Medicaid's Role in Safeguarding Health Equity While Fostering Reduction of Harmful Greenhouse Gas Emissions

Topline takeaways

- Actions to reduce harmful greenhouse gas emissions, including but not limited to supporting sustainable energy, transportation, and procurement practices, can have the added benefits of addressing drivers of health and improving health equity and outcomes.
- State Medicaid agencies can ensure providers receive access to financial resources and incentives that align with their diverse needs and capacities by seeking input on health care providers' needs, strengths, and financial capabilities related to implementing healthcare sector decarbonization activities and using this input to design policies and measurement frameworks that account for those needs.
- By offering education and technical assistance, especially for providers with fewer resources, and helping them identify additional funding sources, state Medicaid agencies can build health care providers' capacity to launch and measure initiatives to curb climate change, improving environmental sustainability and health equity while maintaining access to high quality care.

Introduction

Our focus in this brief is on how Medicaid can integrate its instrumental role in safeguarding health equity with new efforts aimed at reducing the health care sector's production of harmful greenhouse gas emissions (also known as decarbonization). Since its inception, Medicaid has played a leading role in promoting health equity by providing health care to people experiencing structural inequities, such as people of color, children, older adults, and people with low incomes.[1] Carbon dioxide and other greenhouse gases contribute to climate change, which disproportionately impacts these same groups of people[2,3] that Medicaid was designed to serve. Currently, some state Medicaid agencies are beginning to explore the role they might play in addressing the fact that the health care system generates roughly 9% of all harmful carbon emissions in the United States.[4] Many solutions involve incentivizing providers to modify operations. However, not all providers have adequate capacity to implement some decarbonization strategies, and thus requirements to do so without adequate financial support and technical assistance might unwittingly exacerbate inequities. Pursuing and integrating the dual missions of safeguarding equity and promoting decarbonization in health care is an emerging area of Medicaid policy with many promising practices.

State Medicaid agencies have an opportunity to encourage health care providers to implement actions to reduce harmful greenhouse gas emissions while safeguarding health equity for the people they serve (Box 1). For example, they could motivate providers to measure and report greenhouse gas emissions through quality measurement programs or incentivize them to use sustainable practices through contracting and payment mechanisms.[5]

To avoid exacerbating inequities, it is important for state Medicaid agencies to consider that providers serving Medicaid enrollees start with differing resources and capacity to implement efforts to reduce harmful greenhouse gas emissions. While some efforts may be cost saving or neutral, others may require

substantial financial resources to launch. Although many health care providers agree that reducing harmful greenhouse gas emissions is important, some raised concerns about having the capacity and

resources to implement or report on these efforts.[6] Safety net providers, such as federally qualified health centers (FQHCs) and Rural Health Clinics (RHCs), that provide care for people with Medicaid coverage,[7] often operate with fewer resources and might not be as capable of investing in decarbonization efforts compared with larger or better-resourced health systems.[8,9] Without adequate technical assistance and financial support, requiring all providers to implement decarbonization practices could inadvertently strain some providers with fewer resources. That strain could potentially undermine access to and quality of care available to people enrolled in Medicaid, worsening health inequities.

To proactively address this risk and adequately support providers, state Medicaid agencies can gather input from other state agencies, providers and community groups to identify and address equity concerns. They can then incorporate this input as they design measures and policies and provide education and technical assistance to build providers' capacity to implement and measure decarbonization efforts. Through these strategies, state Medicaid agencies are well positioned to equip providers in reducing their greenhouse gas emissions while maintaining access to high quality care.

Box 1. Examples of actions Medicaid agencies can foster to reduce production of harmful greenhouse gas emissions and promote health equity

- Switching to renewable energy sources, such as solar or wind power, can improve air quality, benefiting both health care facilities and surrounding communities.[23] Cleaner air can reduce respiratory illnesses, particularly in communities disproportionately exposed to pollution.[24]
- Investing in sustainable transportation practices, such as promoting telehealth, using zero-emission medical transportation fleets, providing bicycling incentives, and supporting public-transit options, can reduce greenhouse gas emissions and air pollution.[25] Better options for public transportation enhance access to health care for communities with lower incomes, reducing transportation-related barriers to health and improving health equity.[26]
- Using sustainable procurement practices, such as sourcing health care supplies and food from local suppliers, can reduce greenhouse gas emissions associated with supply chains and reduce poverty by supporting the local economy.[27]

Opportunities for Medicaid to engage providers, public agencies and other affected groups in policy design

State Medicaid agencies can consider the following strategies to understand and address providers' diverse needs when designing policies and measurement frameworks for reducing harmful greenhouse gas emissions. To engage providers and other affected groups in policy design, state Medicaid agencies can:

- **Gather input from health systems leaders and providers.** State Medicaid agencies can review publicly available summaries of comments and use strategies such as requests for information, listening sessions, or public comments on proposed policies and measures to gather additional input specific to their state about health systems leaders and providers strengths, needs, and perspectives. For example, the Centers for Medicare & Medicaid Services (CMS) issued a request for information as part of rulemaking to gather input on what the U.S. Department of Health and Human Services and CMS could do to help providers understand "how to take action on reducing their emissions and tracking their progress in this regard."[10] In addition, the Washington State Hospital Association

included questions on decarbonization in its Medicaid Quality Incentive program, which gives participating hospitals the opportunity to share input and earn incentive payments for reporting on metrics.[11]

- **Prioritize input from providers with fewer resources.** State Medicaid agencies can prioritize getting input from safety net providers who serve many people enrolled in Medicaid, but often have fewer financial resources, such as FQHCs and RHCs. This input can help state Medicaid agencies better understand these providers' perspectives and strengths related to decarbonization as well as their unique needs and capacity challenges. This understanding can inform which supports could help build readiness to participate in decarbonization efforts.
- **Gather input from communities about equity considerations.** State Medicaid agencies can also solicit and incorporate feedback from affected groups beyond the health sector, such as community-based organizations, to identify and proactively address concerns about unintended consequences of new decarbonization policies. They can focus on communities who are disproportionately affected by climate change. For example, the Oregon Health Authority conducted a formal tribal consultation when developing a report summarizing climate and health initiatives in Oregon and priorities for future public health action.[12]
- **Coordinate with other state agencies.** Since climate change is a cross-cutting issue that requires collaboration across agencies, state Medicaid agencies could also review public comments for decarbonization policies administered by other state agencies (e.g., Departments of Public Health, Transportation, or Energy) to identify relevant takeaways for the healthcare sector. State Medicaid agencies could also seek input directly from representatives of these agencies to find opportunities for collaboration and consider participating in interagency work groups focused on decarbonization. State Medicaid agencies have developed interagency relationships to advance other priorities, such as housing. For example, through technical assistance from the Medicaid Innovation Accelerator Program, several state Medicaid agencies partnered with other state agencies to improve access to supportive housing.[13]
- **Convene an internal state Medicaid agency workgroup to advance climate change action.** State Medicaid agencies can consider convening internal workgroups to gather ideas and plan for how to incorporate feedback from providers, community groups, other agencies, and other affected groups to accelerate progress or maintain momentum for new or existing decarbonization policies. By convening staff within state Medicaid agencies who are interested in climate change with a diverse range of expertise, such as financing, quality measurement, care delivery, and health equity, state Medicaid agencies can ensure alignment with existing policies and effective coordination and communication about new decarbonization policies.

Strategies to select measures to monitor progress towards goals for reducing harmful greenhouse gas emissions in the health sector

To incentivize providers to efficiently measure and report, state Medicaid agencies can:

- **Leverage and adapt existing measures.** State Medicaid agencies could incentivize and support providers to measure and report on greenhouse gas emissions across different settings to help monitor progress towards decarbonization goals. Although a standard set of measures does not yet exist across payers, researchers have compiled several measure concepts for assessing greenhouse gas emissions, including total greenhouse gas emissions from energy use, owned and leased vehicles, and inhaled

anesthetics.[14,15] For example, the National Academy of Sciences' Climate Action Collaborative Policy, Financing, and Metrics Workgroup is working to identify a targeted set of metrics related to reducing harmful emissions.[16]

- **Align measures across payers and regulatory organizations.** To lessen the administrative burden on health care providers, especially smaller or less-resourced organizations, state Medicaid agencies can coordinate with other payers, regulatory agencies, and researchers to align measures, where possible. State Medicaid agencies could also monitor accreditation standards to consider opportunities to integrate climate into measures. State Medicaid agencies can identify opportunities to align new measures with existing measures and continue to monitor how feasible and useful the measures are to help providers and the state assess progress toward decarbonization and health equity goals at the patient level.

Strategies to build providers' infrastructure and capacity to reduce greenhouse gas emissions

State Medicaid agencies can consider the following strategies to build capacity for lower resourced providers to reduce greenhouse gas emissions, such as connecting providers with education, offering technical assistance, and helping providers identify other funding streams.

- **Build in upfront funding and technical assistance to help providers strengthen infrastructure.** Research on helping FQHCs participate in alternate payment models suggests the importance of taking a "stepped approach," including providing upfront funding for smaller FQHCs to build infrastructure such as data analytics technology and staffing.[17] Similarly, providing funding for smaller providers with fewer resources and less experience in decarbonization can help them leverage existing population health infrastructure and build additional infrastructure needed to succeed in quality measurement and value-based payment programs to mitigate climate change.
- **Provide technical assistance and support to build providers' capacity to design, implement, measure, report on decarbonization.** State Medicaid agencies could educate providers about resources on cost-saving measures, such as saving electricity or reducing waste and share resources to help them measure and report on greenhouse gas emissions. For example, the Office of Climate Change and Health Equity (OCCHE) compiled resources on reducing health sector emissions, including information about engaging organization leaders, setting clear goals in emissions reduction, and conducting facility-level measurement and data collection.[18] Other government agencies such as the Agency of Healthcare Research and Quality and nonprofits such as Healthcare without Harm also released reports and toolkits with case studies and examples of facility-level measures and decarbonization strategies.[19,20] State Medicaid agencies can start by sharing existing resources and then tailor materials or develop new resources focused on their specific state context.
- **Inform providers about additional resources or funding streams to help launch and sustain decarbonization efforts.** State Medicaid agencies can inform providers of other funding streams to help them launch and sustain their decarbonization efforts. For example, the OCCHE maintains a list of federal decarbonization funding opportunities through agencies such as the Environmental Protection Agency and U.S. Department of Energy. The OCCHE website also describes resources funded through the Inflation Reduction Act to reduce emissions, such as the U.S. Department of Agriculture's Renewable Energy for America Program.[21] Based on the specific state funding context, State Medicaid agencies can identify opportunities to partner with other agencies funding or advancing related work. For example, the Oregon Health Authority developed a memorandum of

understanding with the Oregon Department of Transportation to establish regular meetings to check on cross-agency efforts, share data and accountability metrics, and strategize about funding cross-agency efforts.[22]

Conclusion

Actions to reduce the health sector's production of harmful greenhouse gas emissions not only help the environment; they can also address drivers of health and enhance health equity and outcomes. State Medicaid agencies can safeguard health equity while also incentivizing reducing the environmental impacts of the health care sector. To do this, it is important that state Medicaid agencies account for the diverse needs of health care providers and organizations when designing policies, as well as build providers' capacity, especially those with the fewest resources or capacity, to take part in decarbonization activities.

How We Conducted This Study

Mathematica is working with the Commonwealth Fund to inspire, inform, catalyze, and equip state Medicaid agencies to become leaders in reducing the amount of greenhouse gases the health system generates. This brief draws from a landscape scan of publicly available sources, listed in the citations section.

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Citations

[1] Medicaid and CHIP Payment and Access Commission. *Medicaid's Role in Advancing Health Equity.* (MACPAC, June 2022), https://www.macpac.gov/wp-content/uploads/2022/06/Chapter-6-Medicaids-Role-in-Advancing-Health-Equity.pdf.

[2] "Climate Effects on Health," Centers for Disease Control and Prevention, n.d., https://www.cdc.gov/climateandhealth/effects/default.htm.

[3] "Climate Change and Health Equity," Office of Climate Change and Health Equity, May 6, 2022, https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/index.html.

[4] Victor J. Dzau et al., "Decarbonizing the U.S. Health Sector – A Call to Action," *The New England Journal of Medicine* 385, no. 23 (December 2021): 2117-2119. https://www.nejm.org/doi/pdf/10.1056/NEJMp2115675?articleTools=true.

[5] Hardeep Singh et al., "Mandatory Reporting of Emissions to Achieve Net-Zero Health Care," *The New England Journal of Medicine* 387 (2022): 2469–2476, https://www.nejm.org/doi/full/10.1056/NEJMsb2210022.

[6] CMS, "Medicare Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2023 Rates; Quality Programs and Medicare Promoting Interoperability Program Requirements for Eligible Hospitals and Critical Access Hospitals; Costs Incurred for Qualified and Non-Qualified Deferred Compensation Plans; and Changes to Hospital and Critical Access Hospital Conditions of Participation," *Federal Register* 87, no. 153 (August 2022): 48780,

https://www.federalregister.gov/documents/2022/08/10/2022-16472/medicare-program-hospital-inpatient-prospective-payment-systems-for-acute-care-hospitals-and-the.

[7] Centers for Disease Control and Prevention, *Medicaid Service Delivery: Federally Qualified Health Centers* (Centers for Disease Control and Prevention, 2014), https://www.cdc.gov/phlp/docs/brief-fqhc.pdf.

[8] Aaron Bernstein, Kristin Stevens, and Howard Koh, "Patient-Centered Climate Action and Equity," *JAMA* 328, no. 5 (July 2022): 419-420. https://jamanetwork.com/journals/jama/fullarticle/2794469

[9] Singh et al., "Mandatory Reporting of Emissions."

[10] CMS, "Medicare Program; Hospital Inpatient Prospective Payment Systems."

[11] "Medicaid Quality Incentive," Washington State Hospital Association, 2022, https://www.wsha.org/quality-safety/projects/medicaid-quality-incentive/.

[12] Emily York et al., *Climate and Health in Oregon: 2020 Report* (Oregon Health Authority, Dec. 2020), https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documents/2020/Climate%20and%20Health%20in%20Oregon%202020%20-%20Full%20Report.pdf.

[13] CMS, *Medicaid Innovation Accelerator Program: Community Integration through Long-term Services and Supports State Medicaid-Housing Agency Partnerships* (CMS, August 2018),https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/iap-downloads/program-areas/medicaid-iap-housing-partnership-factsheet.pdf

[14] Bhargavi Sampath et al., *Reducing Healthcare Carbon Emissions: A Primer on Measures and Actions for Healthcare Organizations to Mitigate Climate Change*, AHRQ Publication No. 22-M011 (Institute for Healthcare Improvement, Sep. 2022), https://www.ahrq.gov/sites/default/files/wysiwyg/healthsystemsresearch/decarbonization/decarbonization.pdf.

[15] Matthew J. Eckelman et al., "Health Care Pollution and Public Health Damage in the United States: An Update," *Health Affairs* 39, no. 12 (December 2020): 2071–2079. https://doi.org/10.1377/hlthaff.2020.01247.

[16] National Academy of Medicine, "Health Care Supply Chain Working Group," (Presentation, National Academy of Medicine, n.d.), https://nam.edu/wp-content/uploads/2022/04/Working-Groups-Overview-slides.pdf.

[17] Martha Hostetter and Sarah Klein, *The Perils and Payoffs of Alternative Payment Models for Community Health Centers* (Commonwealth Fund, Jan. 19, 2022). https://doi.org/10.26099/2ncb-6738.

[18] "Compendium of Federal Resources for Health Sector Emissions Reduction and Resilience," Office of Climate Change and Health Equity, last reviewed May 23, 2023, https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/actions/health-care-sector-pledge/federal-resources/index.html.

[19] Sampath et al., *Reducing Healthcare Carbon Emissions*.

[20] Healthcare Without Harm, *Sustainable Procurement in Health Care Guide* (Healthcare Without Harm, 2020), https://greenhealthcarewaste.org/wp-content/uploads/2020/12/Sustainable-Procurement-in-Health-Care-Guide.pdf.

[21] "Health Sector Resource Hub," Office of Climate Change and Health Equity, last reviewed May 15, 2023, https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/health-sector-resource-hub/index.html.

[22] Centers for Health Care Strategies, *Oregon Cross-Agency Collaboration: Making Healthy Connections Through Transportation and Education* (CHCS, May 2018), https://www.chcs.org/media/BHBHC-State-Profile_OR_053018.pdf.

[23] "Air Pollution and Health," Centers for Disease Control and Prevention, December 21, 2020, https://www.cdc.gov/climateandhealth/effects/default.htm.
[24] Sampath et al., *Reducing Healthcare Carbon Emissions.*
[25] Sampath et al., *Reducing Healthcare Carbon Emissions.*
[26] Laurie Barrie Smith et al., "The Effect of a Public Transportation Expansion on No-Show Appointments," *Health Services Research* 57, no. 3 (November 2021): 472–81. https://onlinelibrary.wiley.com/doi/10.1111/1475-6773.13899
[27] Healthcare Without Harm, *Sustainable Procurement in Health Care Guide*.