Insights Series A thought leadership publication Sustainability in action Starting the process

of transformation

Introduction

The environmental, financial, and social challenges facing healthcare providers are inextricably linked. We know that institutions who embrace sustainable practices are better equipped to meet the evolving needs of both patients and communities. But is greater sustainability a realistic and attainable goal at a time when resources are strained, patient demands are increasing, and costs are rising? How can one get started amongst these challenges?

Northwestern Medicine is a non-profit healthcare system affiliated with the Northwestern University Feinberg School of Medicine in Chicago, Illinois. It includes research hospitals, acute care facilities, and academic centers comprising a network of 11 hospitals, 35,000 employees, and serving more than 1.4 million patients in the Chicago area.

We spoke with Jeff Good, Chief Sustainability Executive at Northwestern Medicine, to learn more about his experiences developing and implementing effective sustainability solutions. His insights on how Northwestern Medicine tackled these challenges are candid and instructive – and provide a positive example of how sustainability, innovation, greater community engagement, and improved patient outcomes can be successfully combined.

Northwestern Medicine Overview



11 hospitals



35,000 employees



1.4 million patients



Interview

Siemens Healthineers

Jeff Good, thank you for speaking with us. You've now served as Chief Sustainability Executive at Northwestern Medicine since 2023. Could you tell us a bit more about how you approached this new role when you accepted this position?

Jeff Good

It's great to talk to you. In a role like this, I think it's essential to start with a clear understanding of the Why. To undertake a sustainability journey in healthcare you have to be clear about why you're doing it. Sustainability in this context isn't just about meeting global targets or checking boxes on an environmental checklist; it's about making a genuine, tangible impact on the communities you serve.

Institutions have to start by clarifying their purpose: Are they motivated by the pressing need to improve air quality, reduce waste or by a desire to improve the health and well-being of

"You don't need to boil the ocean. Even the small actions count."

Jeff Good, Chief Sustainability Executive,
Northwestern Medicine

local populations? Whatever the impetus, authenticity is key. You have to be authentic about what you can do and set realistic, achievable goals – goals that are aligned with social realities.

In my experience, it's better to set goals based on making a local impact in your community rather than investing in environmental efforts in another country or adopting lofty, abstract targets that might resonate on a global stage. True sustainability cannot be a distant, far-off ideal; it has to be a practical commitment to improving the systems and spaces where patients live, work, and heal. That can mean things like reducing pollution in urban centers, ensuring access to healthy food, or lowering the volume of healthcare-associated waste.

Once you've decided to focus on local efforts, what's the next step? How do you decide what to pursue and how do you ensure that you're getting results?

Jeff Good

The next crucial step is baselining. Before a hospital or clinic can embark on meaningful change, it first needs an accurate assessment of its current environmental impact – things like resource usage and operational inefficiencies. This means taking stock of everything from energy consumption to waste management practices to water use to supply chain logistics. Baselining is more than a snapshot; it provides the data necessary to identify areas for improvement.

Once you have this data, you then have to prioritize initiatives based on their potential impact and financial feasibility. You have to ask tough questions like, can something be done without



impacting our financial capabilities? Or which projects can bring immediate returns with less investment? Sustainability efforts have to be both impactful and financially viable. You don't need to boil the ocean. Even the small actions count.

This approach was probably a change from the way things had been done previously. What steps did you take to ensure buy-in both from management and from employees, especially those who were directly impacted?

Jeff Good

These efforts did represent a change for a lot of people. For an initiative like this to succeed, clear and consistent communication is essential. Not just with senior management, but with everyone – true buy-in has to start at the ground level. One important step is to make it easy for employees to find information in a centralized place and to engage directly, for example an internal webpage that talks about all the sustainability initiatives and allows people to submit their own ideas.

For us, one of the most effective ways to foster this was to establish a local Sustainability Council – an inclusive group that not only drives initiatives but actively listens to the insights and concerns of frontline staff. For us, these councils are a forum for sharing best practices and pilot projects, but also for creating a culture of collaboration where ideas flow freely.

Today, we're seeing a lot of sustainability programs that were initiated by staff. For example, it was the frontline staff that noticed patient booties were being thrown away, and they questioned whether these could be repurposed somehow. Other employees have challenged us on eliminating Styrofoam cups or plastic straws.

One of our pilot projects is a program to recycle PVC-based medical waste, like IV fluid bags, into other products like playground equipment and industrial floor mats. PVC is used in a lot of medical equipment and devices, but once it has been properly cleaned and sanitized it can be effectively recycled. The challenge is properly sorting the waste for recycling, so it's important that staff understand what's being done and buy into it. Another key is that the staff is not just asked to recycle as one additional task to their work, but stakeholders were engaged to develop a new process that would integrate recycling into the nursing workflow while working around space constraints. It's great to see how they've embraced this effort – we've already recycled more than 170,000 IV bags.¹

¹ptonline.com/news/baxter-to-scale-up-pvc-intravenous-bag-recycling-program

The challenge with a lot of sustainability initiatives is that people don't see the results or the impact in their day-to-day work. As you said at the outset, goals can often be very abstract. When projects like this get off the ground, what do you do to make sure that people feel personally engaged?

Jeff Good

You're right, making sustainability visible is a crucial part of clear communication, especially with employees. When people see our commitments materialize through visible actions — whether it's energy-efficient retrofits or waste reduction efforts — they're much more likely not only to support them but to become active participants.

For example, when recycling bins are placed around the hospital, staff realize that the hospital is being more circular in its approach. Not everyone might understand what it means to reduce greenhouse gas emissions, but they understand that things they use are being recycled and reused and that this material is helping others. Steps like this not only gets results, but they also serve as important visual reminders.



You mentioned results. At the end of the day, that's what everyone is looking for! Management, as well as employees want to know if the efforts they're making are having an impact. How do you demonstrate this?

Jeff Good

Measuring outcomes is essential. It's not enough to just implement sustainability initiatives. You have to invest in measurement tools and data analytics to track your progress. Whether it's assessing energy savings, waste reduction, or the carbon footprint of supply chains, you need granular data in order to understand the real-world impact of these efforts.

The benefits of this are twofold: having accurate data reassures leadership that they are making meaningful strides toward their sustainability goals; that their investments are paying off. And second, it provides transparency to staff and stakeholders, showing them the organization is on the right path.

The other benefit of precise data is that it allows you to refine strategies. Sustainability cannot be just a one-off initiative. It has to be an ongoing process, a process that often requires persistence and adaptation.

A careful review of data sometimes means making adjustments to existing initiatives. And sometimes it means looking ahead at long-term goals even if immediate results are modest.

But it can happen that the data may not demonstrate what you expect to see. Often, you just have to stick with it. Engage with vendors and form a close partnership so they can support you to look for better way to collect more data or measure it at a refined level to see your investment is paying off. You know you are doing the right thing, and the outcome is probably there, but maybe it is just not being measured in the right way.



Making radiology more sustainable

Northwestern Medicine is transforming a former retail space into a sustainable radiology imaging suite. One innovative feature of this radiology suite is that imaging equipment including MRI and CT scanners will be pre-installed with power meters to measure real-time energy consumption.

In addition, a digital twin of the imaging service was created to simulate the workflow of the facility, in order to optimize operational efficiency. The modeling suggest ways in which wait time for patients can be shortened and capacity increased, making it possible to serve more patients.



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"Our vendors are the ones with the expertise and innovation know-how on how products can be made more sustainable."

Jeff Good, Chief Sustainability Executive, Northwestern Medicine

Siemens Healthineers

You've talked about the internal measures you're implementing at Northwestern. What about the wider community and your many partners. How do you engage with them?

Jeff Good

For us, our vendors and suppliers are crucial partners. We're working on formalizing a procurement plan to engage vendors in our sustainability efforts. They're the ones with the expertise and innovation know-how on how products can be made more sustainable. They are eager to hear our ideas, and we're eager to hear theirs. That can be anything from reducing waste by making products that are reusable or developing technology and equipment that is more energy efficient.

It's also important to create a network on this topic. In Chicago, there are five large medical centers. While we are competitive with each other, when it comes to sustainability, I find that hospitals are keen to work together and share sustainable practices. We asked each other questions like, "What have you done with reprocessing? What's your experience with reusable gowns?

Did you think about waste in this way?" People are willing to share because we all know we are doing the right thing, and that's refreshing. When it comes to sustainability, we're all on the same team!

It's sometimes been said that sustainability is a marathon, not a sprint. But I think an even better analogy is a relay race. To get to the finish line, a lot of different people and organizations have to participate.



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About the authors



Jeff Good
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Jeff Good joined Northwestern Medical Group in 2008 as Director of Budget and Planning. He became VP of Operations and Surgical Services in 2016, then served as VP of Security and Emergency Management from 2018 to 2021. From 2021 to 2023, he was President of Palos Hospital. In September 2023, he was named Chief Sustainability Executive at Northwestern Medicine, where he now leads system-wide environmental and sustainability efforts.



Joanne Grau
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Based in Germany, Joanne Grau brings over 16 years of global marketing experience at Siemens Healthineers, spanning the U.S., Asia, and Europe. She began her career as a molecular biology researcher and has authored multiple scientific publications.



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André Steinbuss has spent almost ten years in various positions in marketing with a focus on diagnostic imaging at Siemens Healthineers. André graduated in medical technology engineering at the University of Applied Sciences in Luebeck. Before joining marketing, he spent ten years in research and development in the hearing instrument business of Siemens. During this time, he has authored multiple patents and publications.

At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. Sustainably.

As a market leader, we want to advance a world in which breakthroughs in healthcare create new possibilities with a minimal impact on our planet. We've been pushing the boundaries in medical technology for more than 125 years. By consistently bringing innovations to the market, we enable healthcare professionals to innovate personalized care, achieve operational excellence, and transform the system of care.

With the unique combination of our strengths in patient twinning¹, precision therapy, as well as digital, data, and artificial intelligence (AI), we are well positioned to take on the greatest challenges in healthcare. We will continue to build on these strengths to help overcome the world's most threatening diseases, enable efficient operations, and expand access to care.

Our portfolio, spanning in vitro and in vivo diagnostics to image-guided therapy and cancer care, is crucial for clinical decision-making and treatment pathways. We are committed to improving healthcare access for all, limiting our environmental impact as we pioneer breakthroughs, and engaging our diverse Healthineers to achieve this impact on a global scale.

Motivated by our purpose and guided by our values, we are building an inclusive culture, where we embrace diversity in all its forms. We are a team of 73,000 Healthineers in over 70 countries passionately pushing the boundaries of what is possible in healthcare to help improve the lives of people around the world.

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¹Personalization of diagnosis, therapy selection and monitoring, aftercare, and managing health.