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## Decarbonization Starts at the Top

*Leaders' critical role in reducing the carbon impact of quality patient care.*

A growing number of healthcare leaders are driving initiatives to reduce their organizations' greenhouse gas emissions. They recognize the significant contribution their health systems' operations and supply chains make to a warming climate, creating both an opportunity and an obligation to mitigate the environmental impact of quality patient care. Healthcare leaders are uniquely positioned to reduce their health systems' carbon footprints and catalyze meaningful action across the sector.

Through effective governance systems; diverse stakeholder engagement, including environmental impact as a key dimension of quality and safety; and establishing more sustainable supply chain practices, healthcare leaders can steer their organizations toward more climate-conscious operations.

### Establish a Governance System for Decarbonizing Care Delivery

A healthcare organization's decarbonization governance system provides an infrastructure for accountability, including setting targets, tracking progress and driving coordinated activity toward decarbonization goals. The governance system ensures that sustainability initiatives are embedded in the organization's

overall strategic planning and operations, promoting cross-functional alignment, collaboration and learning. The following actions can help establish a governance system for decarbonizing care delivery:

- **Set decarbonization goals.** Clear, measurable, science-based goals that commit to net zero emissions by 2050, with significant reductions by 2030, are foundational to addressing climate change. These targets encompass all aspects of care delivery and environmental sustainability, from energy use and waste reduction to supply chain management and investment portfolios. Institutional goals must cascade down to the facility, departmental and team levels, so each team understands its role and opportunities to advance the organization toward its net-zero targets.
- **Establish an executive-level team with accountability for the decarbonization strategy and implementation.** Clarifying accountability for setting and executing a net-zero strategy and operating plan will ensure continued prioritization and support. A comprehensive greenhouse gas emissions reduction strategy

includes an outline of the key initiatives, timelines and resources required to realize the established goals. Closely align these strategies with the organization's overall mission, vision and values, and encompass all levels of care delivery, from individual facilities to systemwide initiatives.

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- **Measure emissions.** A measurement system is essential to track progress. Starting with a greenhouse gas emissions inventory in your health system, identify carbon hot spots and benchmark performance. The data can also support the translation of systemwide goals and objectives into work plans and dashboards and inform the prioritization of sustainability initiatives. The Agency for Healthcare Research and Quality's 2022 decarbonization primer provides a set of measures to prioritize tracking.

### Engage Diverse Stakeholders to Lead and Support Climate Initiatives

Enlisting the support of internal and external stakeholders is crucial for the success of decarbonization initiatives in healthcare. Executives must work together with staff, community partners, suppliers and others to gain buy-in, share knowledge and leverage collective expertise. This can be accomplished by the following:

- **Foster a culture of sustainability.** Executives across the system must actively promote sustainability initiatives and engage employees at all levels in reducing greenhouse gas emissions. This involves promoting awareness, education and training programs to increase staff understanding of the climate impacts of healthcare and clear guidance on how to act.
- **Engage the clinical workforce.** Clinicians are increasingly climate conscious and invested in sustainable care delivery. Healthcare leaders are well-positioned to broaden the definition of quality to integrate environmental considerations, in addition to cost, patient safety and health equity. This expanded view of healthcare quality can inform clinical decision-making by promoting evidence-based practices that consider the carbon impacts of different treatment options such as reducing unnecessary tests or procedures, shifting to low-carbon or reusable medical supplies and reducing or decommissioning desflurane use.
- **Partner with the local community.** Healthcare leaders can

partner with local community organizations to promote climate efforts, such as energy-saving initiatives, public and active transport use, and sourcing from local suppliers. Engaging with local partners can foster shared ownership and promote a culture of sustainability beyond healthcare systems. These partnerships also serve as a foundation for building resilient communities that can withstand infrastructure and social disruptions from extreme weather and other climate change effects. Because these are felt most acutely by historically marginalized communities, working closely with local partners in decarbonization demonstrates a commitment to health equity.

Leadership support of all stakeholders is crucial in setting the tone for an organization's commitment to a culture that prioritizes sustainability.

### Embed Climate Action Into the Quality and Safety Strategy

Healthcare leaders increasingly face the mandate to integrate environmental sustainability across their systems as a dimension of value and quality. This requires considering the environmental impacts of care delivery in decision-making processes, evaluating the environmental performance of the organization and using this information to drive quality improvements.

- **Incorporate greenhouse gas emission metrics into the quality and safety dashboard.** By adding decarbonization indicators, such as energy consumption, desflurane use and fleet electrification rates, into existing quality

measurement frameworks, hospital leaders can establish sustainability as a core component of the organization's quality improvement efforts.

- **Integrate sustainability into quality improvement projects.** Hospitals regularly have a wide array of quality improvement initiatives underway. By ensuring that each chartered project accounts for environmental considerations, such as impact on greenhouse gas emissions, reducing waste or conserving resources, leaders can standardize the integration of sustainability into all aspects of the organization's quality improvement efforts.
- **Enlist infection prevention experts to champion sustainability initiatives.** Historically, patient safety and sustainability efforts have appeared to conflict. In practice, however, many interventions to decarbonize care delivery, such as reducing unnecessary testing and optimizing procedure packs, have improved patient safety and care quality. It is increasingly evident that leaders of infection prevention and sustainability must work in partnership to ensure that clinical practice is both safe and environmentally responsible.

By taking a holistic approach to integrating climate action into their quality and safety strategy, hospitals can ensure that reducing greenhouse gas emissions becomes an integral part of operations and contributes to the delivery of high-quality care in an environmentally responsible manner.

## Establish a More Sustainable Supply Chain

The supply chain of a typical healthcare delivery organization accounts for about 50% of greenhouse gas emissions. To meaningfully reduce emissions across the healthcare sector, organizations must shift away from the traditional model—in which resources are extracted, processed, used, then discarded—toward a regenerative circular economic model in which materials are designed to have lasting value and continually cycled back into the economy.

Healthcare leaders can propel a shift in the supply chain toward a more circular economy by:

- Establishing clear expectations with and disclosure requirements for suppliers.
- Incorporating environmentally preferred purchasing (EPP) principles in procurement decisions.
- Implementing product stewardship programs such as reprocessing single-use devices.
- Forming power purchase agreements such as long-term renewable energy contracts.
- Partnering with group purchasing organizations to promote decarbonization across the supply chain.

These practices create economic, environmental and social benefits by reducing resource consumption, minimizing waste and promoting sustainable business practices.

Healthcare leaders play a pivotal role in driving decarbonization

efforts and reducing the carbon impact of quality patient care. These strategies serve to guide leaders in their efforts to establish more climate-conscious practices and operations, both within individual health systems and across the healthcare sector. ▲

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