



# green ideas

Pointers for a  
planet-friendly  
practice

## What does it mean to “go green” in health care? That’s a question now being asked with increasing frequency as more health care providers recognize the value of environmentally friendly practices in the medical office.

By Mark Harris

It was probably inevitable that long-standing environmental concerns over such issues as air pollution, toxic chemicals, recycling, and waste management would make their way into health care management and policy decisions. After all, the core mission of health care is to promote the well-being of patients and society. Ideally, the environmental practices of health care organizations should reflect and enhance this core mission.

Compelling practical reasons for reducing health care’s environmental footprint exist, as well. The health care industry produces thousands of tons of waste each day, including biohazards and other toxic wastes. In fact, according to the Environmental Protection Agency (EPA), medical waste incinerators had become one of the largest sources of toxic air emissions in the United States by the mid-1990s.<sup>1</sup> Since that time, new EPA regulations and increased efforts by the American Hospital Association and other health care organizations have made pollution prevention a major industry goal.<sup>2</sup>

While many of the environmental challenges facing health care require industry-wide leadership, the solutions often begin at the grassroots level. That’s one reason why you, as a medical assistant, are uniquely qualified to help promote the transition to more sustainable practices. As professionals working in both administrative and clinical positions, you are often

the staff with the best knowledge of an office’s inner workings.

### Cultivate awareness

What exactly do green practices entail in the health care setting? “The concept of the green medical office is really about becoming aware of the resource management in use in an office,” says Joel Kreisberg, DC, MA, founder and senior director of the Teleosis Institute, an advocacy group for sustainable practices in health care. “Basically, that means conservation of resources, pollution prevention, and monitoring environmental performance.”

As an adviser, Dr. Kreisberg likes to suggest medical offices begin the transition to more sustainable practices by organizing a staff “green team.” Typically, the use of paper and paper products is one of the first issues a green team assesses. Going green can mean simply making the switch to buy paper made only from recycled contents, or it can mean implementing a new office policy requiring the use of two-sided paper for printing. Notably, the advent of electronic medical records (EMRs) has become an important new way to use less paper.

Indeed, while most of the news about EMR systems has focused on the enhanced efficiency and convenience they bring to routine office procedures, EMRs also serve as conservation tools. “Our EMR system allows us to drastically cut down on paper consumption,” says Mary Lou Allison, CMA (AAMA), office manager for internal

medicine specialists Prokos, Boss, and Drouff in Jupiter, Fla. “For example, we’ve set up our computer system so we can view faxes [100 to 300-plus daily] electronically instead of printing them. This includes prescription renewals from pharmacies, medical records for patients, laboratory and imaging reports, and other materials. Patients can also request appointments and medication refills now via e-mail. Additionally, the clinic website now offers patients diet and exercise instructions they can view from home, which largely eliminates the need for paper copies.”

The Florida clinic also made the switch to Energy Star-rated lightbulbs and air conditioners. Under the auspices of the EPA and the Department of Energy, Energy Star is a program that seeks to promote more energy-efficient products and services for businesses and homes. As such, the Energy Star label sets standards for computer monitors, servers, lighting, and other office equipment.

According to the EPA, Energy Star-qualified products average about 20 percent better energy efficiency than conventional options.<sup>3</sup> Fluorescent lighting with the Energy Star label requires about 75 percent less energy than standard incandescent bulbs, for example. These savings amount to a notable difference when you consider that lighting represents the largest cost component of most office electrical bills. Typically, Energy Star lightbulbs also last about 10 times longer than standard bulbs.<sup>4</sup>

### Daily greening

Other issues to assess during the initial phase of a green overhaul include such concerns as recycling, water conservation, environmentally preferable purchasing, and use of medical devices.

**Recycle.** “We like to suggest offices set up a three- or even four-level waste disposal and recycling system,” says Dr. Kreisberg. “This involves a system to dispose of regular waste, paper waste, ‘red-bag’ biohazard waste, and in some cases compostable waste.” Perhaps more than any other green practice, recycling requires buy-in from staff. The green team should take it upon itself to ensure everyone is in the loop about the whys and hows of the recycling initiative. They can provide regular updates during staff meetings or sponsor occasional seminars to educate the staff on the green team’s ongoing work.

The green team might also consider recruiting staff coordinators to serve as point people for the recycling initiative, suggests Laura Brannen, executive director of Hospitals for a Healthy Environment. Such volunteers can ensure recycling containers are properly maintained and address any problems as they arise.<sup>5</sup> “Recycling containers that are not color-coded, have no labeling, and no coordinator responsible for monitoring its use, will—guaranteed—have trash in it,” says Brannen. The latter is an especially important concern. Red-bag waste costs at least five times more to dispose of than regular waste, and so it becomes even more expensive if it includes non-hazardous wastes, such as paper and other items.<sup>6</sup>

**Conserve water.** “Typically, an office can reduce its water bill by 20 percent with a little bit of effort,” says Dr. Kreisberg. “You can noticeably reduce water flow just by putting in low-flow faucets, for example.” Fortunately, an assessment of office water usage begins simply with looking at the water bill. “Obviously, there are not that many water systems in any building,” says

Dr. Kreisberg. “You have toilets, sinks, and landscaping. So basically you just want to assess where water is being used.” Accordingly, an office can take steps to repair leaking fixtures, install new faucets or even water-saving toilets.

**Take stock.** The supplies a facility buys (e.g., paper, cleaning products, chemicals, paint, and tissue paper) can also have an appreciable environmental impact. The goal of environmentally preferable purchasing is to try to reduce the use of any supplies that might pose potential risks for staff and patients or otherwise harm the environment. This can include decisions to find alternatives to products that use harsh chemicals or involve unnecessary packaging. Some health care facilities have begun to replace rag mops with microfiber mops and cloths, for example, reducing the need for abrasive chemical cleaners (microfiber mops are also easier on employee backs than the traditional bucket and wet mop).<sup>7</sup>

Large health care organizations often have separate departments for environmental purchasing. At the clinic level, there are organizations that offer green purchasing assistance, such as Council Connections, a nationwide coalition of community health centers. Council Connections buys in bulk to offer community clinics and other nonprofit health care groups price reductions on office supplies.<sup>8</sup>

Greening opportunities also can be found in contract services. Some linen suppliers, for example, provide reusable cloth gowns and sheets, making it possible to replace disposable paper gowns and sheets. This service can lead to a reduction in both solid wastes and red-bag wastes, as the latter includes used paper gowns or sheets with bodily fluids.

**Reuse.** Another emerging solution in sustainable practices involves the safe reuse of medical devices once designated as single-use devices. For instance, a gynecologic office can replace single-use plastic specula with sterilized metal specula. There is

also a growing reprocessing industry that specializes in sterilization procedures for single-use devices. According to Practice Greenhealth, reprocessed devices usually are delivered back to hospitals and clinics in reusable totes, offering another advantage over the paper and cardboard packaging often found with new products.<sup>9</sup>

### A green vision takes root

Dr. Kreisberg is a firm believer in the power of the green team. “The first thing a green team will do is the assessment,” he says. “They’re essentially asking: ‘What are the projects we can do first to get the most bang for the buck?’” This first round of assessments and planned improvements will usually take from six months to a year, he notes.

As the programs and development coordinator for San Francisco-based North East Medical Services (NEMS), Kathleen Sheung led such an initiative in 2008, which took seven months to put into place. With assistance from Teleosis and a grant from the Tides Foundation, nonprofit NEMS organized a green team composed of 10 providers and staff.

“We organized our team to include staff from every department,” says Sheung. “They definitely had an inside view of what was going on in their respective departments. This was important because with administrative issues, it can sometimes be a little difficult for departments to communicate with each other. By getting them together on one team we were able to share ideas more effectively.”

The NEMS green team tackled such first-line issues as recycling, composting, conservation, and paper usage. Along the way, they would also sponsor regular staff seminars to educate everyone on what was happening. “We have roughly 300 staff at four clinics and it was important to make sure all of our staff were fully educated about the program,” explains Sheung.

For their efforts, the team registered a number of accomplishments. A recycling

system for plastic, glass, paper, and aluminum was introduced, as well as one for used batteries, electronics, and cell phones. Additionally, the team developed a new memo and bulletin board system to reduce individually printed notices, streamlined the format for patient progress notes, and implemented a “double-sided” printing policy. Supplies are now ordered electronically and new electronic payroll options are available to employees. More recently, NEMS has begun the switch to a fully operable EMR system.<sup>10</sup>

Additionally, a new composting program has been set up in staff lounges. Food scraps, napkins, paper take-out containers and similar waste is turned into soil for nearby farms. “An employee with the city’s Department of the Environment worked with us to ensure that we were getting the lowest price for waste and compost pick-up services,” Sheung notes. The latter saves NEMS \$2,400 in annual garbage disposal costs (minus some composting expenses).

Finally, to improve water conservation, NEMS installed automatic water faucet sensors in their sixth-floor restrooms and a water cooler in the conference room. “We used to buy three 24-bottle cases of water per month for the use of our guests and visitors in the conference room, at a cost of \$22.47 a month,” says Sheung. “To save plastic and resources, the clinic instead purchased a water cooler for \$159.99. It now costs us \$4.99 per large refillable water bottle for the cooler.” Such a change saves NEMS about \$1,300 annually, says Sheung.

## Sustainability blossoms

In taking up the environmental mantle, remember that the goal of a green medical office is perhaps less a final destination than a shift in orientation. This shift requires an ongoing commitment to a new, more environmentally aware way of working. The good news is that once the first phase of planned improvements

## Energy-saving ideas



During cold weather, take advantage of the sun’s warmth by keeping blinds open during daylight hours on sunny days. On warm days, close or angle blinds to keep out the heat of the sun.



Set up computers to enter system standby or hibernate after 30 to 60 minutes of inactivity and set monitors to enter sleep mode after 5 to 20 minutes of inactivity. Surprisingly, using screen savers may actually prevent a computer from entering sleep mode. To maximize energy savings, set up Energy Star Power Management features, which will place monitors and computers (e.g., the CPU and hard drive) into a low power “sleep mode” after a period of inactivity.



Employ innovations, such as automatic controls, to turn lights off or down when not needed. With good design, energy use from lighting in most buildings can be cut in half while maintaining or improving lighting quality.



Regular examinations of your building’s equipment, systems, and maintenance procedures by management can save 6–20 percent in utility costs.

*Source: Bring Your Green to Work with Energy Star. Test Your Energy IQ Quiz. Environmental Protection Agency. <http://www.energystar.gov/index.cfm?fuseaction=bygtw.showSplash>*

is achieved, most medical offices are well poised to take their environmental commitment to the next level.

“Our initial greening efforts were directed mostly toward the staff,” remarks Sheung. “Next, we’re going to move on to address issues related more to our patients. We’re interested in setting up a medication take-back program at our main clinic, for example. This will allow patients to drop off expired or unused medications.” The

program helps protect surface water by keeping unwanted medications out of wastewater. “We’re also going to set up more composting and recycling bins in our patient areas,” adds Sheung.

At his own Bay Area chiropractic clinic, Dr. Kreisberg reports that during the first year of their green initiative, they reduced solid waste usage by 50 percent. This led to a decision to try to achieve a 60 percent reduction by the end of the second year. “After we achieved that goal,” says Dr. Kreisberg, “we decided the only way to get to 70 percent was to stop using so much single-use food packaging, so we began to try to eat lunch together more, using cups and plates that we washed. We actually got our solid waste reduced to 70 percent from where we started.”

Fortunately, an ongoing commitment to sustainability is not a commitment health care providers have to go alone. In fact, a host of resources is available for those interested in developing more sustainable practices. “The local utility company might have a program where they will do a free energy assessment for a business,” says Dr. Kreisberg. “You can get advice on the best way to change your lighting, for example. Or the local water company can advise on switching to low-flow water filters.” For projects that are more comprehensive in scope, nonprofits such as the Teleosis Institute, Practice Greenhealth, and other organizations offer various programs and consulting services.

The EPA also offers help. Health care providers that sign on as Energy Star partners can access recommended energy management strategies and other resources. Health care providers can also take advantage of free online Energy Star workshops. The workshops address benchmarking; rating and improving energy performance; purchasing and procuring efficient equipment; PC power management; and other topics. The series on performance improvement, for example, includes such topics as planning upgrades

strategically, assessing poor performance, adopting an integrated approach to facilities upgrades, and fostering staff involvement in green initiatives.<sup>11</sup>

“We in health care want to do things that are good for people and the planet,” concludes Dr. Kreisberg. “We’re living in a time when we need to be more concerned with resources because our planet is stressed. Greening is a way of participating in the shift in our culture toward business and systems that are also good for our environment.”

Sheung concurs. “I think the green medical clinic is the direction we’re all heading in,” she says. “In terms of improving patient care, it’s not just a benefit to the staff and patients at your clinic, but it’s for the whole community.”

It makes sense that health care by nature of its healing *mission* would embrace sustainable practices. But perhaps it makes even more sense that health care by nature of its *expertise* will in years to come take the lead in developing the best environmental practices that serve as a model to other industries and society as a whole. ◀

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## Guardians of greenness

Ready to go green? These organizations can help you develop more sustainable practices.

### Council Connections

Council Connections was founded by community health centers in 1979 to provide significant pricing discounts through the power of volume purchasing. The group offers contracts for green products and services. (*Membership is free.*)

<http://www.councilconnections.com/site/about.asp?Page%5FId=100>

### Energy Star

The Energy Star label guarantees products meet energy efficiency guidelines set by the EPA and U.S. Department of Energy. The Energy Star partnership offers businesses an energy management strategy that helps in measuring current energy performance, setting goals, tracking savings, and rewarding improvements.

<http://www.energystar.gov>

### Health Care Without Harm

Health Care Without Harm works to implement ecologically sound and healthy alternatives to health care practices that pollute the environment and contribute to disease.

<http://www.noharm.org>

### Practice Greenhealth

Practice Greenhealth is a membership and networking organization for institutions in the health care community that have made a commitment to sustainable, eco-friendly practices.

<http://www.practicegreenhealth.org>

### Teleosis Institute

The Teleosis Institute is an affiliated program of Practice Greenhealth devoted to developing effective, sustainable health care provided by professionals who serve as environmental health stewards.

<http://www.teleosis.org/index.php>

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