning off unnecessary lights, or any number of other practices.”

A MESSAGE FROM PAT MARYLAND

The Environmental Stewardship Program annual report shares the stories of Ascension hospitals and health ministries, acting as stewards of God’s creation with practical solutions to minimize Ascension’s impact on the natural environment in the communities we serve.

The benefits of the Environmental Stewardship Program are threefold: environmental, financial and social. The System demonstrates a reduced environmental impact through better management and reduced resource use within nine categories of environmental stewardship.

The economic benefit allows money previously spent on energy and waste management, for example, to be directed to the core Mission of providing healthcare services to all persons.

The societal benefit of sustainable food results in healthier patients, visitors, staff and residents of the communities served by Ascension.

This report illustrates the many ways in which our Environmental Stewardship Program helps us to achieve our Quadruple Aim, which commits us to delivering exceptional health outcomes, an exceptional experience for the people we serve, and an exceptional experience for providers, at an affordable cost.

I encourage all of us within our One Ascension ministry to infuse sustainability into our daily work as illustrated by the examples in this year’s annual report.
Ascension is further integrating its national health system by unifying its sites of care, under the Ascension name and Mission. This will make it clearer and easier for patients to access care and navigate their health. Said Anthony R. Tersigni, EdD, President and Chief Executive Officer of Ascension: “Adopting a unified Mission statement and creating a clear and consistent identity reflects our collaborative national system and moves us in this direction.”

“For the past several years, Ascension has been on a journey to create ‘One Ascension,’” said Robert J. Henkel, Executive Vice President, Ascension, and President and Chief Executive Officer, Ascension Healthcare. “As we work together to sharpen our focus on clinical quality and safety, we also are expanding beyond traditional hospital-based approaches, collaborating with community partners to build clinically integrated systems of care to eliminate health disparities and improve the health of communities.”

Ascension’s Healthcare Division operates 141 hospitals in 24 states and the District of Columbia, while its Solutions Division provides a variety of services and solutions including physician practice management, venture capital investing, investment management, biomedical engineering, facilities management, clinical care management, information services, risk management, and contracting through Ascension’s own group purchasing organization.

With the Environmental Stewardship Program, each hospital establishes a Green Team, which aligns with the Environment of Care committee and reports to the COO/Administrator.

The Program is organized into nine categories:

1. **Leadership & Infrastructure**
   - Integrating sustainability into organizational strategy

2. **Education & Communication**
   - Creating awareness; improving adoption and practices and sharing success stories

3. **Food Systems**
   - Increasing health and safety in food service while decreasing waste and use on non-therapeutic antibiotics in meat and poultry products

4. **Energy Efficiency**
   - Helping hospitals reduce costs and protect scarce resources

5. **Water Conservation**
   - Decreasing the strain on municipal water supplies and reducing energy needed to treat and deliver water

6. **Sustainable Site & Transportation**
   - Green construction, operations and maintenance of healthcare facilities; vehicles; landscaping; and site water management

7. **Chemical Management**
   - Reducing exposure to chemicals in order to “first do no harm”

8. **Environmentally Preferred Purchasing**
   - Purchasing products that are durable, efficient and cost-effective, while reducing the hospital’s environmental impact

9. **Waste Management & Reduction**
   - Reducing waste while increasing recycling and donations, safely
The call to lead Catholic healthcare in ecological sustainability is social, mission driven, and economical. The center of attention for Ascension is the patient, especially the poor and vulnerable. When decisions are made that do not respect God’s creation, the poor and vulnerable suffer the most. Natural disasters, scarcity of resources, and drought are just a few negative consequences felt by vulnerable populations. The cry from harm to our earth is the cry of the poor and we must respond by making care of God’s creation a high priority.

Pope Francis hasn’t invited the faithful to think about being better stewards; he has told us it is a responsibility. In Laudato Si (Praised Be) he emphasizes our interconnectedness to all living things on this planet, “Our relationship with the environment can never be isolated from our relationship with others and with God.” As a ministry of the Church, we have the opportunity to live out this call across the nation as One Ascension. There is an unlimited potential to inspire communities with each sustainability initiative implemented. Through culture-driven individual behavior change to nationwide management of resources, we can reduce our impact on the environment and in the communities we serve, and create a more holistic healing ministry across the healthcare continuum.

The virtuous servant leadership of the Environmental Stewardship Program has led to incredible financial benefits while also engaging associates, serving the common good, and living out the mission at an innovative level. Many programs qualify as community benefit while improvements to how we heat and cool our facilities save on energy costs. Most of our shared core values are integrated into strategic decision-making that better protects our common home. We as One Ascension care for God’s creation because we serve God’s call and all of God’s people.

Chris McClead
VP, Mission Integration, Ascension Michigan

“Our relationship with the environment can never be isolated from our relationship with others and with God.”

Pope Francis
Laudato Si’ (Praised Be)
Leadership & Infrastructure

Integrating sustainability into organizational strategy

Ascension uses its voice as a leader in healthcare sustainability via participation on a national basis in the following organizations:

- Practice Greenhealth/ Healthier Hospitals Initiative (HHI)
- American Society for Healthcare Engineering (ASHE)
- Better Buildings Challenge/ Better Buildings Alliance
- Health Care Without Harm/ Health Care Climate Council
- Healthcare Plastics Recycling Council Advisory Board
- Facility Guidelines Institute
ASCENSION’S COMMITMENT TO REDUCING ENVIRONMENTAL IMPACT

The following article illustrates Ascension’s work with other faith-based organizations in order to mitigate the impacts of climate change.

At a visit in June 2016 to the district office of U.S. Sen. Claire McCaskill (D-MO), Environmental Stewardship Manager Lois Sechrist detailed Ascension’s dedication to reducing the environmental impact of the System’s acute care hospitals across the nation.

Lois, along with representatives from other faith-based organizations, commemorated the one-year anniversary of Laudato Si’, the papal encyclical on the environment, by discussing strategies to reduce environmental impact.

“We are pleased to work with other faith-based organizations to demonstrate the economic, environmental and social benefits of caring for the earth while we carry out our sacred Mission of caring for patients,” said Peter Leibold, Ascension Chief Advocacy Officer. “Our decisions today will be far reaching, as we work to provide the best care possible to our patients without compromising the ability of future generations to meet their own needs.”

Lois spoke about Ascension’s plan to reduce energy consumption dramatically across acute care hospitals to minimize reliance on all types of fossil fuels while also reducing health impacts through reduced carbon emissions.

Representatives from Missouri Interfaith Power and Light, Franciscan Sisters of Mary, Catholic Charities and Sisters of St. Joseph of Carondelet also spoke about their organizations’ efforts to reduce their environmental impact.

Ascension is an active member of Practice Greenhealth, Health Care Without Harm, and the Health Care Climate Council, in alignment with President Obama’s Climate Action Plan, which is working to mitigate the impacts of climate change in healthcare.
Via Christi Health sponsored a Go Green Conference in October 2015 to launch a commitment to environmental stewardship and recognize the Feast of St. Francis of Assisi. Associates were asked to take the Go Green Pledge, committing to action at work and home to be a better steward of the environment.

- **Pray** and reflect on the duty to care for God’s Creation and protect the poor and vulnerable.
- **Act** to change our choices and behaviors to reduce the ways we contribute to climate change.
- **Advocate** for Catholic principles and priorities in climate change discussions and decisions, especially as they impact those who are poor and vulnerable.

**HEALTH MINISTRIES CARE FOR THE EARTH IN SUPPORT OF ASCENSION MISSION**

Health ministries across Ascension celebrate Earth Day on April 22. Started in 1970, this international movement is now coordinated globally by the Earth Day Network. The Pope’s encyclical on the environment reiterated Catholic healthcare’s calling to care for the earth.

Via Christi Health’s Green Team organized a “Shred Day” for not only associates, but local community members as well. People were encouraged to bring their old sensitive documents and files to the event for shredding, decreasing the amount of waste that may end up in a landfill. The event was a success, with nearly 80 community members in attendance and about 2,000 pounds of paper being recycled.

Other Earth Week activities at Via Christi included a staffed informational booth with activities to engage and educate associates on how to recycle with the health ministry’s new system. Ascension System Office locations in St. Louis offered associates a similar shredding opportunity this week. In addition to documents and files, certain electronics, including hard drives, cell phones, CDs, VHS tapes and other data storage devices were accepted.

Seton Healthcare Family in Austin, part of Ascension Texas, also planned Earth Day activities. Recycling posters were installed throughout the ministry’s healthcare settings, and associates were encouraged to download their own copies.

Probably the biggest, and tastiest, Earth Day event at Seton was the Culinary Celebration. Thanks to TouchPoint, all Seton cafeterias included special menus with recipes featuring local and fresh produce. Each person who bought a meal was entered into a drawing for a rain collection barrel.

**Education & Communication**

Creating awareness; improving adoption and practices and sharing success stories
Top: Associates planted gardens as part of Earth Day activities at Via Christi Health, Wichita, Kansas.

Left: Eric Tate, TouchPoint Executive Chef, offers healthy appetizers to Earth Day participants at Borgess Medical Center, Kalamazoo, Michigan.

Right: Diane Pennay, TouchPoint linen associate and Kevin Izard Carroll, Stericycle Healthcare Sustainability Specialist, participated in the Earth Day Fair presented by the Stewardship of the Environment Committee at Our Lady of Lourdes Memorial Hospital, Binghamton, New York.
Food Systems

Increasing health and safety in food service while decreasing waste and use of non-therapeutic antibiotics in meat and poultry products

Several Ascension hospitals including St. Vincent’s Medical Center, Bridgeport, Connecticut and Providence Hospital, Mobile, Alabama stage weekly farmer’s markets. Columbia St. Mary’s, Milwaukee, Wisconsin purchases local produce when in season. Saint Thomas Health, Nashville, Tennessee and St. Vincent’s HealthCare, Jacksonville, Florida work directly with farms to purchase seasonal, local food. In addition, St. Vincent’s HealthCare launched the Dinner-in-a-Box take-home meal preparation program with Black Hog Farms in April 2016.

TouchPoint Food and Nutrition Services (FNS) supports innovative programs, including Menus of Change, developed by the Culinary Institute of America and the Harvard T.H. Chan School of Public Health. Menus of Change incorporates healthy, sustainable, delicious food choices featuring fresh foods, less meat, more whole grains and produce.

The Imperfectly Delicious Produce (IDP) program launched in 2014 by Compass Group (the parent of TouchPoint Support Services) reduces food and water waste. Imperfect fruits and vegetables that might have languished in fields or been sent to composting or a landfill are purchased from growers and distributors. Produce purchased through IDP is estimated to reduce cost by 20%, providing a financial benefit to Ascension hospitals.

17 Ascension hospitals with composting programs include all Seton hospitals in Austin, Texas, Saint Agnes Hospital, Baltimore, Maryland, four Wheaton Franciscan hospitals in Wisconsin, St. Vincent Jennings, North Vernon, Indiana and Sacred Heart Hospital on the Emerald Coast, Miramar Beach, Florida.

Kitchen preparation food scraps are donated to local farmers for pig feed at Borgess-Lee Hospital, Dowagiac, Michigan and Our Lady of Lourdes Memorial Hospital, Binghamton, New York and to the on-site Women in Agriculture vermiculture (worm farming) program at Genesys Regional Medical Center, Grand Blanc, Michigan.

19 Ascension hospitals have eliminated the use of Styrofoam in their retail food service, which is a strong testament to environmental stewardship in light of challenging healthcare budgets. Several more limit Styrofoam use only to cups for hot drinks and soups. Styrofoam products are significantly less expensive than equivalent paper products. However, polystyrene is not biodegradable, is not commercially recycled and contains suspected carcinogens and neurotoxins that are hazardous to humans.

St. Vincent Hospital, Indianapolis, Indiana, transitioned to china dishes for patient meals and retail food service after the renovation of Café 86. Cafeteria customers using china will receive a free meal after 10 visits.

Signage used to introduce the reusable china program at St. Vincent Hospital, Indianapolis, Indiana.
TOUCHPOINT SUPPORT SERVICES CELEBRATES FOOD DAY 5

Hospitals across Ascension served by TouchPoint Support Services supported Food Day in October 2015 by serving meals that featured meat or poultry raised without routine use of non-therapeutic antibiotics.

The Food Day platform focuses on food education, food justice and getting Americans to move toward a greener diet. Thousands of events took place across the country to bring Americans together to celebrate and enjoy real food and push for improved food policies.

During Food Day, TouchPoint educated patients, residents, visitors and staff about how they can make better choices to protect their personal well-being and the health of their communities.

Health Care Without Harm – an international coalition of hospitals and healthcare systems, medical professionals, community groups, health-affected constituencies, labor unions, environmental and environmental health organizations, and religious groups – organizes the Food Day event. By partnering with Health Care Without Harm, TouchPoint joins more than 350 hospitals nationwide to raise awareness about eliminating the overuse of antibiotics in animal agriculture and building a healthy, sustainable food supply. If every hospital in the country committed to serving meat raised without routine non-therapeutic antibiotics year-round, it could result in over 750 million meals served and $868 million spent on healthy, sustainably raised meat.

TouchPoint and Ascension are committed to serving poultry raised without routine non-therapeutic antibiotics year-round. It is one of the many sustainable initiatives incorporated into the TouchPoint Corporate Social Responsibility platform.

TouchPoint Food & Nutrition Services celebrated Food Day 2015 with recipes featuring chicken raised without routine use of non-therapeutic antibiotics.
Energy Efficiency

Helping hospitals reduce costs and protect scarce resources

“We have drawn the following goals from the American Society for Healthcare Engineering (ASHE) Sustainability Roadmap for Hospitals as we incorporate sustainability initiatives into our daily work at Medxcel Facilities Management:

- Reducing energy use, waste, and costs
- Getting ahead of the regulatory curve
- Enhancing the environment for patient care
- Improving our organization’s standing in the community

Sustainability offers a strategic framework that unifies everyone around the aim to optimize environmental, economic and social benefits.”

**Michael Argir**
*President and Chief Executive Officer, Medxcel Facilities Management*

The Ascension Environmental Stewardship Program started in 2008 with energy efficiency. The program now incorporates energy reduction activities driven by two primary efforts: Retro-commissioning (RCx) and targeted capital projects. RCx involves simply tuning existing facility systems for optimal performance and efficiency and features the following four steps:

- Repair and calibrate failed HVAC system components.
- Program building controls to turn off or set back systems during unoccupied periods, as allowed by governing codes and standards.
- Program building controls to maintain comfort conditions as efficiently as possible.
- Balance HVAC systems to deliver appropriate airflows according to current prevailing codes and standards.

Targeted capital investments are aimed at identifying, developing, and executing projects whose primary objective is energy reduction. Typical capital projects are: Building controls upgrades, heat recovery chillers, lighting system upgrades to light-emitting diode (LED) lamps, high-efficiency boiler burners, and heat recovery systems.

LED lighting conversions are being implemented across Ascension for parking garages, parking lots, general lighting and surgical lights. State programs and electric utilities provide incentives and rebates so that projects have a payback of less than two years. Fluorescent lamps contain mercury, so using LEDs improves safety through hazardous chemical avoidance. LED lighting saves energy (50 to 60 percent from fluorescent lamps) and results in reduced maintenance expenses. Longer lamp life means less frequent replacement is required, improving safety for maintenance staff in hard-to-access areas such as parking garages and building lobbies.

**2008-2016**

- **19.2%** energy use reduction
- **$51.2 million** in cost avoidance
- **1,000,125 tons** reduction in carbon dioxide emissions
Ascension partnered with Schneider Electric in 2004 to standardize facility operations in relation to utility use and overall consumption patterns for electric, gas, water and sewer. The relationship with Schneider Electric not only helps optimize procurement options for electricity and natural gas which provides direct and immediate cost savings, but also provides visibility into facility data. Utility invoices are fed into the Schneider Electric Resource Advisor and Department of Energy (DOE) Energy Star Portfolio Manager databases through an automated data feed. Both programs are used to benchmark energy consumption to comparable healthcare facilities in order to track performance across Ascension facilities.

**ASCENSION EFFORTS ON ENERGY EFFICIENCY**

Design projects by healthcare organizations have allowed hospitals to reach new levels of sustainability and efficiency. Ascension is improving building and operating standards by requiring all new hospitals to be designed to achieve an Energy Star rating of 75 or better. These ratings, on a scale of 1 to 100, provide a means for benchmarking the energy efficiency of specific buildings against the energy performance of similar facilities.

In support of Ascension’s Environmental Stewardship Program, both new construction and major renovation projects use a robust set of architectural, engineering and construction standards to ensure the national health ministry continues on the path of greater energy efficiency. Preferred engineering firms develop projects such as replacing chillers, boilers, air handling units and equipment motors. Greenfield projects (new hospitals built on an open site) designed under the standards have achieved Leadership in Energy and Environmental Design (LEED) Silver certification or higher.

The 155,000-square-foot, three-story St. Vincent’s Clay County Hospital in Middleburg, Florida, was one of the first projects to test how Ascension’s energy performance measures would mesh with existing design methods, such as a requirement that all patient rooms be supplied with 100 percent outside air. “That presents a special challenge,” said Gerry Kaiser, Planning, Design & Construction Senior Director. The hospital far exceeded its goal, achieving an Energy Star Score of 97, which puts it in the top three percent for energy efficiency among similar buildings in the same environment.
Hospitals are one of the top ten consumers of water in the communities they serve. Most water is treated to potable water standards, which means that it is clean enough to drink. However, only about 20 percent of that water is actually used for drinking and sanitary needs. In a healthcare setting, water is crucial for everything from environmental surface cleaning to handwashing to sterilizers for medical equipment — all of which protect patients from dangerous pathogens.

Being mindful of how water is used in a healthcare facility will affect the Triple Bottom Line with environmental, financial and social benefits. In addition, water heating accounts for 28 percent of the energy used in U.S. hospitals, so water conservation translates directly into energy efficiency.

Ascension hospitals employ many practical and innovative water conservation projects including: hands-free and low-flow controllers on plumbing fixtures; dual-flush toilets and waterless urinals where allowed by local codes; recycling chilled water from cooling towers; water leak testing and inspection; and microfiber mops for cleaning that use 95 percent less water and less cleaning chemicals.

Practices used to minimize water use for landscaping: Spot irrigation and no irrigation; weather-controlled irrigation systems; using water from ponds, wells, detention ponds and municipal reclaimed water for irrigation; landscaping with native, drought-tolerant plants; areas with no plantings using stone, gravel and mulch; acreage with native prairie.

"With the potential for severe droughts and water shortages in the years ahead, it is imperative that we are mindful of our water usage in all of our facilities as good environmental stewards."

Dan Scher, Senior Director, Planning, Design & Construction

"In 2006, Ascension pledged to reduce the use of bottled water to absolute necessity, following the similar actions of our Sponsors," said Sr. Bernice Coreil, DC, Senior Executive Advisor to the President, Ascension. “Our work to promote the common good and live the Mission envisioned by our Sponsor compels us to call attention to the important issue of sustainable water management.”

“With the potential for severe droughts and water shortages in the years ahead, it is imperative that we are mindful of our water usage in all of our facilities as good environmental stewards,” said Dan Scher, Senior Director, Planning, Design & Construction.
When we think of our impact on the environment, we often consider how the resources we use, such as energy and water, affect the world outside. As caregivers, we also consider indoor environmental quality – the quality of a building’s environment and how it affects the health and well-being of the associates and patients who occupy the space. Within our hospitals, the quality of furniture, fixtures and equipment plays a key role in the quality of the indoor environment.

Dell Seton Medical Center at The University of Texas (DSMCUT) Austin, Texas, continues Seton’s legacy of green building leadership by establishing a goal of Leadership in Energy and Environmental Design (LEED) 2009 for Healthcare Gold certification and 4-Star Austin Energy Green Building rating. The hospital will also contribute to the Sustainable SITES certification being pursued by the UT Medical District. As a result of the best practices in sustainable design, construction and operations, DSMCUT will serve as a valuable resource and create an exemplary environment for patient healing and the education of future health care practitioners.

The project’s urban location in the center of downtown Austin on the University of Texas campus provides associates and visitors excellent access to public transportation. The hospital will encourage the use of alternative transportation by providing bike racks and giving parking priority to hybrid and alternative-fuel vehicles, as well as to employees who carpool.

The project is on track to achieve greater than 24% energy cost savings versus a typical new hospital by combining an efficient thermal envelope with energy efficient mechanical and lighting equipment and utilizing chilled and hot water from UT’s highly efficient district thermal energy grid. Energy efficient features include mechanical equipment that captures and reuses waste energy, 100% LED lighting, and HVAC / lighting controls integrated real-time with the patient admissions system. Reflective roof materials and light-colored sidewalks decreases the urban “heat island” effect and also reduces the amount of energy required for air conditioning.

Interior courtyards and adjacent UT campus greenspace provide verdant areas accessible to patients, associates and visitors. The landscaping will be drought-tolerant native and non-invasive adapted plants, and will be 100% irrigated with condensate water collected from the building’s air handling units. Storm water management for the project will be through innovative vegetated bioswales to control water quality in order to protect an urban creek bounding the hospital that flows directly into Lake Austin. Water-efficient plumbing fixtures and equipment will reduce domestic potable water use by over 35% as compared with a typical hospital.
Other sustainable features of the project include environmentally preferable materials and products with recycled content that are regionally extracted/manufactured, Forestry Stewardship Council (FSC)-certified wood, rapidly renewable materials, and avoidance of chemicals of concern. Low Volatile Organic Compound (VOC)-content materials are used for all interior and exterior adhesives and sealants, paints and coatings. Agrifiber products and batt insulation with no added urea formaldehyde are also utilized. More than 75% of the construction waste will be diverted from landfills.

With education being the foundation of the new hospital, associates, visitors and patients will be able to learn about this very special environment by reading over 20 signs located throughout the hospital that describe its environmentally sustainable attributes. The DSMCUT teaching hospital will truly be a place for healing and learning.

Phillip Risner  
Senior Project Manager, Planning, Design & Construction
ASCENSION PATIENTS, ASSOCIATES BREATHE EASIER THANKS TO FACILITIES MANAGEMENT

On average, a human being takes more than 20,000 breaths a day, inhaling the oxygen necessary to survive and exhaling waste like carbon dioxide to keep us healthy. The amount and quality of the air we breathe outside and indoors are vital parts of our overall health.

“Healthcare codes require that we deliver a certain amount of air to spaces depending on clinical function. This includes outside air and recirculated air at a certain rate – for both infection control and the comfort of the patients we serve,” said Jim Prince, Manager of Energy Management, Planning, Design & Construction.

Jim represented Ascension at the Department of Energy’s Better Buildings Summit in Washington, D.C., May 9-11, where he presented information during a breakout session, “Optimizing Air Change Rates at Ascension Hospitals.”

Jim and his team in the energy program, along with partner engineering firms, visit Ascension hospitals to ensure that the right amount of air is being delivered, all codes are being met, and systems are working properly in order to conserve energy while keeping patients – and staff – safe and healthy.

“We were once again thrilled to be able to present during this year’s Better Buildings Summit,” Jim said. “Our team proudly represents Ascension’s priority to act as good stewards of our resources, while at the same caring for the earth and the communities we serve.”

During this national meeting, leading organizations come together to discuss how they’re pursuing the Better Building Challenge by working toward cutting energy usage in their buildings by 20 percent by the year 2020.

“Ascension was one of the early partners in the 2020 challenge, and was the first healthcare partner to join,” Jim said. “Most of the challenge participants are eager to learn about ways Ascension helps set the energy efficiency pace – particularly partners from the healthcare sector.

“We have almost met our goal, which benefits both our environment and our organization financially. A 20 percent energy reduction per year amounts to $30 million per year in savings.”

Ascension is also beginning to look at solar as an alternative energy source. In Baltimore and Washington, D.C., Ascension is working to install solar panels on facility rooftops, in addition to building parking lot “canopies” that both keep cars cooler and provide energy for buildings. These projects are slated to be completed in FY17.
Waste Management & Reduction

Reducing waste while increasing recycling and donations, safely

There is tremendous opportunity to recycle paper and plastic waste from hospitals. The American Hospital Association’s Sustainability Roadmap for Hospitals notes that non-hazardous waste makes up approximately 85 percent of a hospital’s total waste stream, meaning it is free from patient contact and contamination.

Medical waste, including Regulated Medical Waste (red bag), Pharmaceutical, and Hazardous Waste, is a specific healthcare category with stringent regulatory requirements. It is the most expensive healthcare waste category and must be managed carefully, with significant opportunities to reduce cost if paper and plastics are removed from this waste stream pre-surgery, before the patient enters the operating room. This eliminates any chance of contamination and ensures compliance with codes and regulations.

St. Vincent Carmel Hospital, Carmel, Indiana was one of the first Ascension hospitals to adopt the Practice Greenhealth “Greening the OR” program, focused on recycling paper and plastics in clinical areas. Their efforts began as a grass-roots initiative five years ago, motivated by nursing staff that questioned the amount of solid waste included with Regulated Medical Waste (red bag) leaving the ORs. The American Association of Perioperative Nurses (AORN) has a Position

Electronics recycling drive at the Ministry Service Center, Indianapolis, Indiana.
Statement on Environmental Responsibility, which helps to engage clinicians in this effort: “Nurses have an ethical and professional responsibility to advocate for patients’ health. Because human health is affected by and is dependent on the surrounding environment, by extension, nurses must work to actively protect the environment by promoting and participating in initiatives that mitigate environmental impact.”

Ascension hospitals participate in the FDA-approved Stryker medical device reprocessing program to capture items such as blood pressure cuffs, compression devices and endoscopic trocars. In recent years, medical devices have been made of plastic components, designed to be disposable to address infection control issues. However, disposing devices as medical waste is very expensive, driving up medical costs. In FY16, Ascension hospitals collected 1.4 million devices, diverted 580,000 pounds of waste from landfill and saved more than $11.2 million dollars.

Ascension partners with Stericycle to manage waste streams in its acute care hospitals and ambulatory facilities. TouchPoint Environmental Services (EVS) implements waste management practices on a day-to-day basis. In FY16, 68 Ascension hospitals participated in the Stericycle Integrated Waste Stream Services (IWSS) program.
Chemical Management

Reducing exposure to chemicals in order to “first do no harm”

Chemicals have a direct impact on the indoor environment that is experienced by patients (who are already in a compromised physical state), associates and visitors. Careful consideration of the benefits and risks associated with chemicals in building materials, cleaning products and pesticides is a significant factor in creating a healing environment.

Ascension participates in the Practice Greenhealth/Healthier Hospitals Initiative Safer Chemicals program with two objectives:

- **Purchase furnishings and furniture for our hospitals with safer chemicals with the goal to eliminate** BPA (used in polycarbonate plastics), phthalates (additives to make plastic more flexible), mercury, formaldehyde, volatile organic compounds (VOCs), perfluorinated compounds, polyvinyl chloride (PVC), and flame retardants where code permits.
- **Work with the Ascension infection control team on antibiotic stewardship, including eliminating the use of** triclosan, triclocarban and other added or built-in chemical antimicrobials unless proven effective to reduce healthcare-associated infections (HAIs).

In partnership with TouchPoint Environmental Services (EVS), Ascension hospitals have adopted green cleaning practices that protect the health and safety of patients and associates by lessening exposure to harmful chemicals. In FY16, Ascension hospitals spent 33% of all cleaning supply purchases on Green Seal and UL ECOLOGO certified products for carpet, window, all-purpose, bathroom and general floor care (not including floor strippers or finishes).

75% of Ascension hospitals use microfiber flat mops and 45% use microfiber cleaning cloths. Mop heads are changed for each room, promoting infection control while using 95 percent less water and less cleaning chemicals.

Borgess Medical Center, Kalamazoo, Michigan and St. Vincent’s Medical Center, Bridgeport, Connecticut installed aqueous ozone (ozonated water) systems to replace general-purpose cleaners for glass and stainless steel. 53 Ascension hospitals use hydrogen peroxide-based disinfectants in place of quaternary disinfectants in order to reduce the chemical footprint within those facilities.
Environmentally Preferable Products are those products that have a lesser or reduced effect on human health and the environment when compared with other products that serve the same purpose.

The Resource Group’s service excellence culture drives its commitment to procure products and services from manufacturers and suppliers that demonstrate like-minded environmental and social responsibility standards to Ascension, including high quality and savings over the product’s lifetime. These products also have a reduced effect on human health and the environment when compared to other products that serve the same purpose, thus supporting the sustainability of healthcare.

In order to yield the benefits of environmentally preferred purchasing, The Resource Group’s Senior Manager for Sustainability and Diversity focuses on building mutually-beneficial business relationships with diverse suppliers that have sustainability practices embedded into all areas of their business. Together with Ascension, The Resource Group has established relationships with multiple vendors that have infused sustainability into their corporate culture, including J&J, Grainger, Stryker, TouchPoint Support Services, Stericycle, Herman Miller, Haworth, BD, Cardinal Health, Medtronic and Baxter. Additionally, as part of the User-Directed Strategic Sourcing™ process, The Resource Group requests information from vendors related to their environmental practices, such as requesting a copy of their Corporate Environmental Policy or environmental report and documenting their green certifications, in order to understand how the vendor has embedded sustainability into their organizational strategy.

St. Vincent’s Health System, Birmingham, Alabama, includes the Resource Group Implementation Managers in hospital Green Teams to promote knowledge and awareness of sustainable purchasing practices. Feedback from The Resource Group informs the Green Team of potential improvements in the purchase of environmentally preferable materials and products.

St. John Sapulpa Hospital, Sapulpa, Oklahoma implemented a product standardization process with Symphony technology, incorporating 180 items used across St. John Health System. The initiative is expected to reduce waste of purchased products unused due to expiration by more than 50% and will be a continued initiative yielding improved standardization in the coming year.
Partnering Internally & Externally to Achieve our Goals

The Environmental Stewardship Program encourages cross-functional collaboration across health ministries and subsidiaries, together with vendor partners. Through monthly System Green Team calls attended by representatives from each health ministry as well as key systemwide departments; webinars, newsletters and the myCommunities web page, health ministries and hospitals share best practices, successes and challenges.

Environmental Stewardship Program initiatives result in activity across multiple categories. For example, furnishings standards developed by Facilities Resource Group, including products from Herman Miller and Haworth, touch on:

**Waste Management and Reduction.** “We are working in Ascension Michigan to reduce our impact on the environment through an innovative program with Herman Miller to repurpose and donate used furniture to the Habitat for Humanity ReStore and the Barclay Hills Education Center in Kalamazoo,” said Heidi Fentress, Senior Analyst, Interior Design, Planning, Design & Construction, who has been involved in both new construction and renovation of existing spaces. “This will extend the life of unneeded furniture and keep still-useful items out of the landfill.”

**Chemical Management.** Ascension is working with Practice Greenhealth and the Healthier Hospital Initiative’s Safer Chemicals Challenge to identify ways to ensure a safe environment by identifying chemicals of concern (such as antimicrobials and flame retardants) and reducing their use in healthcare furnishings.

**Environmentally Preferable Purchasing.** Facilities Resource Group and The Resource Group are working with key stakeholders across Ascension to identify furniture standards for Ministry Markets to create consistency and improve indoor environmental quality and sustainability of furniture.

In FY16, Saint Thomas Health in Nashville, Tennessee visited the Ministry Service Center (MSC) in Indianapolis, Indiana and learned how to conduct an electronics recycling event for associates. In turn, the MSC implemented a plastic bag recycling project that originated at Saint Thomas Health.
Presentations, Awards and Publications

Ascension has presented at the Practice Greenhealth CleanMed conference for the past five years and has won multiple Environmental Excellence awards since 2002.

2016 PRESENTATIONS
CLEANMED CONFERENCE 2016

• Farm to Table: Partnerships to Advance Local Purchasing
  Serving locally produced foods in the health care setting has many benefits, from connecting patients, staff and visitors to their food system and its fresh and health bounty to supporting regional producers thus creating farm viability and local jobs. However, it can be a challenge to find and source local products for a hospital. Hospitals have taken creative approaches to working with their suppliers and directly with local farmers to make farm to table programs a success. Lois Sechrist with Ascension and Courtney Spurlock with TouchPoint shared successes of farm-direct purchasing programs at St. Vincent’s HealthCare in Jacksonville and Middleburg, Florida and Saint Thomas Health in Nashville, Tennessee. The presentation included details on identifying producers, developing purchasing relationships, contracting, crop planning with farms and how to incorporate seasonal produce into meal planning.

• Greening the OR at Ascension, Using Lean Practices, Interns and Grants
  Via Christi Health and Ascension have collaborated with the EPA Pollution Prevention intern program and the Practice Greenhealth Greening the OR framework to achieve Triple Bottom Line benefits in clinical settings. Over a seven year period, Via Christi Health has partnered with the Kansas State University Pollution Prevention Institute (PPI) to host summer P2 interns. PPI hires, trains, mentors and places interns with partners that have applied to the program. The Ascension Environmental Stewardship Program is working with The Resource Group to employ Practice Greenhealth “Greening the OR” tools. Ministry Health Care has employed lean 5S (Sort, Straighten, Sweep, Standardize and Sustain) techniques in this effort. These two initiatives are combined to provide powerful results. With an environmental focus, it becomes a cost-effective way to engage departments and turn functional areas into high-performance stations while eliminating environmental waste in process and physical form. The presentation was conducted by Carolyn Koehn, Via Christi Health and Lois Sechrist, Ascension Environmental Stewardship Program, with assistance from Iqbal Mian with Practice Greenhealth and Nancy Larson with Kansas State University.

2016 ENVIRONMENTAL EXCELLENCE AWARDS

• Borgess Medical Center in Kalamazoo, Michigan, Partner for Change Award
• Alexian Brothers Behavioral Health Hospital in Hoffman Estates, Illinois, Partner Recognition Award
• Seton Shoal Creek Hospital in Austin, Texas, Partner Recognition Award
U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) ENERG STAR CERTIFICATIONS
THREE ASCENSION HOSPITALS ACHIEVED ENERGY STAR CERTIFICATION IN 2015

- Columbia St. Mary’s – Ozaukee Campus in Mequon, Wisconsin
- Saint Thomas Midtown Hospital in Nashville, Tennessee
- St. Vincent’s Medical Center Clay County in Middleburg, Florida

PUBLICATIONS

Dell Children’s Medical Center of Central Texas was featured in the May-June 2016 issue of Health Progress, the Journal of the Catholic Health Association of the United States, *Health Progress* – “Green Design Helps Children, Families Heal”

*Greenhealth*, the online publication of Practice Greenhealth, featured Ascension’s Environmental Stewardship Program in two recent articles:

*Greenhealth* – “Texas Does it Big”
*Greenhealth* – “Savvy Stewards”
The rapid pace of change at Ascension continues with the One Ascension journey and moved to a unified identify, beginning in the Michigan and Wisconsin Ministry Markets. Healthcare is moving to value-based care, increased focus on ambulatory settings and direct involvement in community benefit programs to improve access to healthy diets and address climate change risks in low-income communities.

The Environmental Stewardship Program will continue operational alignment with the Environment of Care (EOC) committees at each hospital. The EOC scope includes safety, security, hazardous materials and waste, medical equipment and utilities, which aligns well with environmental stewardship.

Three initiatives on which the Environmental Stewardship Program will focus on in FY17:

**ANTIBIOTIC STEWARDSHIP**

- Reduce the use of antimicrobials in architectural and furnishings products
- Purchase meat products raised without the routine use of nontherapeutic antibiotics

**WASTE MANAGEMENT**

- **Reduce** (buy less; minimize packaging, ship efficiently); **Reuse** (via beneficial donation programs); **Recycle** (including composting); then **Landfill** as a last resort.

- Priority is placed on infection control and patient safety, while reducing environmental impact and creating opportunities for associate engagement and satisfaction.

**MITIGATION OF CLIMATE CHANGE IMPACTS**

- Energy efficiency, resulting in reduced carbon dioxide emissions
- Explore opportunities to use renewable energy to reduce reliance on fossil fuels
- Improve resiliency of healthcare facilities in order to remain operational during severe weather events
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<thead>
<tr>
<th>Name</th>
<th>Title and Company</th>
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<tbody>
<tr>
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Sources

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Thank you to health ministry, hospital and vendor contributors who provided photographs and articles used in this publication.