

Lower costs by going green!

The U.S. health care industry contributes almost 10 percent of the nation's total carbon dioxide emissions.¹ In fact, if the U.S. health care industry were a country, it would rank 13th in the world for greenhouse gas emissions.¹ The American Medical Association concurs with the scientific consensus that the Earth is undergoing global climate change and that these changes will inevitably create conditions that adversely affect public health.² The AMA encourages physicians to serve as role models for promoting environmental sustainability and to help educate their patients and the public on environmentally sustainable practices. Physicians and practices are encouraged to cooperate in green initiatives that promote environmental sustainability and responsible waste management policies.

Small changes in the way practices operate can add up to lasting, meaningful benefits for practices, individuals and the environment. Practices that demonstrate their commitment to environmental responsibility can save money, attract and retain employees, and experience a positive public perception by promoting their environmentally friendly efforts.

Implementing procedures and policies to help your medical practice save energy, reduce costs and increase efficiencies can be relatively easy to accomplish and inexpensive. This guide provides tips for changes to help make operations more energy and cost efficient. You'll also find helpful answers to questions and links to other valuable resources.

What is a carbon footprint?

A carbon footprint is a measure of the amount of greenhouse gases, including carbon dioxide, emitted as a result of the activities or operations of a person, household, business, medical practice or other entity. Estimate your practice's carbon footprint.

What contributes to a medical practice's carbon footprint?

The use of heating and cooling systems, computers, medical devices and other energy intensive equipment consumes energy, most often in the form of electricity powered by fossil fuels. Carbon dioxide and other greenhouse gas emissions are released as a result. Transportation and food choices can also influence carbon emissions.

Why does it matter?

Greenhouse gases from human activities have been the most significant driver of observed climate change since the mid-20th century.³ As greenhouse gases build up in Earth's atmosphere, the climate warms and other changes in the ocean, environment and on land are provoked. Organic life forms of all kinds are affected by the volatility of the atmosphere. The effects of climate change also have direct implications for health care. A 2009 study suggested that climate change will have considerable impacts on human health by directly changing patterns of disease and mortality, extreme weather events including flooding and drought, food security, potable water, habitable areas and population health.⁴

How will your practice benefit from going green?

Businesses attempt to reduce waste and conserve energy for a variety of reasons. Cost savings is likely top of mind for most businesses, health care practices being no exception. A 2012 study projected more than \$5.4 billion in savings if all U.S. hospitals reduced energy consumption and waste, and gained efficiencies in operating room practices.⁵ On a smaller scale, implementing such changes can reduce monthly utility costs to help generate immediate savings.

Practices that implement processes and policies to increase environmental sustainability can benefit from a healthier work environment—and an improved public image by promoting their efforts. Patients can benefit from a green practice, as potential patient contact with toxic materials is reduced and better treatment outcomes can be produced through more healthful dietary programs and improved environmental quality.⁶ Inform patients of your environmentally friendly efforts with brochures or signage (printed on recycled paper) in the waiting room, digital signage if appropriate, email newsletters, or through patient billing statements.



10 reasons to green your office:7

- 1. Wiser and more responsible uses of resources
- 2. Saves money
- 3. Creates a healthier work environment
- 4. Facilitates team building
- 5. Generates ideas from every member of your office
- 6. Improves employee retention
- 7. Enhances public relations
- 8. Contributes to a decrease in pollution
- 9. Builds a healthier community
- 10. Makes environmental sustainability part of your life

How can medical practices reduce their carbon footprint?

Medical practices can make changes on several levels to help reduce their carbon footprints. Small changes can be made immediately, and others can be part of a long-term strategy.

Immediate changes to reduce energy consumption and waste

- Establish a "turn off" policy: If your practice's clinic hours allow for it, make it a practice-wide rule to completely turn off computers, lights, printers, and fax and copy machines at the end of each day.
- Reset your thermostats: Set the office thermostat at 68°F (20°C) in the winter and 74°F (23°C) in the summer for optimal efficiency. If you have a programmable heating and cooling system, and your clinic hours do not extend overnight, set the thermostat to automatically lower the temperature each night in winter and raise the temperature each night in summer.
- Replace your old light bulbs with energy efficient alternatives: Light-emitting diode (LED) and compact fluorescent lamp (CFL) bulbs are energy-saving alternatives to incandescent light bulbs. CFL and LED lights use up to 75 percent less energy than incandescent bulbs and last up to 25 times longer. Depending on your practice needs, you may prefer one over the other, so it's important to <u>compare your</u> <u>options</u>.
- Reduce and recycle waste: Create an office policy to buy supplies in bulk and purchase supplies made from—and packaged in—recycled materials. Ensure

recycle bins are readily available throughout your office. Buy recycled printer paper and tap into your local office supply store to help with recycling printer ink cartridges. Print double-sided or go paperless with an electronic health record. Use a digital fax system in which fax images are received through email instead of on paper. If you have a break room or kitchen in your office, use reusable plates and cups instead of Styrofoam[®], paper or other one-time use dishes.

Long-term changes

Some alterations may require more capital investment and time to implement, but will have lasting benefits for your practice and your patients.

Create an environmental sustainability strategy:

Make a commitment to your practice, your staff and your patients. Incorporating new energy saving policies and procedures is an ongoing process and requires long-term dedication. Create a culture within your practice that empowers your staff to participate in the process and fully engage with and support the effort. Set goals and dedicate financial resources to reach them. Measure your progress, make adjustments and look for new ways to improve your efforts. See an example of an environmental sustainability policy.

Install renewable energy sources: Solar water heating technology, or solar thermal systems, can save energy by harnessing the power of the sun to heat your water. Solar thermal systems can generate immediate and long-term cost savings. In most commercial markets, consumers and businesses can purchase "green power" from the utility company. While it is a good way to ensure some of your energy is coming from renewable sources, the cost could be higher than traditional electricity so this may or may not be not be the right option for your practice.

Communicate with patients digitally: If possible for your patient panel and specialty, implementing a telehealth program can help reduce energy consumption. Communicating with patients through text, email and telephone can help increase access to care, save patients time and fuel cost, and help reduce the overall footprint of obtaining care. It is important to set up clear and compliant policies for any telehealth program, so be sure to consult your local, state and federal regulations. Learn more using the AMA's STEPS Forward™ practice improvement strategies module, <u>"Adopting Telemedicine."</u>



What else should you know?

There are many resources available to physicians to help make the transition to a green practice easier and more approachable.

The American College of Physicians offers a "Climate Change Toolkit" that includes clearly written background information, an educational presentation and lists of talking points for conversations with patients.

Visit acponline.org for this toolkit and more.

My Green Doctor (MGD) is a free, not-for-profit online service that provides physician-approved content to help physicians and outpatient facilities utilize sustainable practices to save money and gain efficiencies. The Florida Medical Association, the World Medical Association, the Florida Academy of Family Physicians and Physicians for Social Responsibility partnered to offer this free learning tool. Learn how to form an office "Green Team," conduct monthly meetings and achieve "Green Doctor Office" recognition.

Anyone can use the MGD service—physicians, practice managers, nurses, physician assistants, clerical staff, administrators, cleaning staff and others. The workbooks are written by physicians and provide action steps that practices can implement. Topics include energy and water efficiency, recycling, chemicals in the workplace, transportation choices and healthy foods. Videos, presentations and customizable waiting room brochures are also available for download.

Visit mygreendoctor.org for more information.

The Green Guide for Healthcare[™] is a toolkit that helps health systems integrate environmental and health principles into the planning, design, construction, operations and maintenance of health care facilities. The guide contains information and resources for anyone in the health care industry, but is best suited for health care executives, medical and design professionals, engineers, constructors, facility managers and service providers. Physician leaders should encourage their hospital to take advantage of this resource.

Visit gghc.org for more information.

ENERGY STAR® is a well-known program established by the U.S. Environmental Protection Agency (EPA). The program awards organizations that make outstanding contributions to protecting the environment through superior energy efficiency efforts. The EPA also offers informational resources for consumers and businesses to help them adopt better energy efficient practices and policies.

Visit <u>energystar.gov</u> for more information.

The future of green health care

Health care practices, from independent establishments to large health systems, all have a responsibility to help reduce the impact the industry has on our environment. Integrating changes on multiple levels could save our nation billions of dollars in health care spending⁸ as well as have positive impacts on patient outcomes.⁶ The AMA will, through its policy framework and diligent advocacy, continue to encourage and support physicians and practices in their efforts to decrease their carbon footprint and increase their long-term sustainability.

1. Eckelman, M.J., Sherman, J., Environmental Impacts of the U.S. Health Care System and Effects on Public Health. PLoS One, 2016. 11(6): p. e0157014.

- 2. American Medical Association. Policy H-135.938. *Global Climate Change and Human Health*. Accessed July 18, 2017; Available from: policysearch. ama-assn.org/policyfinder/detail/climate%20change?uri=%2FAMADoc%2FHOD.xml-0-309.xml.
- 3. United States Environmental Protection Agency, Climate Change Indicators: Greenhouse Gases. 2017.
- 4. Costello, A., et al., Managing the health effects of climate change. The Lancet. 373(9676): p. 1693-1733.
- 5. Kaplan, S., et al., Can Sustainable Hospitals Help Bend the Health Care Cost Curve? 2012, The Commonwealth Fund.
- 6. Practice Greenhealth, The Business Case for Green Healthcare Facilities. 2008, prepared by Institute for Innovation in Large Organizations.
- 7. Sack, T. Ten Reasons to Go Green. 2017 Accessed Sept. 8, 2017; Available from: mygreendoctor.org/welcome-to-my-green-doctor/nine-reasons-togo-green/.
- 8. Advisory Board. The Health Care Sustainability Initiative. Accessed Sept. 8, 2017; Available from: advisory.com/community-impact/health-caresustainability-initiative.

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