Medicaid Policy Options: Innovative Approaches to Support the Reduction of Harmful Greenhouse Gas Emissions from the Health System

Topline Takeaways

- State Medicaid agencies have an array of tools to help reduce the amount of harmful greenhouse gases created by the health care system.

- Telemedicine decreases the use of transportation among Medicaid patients and providers and is a viable mechanism to reduce emissions associated with care provision.

- Quality improvement programs can provide incentives for health care entities to pursue climate change mitigation while enabling states to collect annual sustainability data.

- Agencies can identify ways to make approved medical and social services more sustainable and reduce emissions, for example through contracting and purchasing.

Introduction

Climate change threatens the health of communities and the health system's ability to deliver care; thus, many public agencies and health associations have named climate change a top threat to human health in this century. As greenhouse gas emissions continue to raise global temperatures, climate change-related risks—such as heat waves, extreme precipitation, wildfires, fungal infections, droughts, and severe storms—will become more frequent, jeopardizing health care facilities' functioning and patients' ability to access critical services. Climate change also strains health systems, raises health care costs, and exacerbates health disparities.[1]

The health system is a major producer of harmful greenhouse gas emissions, generating approximately 9 percent of all emissions in the United States.[2] One major driver of emissions production comes from U.S. hospitals, which are the second-highest commercial building fuel consumers (including electricity, natural gas, and direct heat; second only to the food service industry).[3] State Medicaid agencies can engage downstream entities (for example, individual hospitals within health systems), managed care organizations, and providers to reduce greenhouse gas emissions as an important harm reduction strategy.

As one of the largest health care payers in the United States, Medicaid shoulders a major share of the costs from climate change-related events.[4] Further, many patients served by Medicaid—including children, older adults, individuals and families with low income, people with disabilities, and communities of color—are disproportionately affected by climate change.[5] By integrating mitigation into their programs, state Medicaid agencies can proactively address a growing threat to the health of the patients in their care.

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. Mathematica synthesized findings from a rapid landscape scan of existing state policies

> **Mitigation** refers to actions that foster the reduction of harmful greenhouse gas emissions.

and interviews with state health care leaders. Based on that research, this brief highlights policy tools that state Medicaid agencies may consider and implement to act on climate change mitigation and safeguard the health of their beneficiaries.

Opportunities for State Medicaid agencies

Promote telehealth services. Many state Medicaid programs allow patients to receive care via telehealth and telehealth use greatly increased throughout Medicaid programs during the COVID-19 public health emergency (PHE).[6] In fact, a greater percentage of Medicaid patients used telehealth compared with privately insured individuals during the PHE.[7] Telehealth can ensure continuity of care, increase access to specialists who otherwise may be too far to travel to, and allow for more timely access to care. Telehealth can also reduce greenhouse gas emissions because patients (and, often, providers) do not need to use transportation to travel to an in-person health care setting.[8] The technology used to log in to telehealth appointments generates fewer emissions than transportation used for in-person care.[9] Additionally, health care systems may be able to decrease emissions by reducing the number of offices used to see patients in-person, thereby reducing the need to heat and cool exam rooms or transport medical supplies to in-person settings. Millions of patients are already familiar with telehealth—many of whom would otherwise face barriers to accessing care due to transportation challenges—and states are well-positioned to promote the continued use of telehealth to mitigate climate change.

States interested in pursuing telehealth as a mitigation strategy will likely need to motivate Medicaid providers, health systems, and patients to transition to telehealth. For instance, states can encourage patients to use telehealth by reducing cost-sharing expenses, such as copays and other out-of-pocket costs.[10] Among providers, states could build telehealth provision into managed care plan contracts or reward organizations that offer virtual care options.[11] Utilization data from the private sector indicates that telehealth visits are less costly than in-person care;[12] cost savings or other funding opportunities for telehealth transition[13] could be used to fund incentive programs.

Because telehealth is not appropriate for all medical interventions, states may first need to identify practice areas that can transition to telehealth effectively as well as care options to enhance telehealth, such as remote patient monitoring. States would need to ensure that in-person care is still available for patients for whom telehealth is not appropriate.

Create quality incentive programs with climate change goals. State Medicaid programs can incentivize specific actions among providers, organizations, and systems through innovative contracting approaches. For example, Medicaid quality incentives can aim to increase quality of care, or an incentive payment program can compensate providers based on their patients' outcomes.[14]

States can build climate change goals into incentive programs to encourage mitigation and reward those who take measurable action. For instance, the Washington State Medicaid Quality Incentive Program included a survey on climate change and health in its 2022 incentive measure guidelines.[15]

The Washington State Medicaid Quality Incentive Program includes the questions:

- What environment/climate conditions has your organization had to take action to respond to?

- What projects, programs, practices or policies do you have regarding how you are addressing population health in the context of these environmental/climate conditions?

- To what degree does your organization have projects, programs, practices, or policies that address environmental sustainability practices?

- How do you measure progress in [environmental sustainability] topics?

- Do you measure greenhouse gas emissions? If so, how? If not, do you have plans to?

To see all measure guidelines, go to:
http://www.wsha.org/wp-content/uploads/2022-WSHA_MQI-Guidelines_06022022_Final.pdf

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Although respondents were not required to take the survey, eligible hospitals that wished to earn the quality incentive could gain 10 points for survey completion (one of the biggest single-criteria opportunities for points included in reporting). The survey gathers general information on how hospitals have integrated climate change considerations into their practice and asks them to consider mitigation efforts.

In other states, similar surveys could include specific mitigation measurements that could be compared year over year (for example, by asking questions such as, "How much renewable energy does your organization generate or purchase annually?" or "What percentage of your fleet vehicles are electric?"), awarding more incentive points to organizations that take the survey each year and demonstrably increase mitigation efforts. By making such surveys optional, Medicaid-funded organizations without the capacity to track mitigation efforts would not be penalized, but those that are able to would be incentivized to report sustainability efforts and make annual progress towards greater emissions reductions.

Incorporate mitigation tactics into Medicaid demonstrations to promote sustainability in medical and social service provision. In 2021, the Centers for Medicare & Medicaid Services clarified how states may use Medicaid demonstrations to address social determinants of health (SDOH).[16] Today, several states use demonstrations to help people who have health-related social needs (HRSN), such as housing and nutrition assistance. Climate change can be framed as an SDOH that states can address via HRSN-focused services because it impacts patients' health, harms their physical environment, and causes economic instability.[17] States that reduce emissions associated with HRSN service provision can provide crucial services for patients while also curtailing their contribution to environmental drivers of health outcomes.

Oregon is the first state to explicitly build climate change considerations into an approved 1115 demonstration.[18] The Oregon Health Plan[19] includes various HRSN services that provide patients with more protection from climate events, such as distributing devices needed to maintain healthy living conditions like air conditioners, air filtration devices, and generators. However, Oregon's services are limited to adaptative measures that prepare for and respond to climate-related risks; currently, no states specifically address climate change mitigation via a Medicaid demonstration. State leaders shared in interviews that they are motivated to replicate Oregon's adaptation actions while providing medical and social services more sustainably.

States can improve sustainability and promote climate change mitigation within their approved HRSN services by adjusting the way those services are delivered. Delivering HRSN services more sustainably allows state Medicaid agencies to address both the unique needs of their beneficiaries and reduce emissions associated with care provision.[20]

Health-related social needs (HRSN) delivery modifications to reduce emissions[21]

HRSN	Mitigation approach	HRSN modification
Housing	Use energy efficient appliances for approved and medically necessary home environment modifications	Purchase energy efficient air conditioners, heaters, and air filtration devices for patients receiving housing support services
Transportation	Decrease greenhouse gas emissions produced from non-emergency patient transport	Contract with providers with electric fleets to provide non-emergency transportation
Food support	Prioritize food sources that generate fewer emissions	Integrate lower-emission ingredients into meals by requiring a certain percentage of meals to be plant based or locally sourced

Conclusion

The health system is a major source of greenhouse gas emissions, which means the system charged with protecting health is also harming people's health. But state Medicaid agencies can reduce these harms by providing incentives for reducing harmful emissions. By taking innovative action, states can build mitigation tactics into their Medicaid programs to provide sustainable services and motivate behavior change among providers and patients.

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