



2011 SUSTAINABILITY REPORT

Environmental Mission Statement:

Inova Health System is committed to establishing an environmental program that contributes to a safer and healthier environment for our patients, employees and community.



TABLE OF CONTENTS

SHARING OUR JOURNEY

Letter from the CEO

Letter from the Office of Sustainability

Sustainability Strategy & Goals

ASSESSING OUR IMPACTS

Waste

Energy

Water

Purchasing

Food

Transportation

Building

Health Information Technology

MAXIMIZING OUR POTENTIAL

The Going Green Initiative

CELEBRATING OUR SUCCESS

RECOGNIZING OUR PARTNERS



FROM THE CEO



I am delighted to present to you Inova's 2011 Sustainability Report. Join us in exploring the distinct connections between environmental and human health as they relate to healthcare. Our mission is to protect health, and we believe sustainability is intrinsic in all we do. Our greatest success stories are not of the patients we treat but of those who never set foot within our facilities in the first place.

This is the ultimate vision of Inova's sustainability program. For us, sustainability is not just about being "green," it is about our professional duty as healthcare providers to promote the healthiest future possible. From supporting healthy, local foods to decreasing pollution from energy consumption to reducing exposure to the chemicals contained in medical products, each of Inova's sustainability strategies has a direct, positive impact on human health. As the size and breadth of our program continue to grow, so will the magnitude of its impacts. Join the future of health.

Sincerely,

A handwritten signature in black ink, which appears to read "Knox Singleton". The signature is fluid and cursive.

Knox Singleton

CEO, Inova Health System



2011 AT A GLANCE



Recycled over 3 million pounds of materials, yielding savings equivalent to eliminating the annual emissions of 823 vehicles

Achieved 60% energy savings at one Inova hospital by switching from fluorescent to induction lighting

Prevented over 20,000 pounds of materials from entering the landfill through a single-use device reprocessing program

Donated more than 75 tons of clinical supplies, medical equipment, furniture and linens to local and global charities

Spent more than \$45,000 on local produce, keeping valuable dollars in the community and supporting local farmers

Increased access to fresh, healthy foods for SNAP benefit recipients by matching purchases at local farmers markets

FROM THE DIRECTOR OF SUSTAINABILITY



We are pleased to share our environmental accomplishments with you in the form of Inova's 2011 Sustainability Report, our second annual publication dedicated solely to reporting Inova's environmental performance and sustainability initiatives. From cook-offs to fashion shows, RC car races to Oscar awards, shred events to rain barrel demonstrations, we pushed in 2011 to make sustainability a part of the Inova experience for our patients, visitors, employees and community members.

We take great pride in this work and look forward to sharing more and more as our efforts continue to grow. We hope this report will provide you with the inspiration, enthusiasm and ideas to move forward along your own personal sustainability journey.

Stay green,

A handwritten signature in black ink that reads "S. Wadhwa".

Seema Wadhwa, Director of Sustainability



OUR SUSTAINABILITY STRATEGY

In order to achieve the largest impact possible, Inova has identified ten sustainability focus areas. Our sustainability program aims to reduce our impacts in these key areas by targeting the goals listed on the following pages.



Strategy 1: Waste Management

- Reuse and repurpose materials before throwing away
- Reduce amount of regulated medical (RMW) waste produced by Inova hospitals
- Divert waste from landfill through recycling, source reduction and other strategies



Strategy 2: Energy Management

- Track and understand energy performance
- Implement energy efficiency and conservation measures
- Support new technologies which promote energy conservation and efficiency



Strategy 3: Water Management

- Implement water efficiency and conservation measures
- Utilize grounds management practices which reduce water consumption
- Support new technologies which promote water conservation and efficiency



Strategy 4: Environmentally Preferable Purchasing

- Understand the lifecycle impacts of the products used in Inova hospitals
- Develop strategies to help purchasers identify environmentally preferable products
- Work with suppliers to develop and support new, environmentally preferable products



Strategy 5: Sustainable Foods

- Provide a variety of fresh, healthy food options to patients, employees and visitors
- Minimize the environmental impact of food purchases while supporting local farmers
- Promote wellness by increasing access to and knowledge of healthy food choices



Strategy 6: Alternative Transportation

Reduce environmental impact of Inova employees' transportation choices
Increase availability and visibility of alternative transportation options for employees
Develop incentive programs to promote use of alternative modes of transportation



Strategy 7: Green Building

Create safer healing environments through evidence-based design and green construction
Reduce environmental impacts of materials used during facility construction and maintenance
Develop a consistent, low-impact approach to the maintenance of Inova facilities



Strategy 8: Health Information Technology (HIT)

Support technologies which streamline processes and deliver improved outcomes
Use HIT technologies as a tool to promote waste and energy reduction
Communicate the environmental co-benefits of HIT technologies



Strategy 9: Employee Engagement

Make sustainability relevant and attainable for all employees
Give employees the tools they need to be sustainable at work
Develop mechanisms for employees to provide input and feedback



Strategy 10: Community Benefit

Add sustainability programming to existing line of community programming options
Create opportunities for community members to participate in sustainability at Inova
Use sustainability as a mechanism for supporting community wellness

CASE STUDY

Creating Healthier Hospitals



In 2011, Inova became a Founding Sponsor of the Healthier Hospitals Initiative (HHI), a national movement to implement a completely new approach to improving environmental health and sustainability within the healthcare sector. The HHI is a coordinated, sector-wide approach based on the premise that how we design, build and operate hospitals can improve patient outcomes and workplace safety, prevent illnesses, create environmental benefits and see significant cost savings

As part of this initiative, eleven of the largest, most influential US health systems partnered with industry experts Health Care Without Harm, the Center for Health Design and Practice Greenhealth to help chart the path to a more sustainable healthcare industry. This group of 11 healthcare systems from across the country - comprising over 490 hospitals and with more than \$20 billion in purchasing power - is dedicated to promoting the widespread adoption of sustainability within the healthcare industry.

By leveraging the influence and visibility of these individual health care leaders, positive changes will be timely and meaningful and will have a reach well beyond the health care sector. Inova is pleased to count ourselves among this extraordinary group of hospitals, and we look forward to sharing our accomplishments as the HHI continues to expand its agenda and membership.

OUR SUSTAINABILITY GOALS



2011 Goal: Reduce impacts from purchasing

In 2011, Inova created a new purchasing policy which addresses energy and water conservation, waste reduction, chemical minimization and locality in our purchasing decisions. The policy is slated to be reviewed, adopted and implemented across Inova in 2012.

2011 Goal: Promote Healthier Foods

In addition to increasing Inova's percent spend on local produce, we hosted events such as monthly farmers markets, cook-offs, and cooking classes. We also conducted CSA feasibility studies at several Inova hospitals and became a partner in the Buy Fresh Buy Local program, which promotes sustainable food systems and provides local resources for accessing fresh, healthy foods.



2011 Goal: Improve Employee Transportation

Inova partnered with Fairfax County to distribute free SmarTrip cards and to conduct a commuter survey which led to the development of an Employee Commuter Bus program scheduled to launch in 2012. We additionally hosted several alternative transportation fairs to educate employees about the public and alternative transportation options available to them.

2011 Goal: Reduce Energy Consumption

As part of an overall energy strategy, we continued to track Inova's energy consumption through Energy Star and reached the 20% reduction mark for electricity consumption from 2009 (baseline) levels. We also completed induction lighting projects in several parking garages, as well as a lighting retrofit project across the whole of Inova Loudoun Hospital.



2011 Goal: Develop Sustainability Communications

We developed extensive educational resources for use by Inova employees, including Green Standards, CEO Letters and other materials to post around Inova. We also released our first Sustainability Report and hosted a variety of engagement events such as a Going Green scavenger hunt, a blue wrap design contest and fashion show, and a tree seedling giveaway on Earth Day.

2012 GOALS

Goal 1: Identify and baseline additional sustainability metrics

Goal 2: Build sustainability into Inova's organizational structure

Goal 3: Improve Inova's waste profile by reducing regulated medical waste (RMW) and increasing recycling

Goal 4: Expand sustainability program within Inova's local communities

Goal 5: Create additional forums for sustainability communication

ASSESSING OUR IMPACTS

WASTE MANAGEMENT

The Issue

Hospitals generate enormous quantities of waste. This waste not only contributes to increasingly full landfills and rising disposal costs, but its collection, transportation, processing and disposal all have environmental impacts of their own.

Many of these environmental impacts are also associated with impacts to human health. The transport, treatment, and processing of waste creates air pollution which contributes to asthma and other respiratory illnesses, while leaks or fires in landfills have the potential to pollute air and water supplies with a variety of hazardous chemicals.

The incineration of waste additionally yields a wide range of pollutants and other harmful chemicals. Though recent improvements in incineration technology help capture most of these chemicals before they are released into the environment, the potential for exposure still exists.



2011 Waste Summary for Inova Health System Hospitals

Waste Type	2010 Total Lbs	2010 % of Waste Stream	2011 Total Lbs	2011 % of Waste Stream	Target %
Solid Waste	10,025,300	59.3%	10,643,335	62.6%	64.5% - 65%
Recycling	3,202,820	19%	3,091,738	18.2%	25%
Regulated Medical Waste	3,618,104	21.4%	3,179,883	18.7%	10%
Haz Waste	52,961*	0.3%	90,271	0.5%	0.5%

*2010 hazardous waste data is based on incomplete waste reports

Our Solution

Nearly all waste is preventable to a certain extent. At Inova, we combine waste prevention efforts with a program to manage the impacts of the waste we do produce, targeting the waste streams with the largest potential for impact: regulated medical waste (RMW) and recycling. RMW is one of Inova's most expensive and environmentally-impactful waste streams, while recycling is our cheapest, least impactful type of waste.

The current emphasis of Inova's waste management efforts is on increasing the amount we recycle and decreasing the quantity of regulated medical waste (RMW) we produce. It is our goal to push Inova's waste profile to the industry best-management standard of 25% recycling, 10% RMW, and 65% municipal solid waste.

These numbers are based on what current industry leaders in waste management are achieving within their facilities, and will surely evolve over time as healthcare organizations explore innovative new ways to eliminate and manage waste. As they evolve, so too will Inova continue to push forward with them.

In addition to our efforts to reduce RMW and increase recycling, we also have several other waste prevention programs. We reuse pallets and delivery totes in our warehouses and a portion of our surgical gowns, towels and basins are also reusable. Our single-use device reprocessing program also helps us keep over 20,000 pounds of waste out of the landfill each year. We donate clinical supplies, medical equipment, furniture and linens both domestically and internationally to support a variety of health-based charitable mission work.

CASE STUDY

Inova's Waste Barcode Management System

Regulated medical waste, or RMW, is one of Inova's most expensive waste streams, costing five to ten times more to dispose of than regular trash. It is also more environmentally intensive to dispose of since it requires significantly more transport and treatment than regular solid waste.

Industry best practice levels for RMW indicate that it should be around 8-10% of a hospital's waste stream, but in 2011 the rate at some Inova hospitals was much higher than this threshold.

To address this issue, an innovative waste barcode management system was created to track the path of RMW throughout Inova Fairfax Hospital. Each soiled holding area within the hospital is assigned a unique barcode and given sheets of stickers with that barcode on them.

When the cart carrying all of the area's RMW is ready to be taken to the waste dock, it is tagged with a barcode sticker from that area. At the waste dock, the RMW is weighed and a barcode scanner is used to track the weight to the area in which it originated.

This barcode system has helped Inova Fairfax Hospital gain a more detailed understanding of its waste profile and identify the best strategies for improving it.



ENERGY MANAGEMENT

The Issue

Hospitals are enormous consumers of energy, and have been identified by the EPA as the second most energy-intensive type of commercial space in the country. This is because hospitals operate continuously, running life-saving medical equipment and mechanical support systems every day of the year to provide top-notch care and optimal healing conditions for every patient treated.

Inova's facilities are no different, and as a result of our hospitals' scale and unique resource requirements, Inova Health System is one of the largest consumers of energy in the entire state of Virginia. Unfortunately, the majority of the energy that is used to power most healthcare facilities comes from non-renewable fuel sources such as natural gas, coal and petroleum. These fuel sources create pollution when they are extracted, transported to the power plant, stored, and burned.

The pollution from all of these energy sources can lead to significant health issues, from the emission of small airborne particles that contribute to chronic bronchitis and aggravated asthma, to the generation of greenhouse gases that form ozone which inflames the lungs, to the environmental dispersion of toxic heavy metals such as mercury, arsenic and lead.

Our Solution

As energy-efficient technologies continue to improve, Inova becomes better able to minimize impacts of our energy consumption. Though we cannot necessarily scale down the number of diagnostic machines we use, or the room temperatures we must maintain, or the support services we must provide, we are still able to consciously affect the technologies and processes used within our facilities.

By tracking our consumption patterns, supporting new technologies, identifying low-hanging retrofit opportunities, and educating our employees to inspire behavior change, we strive to minimize the impact of Inova's operations without minimizing the essential services we provide. As our energy profile improves, we will continue to work in partnership with a team of internal and external stakeholders to explore additional energy savings opportunities.

In 2009, Inova became an Energy Star Partner for Change, committing to tracking our annual energy consumption and reducing our total usage by 10%. Since 2009, we have reduced our system energy consumption by over 20%.

To achieve this goal, we targeted efforts as varied as induction lighting retrofits, the installation of motion and daylight sensors, the commissioning of our buildings' mechanical systems, and the development of an automatic shut-off program for peripheral computer equipment.

Energy-Saving Technologies

- Motion sensors
- Daylight sensors
- LED lighting
- Induction lighting
- Solar panels
- Energy Star-rated computers

Water-Saving Technologies

- Low-flow toilets
- Automated faucet sensors
- Drip irrigation systems
- Water-efficient sterilization equipment



CASE STUDY

Energy Savings from Induction Lighting

Lighting is one of the largest consumers of energy in any building. Many lights in hospitals remain lit around the clock, adding to electricity and maintenance costs and contributing to a larger environmental footprint for the facility. In 2011, the Engineering Team at Inova Loudoun Hospital decided to address this issue by initiating a lighting retrofit.

After over a year of planning, the hospital made the switch from fluorescent to induction lighting. This new lighting technology was installed in Inova Loudoun Hospitals' ER entrance, main atrium, and all parking areas on the campus. These lights require about 60% less energy than the fluorescent fixtures, and also contribute to reduced lighting system maintenance costs due to the need to be replaced less often. They will yield significant savings and a quick ROI over the fluorescent bulbs they replaced.

WATER MANAGEMENT

The Issue

Due to the scale and variety of services provided by hospitals – from food to sanitation, HVAC to laundry – these facilities are generally one of the largest consumers of water within their local communities. In order for a hospital to use this water, energy is required to transport it from the water treatment plant, pump it around the facility, heat or cool it on-site, pump it back to the treatment plant, and treat it so that it can be used again.

When more water is used, more energy is spent on the transportation and treatment processes. This generally leads to the increased consumption of fossil fuels as an energy source, creating a variety of environmental and health impacts such as air pollution, water pollution, and exposure to toxic chemicals.

Our Solution

Inova aims to minimize our water consumption by supporting water-efficient technologies and streamlining water-consuming processes such as landscape management, cleaning and even handwashing. By analyzing our most water-intensive areas – such as sanitary systems, HVAC, medical processes, laundry, and food services – we are able to identify specific opportunities for reduction in each.

We eliminate wastewater from the handwashing process by installing motion sensor faucets. We reduce the amount of water required for sterilization by purchasing water-efficient autoclave machines. We minimize the need for irrigation by landscaping with native, drought-resistant plant species and using drip-irrigation bags. And we strive to engage Inova employees in the water conservation process – both at work and at home – through educational programming such as our Build a Rain Barrel Workshop and Earth Day rain barrel giveaway.



ENVIRONMENTALLY PREFERABLE PURCHASING

The Issue

In recent years, the healthcare industry has moved away from reusable products. This shift has significantly increased demand for the natural resources required to make products that are used a single time then discarded. The extraction, processing, transport and disposal processes for these resources consume enormous quantities of energy.

Single-use products have also led to a rise in waste, both from the sheer volume of products being discarded and also the excessive packaging required to transport them. Additional energy and resources are required to extract, produce, transport and dispose of these extra packaging materials. And as more resources and energy are consumed, more harmful contaminants are released into the environment.

Another major purchasing issue currently facing the healthcare industry is the presence of potentially harmful chemicals in the products used in hospitals, from IV bags to mattresses to gloves. The production, use and disposal of many products can expose humans to a range of carcinogens, reproductive toxins, artificial hormones and other hazardous materials. This issue is of particular concern for high-risk patient populations who have unusually high exposure to these products.

CASE STUDY

Single-Use Device Reprocessing

Many single-use medical devices are expensive and often made out of materials that are costly and difficult to extract. They end up in the landfill after only one use because that is how they have been designed.

Rather than throwing away costly medical devices such as harmonic scalpels, trocars and diagnostic ultrasound catheters after just one use, Inova's reprocessing program allows us to collect them and send them to our reprocessing partner.

At the reprocessing facility, they are deconstructed, cleaned, reconstructed, individually tested, sterilized and repackaged, yielding a "reprocessed" product that meets the exact same standards as when it was originally manufactured. Inova is then able to buy back these devices at a fraction of the cost while reducing the demand for brand new products.

In 2011, Inova's single-use device reprocessing program prevented over 20,000 pounds of materials out of our waste stream – roughly equivalent to the weight of four hippos.



Our Solution

Inova's Supply Chain Management department is the front door to all of the products that enter our hospitals. It is our greatest opportunity to target issues of disposability, overpackaging and chemical content.

Our Purchasing team has worked closely with Inova's supplier partners to develop a strategy for reducing the environmental and health impacts of our purchases, giving a "value-add" in the vendor evaluation process for products that reduce waste, minimize chemicals and conserve energy and water.

By emphasizing our preference for such products, we aim to use Inova's sizeable purchasing power to increase demand for products with minimal impacts to health and the environment.

In 2011 we initiated a project to take our purchasing commitment a step further by integrating environmentally preferable characteristics into the software platform already in use by Inova's purchasers. In this effort – which we hope to complete in late 2012 or early 2013 – we will categorize and analyze all of the products purchased by Inova, working with our supplier partners to identify any environmentally preferable characteristics of the products we use.

Once we have completed this background analysis we will be able to create a "tag" in the Lawson system for those products that have such characteristics, allowing our purchasers to easily pinpoint those products that fit with Inova's environmentally preferable purchasing strategy.

Inova's Environmentally Preferable Purchasing Strategies

Chemical Minimization - products should reduce the quantity and potential negative impacts of the chemicals they contain, including:

Mercury	PVC/vinyl
Lead	Flame retardants
PBTs (persistent bioaccumulative toxics)	BPA (bisphenol A)
DEHP and other phthalates	VOCs (volatile organic compounds)
Carcinogens, mutagens & reproductive toxins	Latex

Waste Minimization - products should assist in reducing the amount of waste Inova generates and/or reduce overall lifecycle impacts through:

Recycled content	Biobased material content
Recyclable	Biodegradable content
Reusable	Compostable content
Reduced materials	Increased durability/length of service

Energy & Water Conservation - products should have characteristics that either reduce demand for or increase efficiency of the energy and water used by Inova

Local Purchasing - products should preferably contain content that is extracted, processed and manufactured regionally (defined as within a 250-mile radius)

S U S T A I N A B L E F O O D S

The Issue



For good or for bad, food has a direct, measurable impact on our health and the health of the environment. Consuming nutritious foods produced using environmentally sustainable practices creates a host of positive primary and secondary health impacts, while consuming non-nutritious junk foods whose ingredients were produced using pollutive and wasteful practices is detrimental to health.

Unfortunately, our current food system is broken. It makes highly processed, calorie-laden junk foods much easier and cheaper to access than natural, nutrient-rich food items. It uses antibiotics as a growth stimulator rather than to treat illness in livestock, a practice that a growing body of evidence indicates can pose a risk to human health in the form of antibiotic-resistant bacteria. It grows crops in a way that pollutes the water we drink, the air we breathe and the world we live in. It produces the vast majority of America's food supply in a way that sacrifices long-term well-being for the instant gratification of mass production.

Our Solution

In 2011, Inova spent thousands of dollars on locally produced fruits and vegetables. This money supports local family farms who are more likely to use environmentally responsible production practices than their factory farm counterparts. During the growing season, our percent spend on local produce reached nearly 15% at some Inova hospitals.

We additionally conducted audits in all of our hospital cafeterias to baseline the overall healthfulness of the available food options. To engage employees in Inova's sustainable foods program, we hosted a CEO Celebrity Chef Cook-Off, a Local Foods Cook-Off for employees, and several Take & Bake Cooking Classes teaching participants how to prepare delicious, healthy meals using seasonal produce. We also hosted seasonal produce stands in Inova cafeterias throughout the growing season.

Inova's sustainable foods program also extends into the community. Last year we distributed thousands of Buy Fresh Buy Local guides – which include a comprehensive listing of local farmers markets – to local community members. We also partnered with local farmers markets to promote the use of SNAP/EBT programs at the markets, with a goal of increasing access to healthy foods for lower-income families within our community.

As part of this effort Inova created the Double Dollars program, which matches the first \$10 spent at farmers markets by SNAP/EBT users. In a follow-up survey of program participants, 75% of consumers responded that the Double Dollars program increased the amount of fresh fruits and vegetables they purchased, while 100% of farmers market vendors reported increased sales.

Inova's Sustainable Foods Strategies

- Increased healthfulness
- More local, seasonal foods
- Reduced environmental impacts of food purchases
- Increased community access to healthy foods
- Increased awareness of healthy food choices



ALTERNATIVE TRANSPORTATION

The Issue

Vehicular emissions are a primary, localized source of air pollution in Northern Virginia. Exhaust from vehicles contains a variety of pollutants that have been associated with pulmonary, cardiac, vascular and neurological impairments.

Motor vehicles are also a major contributor to smog, which contains ground-level ozone that can irritate the respiratory system, reduce lung function, aggravate asthma, and inflame and damage the lining of the lung.

The millions of cars on the road in the metro DC area each day have a substantial impact on the quality of the air our patients, employees and community members breathe. And when the number of vehicles on the road rises, the quality of air in our community falls.

Our Solution

The goal of Inova's alternative transportation program is to reduce the impact of 16,000 employees commuting to and from work throughout the week. By helping to remove vehicles from the road, we are reducing vehicle-related emissions, contributing to a healthier air quality and fewer pollution-related respiratory illnesses within our local communities.

In reducing the number of commuters on the road, we are also helping to reduce traffic congestion in Northern Virginia, helping to eliminate a small portion of each vehicle's daily emissions. This creates the potential for significant impact when considering the hundreds of thousands of vehicles driving in Northern Virginia on a daily basis.

Inova's alternative transportation strategy consists of providing viable alternative transportation options for employees. In addition to providing bike racks at all Inova hospitals, we have incentivized the use of carpools and hybrid vehicles by creating preferred parking spaces in employee parking areas.

Depending on the location of the hospital, we also offer a variety of public transit options for Inova employees, including a metro shuttle bus, a monthly public transportation stipend and a pre-tax commuter benefit program.

To increase the visibility of these options and educate employees on how to use them, Inova also held several Alternative Transportation Fairs and Remote Control Carpool Races, where SmarTrip metro cards, bike trail maps, bus schedules, and other commuter information was distributed.



GREEN BUILDING

The Issue

Like virtually all buildings, the products used to build and maintain Inova's hospital facilities have a tremendous impact on levels of indoor air pollution, which is estimated by the EPA to be one of the top five environmental risks to public health.

Products such as paint, particle board fixtures, carpets and cleaners can all contain chemicals that are detrimental to human health. These indoor air pollutants may contribute to various short-term health issues for patients, while the medical teams who care for them and are exposed to them on a daily basis are also prone to short- and long-term health impacts.

At the same time, many building products also create significant health impacts. Both the production and disposal of vinyl (PVC) – one of the most common flooring surfaces in hospitals – create highly carcinogenic dioxins, one of the most toxic substances known to man. The exhaust from the diesel construction equipment necessary to create a building contains over 40 toxic air contaminants, which include many known or suspected cancer-causing substances. The application of pesticides indoors and outdoors can contaminate local air, water and food sources, exposing everyone they come in contact with to toxic chemicals that have been linked to a range of health problems.

Virtually every product used in a hospital requires energy to produce, transport and ultimately dispose of, which leads to increased air pollution in communities around the globe.



Our Solution

Inova has developed several strategies for minimizing the health impacts of our facilities. 2011 saw the continuation of several new construction projects set to achieve Leadership in Energy & Environmental Design (LEED) certification.

The LEED requirements target the impacts of the entire construction process, looking at site sustainability, water efficiency, energy & atmosphere, materials & resources and indoor environmental quality. Inova has taken great strides to ensure that the impacts from the construction of our buildings are minimal, and LEED-rated new construction projects will include a variety of green features designed to create safer, healthier working and healing environments for their occupants.

Our integrated pest management program focuses on removing or altering the conditions that attract pests, utilizing a combination of non-toxic pest elimination methods before reverting to the use of toxic pesticides. We use a range of Green Seal Certified cleaning products, including general purpose cleaners, cleaning and degreasing compounds, metal polish and carpet and upholstery cleaners. We also use eco-friendly landscaping practices such as xeriscaping and water-efficient irrigation to maintain our grounds.

HEALTH INFORMATION TECHNOLOGY (HIT)

The Issue

Modern hospitals rely on technology to provide the best care and pursue the most cutting-edge research possible. Unfortunately, these technologies generally don't do much to reduce the paper waste from old, outdated systems and at times may even lead to the creation of additional paper waste. The production and disposal of most paper – including recycled paper – requires chemicals whose production can lead to the release of harmful chemicals such as dioxins into the atmosphere. At the same time, the technologies used in HIT consume energy which also contributes to air pollution that can impact health.

From a different perspective, millions of patients and healthcare employees travel to doctors' offices and hospitals each day to meet with their care providers. Many of these visits are simple check-ups or medical consultations, and yet many patients who don't necessarily require an in-person visit are spending valuable time commuting to and from their appointments. This contributes to increased local traffic congestion and air pollution, requires that larger parking facilities be built to hold the peak number of cars expected to be on-site in a given day, and wastes the valuable time of patients and their care providers.

CASE STUDY

Implementing Electronic Paystubs



Before 2011, the compensation of Inova's 16,000 employees consumed large amounts of time, money and paper. Many resources were consumed in order to ensure each employee's bi-weekly paychecks were received on time, and the paper trail continued to pile up.

In 2011, Inova made the switch from paper to electronic paystubs. This system has eliminated over 15,000 forms and envelopes sent out every two weeks. That equates to eliminating more than 390,000 sheets of paper and envelopes each year - over 3,000 pounds!

The environmental savings from this initiative are significant. According to the Environmental Paper Network, the elimination of 3,000 pounds of paper saves about six tons of wood made from about 36 trees. It also eliminates the use of over 34,000 gallons of water.

Our Solution

Inova uses health information technology, or HIT, to improve our services and reduce our environmental impact. In addition to purchasing Energy Star-rated desktop computers and office equipment, we have virtualized the servers at Inova's data centers. This process has eliminated over 300 physical systems to date, saving 150 kilowatts per hour of power consumption and 45 tons of air conditioning needs.

Two of our Server Engineers also completed the CompTIA Green IT certification, which "ensures knowledge and skills necessary to implement environmentally sound techniques within an organization's IT infrastructure by incorporating emerging technologies that shape the global green IT industry."

HIT has also spurred innovation in health care delivery via the advancement of electronic medical records (EMR). These electronic systems give care providers a way to connect remotely with patients and with each other, allowing them to share best practices and patient information throughout the health care network while streamlining systems and eliminating waste.

Inova is pleased to announce that we will be implementing the Epic EMR system throughout Inova over the course of the upcoming months. We look forward to sharing the results of this move forward in future reports.

MAXIMIZING OUR POTENTIAL

THE GOING GREEN INITIATIVE

Inova recognizes that our sustainability program would not reach its fullest potential without the support and commitment of our team. To achieve this, we must make sustainability applicable to the lives of our employees, building it into their jobs and ensuring that they have the tools they need to perform in a sustainable manner while at work.

The Going Green initiative was created to achieve this goal. Through a blend of education, communication and strategic programming, we strive to translate sustainability into a dialogue that is understandable, meaningful and relevant to all Inova employees.

Each of our operating units has a Green Team consisting of volunteers who are passionate about making their workplace more environmentally sustainable. Through monthly meetings, the team helps to decide the Going Green agenda at their operating unit and also helps to carry out the various Going Green events and programs held throughout the year.

Inova's Green Teams are the Office of Sustainability's "eyes and ears" on the ground, acting as Going Green ambassadors within their respective workplaces. Our Green Team members are often responsible for helping get new programs off the ground by providing us with the ideas and enthusiasm needed to implement and adopt new programs.

CASE STUDY

Inova's Medical Donations Program: Extending Our Mission

At Inova, we often end up with surplus medical supplies, gently-used medical equipment, furniture and other objects that, though we no longer have use for them, are still valuable and useful in the medical setting. Inova has a robust medical donations program, donating over 75 tons of supplies in 2011 to organizations within and outside the US.

These donations keep waste out of the landfill while continuing Inova's mission to protect the health of the diverse community we serve. Through these donations, we have been able to support the medical missions of charity organizations such as the Community Coalition for Haiti (pictures below), which provides access to quality care for some of Haiti's most vulnerable population.



THE GREEN TEAM: FEATURED PROFILES

Name:
Cindy O'Hara

Occupation:
Manager,
OB Community Services

Green Team Member:
4 years



Helps Inova Go Green by:
Acting as the Going Green co-chair for Inova Loudoun Hospital. I work with the Green Team to maintain the Going Green community bulletin board, run green team meetings and manage Green Thumb Thursday events.

I also always make sure to turn off lights and electronics, take advantage of natural daylight in my office, and have prompted a switch to electronic rather than printed meeting handouts and reports.

Name:
Dr. Ravindra Gupta

Occupation:
Medicine Hospitalist,
Dept. of Medicine

Green Team Member:
7 years



Joined Inova's Green Team because:
Seven years ago, the Dept. of Medicine Chair requested that we get involved with administration to some degree. I wasn't particularly excited about any specific committee at the time so I decided to form my own.

I was, and still am, quite passionate about the link between our own well-being and the health of our ecosystem. With the help of the former VP of Materials Management, we started the Environmental Committee. It has grown by leaps and bounds since then.

Name:
Sheryl Rose

Occupation:
Medical Technologist

Green Team Member:
4 years



Joined Inova's Green Team because:
I have always wanted Hospitals to "Go Green" since my days working at Alexandria Hospital. Before "Going Green" was a phrase I submitted an idea for Alexandria Hospital to recycle.

At the time ideas were being given to save the Hospital money. My idea was not used at that time. When the opportunity came about 4 years ago for a Laboratory tech to make the lab "green" I volunteered.

Name:
Meredith Solomon

Occupation:
Medical Librarian

Green Team Member:
Since joining the Inova team in 2011



Helps Inova Go Green by:
Doing my best to recycle paper, bottles and anything else I know is recyclable. In the library, we reuse the blank side of paper that has already been printed on once to reduce the amount of paper we consume. The amount of paper still used – even in this 'electronic age' – is enormous and if we can find ways to reduce use I am all for it.

I am also working on a project to create a recycling station for items such as batteries, small printer toners and pens in the Library.

GOING GREEN EVENTS

Another crucial component of Inova's Going Green initiative is the visibility of our program to employees, visitors and community members. We recognize the importance of providing fun, educational events that increase the visibility of our Going Green program. We use such events as tools to educate our employees, visitors and community members about Inova's environmental program. The more people we draw to these events, the more we are able to broaden the reach of our message.

In 2011, Inova hosted a variety of Going Green events in support of this effort, reaching thousands of individuals within and outside of the Inova family. Each of these events was designed to support Inova's mission to promote wellness by giving people the tools they need to live healthier, more sustainable lifestyles. These events included:

Make Your Own Rain Barrel Class

CEO Celebrity Chef Cook-Off

Local Food Employee Cook-Off

Weekly Farmer's Markets

Electronic Waste Recycling

Confidential Paper Shredding

Remote Control "Carpool" Race

Weekly Farmer's Markets

Plug-In & Win Home Energy Audits

Waste Education Carnival

Carbon Footprinting

Going Green Scavenger Hunt

Tree Seedling Giveaway

Earth Day Fairs



CASE STUDY

Project Blue Wrap Fashion Design Competition

Blue wrap is a sterile plastic fabric that is used to protect sterilized surgical instruments as they are transported about the hospital. Several years ago, Inova's Green Team identified a new use for this material, turning the bright blue "fabric" into tote bags and aprons.

Then, in 2011, we pushed the concept one step further, hosting Inova's first-ever Blue Wrap Fashion Design Competition. Participants from within Inova and across the country were challenged to get imaginative with eco-friendly fashion by reusing blue wrap, transforming it from an OR staple to a fashion inspiration. The goal of this competition was to help redefine waste, encouraging participants to reconsider the potential of the everyday items around them.

As part of the competition, Inova partnered with DC Fashion Week to host Fall 2012's Eco-Fashion Show, the opening show of DC Fashion Week. Fourteen winning contestants were selected to have their designs featured on the runways alongside the work of professional eco-friendly fashion designers.



CELEBRATING OUR SUCCESS

2011 AWARDS & RECOGNITION

Throughout the years, Inova has strived to develop an environmental sustainability program that contributes to a healthier future for our patients, employees and community. We take great pride in the awards and recognition we have received for this effort, and look forward to adding to this list as our program continues to grow.



Practice Greenhealth System for Change Award

- Inova Health System



Practice Greenhealth Partner for Change with Distinction Award

- Inova Fair Oaks Hospital
- Inova Loudoun Hospital



Practice Greenhealth Partner for Change Award

- Inova Alexandria Hospital
- Inova Fairfax Hospital
- Inova Mount Vernon Hospital



Loudoun County Green Business Challenge Silver-Level Winner

- Inova Loudoun Hospital



Fairfax County Best Workplaces for Commuters Award

- Inova Alexandria Hospital
- Inova Fairfax Hospital

RECOGNIZING OUR PARTNERS

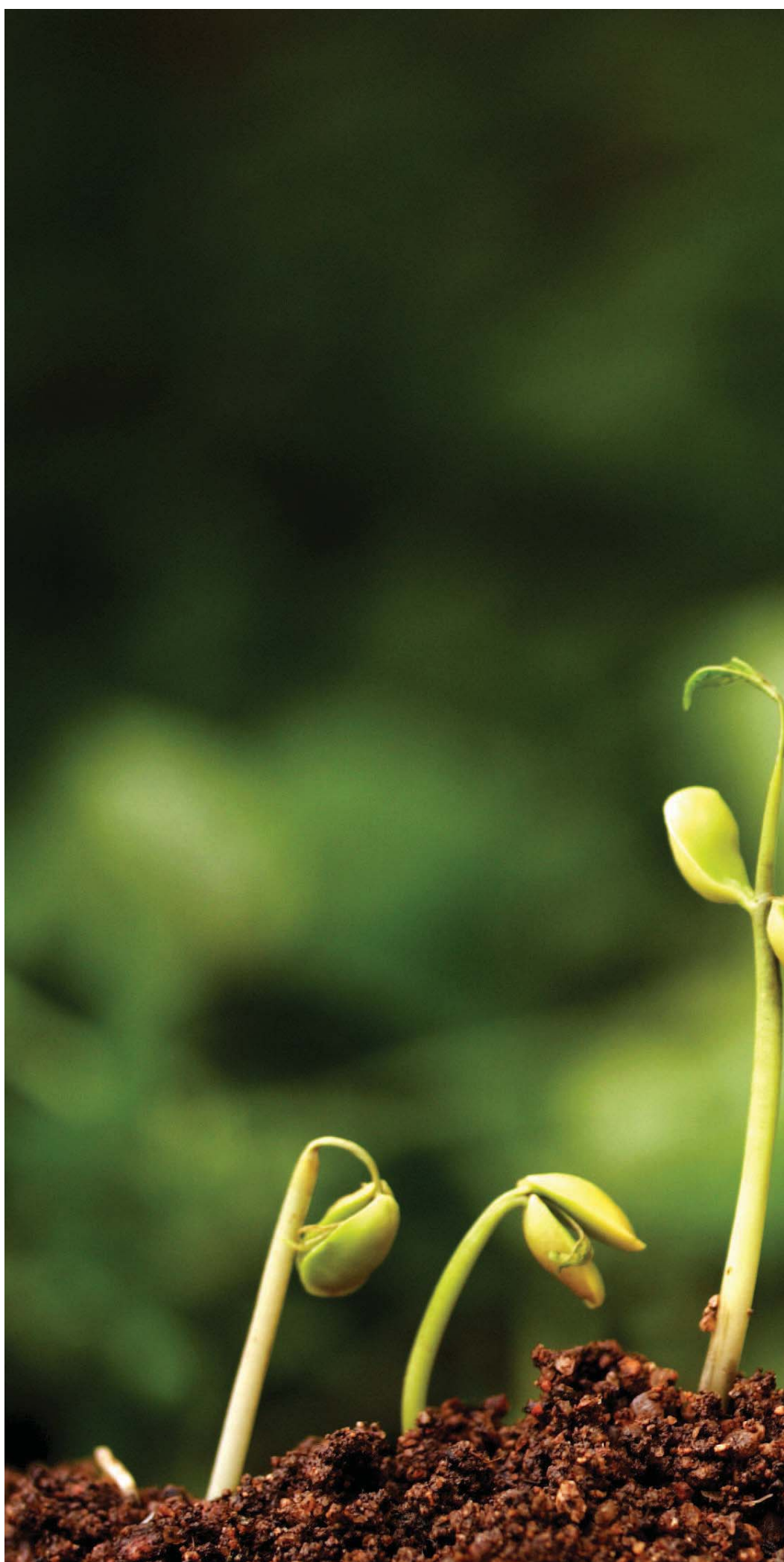


NOTES:

The environmental and facilities data contained within this report are provided by Inova's vendors and departmental leaders within the organization and are self-reported through tools such as Energy Star's Portfolio Manager and the EPA's WasteWise program.

This report only covers those environmental aspects associated with Inova Health System's five main hospitals and does not include information regarding sustainability initiatives within the system's corporate offices or outlying facilities. As Inova's sustainability program continues to expand, relevant initiatives at these entities will be added to future reports.

Inquiries regarding Inova's 2011 Sustainability Report may be directed to Seema Wadhwa, Director of Sustainability in Inova's Office of Sustainability and system-wide point of contact for sustainability-related activities. For more information about sustainability at Inova or to review this report online, visit www.inova.org/sustainability.







Inova Health System is a not-for-profit healthcare system based in Northern Virginia that consists of hospitals and other health services, including emergency- and urgent-care centers, home care, nursing homes, mental health and blood donor services, and wellness classes. Governed by a voluntary board of community members, Inova's mission is to improve the health of the diverse community it serves through excellence in patient care, education and research. Inova provides a healthy environment for its patients, families, visitors, staff and physicians by prohibiting tobacco use on its campuses.