

**Testimony of Providence  
Ways and Means Committee  
of the  
U.S. House of Representatives  
Preparing America's Health Care Infrastructure for the Climate Crisis  
Sept. 15, 2022**

Good morning, Chairman Neal, Ranking Member Brady, and members of the Committee. My name is Elizabeth (Beth) Schenk, executive director of environmental stewardship at Providence, and I am pleased to be with you here today.

Providence is a Catholic not-for-profit health system located in seven states: Alaska, California, Montana, New Mexico, Oregon, Texas and Washington. Providence serves 52 (including 14 rural) hospitals, more than 900 clinics, a health plan, senior services, home health, hospice, PACE, housing, and many other health and educational services. We are committed to understanding and responding to the needs of the many communities we serve, and to providing high-quality, equitable health care for the 5 million unique patients that come to us for care every year.

As health care providers, we have seen the impact climate change has on health. As a faith-based, mission driven organization, our vision is "Health for a Better World". And to us, health care extends beyond the walls of our hospitals. We know that to improve the health for our patients, we must improve the environmental conditions in which they live, including reducing the negative health impacts from climate change.

We have committed to become carbon negative by 2030. This means we aim to reduce, remove, or offset more carbon (greenhouse gases) from the atmosphere than we emit.

It is incumbent on us to act for several reasons:

1. **Our environmental crisis is harming the health of our patients, caregivers, and facilities:** The climate crisis drives events that cause illness and poorer health outcomes, and can threaten homes and livelihoods. Headquartered in the Pacific Northwest we have experienced firsthand how these climate related events are harming health. From heat waves in Oregon, wildfires in Northern California to freezes in Texas we have seen

the direct impact of these events on our patients, our caregivers and facilities. For example:

- a. During a Pacific Northwest heatwave, we had no spare beds at our emergency departments from the Canadian border to southern Oregon and hundreds more people died during the heat wave than would have had the weather been typical. ([Hidden Toll of the Northwest Heat Wave: Hundreds of Extra Deaths - The New York Times \(nytimes.com\)](https://www.nytimes.com/2021/07/26/us/heat-wave-pacific-northwest.html))
- b. At one of our long-term care facilities in Oregon, the wildfires were too close for safety, and residents had to be evacuated to temporary housing in Portland.
- c. In 2020, the wildfires in Santa Rosa, California and in Medford, Oregon required more than 700 of our clinicians to evacuate and more than 30 lost their homes and some lost their loved ones.

These types of events significantly disrupt patient care, and our communities depend on us to be there. Our communities and health system need to be more resilient against these climate related events.

2. **Cost-effective, efficient, and resilient operations are imperative to sustain our services:** Hospitals are reeling financially from the Covid pandemic. Providence is struggling to meet the costs of labor, supplies and energy during this inflationary period. We reported a financial loss of \$934 million in the first half of 2022. It is imperative we take proactive measures to provide long-term financial sustainability in our health system so we can continue to care for our communities for years to come. For example, in 2021, Providence spent almost \$130 million on energy. Improving our energy efficiency will reduce the associated greenhouse gas emissions as well as reduce our energy costs. We want to reduce our energy costs by 20 percent and hope doing so would reduce overall health care costs and improve the quality of care we provide our patients. Environmental stewardship initiatives often yield significant financial savings, and we are committed to returning these savings to our patients and into our communities. For example, one of our anesthesia stewardship initiatives led to a widespread clinical practice change toward a low-carbon, less expensive anesthesia gas without compromising patient outcomes. More specifically, this switch reduced our emissions and provided \$3.5 million in savings.

### **At Providence, WE ACT**

Addressing the climate crisis in health care is daunting. We know that not all hospitals and health systems are addressing it today, and at Providence, we are responding to the challenge with innovative solutions.

We introduced our WE ACT framework, which outlines five areas for greenhouse gas mitigation across Scopes 1, 2, and 3: **W**aste, **E**nergy/water, **A**griculture/food, **C**hemicals, and **T**ransportation. We systematically track the usage and cost of a given resource and its carbon

emissions on a monthly basis for all of our hospitals. This information gives us insights for data-driven action. Below are a few accomplishments from the past year:

- **Waste – a heavy case:** Hospitals can generate 42 pounds of waste per patient, per day. As part of our goal to become carbon negative by 2030, Providence is committing to diverting more than 50 percent of our total organizational waste away from landfills or hazardous streams. Some hospitals, like Providence St. Patrick Hospital in Missoula, Mont., have already achieved that goal, while others, like Providence Alaska Medical Center in Anchorage, Alaska, are well on their way with creative ways to reduce or reuse waste. They have been able to divert a significant percentage of their waste through compost and recycling; they donate unneeded food and supplies to local organizations and shelters. Providence has managed their Medical Supply Recovery Organization for decades, donating thousands of tons of supplies worth millions of dollars to those in need, domestically and abroad.
- **Energy and water – when less is more:** Water and energy are critical resources and Providence is working toward large-scale efficiencies. For instance, we implemented an effort to control heating and cooling systems in medical office buildings based on an occupancy schedule, which reduces energy consumption when buildings are not in use. 26 Providence health care facilities in Washington and Oregon are operating on 100 percent renewable electricity today. In addition, Providence Centralia Hospital installed the largest solar array on a hospital in Washington. Further, hospitals in California saved water and costs by upgrading their scrub sinks to antimicrobial laminar flow devices saving water while maintaining effective water pressure.
- **Agriculture and food – a sustainable attitude:** Producing food uses energy and water, creates methane, and results in pollution from transportation and chemicals. About 10-15 percent of a hospital's daily solid waste comes from food. Providence partners with our food service vendors to reduce the carbon intensity of meals served, reduce waste, and ensure sustainable and socially responsible food purchasing practices. In addition, hospitals like Providence Milwaukie Hospital and Providence Willamette Falls Medical Center in Oregon are composting food waste and purchasing locally grown food to reduce their environmental impact. Several hospitals support gardens and donate the produce to local food banks. Not only do these practices reduce environmental impact, but they represent direct investment in our local communities, which is vital.
- **Chemicals – going green and clean:** Providence anesthesia clinicians have reduced carbon emissions from anesthetic agents by 70 percent, saving \$3.5 million annually. Several of our sites have decommissioned the use of leak-prone, central supply systems for nitrous oxide, a potent greenhouse gas that depletes atmospheric ozone. We have added guidance in our building standards to select non-toxic finishes and furnishings -

Providence Tarzana Medical Center in Los Angeles has selected such materials for their new patient wing currently under construction.

- **Transportation – the largest contributor of greenhouse gases in the U.S.:** At Providence, we track greenhouse gas emissions from transportation including business flights, rental cars, and hotel stays; from employee commuting, and from reimbursed miles when traveling for home visits, hospice care and other local business travel needs. From our data, we know that we reduced business travel by over 90 percent during 2020 and 2021, during the height of the public health emergency. We now aim to sustain our reductions by at least 50 percent compared to 2019. We are working with our vendors to assess their practices, we support employee commuting with transit vouchers, bike parking, showers, van pools. We have created highly functional hybrid workspaces to allow more remote work where feasible. We have seen rapid growth in telehealth, allowing greater access to care for patients, increased productivity from clinical staff, and in many cases higher satisfaction for both patients and caregivers.

### **Our challenges**

Providence operates in some of the most remote locations like Kodiak, Alaska to some of the most densely populated like Los Angeles, Calif. While our unique and diverse footprint offers many opportunities for innovation, it also creates challenges for working in different jurisdictions and geographies. Several key challenges we face are listed below.

- **Applying a wholistic approach.** We care for the most vulnerable among us, during times of stress and fear. We strive to deliver the most current and effective care, while maintaining finances, addressing changes in technology, and retaining excellent clinicians. While we are committed to reducing greenhouse gases, it is challenging to do so when much of society has not yet transitioned to a carbon-free economy. For instance, our transportation sector is on the cusp of moving toward electric vehicles, but most transportation remains fossil-fuel driven. A significant percentage of our greenhouse gas emissions are from our purchases, yet our supply chains and investment markets are not fully transparent, and it is difficult to understand the impacts of our decisions. We hope that all parties in health care can work together to tackle these challenges. *We need coordinated, systemic, public-private solutions.*
- **Greenhouse gas emissions from clinical care needs to be better researched.** The health care sector has opportunities to better understand how health care decisions and actions related to climate change impact the communities we serve. We are committed both to reduce harm, and to anticipate where our services will be needed as the planet changes, and what clinical issues will emerge. We would like to see enhanced opportunities for research to understand effective ways to reduce our own pollution and greenhouse gas emissions, and to build resilience for patients, communities, and health care delivery.

**Volatile Anesthetics example:** Given the long-standing, extensive use of sevoflurane at low fresh gas flows across the globe, the FDA should remove the fresh gas flow restriction warning from sevoflurane package inserts. This will encourage clinicians to administer anesthetics more efficiently, thereby reducing associated environmental and financial costs.

- Cryogenic tanks of liquid nitrous oxide, both a potent greenhouse gas and an ozone deplete, for central medical gas systems should be prohibited due to the inherent, intentional leak associated with these containers.
- **Inhalers example:** Inhaled medications for asthma and other respiratory diseases are often supplied as metered dose inhalers (MDI), which contain hydrofluorocarbon propellants that are potent greenhouse gases. Fortunately, many of these respiratory medications are also supplied as dry powder inhalers (DPI), which contain no propellant, and are clinically equivalent in many cases. While these inhalers may seem small and insignificant, they add up- the UK's National Health Service (NHS) estimates that these inhaler emissions comprise 5 percent of all healthcare emissions. The FDA should encourage pharmaceutical companies to provide the dry power inhaler (DPI) formulations of all applicable medications and disincentivize the MDI, propellant-containing formulations.
  - As new, low-carbon propellants are developed to replace the current high-carbon formulations, the FDA should “fast-track” approval of inhaled medications containing the same active clinical medications, rather than subjecting these formulations to a prolonged approval process.
- **Lack of transparency hinders our progress.** To better understand the carbon-intensity of medical supplies and equipment, we need knowledge of the materials and chemicals that are in products, in order to perform materials-based carbon assessments. This information should be made freely available to allow healthcare systems to make more informed decisions regarding the carbon intensity of their supplies and equipment. We hope to move forward as a sector in attaining transparency the whole health care sector regarding greenhouse gas emissions and other aspects of pollution. Only with this knowledge can we make more informed decisions that help us reach our goals.
- **Public-private partnership is essential.** No one hospital or health system or sector can solve this alone. Large scale, systemic changes are needed at the industry, governmental and individual level. We need public and private partnerships to be successful. We could use Congress' help in the following ways:

- Funding for health care resilience and climate related grant programs to support non-profit health systems.
- Direct CMS to allow Medicaid 1115 waivers and Medicare and Medicaid Quality Improvement Organizations to provide technical assistance and funding for health care providers in marginalized communities, community health centers, nursing homes, and federally qualified health centers to prepare for extreme weather and climate impacts.
- Increase funding for the Hospital Preparedness Program or other programs that can directly support pre-disaster hospital and health facility resilience projects, including retrofits and maintenance to reduce flood and wildfire risk, harden facilities against extreme weather, and integrate redundant water and power supplies, including microgrids and community renewable energy grids to enhance resilience and access to water and energy when certain portions of the grid are disabled.