### ADDRESSING CLIMATE HEALTH INEQUITIES WITH THE COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA)

An Immediate and Cost-Neutral First Action



#### Written by:

Raziya S. Wang, MD, Stanford University Kathryn Jantz, MSW, MPH, HealthBegins Rishi Manchanda, MD, MPH, HealthBegins

# HEALTH

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#### **CLIMATE CHANGE AND HEALTH INEQUITIES**

The earth's average temperature is now about 2°F warmer than in the 1800s because of human activities such as fossil fuel burning, deforestation, and industrial operations.<sup>1</sup> This slow process of climate change has increased the frequency and intensity of extreme weather events such as wildfires, heat waves, and hurricanes. For example, the Environmental Protection Agency (EPA) reports that the average number of heat waves per year in the United States has almost tripled since the 1960s due to climate change.<sup>2</sup> Climate change also endangers food and water supplies and escalates infectious and vector-borne disease.



All of these impacts have profound direct and indirect consequences for human health and mental health. Direct consequences include injury, illness, and death from extreme weather, infectious disease, or impacted food and water supplies. Indirect consequences may include forced migration, loss of livelihoods, and decreased access to health care.<sup>3</sup>



**Climate change consequences do not affect all populations equally.** Social structures cause some populations to suffer higher climate health exposures and lower resilience.<sup>4</sup> For example, historic housing and land use policies, such as redlining, have placed communities of color and low-income communities disproportionately in industrial zones exposed to air pollution or in flood zones prone to destruction by hurricanes. These same communities often have less access to health care or opportunities for evacuation.<sup>5</sup> Other populations that bear the greatest burdens of climate health impacts include infants and children, pregnant people, elderly adults, outdoor workers, people with chronic medical or mental health conditions, indigenous people, and incarcerated people.<sup>6-9</sup>

While climate change is global, its impact magnifies health inequities within local communities. For example, in 2021, the Pacific Northwest experienced the worst heat wave ever recorded in the region. In Multnomah County, OR, more than half of people who died resided in multifamily dwellings or had unstable housing. Of those who died in multifamily dwellings, one-third lived on the third floor or higher and many did not have air conditioning.<sup>10</sup> Health care has a role to play in preventing these deaths.

#### THE ROLE OF THE HEALTHCARE SECTOR

The healthcare sector has both a responsibility to mitigate its own contribution to climate change *and* to support climate adaptation by aiding communities to prepare for a changing climate.



The United States' healthcare sector itself contributes **8.5%** of greenhouse gas emissions,<sup>11</sup> further driving the very inequities it strives to address.

Just as it would be unethical for a hospital to aerosolize influenza virus outside a primary care clinic, it is unethical for the healthcare sector to contribute significant greenhouse gas emissions.<sup>11</sup> This imperative is both ethical and practical. Since unchecked climate change will ultimately be irreversible, addressing climate-driven health inequities will prevent climate burdens from eventually being experienced by all.

Climate and healthcare experts have previously outlined a variety of opportunities to address these inequities by incorporating a climate lens in healthcare policy, such as through public health infrastructure, healthcare delivery, and the role of payers including the Centers for Medicare and Medicaid Services (CMS).<sup>12</sup> Many of these necessary changes are substantial, involving a deep shift in the status quo for healthcare organizations to build the resources and expertise required to support the communities they serve. Yet policymakers are not able to adopt these policies because of health care's limited implementation capacity, the cost of upfront investment in expertise and resources, as well as insufficient political will around health care's critical role in preparing communities for the impact of climate change.

We propose an intervention that will immediately begin building this capacity and community engagement: incorporating climate change planning efforts into an existing and required process for tax-exempt hospitals, the Community Health Needs Assessment (CHNA).<sup>13</sup> This simple, tangible, and cost-neutral approach invites every participating healthcare organization to immediately engage in addressing the impact of climate change on health at the community level and with community participation. Here, we offer a framework for implementing the CHNA with a climate health equity lens.

#### Using the CHNA as a Climate Tool

Established features of the CHNA make it an ideal tool for climate health action. All taxexempt hospitals are required to complete a CHNA every three years for the geographic area they serve and to include "medically underserved, low-income and minority populations." Hospitals must solicit input from members of these communities, as well as "at least one state, local, tribal or regional governmental public health department," with a goal of assessing community health needs including "environmental factors that influence health in the community." The CHNA may also inform a non-profit hospital's mandatory investments in its community, known as the community benefit standard.<sup>13</sup> In addition, the requirement that the report be made available to the public allows broad accountability of implementation plans.

While this assessment process is highly familiar to hospitals, few, if any, have applied it to climate-related health equity issues. Indeed, CHNA findings may reflect serious impacts of climate change without identifying it as a cause. For example, community members may talk about the need for high quality housing (with air conditioning) but not make the link between the proximal need and the upstream cause. It's vital to recognize climate change as a driver for many health issues that often dominate these assessments, such as substance use, obesity, and healthcare access. Applying a climate lens to the CHNA process facilitates that.

#### CLIMATE QUESTIONS IN THE CHNA

Each hospital develops its own CHNA questions, making this step in the process highly local and adaptable. To more clearly incorporate climate health issues into assessment questions, hospitals can take four complementary approaches:

- 1. Ask directly about community experiences of climate change,
- 2. Ask about health issues that are known to be linked to climate change,
- 3. Ask about access to resources in the event of an extreme weather event, and
- 4. Ask about structural drivers of health inequities that are exacerbated by climate change.

Incorporating these climate-related questions will likely uncover health inequities that can then be addressed on a local level. Some sample questions for each category are included in Table 1.

## TABLE 1. EXAMPLES OF CLIMATE QUESTIONS TO INCORPORATE INTO THE CHNA

Types of Climate Questions	Examples
Direct experiences with climate change	"Is your health impacted by poor air quality or pollution?" "Is your health impacted by extreme heat?" "Have you experienced an extreme weather event that has impacted your mental health?"
Health issues with known links to climate change	"Do you suffer from asthma or breathing problems?" "Do you have difficulty accessing healthy food?" "Do you have chronic medical or mental health conditions?"
Resources during extreme weather events	"Do you have access to cooling during a heat wave?" "Do you have emergency plans in place in case of flooding or fires?" "Are you able to stay safe and healthy if there is a power outage?"
Structural drivers of health inequities	"What factors beyond your control fuel health problems in your community? (e.g., access to well-paying jobs, safe parks, transportation, etc.)" "In what ways do weather and weather events make these worse (e.g., creating an urban heat island or making available jobs more hazardous)?" "Have you experienced displacement or loss of your livelihood due to an extreme weather event?"

Hospitals can, and should, collaborate with local health departments to incorporate climaterelated questions into CHNAs and integrate this assessment process with public healthdirected data collection and analysis. Climate-related questions can also be included in and aligned with health plans' population needs assessments. Data collected through CHNAs can then inform climate adaptation interventions such as establishing cooling centers or providing patients with air filters at home, saving lives in the short and medium term.

CLIMATE CHANGE LINKS EVERY PERSON ON THE PLANET.

#### HOSPITAL RESPONSIBILITIES TO REDUCE GREENHOUSE GAS EMISSIONS

Hospitals must engage in climate mitigation, not only adaptation, to ensure long-term health. (Find links to resources to help hospitals engage in sustainability efforts here.) Some of the opportunities for action-such as reducing sources of direct greenhouse gas emissions from certain anesthetics or hospital boilers-are clearly identifiable and potentially modifiable in the shorter term. Hospitals can simultaneously launch longer-term efforts to address indirect greenhouse gas emissions, such as those from the supply chain.<sup>14</sup> Both short-term and longer-term strategies can be daunting for hospitals to prioritize without the necessary community transparency, accountability, or support. The CHNA is an opportunity to create the necessary community conversations about how to prioritize and garner the necessary support and resources to make critical changes. In addition, climate change has specific local impacts that the CHNA can identify, allowing hospitals to develop resources specific to the needs of their communities. Since the state of the climate continues to worsen, engaging now in the more difficult efforts ensures that hospitals and the communities they serve are climate-ready over time.



**Effectively using the Community Health Needs** Assessment to recognize local climate health inequities is a cost-neutral initial step for U.S. hospitals to begin to incorporate a climate lens into health care and engage in their ethical role to reduce climate change and its impacts. Identifying local climate health problems paves the way for climate adaptation and mitigation for healthier patients and communities now and in the future.

#### **ENDNOTES**

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<sup>10</sup>Multnomah County Health Department. Final Report: Health Impacts from Excessive Heat Events in Multnomah County, Oregon 2021. Multnomah County. 2022. https://www.multco.us/file/119891/download. Accessed June 11, 2024.

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<sup>12</sup>Salas RN, Friend TH, Bernstein A, et al. Adding a Climate Lens to Health Policy in the United States. Health Affairs. 2020;39(12):2047-2216 https://doi.org/10.1377/hlthaff.2020.01352. Accessed June 11, 2024.

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## HEALTH BEGINS

How did it work?

HealthBegins is always interested in learning lessons to share with practitioners and policymakers advancing health equity. Please contact us at <u>info@healthbegins.org</u> to share your observations about applying these practices in your setting.

Raziya S. Wang, MD <u>WiseOwlConsulting11@gmail.com</u> Kathryn Jantz, MSW, MPH kathryn@healthbegins.org Rishi Manchanda, MD, MPH <u>rishi@healthbegins.org</u>