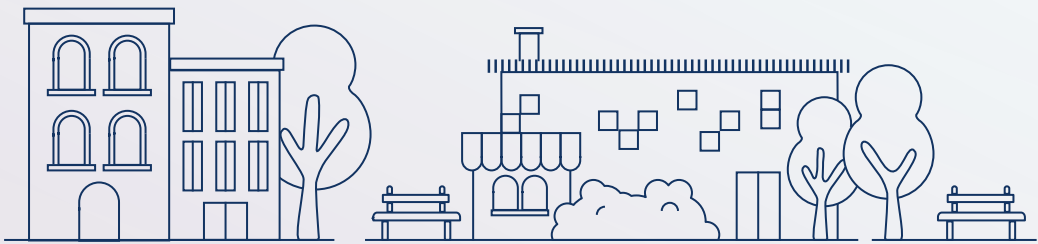


# Global Trend Sensing for Health Equity

MARCH 2024



**EMBARGOED**  
until April 25th





**About the Robert Wood Johnson Foundation**

The Robert Wood Johnson Foundation (RWJF) is committed to improving health and health equity in the United States. In partnership with others, we are working to develop a Culture of Health rooted in equity that provides every individual with a fair and just opportunity to thrive, no matter who they are, where they live, or how much money they have. For more information, visit [rwjf.org](http://rwjf.org)

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# Table of Contents

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Why global learning for health equity?	04
Introduction	06
Cross-cutting themes: Climate change and the rise of AI	08
Trend research slides	11
<b>01. GROWING CALLS FOR MORE EQUITABLE CARE WORK</b>	11
<b>02. GREATER LONGEVITY</b>	16
<b>03. SURGE IN DIGITAL HEALTH INFORMATION IMPACTING WELLBEING</b>	21
<b>04. COMPOUNDING HOUSING CRISIS</b>	26
<b>05. INCREASING RISKS TO NUTRITION SECURITY</b>	31
<b>06. GROWING DEMANDS FOR HEALTHY PUBLIC SPACES</b>	36
Connections across trends	41
What is next?	42
Advisory Board members	43
Methodology	45
Acknowledgements	46
Annex: Sources by theme / trend	47

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# Why global learning for health equity?

Global learning invites us to look beyond what's familiar to us and to find pragmatic solutions from what others are doing successfully. It also invites us to build solidarity with others by working together on common challenges.

Why do some people in the United States live longer, healthier lives than others? While there will always be individual variations, how can we ensure that every person has the opportunity to live their fullest possible life?

These are the fundamental questions of health equity. Across the U.S., people separated by only a short drive or a few subway stops may have life expectancy gaps of up to 20 years. These gaps are not inevitable; they are not the result of “poor decisions” or “bad genes” or even poverty. These are the results of legal and social structures that value some people more than others.

Around the world, there are many places where gaps in health and life expectancy are shrinking. What are these places doing about it? How are they addressing their own structural inequities? What could we learn from them that might help us in the U.S.?

**This report is an effort to answer these questions. What health equity trends are emerging around the world and what are other countries doing to address them? What can we learn from how other countries respond to these trends that help us build a healthier and more just society here in the U.S.?**

All of the trends highlighted in this report—and the ways countries are grappling with them—demonstrate that we have the power to transform the inequitable institutions, systems, and social practices that obstruct equal opportunity. Learning how others are reinventing their systems abroad may help us dismantle one of the biggest systemic barriers to health in our country: structural racism.

This work requires humility—an acknowledgment that health in the U.S. is far from optimal and that we don't have all the answers. But, as this report shows, we can learn a great deal when we open ourselves to ideas and experiences from outside our borders with respect and enthusiasm for how they might help us address our

own challenges. The report spotlights specific examples of places all over the world that have responded to emerging trends with innovative approaches to address health equity.

As I see it, there are three ways this report helps move our efforts forward.

- **First is recognizing that health equity is a universal goal. Many countries—including low-income countries—have made progress.** In Rwanda, for example, government health reform has reduced maternal death rates by 42%. But just as the challenge is universal, so are solutions for advancing healthy lives. The intentionally designed TransmiCable cable car line in Bogotá, Colombia, not only cuts workers' commutes from two hours to less than 20 minutes, but also provides them easy access to healthcare and social services, bicycle pickups, community gardens, and more. Or look at Japan, where the government supports healthy employment opportunities for workers 70 and older. We can learn from these and many other approaches.
- **Second, global learning offers practical solutions and solidarity with peers around the world.** We saw this in full force during the Covid-19 pandemic, when countries joined together to address a global health emergency. But everyday life also offers opportunities for working together to improve people's lives—from how to design better bike lanes to creating more inclusive parks, as we at RWJF found out during a learning tour in Copenhagen.
- **And third, the world is not static. It's constantly evolving, and we need to understand the trends—how things are changing and in what direction.** Our lives are too interconnected to pretend that what happens in Peru or Japan has no relevance for us. We don't just live in the U.S.; we live in the world. We need to get better at looking beyond what's familiar and understanding the forces driving important changes.



CONTINUED →



For this report, we asked global experts to identify key trends with implications for health equity in the U.S. They flagged two overarching themes—accelerating climate change and the rising use of Artificial Intelligence (AI). These themes cut across global trends in equitable caregiving, increasing longevity, the surge in digital health information, nutrition security, housing shortages, and demands for healthy public spaces. The report also notes where these trends intersect with systems that perpetuate structural racism.

We need to know how other countries are addressing global trends—how Morocco, Spain, and Portugal are building wildfire resilience and how Kenya is supporting women entrepreneurs to start their own childcare businesses. We should explore how Finland and Norway are combating health misinformation and building health literacy. What steps are other countries taking to ensure that AI analyses of health data are accurate and don't perpetuate health disparities? How are they integrating healthy public spaces into public housing?

Equipped with information like this, we can build on our own efforts to advance health equity in the U.S., leveraging what we know about global trends and, more specifically, what's worked in other countries. We can get a better idea of what the future holds for us, as well as how we might need to pivot, both to meet new challenges and to take best advantage of new opportunities.

I greatly appreciate Dalberg's leadership in developing this report and the generosity with which our global advisors shared their wisdom and insights and pushed us to ensure the relevance of our learnings.

Learning about how other countries are solving problems unlocks our imagination about what we might do in the U.S. After reading this report, I am dreaming about cable cars flying over Los Angeles, grandmothers counseling people on park benches, and intergenerational housing communities. These ideas aren't so far-fetched—after all, they are already being done somewhere else.



**KARABI ACHARYA, ScD**  
Senior Director,  
Global Ideas for U.S. Solutions  
Robert Wood Johnson Foundation

## INTRODUCTION

Our work aims to identify key global trends in health equity and apply learnings from those trends to the U.S. context

**Recognizing that good ideas have no borders, this report surfaces key trends and innovations in health equity taking place around the world.** The report identifies global innovations in response to these trends that promote more equitable health outcomes. It is intended for a broad audience including practitioners, policymakers, philanthropic funders, researchers, activists, community organizers, and non-profit leaders across sectors.

**The learnings from global trends are meant to spark inspiration—to share new innovations, choices, and ways of thinking—not offer prescriptive solutions.** In the spirit of global learning, the report showcases innovations and novel connections that health equity practitioners might consider in their work.

## THIS REPORT PROFILES THE FOLLOWING SIX TRENDS:

### 01. GROWING CALLS FOR MORE EQUITABLE CARE WORK



**Calls are growing for more equitable distribution and valuing of care work,** which is disproportionately carried out by women. Economies that recognize, reduce, and redistribute unpaid care work, and governments committed to rewarding and representing paid care work are essential underpinnings to support **women's economic empowerment and health equity.**

### 04. COMPOUNDING HOUSING CRISIS



Intensifying forces of inflation, climate change, migration, and urbanization are exacerbating the global housing crisis, with significant implications for health outcomes due to **unsafe, unhealthy, or unstable living conditions.**

### 02. GREATER LONGEVITY



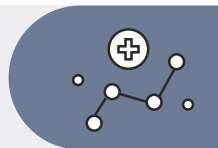
Lifespans are increasing, making it imperative that societies, communities, and health systems consider how to **engage, support, and maintain the health of aging populations** while viewing older adults as assets to society as a whole. Attention to healthy aging starts earlier than in old age, requiring a focus on **lifelong health.**

### 05. INCREASING RISKS TO NUTRITION SECURITY



**Accelerating climate change, price inflation, and global shocks** are undermining nutrition security, worsening nutrition-related health outcomes such as **non-communicable diseases,** as well as impacting livelihoods and local environments. A focus on nutrition security allows for consideration of how the **nutritional value of food,** or lack thereof, impacts health.

### 03. SURGE IN DIGITAL HEALTH INFORMATION IMPACTING WELLBEING



Increasing access to **digital and personalized health information** is shifting the role that individuals play in their own health journeys. Demographic characteristics such as age, education, and language may better position **certain individuals to leverage this information and improve their health outcomes, while others may be at risk of being left behind.** At the same time, as data sets are increasingly used to benchmark behavior, the **diversity of the data they contain is of paramount importance.** As health information continues to proliferate, the health system will need to ensure **an equitable playing field for health information development, access, and use.**

### 06. GROWING DEMANDS FOR HEALTHY PUBLIC SPACES



**The Covid-19 pandemic** sparked a redefinition of public spaces, with **communities calling** for more equitable, healthy public spaces. The healthy use of public spaces can increase **social connection and promote healthy habits.** Public spaces can include streets, sidewalks, neighborhood gardens, parks, edge space between buildings, parking lots, public transportation, and more.

# INTRODUCTION

## Trends


Within this report, trends are defined as a collection of signals indicating a change in a given direction (increase, decrease, acceleration, deceleration, evolution, or transition). Relevant trends for this work must:

- Occur in at least two or three countries
- Be prevalent *outside* the U.S., but relevant to the U.S.
- Directly link to health equity, with a particular focus on the social determinants of health
- Be validated by experts as a notable change in the relevant field

AS DESCRIBED ABOVE, THIS REPORT PROFILES SIX TRENDS:

01. GROWING CALLS FOR MORE EQUITABLE CARE WORK 	04. COMPOUNDING HOUSING CRISIS 
02. GREATER LONGEVITY 	05. INCREASING RISKS TO NUTRITION SECURITY 
03. SURGE IN DIGITAL HEALTH INFORMATION IMPACTING WELLBEING 	06. GROWING DEMANDS FOR HEALTHY PUBLIC SPACES 

A section dedicated to each trend includes a detailed trend description at the global level, the U.S. relevance of the trend, policy and community-led solutions that are supported by spotlight examples, questions, and connections to other trends.

For each trend, implications related to structural racism within American society, history, and the healthcare system have been noted with the following icon: 

These trends, while distinct, are also highly interconnected. For each trend, the report highlights 2-3 key connections with other trends. The hope is that in reading the report, different audiences may be persuaded to think about new allies. For example, could a housing expert become an ally in longevity work? Could a nutrition expert consider how public spaces can play a role in bolstering food systems?


## Cross-Cutting Themes

Experts noted two driving forces that affect all trends: accelerating climate change and the rise of Artificial Intelligence (AI). A range of questions are included for consideration and to encourage deeper thinking and dialogue on how climate change and AI will continue to shift social systems around the globe.



**ACCELERATING CLIMATE CHANGE**

**Accelerating climate change** impacts all social determinants of health due to increasingly frequent and severe climate events and climate-related environmental changes which will threaten lives, livelihoods, and social systems broadly.



**RISING USE OF AI**

**Rising use of AI** presents opportunities for efficiency gains and expanded access to health resources and services. However, if AI is not designed with equity and diversity in mind, it will exacerbate health inequities.

**ACCELERATING CLIMATE CHANGE**

How might we leverage global learning to bolster climate resilience?



Climate change has been felt for decades and is rapidly increasing in severity. Almost half the global population lives in locations that are highly vulnerable to climate change.<sup>1</sup>

Climate change poses an existential threat to all social determinants of health. Climate impacts, including more heatwaves, wildfires, heavy precipitation, sea level rise, and increased air pollution, will have both direct impacts (e.g., increased unhealthy urban heat island effects) and indirect impacts (e.g., droughts impacting food availability) on health equity.<sup>2</sup>

“Climate change is the biggest health equity issue globally”

– Ivor Horn, Advisory Board member

However, as systems around the world shift to respond to a changing climate, there are opportunities to weave health equity and climate resilience together in ‘multisolving’\* solutions. For instance, in low-income neighborhoods, the risk of extreme heat is higher due to comparatively lower tree cover and fewer green spaces. The addition of green spaces can also help mitigate flooding (e.g., rain gardens) and support healthy physical activity. Such solutions require collaboration between many sectors to widen our imaginations about the benefits a space or policy might have for a community.

For each trend in this report, we elevate questions that explore opportunities for collaboration. Our goal is to inspire multisolving\* for climate change and social determinants of health.

Low-income and historically marginalized Americans are the most vulnerable to climate change



“Climate change is already impacting health equity for people around the world, and the United States is no exception. Some of the most disastrous impacts of climate change—extreme temperatures, drought, inland flooding, sea level rise, extreme storms, and wildfires—are already impacting the frontline communities I work in. Low-income and historically marginalized Americans are the most vulnerable: Indigenous People, communities of color, immigrants, the unhoused, rural families, and others. For example, in Los Angeles climate change means that 230,000 low-income households are projected to experience over two months of exposure to dangerous indoor air temperatures annually by 2035—a massive challenge to human health and grid resiliency. A large number of these households include elders, children, and caregivers. Solving this and other challenges will require new thinking, as we work to build safe, affordable housing, reimagine public space, and secure stable water and power resources in response to climate change.

Climate change will continue to be the preeminent challenge defining how we work towards health equity solutions in every part of daily life. We must reach out to similarly situated communities in low- and middle-income countries, in addition to drawing from Indigenous and traditional knowledge.”

– George McGraw, Advisory Board member

MULTISOLVING FOR CLIMATE CHANGE & HEALTH INFORMATION



Historically, strong links between environmental and health issues have shaped critical environmental policies. For example, the Montreal Protocol limited chemicals that both cause ozone depletion and increase cancer risk. *How might tracking nuanced health information related to climate change enable better climate advocacy?*

MULTISOLVING FOR CLIMATE CHANGE & THE HOUSING CRISIS



Around the world, new houses will need to be built to account for an increasing population. However, many construction processes are very emission intensive, thereby contributing to climate change. *How might we ensure that new housing developments, particularly for affordable housing, do not further exacerbate the climate crisis?*

MULTISOLVING FOR CLIMATE CHANGE & LONGEVITY



Older adults, especially in low-income communities, are highly affected by extreme weather events (e.g., heat waves, flooding, long winters). *How might older adults be supported to cope with, respond to, and build resilience to the effects of climate change?*

Notes: \*The term ‘multisolving’ is based on work done by Dr. Elizabeth Sawin and colleagues at the [Multisolving Institute](#). Multisolving is taken to mean when a single solution, policy, or investment can address multiple problems across sectors. Sources: See annex.



## CROSS-CUTTING THEMES

**ACCELERATING CLIMATE CHANGE** How might we leverage global learning to bolster climate resilience?

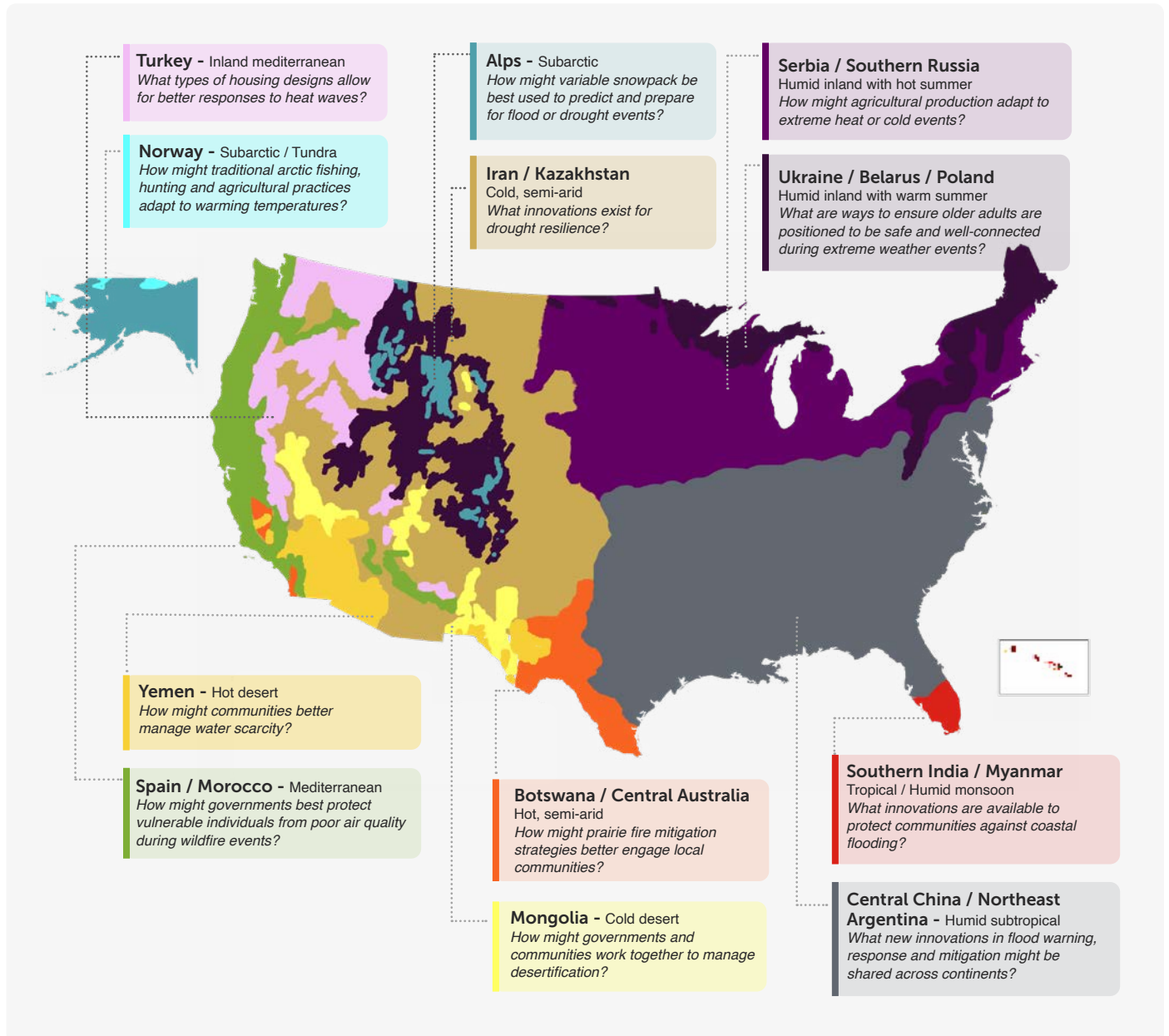


**Many climactic zones in the U.S. mirror other parts of the world.** This means that the Southeastern part of the U.S. could learn from resilience and adaptation strategies used in Argentina or Los

Angeles could learn from Morocco. Changes across the diverse U.S. climactic zones will have important implications on health, which will be explored through probing questions within each trend.

### U.S. CLIMATE ZONES COMPARED TO CORRESPONDING CLIMATE ZONES AROUND THE GLOBE

2050 Köppen-Geiger projections; CSIRO-Mk3.0; A1B Scenario; corresponding climate zones are non-exhaustive,<sup>3,4,5</sup>





RISE OF AI How can we best leverage AI for health equity?

For most of us, Artificial Intelligence (AI) only entered day-to-day life in recent years, yet it is already impacting social, political, and community systems globally. In contrast to climate change, where research has been built up over decades, the rise of AI is relatively more recent. There are many institutions and individuals around the globe dedicated to unpacking the potential equity implications of AI. In this report, we highlight its potential impacts across the trends to challenge readers to always consider the equity risks and opportunities as AI's influence expands.

The rise of AI will shape the way that populations interact with health information, resources, and each other. Globally, over four billion devices already have AI-powered assistants and 35% of businesses are using AI technology.<sup>6,7</sup> Adopting AI across sectors will shift how information is managed, decisions are made, and resources are allocated.

“ I would characterize [AI] as an opportunity and a threat. The extent of its implications are unknown.”

– Chintan Maru, Advisory Board member

As AI is integrated into systems around the world, risks to health equity must be carefully considered. AI tools are often built off LLMs (large language models) which are known to have gender, racial, and other biases, based on the underlying data they are trained with.<sup>8</sup> For example, AI-backed diagnostic systems have been found to provide lower accuracy results for Black patients as compared to white patients.<sup>9</sup> AI products also risk perpetuating misinformation and unethical data collection.<sup>10</sup> Given the rapid rollout of many AI systems and the risks that AI technologies pose, AI safety must be established through effective regulation.<sup>10</sup> Digital literacy and access to phones will be a precursor to accessing AI-enabled technology, leaving those without digital access behind.

However, there will also be opportunities for AI to open doors for more equitable solutions to health challenges. AI-powered “virtual healthcare workers” can provide free advice in multiple languages on a range of topics, from Covid-19, to mental health, to how to quit smoking.<sup>11,12,13</sup> AI can also analyze affordability data to identify housing instability patterns or to connect local food growers and community-based organizations with funding to bring nutritious food into low-income communities.<sup>14,15</sup>

For each trend, questions are posed about how to best leverage AI tools for improved health equity. For example:

LEVERAGING AI IN THE SURGE IN DIGITAL HEALTH INFORMATION



As digital health information grows, AI becomes crucial for quickly sorting through health data and providing valuable insights. However, data used to train algorithms can be more than 75% male and 80% white, which is not representative of the full population.<sup>16</sup> *How can the U.S. ensure AI analyses of health data are representative of all populations?*

LEVERAGING AI AS LIFESPANS INCREASE



Older adults with physical limitations may require support in some daily tasks, such as grocery shopping, recalling appointments, and medication management. New AI tools, like Be My Eyes, assist people needing sighted support with AI to assess and interpret everyday tasks.<sup>17</sup> *How might AI tools further empower older adults to have greater independence in daily life?*

LEVERAGING AI FOR NUTRITION SECURITY



By analyzing food market data, AI can identify areas of food waste and help optimize food production and supply chains. A pilot conducted by WWF and partners used AI purchasing systems in two grocery retail chains to reduce food waste by an average of 14.8%.<sup>18</sup> *How might AI be used throughout the nutrition system (from production to consumption) to stabilize consistent nutrition flows, preventing and managing shocks?*

# Growing calls for more equitable care work



**Calls are growing for more equitable distribution and valuing of care work**, which is disproportionately carried out by women. Economies that recognize, reduce, and redistribute unpaid care work, and governments committed to rewarding and representing paid care work are essential underpinnings to support **women's economic empowerment and health equity**.<sup>1</sup> Care work can involve both paid and unpaid work, including relational activities such as childcare and elder care, and indirect care activities or domestic labor such as cooking and cleaning.<sup>2</sup>

“Care should be seen as a human right, not as something that is for the lucky few.”

– NGO practitioner

## Global Trend

### WHAT IS CHANGING?



Unpaid care work during the Covid-19 pandemic increased for both men and women, however, **mothers were nearly three times as likely as fathers to take on the majority of unpaid care work when schools closed**<sup>3,4</sup>



**Women saw larger job losses than men during the pandemic** in every region of the world due to over-representation in the hardest hit sectors (e.g., hospitality) and the rising need for unpaid care work<sup>4,5</sup>



**By 2030, 2.3 billion people will require care**, due to increased births and aging populations<sup>6</sup>



**If unpaid care work were paid, it would represent US\$11 trillion or 9% of global GDP**<sup>7</sup>

### HOW ARE SPECIFIC GROUPS IMPACTED?



**Globally, women and girls do three times more unpaid care work than men**<sup>6</sup>



There is **no country where the division of unpaid care work is equal between men and women**<sup>8</sup>



Among the 38 member countries of The Organisation for Economic Co-operation and Development (OECD), **many paid care workers are women migrants who are often underpaid in the informal economy**, and not eligible for pensions or social security<sup>4</sup>

### Building a safer, fairer future for all care work

“Redefining care work as a bedrock for economic and societal prosperity demands a seismic shift in gender norms and robust support systems for caregivers. It’s crucial to recognize caregiving as a vital economic driver, challenge traditional roles, and prioritize caregivers directly. Failure to value unpaid work properly perpetuates inequality, with women contributing significantly to the economy through their unpaid labor. In 2020 it was estimated that the value of women’s unpaid work surpassed \$10.9 trillion, eclipsing the combined revenue of the world’s largest corporations. This stark reality underscores the urgent need for transformative action to properly value and support care work. Significant adjustments to the caregiving ecosystem are required to ensure the proper acknowledgment and valuation of caregiving labor. This transformation demands collective efforts from governments, private sectors, NGOs, and individuals to invest in care infrastructure and programming, emphasizing the shared responsibility in fostering a more equitable approach to care work.”

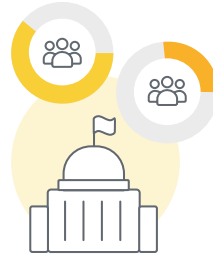
Grameen Foundation’s approach of transforming systems for women is essential to transform the perception of care work, recognizing it as a bedrock of economic and societal prosperity. This demands challenging gender norms, involving all in caregiving, and implementing structural support for caregivers. Such shifts require multi-sectoral investments in care infrastructure. The Grameen Foundation’s RICHES project illustrates this commitment by merging child protection with women’s economic power, redefining caregiver support, and advancing a fair care ecosystem, demonstrating how improved financial services can combat issues like child labor and foster positive change.”

– **Zubaida Bai**, Advisory Board member



## U.S. Context

- **Women make up over 75% of caregivers for adults in the U.S.**<sup>9</sup> and over 90% of paid caregivers<sup>10</sup>
- **Care work is significantly undervalued, and thus underpaid:** In the U.S., 44% of paid care workers live in or near poverty<sup>11</sup>
- **Over 50 million Americans provide unpaid care for a loved one**,<sup>12</sup> and many may be “sandwiched” between caring for an older person and a child<sup>10</sup>
- **In the pandemic, 48% of U.S. mothers shifted to part-time jobs or left their jobs**, particularly low-income mothers and mothers of color<sup>13</sup>
- Unpaid care work is associated with a **greater mental health burden**<sup>14</sup>



### **Structural racism and sexism shape the employment opportunities and trajectories of BIPOC women in the undervalued and underpaid care system.**<sup>15,16</sup>

Women of color and immigrants are vastly overrepresented and are a growing segment of the care workforce: 61% of paid care workers are people of color and 27% are immigrants<sup>11</sup>

- **The U.S. lacks public funding for care.** Medicaid and Medicare cover doctor’s visits, inpatient hospital care, and other medical services, but do not cover childcare or long-term home care.<sup>15,17</sup> This places care responsibilities on family members, who often must take time off work, resulting in lost income
- **The U.S. is the only OECD country that does not mandate any paid parental leave.**<sup>18</sup> Just 23% of all U.S. workers have access to paid family leave through their employer,<sup>17</sup> and only 6% of low earners have access to paid family leave<sup>19,20</sup>

“Elevating care work jobs from poverty wage to family-sustaining wage jobs would be the largest shift in the quality of jobs for women of color in the history of the U.S.... This would have massive ripple effects on their families and communities.”

— NGO practitioner

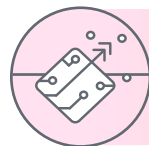


### MULTISOLVING FOR CLIMATE CHANGE

During climate-related disasters, women are more likely to be the last to leave or remain behind due to care responsibilities.<sup>21</sup>

**How might the needs of caregivers themselves be supported during and after climate emergencies?**

Climate-related events, such as heatwaves, fires, and severe storms, are increasingly disturbing school systems. In these moments, caregivers may have to juggle unforeseen care responsibilities with work or other commitments. **How might employers adjust leave practices to better support caregivers with climate events in mind?**



### EQUITABLY LEVERAGING AI

During Covid-19, in most countries around the world, women were spending over 30 hours per week on childcare alone—almost equivalent to the time spent at a full-time job.<sup>3</sup> **How might AI provide the greatest benefit in reducing the time caregivers spend performing caregiving tasks?**

Human relationships between caregivers and care recipients are an invaluable aspect of care. **How can the need for human connection in care be balanced with optimizing the efficiencies that AI offers?**



## Global Learnings

### ✓ POLICY SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Prioritize policies that recognize the economic value of care and provide caregivers with benefits.** The U.S. lacks robust care policies that benefit caregivers, including effective family leave and care systems. The U.S. can look to other countries for examples of governments finding ways to prioritize and invest in policies that improve support for caregivers, and thus recognize the economic value of care. If U.S. leaders were to take political and economic steps to value care work, their actions would validate the belief that all people, particularly those who are historically oppressed, play a critical role in the nation's wellbeing.



#### URUGUAY'S CARE ACT

[READ MORE](#) ↗

Uruguay launched a revolutionary approach to the care economy in 2016 with the Care Act. This law grants all children, persons with disabilities, and elderly individuals the right to receive care, with the state providing free care services, as well as training and regulations to guarantee quality care delivery.<sup>22</sup> The system includes a phone line for elderly individuals living alone, available 24/7.<sup>23</sup> The Care Act also recognizes the right of caregivers to perform their work in decent working conditions and aims to change the prevalent gendered division of labor.<sup>24</sup>



Photo: UN Women



Photo: Fabian Sommer/ Picture Alliance

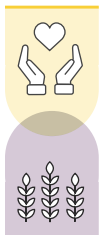


#### GERMANY'S FLEXIBLE LEAVE FOR CAREGIVERS

[READ MORE](#) ↗

In 2012, Germany passed a law to aid individuals in balancing caregiving and work responsibilities. The law allows full-time employees to borrow against their future wages to take time off to care for family members. They can work part-time for up to two years, retaining 75% of their salary. Upon returning to full-time work, they continue to receive 75% of their salary until the borrowed balance evens out.<sup>25</sup>

“Everyone will be a caregiver at some point in life, or somebody will take care of us.” – Maria Clara Pinheiro, Advisory Board member



#### CONNECTION TO NUTRITION

Caregivers are often primary drivers of their household's nutrition, carrying out tasks including grocery shopping, meal preparation, and cooking. Not only are caregivers often responsible for addressing any unmet nutritional needs of their care recipients, but the stress of caregiving may place caregivers themselves at risk of poor nutrition.<sup>26</sup>



## Global Learnings

### ✓ COMMUNITY-LED SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Bolster supportive services for caregivers, including education, training, and mental health support.** There is recognition in the U.S. that it benefits everyone to prioritize the wellbeing of families and to build a nation where all people belong. Yet both public and private support services that are tailored toward caregivers are scarce in the U.S.<sup>27</sup> Other countries invest in community models of caregiving and have healthcare, mental healthcare, and caregiver training targeted towards caregivers specifically. The U.S. can look towards building services and infrastructure that holistically support the needs of caregivers.



Photo: Carers Worldwide



#### CARERS WORLDWIDE IN INDIA, BANGLADESH, AND NEPAL


[READ MORE](#) 

Carers Worldwide works across India, Bangladesh, and Nepal to transform the lives of unpaid caregivers by meeting their needs and promoting their value. Carers Worldwide provides caregivers with physical health services, mental health counseling, loans to pursue education or income-generating opportunities, community caregiving centers to free up their time, and support groups that create social networks between caregivers. Carers Worldwide also advocates for policy change and promotes attitude changes to value caregivers.<sup>28</sup>

“Care work often has **no concept of respite or a short break...**In the long term, care giving can have a significant impact on the caregivers’ own mental and physical health and wellbeing.” — NGO practitioner



#### NOORA HEALTH IN BANGLADESH, INDONESIA, AND INDIA

[READ MORE](#) 

Noora Health works in Bangladesh, Indonesia, and India to equip patients’ families to support their care. They center the patient and their informal caregivers in the healthcare journey by providing culturally and regionally specific training in areas like newborn care, post-surgery care, tuberculosis care, Covid-19 care, and more. Noora Health delivers caregiving training sessions at health facilities and also engages virtually with patients and their informal caregivers once they return home. They also identify key drivers of morbidity and mortality, sharing prevention actions that can be taken at home. Noora Health has 4,700 partner institutions and has trained 5.7 million care workers and 13,000 healthcare workers to date.<sup>29</sup>



Photo: Noora Health



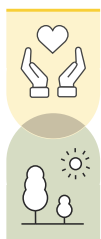
Photo: Kidogo



#### KENYA’S KIDOGO SOCIAL CARE ENTERPRISE

[READ MORE](#) 

Kidogo is a social care enterprise originating in Kenya that uses a franchising model to identify, train, and support female entrepreneurs to create and grow micro childcare businesses. They aim to improve access to quality, affordable childcare, and education in low-income communities. Kidogo spans 70 communities in eight countries and has worked with 1700+ “mamapreneurs” who have cared for 37,000+ children.<sup>30</sup>



#### CONNECTION TO PUBLIC SPACES

Cities can innovatively use their public spaces to make caregiving resources proximate to one another, relieve care workers, and redistribute some caregiving responsibilities away from women. See Bogotá’s District Care System on page 15 for an innovative example of a city restructuring its public spaces to support caregivers.

“Caregiving weaves the fabric of our communities with compassion, **embodying an act of profound love and humanity that touches both the giver and receiver.**”

— NGO practitioner



# Growing calls for more equitable care work

## Bogotá's District Care System

### Innovation

Bogotá's government-run District Care System reorganizes the city's services to create Care Blocks containing easy-to-access services for caregivers and those they care for, all within only a 20-minute walk. When women arrive at a Care Block, they can first bring their children to a childcare center and drop off their laundry. Then, they can attend a caregiving class, where they learn how to spot signs of depression, or an economic development class, where they can update their resume. Once they finish class, they can head to the wellness center to take a group yoga class, or to the 'breathing room' to receive a stress-relieving massage. On their way out, they can pick up their clean, folded laundry. In addition to providing services that alleviate caregiving responsibilities, Care Blocks offer an environment where caregivers are comfortable and supported by their peers to learn and take care of themselves.

### A laundry service at one Care Block has alleviated ~770 days of work for caregivers since 2022.

All the provided services are free, and Care Blocks are located in low-income neighborhoods, aiming to relieve, redistribute, and recognize care work, particularly for the most marginalized.

Each Care Block provides over a dozen services, and together Bogotá's 21 Care Blocks serve almost half a million women. The city hopes to continue expanding this program to serve over 60% of the city's population and have over 40 Care Blocks by 2035.<sup>31</sup>

[READ MORE HERE AND HERE](#) ↗

### Enabling Elements

- **Interagency cooperation:** The Care Blocks are a joint institutional effort with contributions from agencies including the Secretary of Women's Affairs, the District Secretariat for Culture, and the District Secretariat of Integration and Economic Development. This enabled the agencies to pool resources and collaborate to holistically serve the needs of caregivers, which is more effective than the typical approach of working in silos
- **Women-driven:** Bogotá's first woman mayor, Mayor Claudia Lopez Hernandez, was a passionate advocate for Care Blocks. She pioneered this flagship initiative and established 21 Care Blocks, sparking momentum that has continued after she left office
- **Use of existing infrastructure:** When creating a new Care Block, the city identifies and uses existing spaces and infrastructure in the area. This model is financially efficient, avoiding new developments when possible, and meets caregivers where they are—in their communities
- **Reliable funding:** The District Care System is part of the overall city development plan, ensuring that the program is embedded in budgets and thus has stable funding to continue



Photo: Wendy Venegas

“ I like it here because I can exercise, create community, and forget my everyday routine...This is my family.”

– Care Block wellness center participant

### Care Blocks multisolve\* for other trends:



**Public spaces:** Care Blocks innovatively use existing public spaces and create new public spaces to provide free services for caregivers.

**Longevity:** Care Block services include training to care for elders, as well as wellness services that prioritize self-care such as fitness classes and massages for older adults who themselves are caregivers.

# Greater longevity



**Lifespans are increasing**, making it imperative that societies, communities, and health systems consider how to **engage, support, and maintain the health of aging populations** while viewing older adults as assets to society as a whole. Attention to healthy aging starts earlier than in old age, requiring a focus on **lifelong health**.

“It’s not just about helping older populations, it’s about engaging them and understanding what makes them feel better and what brings them joy.”

– NGO practitioner

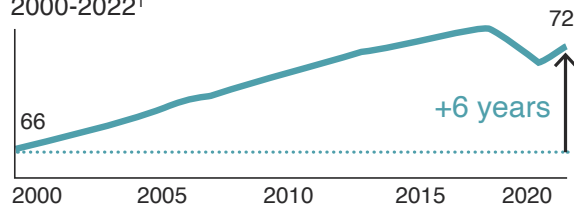
## Global Trend

### WHAT IS CHANGING?



**Globally, life expectancy increased to 72 years in 2022.** By 2050, the number of people over 65 years old will account for 16% of the total global population<sup>1</sup>

**Global average life expectancy at birth, 2000-2022<sup>1</sup>**



Trends towards longer lifespans don’t imply extending healthy life spans: **A quarter of the years beyond age 60 are estimated to be lived in illness or with injury<sup>2</sup>**



Older populations are **more vulnerable to chronic loneliness<sup>3</sup>**, and **half of those over 60 are at risk of social isolation<sup>4</sup>**

### HOW ARE SPECIFIC GROUPS IMPACTED?



**80% of the world’s older people (60+ years old) will live in low- and middle-income countries by 2050<sup>5</sup>**



**Low-income and marginalized populations often have shorter average lifespans.** For instance, in Brazil the life expectancy of Afro-Brazilians is almost seven years less than of white people.<sup>6</sup> These differences are due to a range of factors, including limited access to healthcare.

## Redesigning systems for longer, healthier lifetimes for all

“Redesigning health systems and caregiving for longer healthspan is essential for enabling individuals to sustain vitality and wellness throughout their lives. By emphasizing prevention, helping people to stay active and contribute to society, and offering continuous support from caregivers throughout life, people can extend their periods of good health. This requires creating incentives that encourage individuals to invest in healthy lifestyles aimed at preventing or delaying age-related illnesses. Moreover, it involves influencing the health and insurance sectors to prioritize preventive care and healthy living practices, ensuring they are both incentivized and supported. Additionally, redefining and professionalizing care roles while investing in robust care infrastructure is indispensable for delivering comprehensive support to individuals at all life stages. This holistic approach to health and caregiving not only enhances individual wellbeing but also contributes to building a more resilient and sustainable healthcare system for the future. Furthermore, reshaping societal perceptions through a new narrative for longevity can foster recognition of the value older populations bring to communities. Promoting social connectedness and purpose throughout life is equally crucial for healthy aging, necessitating efforts to help individuals rediscover their purpose, facilitate intergenerational connections, and create collaborative spaces across generations. By addressing these aspects holistically, we can foster healthy longevity and enhance the wellbeing of individuals across all ages.”

– **Maria Clara Pinheiro**, Advisory Board member





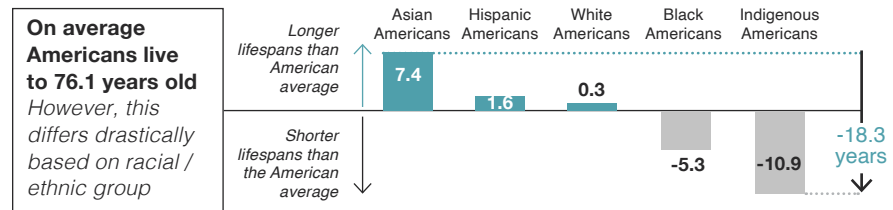
## U.S. Context

- **By 2030, 20% of the total U.S. population will be over 65 years old**, growing from 17.3% in 2022<sup>7,8</sup>
- **More than 30% of older adults in the U.S. are economically insecure.**<sup>9</sup> Over 14% live in poverty, which increased from 10.7% between 2021 and 2022<sup>10</sup>
- **The number of individuals over 50 years old with at least one chronic disease is expected to double** between 2020 and 2050<sup>11</sup>



The U.S. healthcare system often excludes or provides lower-quality care to **Black and Indigenous individuals**, which leads to lifelong health concerns and decreased longevity<sup>12</sup>

Difference in years from national average life expectancy in 2021<sup>12</sup>



**On average Americans live to 76.1 years old**  
However, this differs drastically based on racial / ethnic group

- **One quarter of U.S. adults over 65 years old are socially isolated**, which is associated with a 50% increased risk of dementia and other serious medical conditions<sup>13</sup>
- **Lack of universal health coverage leaves many unable to afford preventative care, contributing to high rates of chronic conditions for aging populations.** By the time individuals are eligible for federally funded Medicare at 65 years old, ~67% of enrollees already have multiple chronic conditions, which may have been preventable by earlier access to care<sup>14,15</sup>

“For people in low-income communities, not having access to healthy food, healthcare, and work has a direct impact on how they experience old age... Living 10-15 years extra in poor health without financial or social support is a problem.”

– Maria Clara Pinheiro, Advisory Board Member



### MULTISOLVING FOR CLIMATE CHANGE

As climates around the world shift, more elderly individuals may be forced to migrate due to climate change. **How might organizations working to support climate refugees tailor their services to account for elderly migrants?**

One approach to reducing transport emissions is to shift toward low-emission models in cities, like biking or walking. **How might we ensure that the needs of elderly folks and others with limited mobility are incorporated when shifting to climate resilient communities?**



### EQUITABLY LEVERAGING AI

Knowing that many older adults experience loneliness in later life, **how might AI tools for loneliness provide companionship in addition to, rather than as substitutes for, human interaction?**

To maintain a high quality of life and extend healthy lifespans, it is important for older adults to remain active within their communities and pursue their passions. AI can facilitate this—for example, AI-powered educational platforms can recommend learning experiences tailored to an older adult’s specific interests and cognitive abilities.<sup>16</sup> **How else might we leverage AI to empower older adults to prioritize lifelong health and engagement?**



## Global Learnings

### ✓ POLICY SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Support policies that enable older adults' lifelong health and engagement.** As the aging population in the U.S. increases, the U.S. can look to other countries that are already supporting larger older populations for examples of policies that promote older adults' engagement and health. Such policies seek to enable older adults' continued contribution, while also ensuring a safety net of supportive care for the elderly and their caregivers.



Photo: Japan Times




### JAPAN'S LONGEVITY ECONOMY

[READ MORE](#) 

The Japanese Government proposed a “Smart Platinum Society” in 2015, which encourages older adults to stay healthy and play active roles in the labor force and society. The government prioritizes employment opportunities for older adults by supporting employee schemes to ensure healthy employment until 70 years old and providing sustainable opportunities to stay engaged in the workforce after that point.<sup>17</sup> Japanese cities have also redeveloped infrastructure to meet the demands of an aging population. For example, school buildings were converted into community centers as the number of schoolchildren declined and the number of older persons increased. The government also implemented the Barrier Free Law, which applies age-friendly and accessibility guidelines to all public transportation systems and public buildings.<sup>18</sup> These “longevity economy” efforts have changed attitudes towards aging in Japan—over 40% of people between ages 65-74 do not consider themselves “older people.”<sup>19</sup>



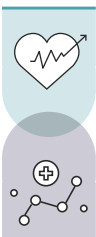
### GERMANY'S LONG-TERM CARE INSURANCE

[READ MORE](#) 

Germany recently moved to require that long-term care insurance be provided to all employees, while also strengthening home-based care and improving care affordability. This type of insurance can cover costs for independent caregivers, contributions to social security for the caregiver, nursing courses for relatives, subsidies for home adaptations, inpatient care, and assisted living or retirement homes.<sup>20</sup>



Photo: Waltraud Grubitzsch/dpa/picture alliance



### CONNECTION TO HEALTH INFORMATION

Navigating the rapid expansion of health information online may present difficulties for older adults, 29% of whom are not comfortable using a digital device.<sup>21</sup>



### CONNECTION TO PUBLIC SPACES

Equitable, safe, and accessible public spaces provide a resource for older adults to age healthily through increased socialization, intergenerational engagement, physical activity, and community participation.



## Global Learnings

### ✓ COMMUNITY-LED SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...


**Empower older adults to engage with society as “lifelong contributors” via structured initiatives that provide opportunities for socializing, reciprocal engagement, and tap into elders’ assets.** The U.S. can learn from other countries that encourage and enable older adults to meaningfully engage with their communities.



Photo: The Friendship Bench



#### ZIMBABWE’S FRIENDSHIP BENCH


[READ MORE](#) 

The Friendship Bench was developed in Zimbabwe in 2007 to provide problem-solving therapy delivered by trained health workers. The Friendship Bench “grandmothers” are community volunteers who are trained to counsel patients on wooden benches within the grounds of clinics.<sup>22</sup> The grandmothers counsel people suffering from common mental illnesses, particularly in low-income areas where there is less access to care. Participating grandmothers benefit from improved health, compared to those not involved, and the community benefits from accessible mental health support. Friendship Bench has launched pilots in many cities around the world, including in New Orleans, New York City, and Washington D.C. in the U.S.<sup>23</sup>

**Encourage compassionate and personalized elderly care.** The U.S. might look towards models that engage elders in their own care, upskill family members to effectively support their elderly loved ones, or institute programs that facilitate consistent engagement of staff with older adults throughout their care.



#### THE NETHERLANDS’ BUURTZORG CARE MODEL

[READ MORE](#) 

Buurtzorg pioneered a nurse-led model of holistic care that revolutionized community care in the Netherlands. It empowers neighborhood teams of nurses to get to know the community and deliver all the care that patients need. By changing the model of care, Buurtzorg has accomplished a 50% reduction in hours of care and improved the quality of care delivered. The Buurtzorg model has since expanded to 24 countries.<sup>24</sup>



Photo: Nursing Times



Photo: Pallium India




#### INDIA’S NEIGHBORHOOD NETWORK FOR PALLIATIVE CARE

[READ MORE](#) 

The Neighborhood Network for Palliative Care trains community members and volunteers in the basic skills required to provide palliative care and support for older populations. This makes palliative care more affordable and accessible, while also equipping younger generations with the critical skills they will need to support and engage their aging neighbors, family members, and friends. The training also shows younger populations firsthand the importance of preventative care, thus improving their ability to proactively care for themselves.<sup>25</sup>



#### PROACT’S CHRONIC DISEASE SELF-MANAGEMENT

[READ MORE](#) 

ProACT, which is currently undergoing trials in Ireland, Belgium, and Italy, will aid multimorbidity patients in proactively self-managing their chronic diseases. ProACT will use digital health solutions to empower multimorbidity patients and their informal caregivers to play an active role in disease self-management and assist older adults in living independently for as long as possible.<sup>26</sup>



Photo: ProAct2020



#### CONNECTION TO CARE WORK

A projected additional 13.5 million formal long-term care workers are needed by 2040 to support the aging population in OECD countries alone.<sup>27</sup> Longevity

outcomes are influenced by the quality of care that older adults receive, and thus greatly impacted by policies that reward and represent paid care work.



# Greater longevity

## Japan's Ibasho community hubs

### Innovation

Following an earthquake and tsunami in Japan in 2011, older people wanted to actively contribute to their communities during this time of crisis. This led to the first Ibasho project—an elder-run café in Ōfunato, designed to foster community resilience in challenging times.<sup>28</sup>

Today, community members in the Massaki district of Ōfunato can step into Ibasho House, a reconstructed farmhouse serving as a multi-generational community space. Here, visitors connect across generations through meals at the café or ramen noodle shop, participate in communal gardening, utilize community-based daycare, and celebrate special events like Hinamatsuri, Tanabata, Bon-odori dancing, and Christmas.<sup>29</sup> Rooted in disaster recovery,

Ibasho House promotes continued resilience by serving as an evacuation center and hosting disaster preparation training.<sup>30</sup> Since its foundation, Ibasho House has welcomed 40,000 people through approximately 1,250 events organized by local elders.<sup>31</sup> Recognizing the importance of Ibasho's long-term sustainability, local elders formed the Ibasho Sozo Project, a non-profit organization to manage the extended operation. By empowering elders to take an active role in their communities and encouraging the participation of individuals with physical disabilities and cognitive illnesses, Ibasho challenges social perceptions of aging and disability. This has fostered socially integrated and sustainable communities. The Ibasho project has been replicated in Nepal and the Philippines, following natural disasters in each.

[READ MORE](#) ↗

### Enabling elements

- **Visible elder leadership:** Ibasho boosts the visibility and self-esteem of elders by empowering them to develop leadership skills, ensuring the project is well managed and sustainable
- **Global cooperation:** Ibasho House received support from Honeywell Hometown Solutions, Operation USA, and Tenjinkai, as well as volunteer experts from around the world<sup>31</sup>
- **Large aging population:** Japan has the oldest population in the world, with nearly 30% of its population aged 65 or older, creating natural momentum for initiatives to challenge social perceptions of aging<sup>31</sup>
- **Cultural respect for elders:** Linguistic and social practices, such as Revere the Elder day and age-specific terminology, contribute to cultural acceptance and appreciation of old age in Japan<sup>32</sup>



Photo: Ibasho

### Ibasho multisolves\* for other trends and themes:



**Public spaces:** Ibasho creates public spaces for community members of all ages to build social capital through its informal gathering spaces that are open to all.

**Climate change:** Elders are disproportionately affected by natural disasters.<sup>33</sup> Through elder-led disaster risk management sessions, Ibasho helps prepare and equip elders to navigate climate disasters.



Increasing **access to digital and personalized health information** is shifting the role that individuals play in their own health journeys. Demographic characteristics such as age, education, and language may better position **certain individuals to leverage this information and improve their health outcomes, while others may be at risk of being left behind.** At the same time, as data sets are increasingly used to benchmark behavior, **the diversity of the data they contain is of paramount importance.** As health information continues to proliferate, the health system will need to ensure an **equitable playing field for health information development, access, and use.**

“ We have an opportunity and duty to reorient the primary purpose of health information—from data designed to facilitate decisions by doctors and healthcare administrators to **data that enables people to be active participants in their own flourishing.**”

— Chintan Maru, Advisory Board member

## Global Trend

### WHAT IS CHANGING?



**30% of the world's data volume is generated by the healthcare industry,** and it is increasing faster than other sectors such as finance and media.<sup>1</sup>



**Health information is increasingly accessible to individuals through the internet and novel technology.**<sup>2</sup>

For instance, the use of wearable devices which collect health data has dramatically expanded, from 325 million to over one billion users, from 2016 to 2022<sup>3</sup>



**Access to health information is not equitably distributed.**

In Denmark, those with higher education levels accessed online health information over 50% more often than those with lower education levels<sup>4</sup>



**For individuals who can access, interpret, and act on health data, it has positive health benefits** including smoother physician-patient communication<sup>5</sup>



**As people seek health information online, the risk of interacting with health misinformation increases.** Up to 87% of health information posts on social media were found to contain misinformation<sup>6</sup>

### HOW ARE SPECIFIC GROUPS IMPACTED?



**Those without access to the internet or digital tools** (e.g., rural populations, women<sup>7</sup>) **or with low digital literacy** (e.g., older adults) may be left behind



**Marginalized groups are often excluded from clinical research studies,** meaning they are vastly underrepresented in health information sources<sup>8</sup>



Individuals with lower levels of education, who speak a different language, or who have irregular legal status face barriers to navigating, understanding, and utilizing health information effectively, making them **more vulnerable to misinformation**<sup>9</sup>

### Drawing insight from information to support personal health flourishing

“An information boom is as much threat as opportunity. The data reflects—and may entrench—many of our system's flaws: race, gender, and caste biases; underemphasis of social and environmental determinants of health; business models that favor hospital-centric specialty care. Data can also overwhelm and distract governments and businesses, even when they have a team of analysts and dynamic dashboards at their disposal. How then can we expect people without those resources to make meaning from a deluge?

Global innovations shared here offer some optimism. They suggest how to equip individuals, families, and communities with the skills and tools to draw insight from information and use it to support their own flourishing. The examples also prompt reflection on important questions as information continues to proliferate. What new questions might guide the gathering of humanistic data to contextualize our customary ways of knowing? How can we make that information inclusive, fair, and trustworthy? How can we organize information not only with healthcare payers and providers in mind, but also households and civil society?

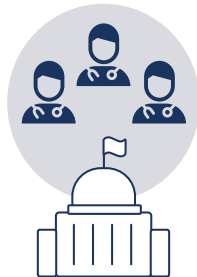
In grappling with these questions, we can begin to draw wisdom from the surge in health information and harness this trend as a tailwind for health equity.”

— Chintan Maru, Advisory Board member



## U.S. Context

- **Americans are increasingly leaning on online health information and personalized health data** collection as key health resource.
- **Nearly 70% of U.S. adults report using the internet as their first source of health information** before going to other health sources or healthcare providers<sup>10</sup>
- **Almost 1 in 3 Americans use a wearable device** (i.e., smartwatch, monitor). However, wearable devices are most common among those who are 18-49 years old, higher-income, and college-educated<sup>11</sup>
- **Within the U.S., health misinformation poses challenges for individuals trying to effectively navigate digital health information.** In a recent U.S. survey, more than half the respondents were uncertain if ten false health-related claims were true or not<sup>12</sup>



**Historically health data is not representative of U.S. minority populations.** For instance, in oncology trials, only 2% of participants were Black women, compared to 84% white women.<sup>13</sup> Black women have been consistently excluded from medical representation, a factor that contributes to high rates of Black maternal mortality<sup>14</sup>

- **Low adult literacy limits understanding of health information:** 77 million Americans struggle with health-related reading tasks, and 65% of these Americans are minorities. This reduces the accessibility of written health information<sup>15</sup>
- **Access to health information shifts the onus to the individual:** 75% of Americans believe that “people are in control of their own health”. While this belief may empower certain individuals to be strong agents of their health, it also minimizes the importance of systemic factors that influence individuals’ ability to access and leverage health resources<sup>16</sup>

“As the [U.S.] healthcare system continues to flounder, we put more and more of the delivery of healthcare onto the shoulders of individuals. Not everyone is equipped equally to manage their disease well.”

— Academic researcher



### MULTISOLVING FOR CLIMATE CHANGE

Historically, strong links between environmental and health issues have shaped critical environmental policies (e.g., the Montreal Protocol limiting chemicals that both cause ozone depletion and increase cancer risk). **How might tracking nuanced health information related to climate change enable better climate advocacy?**

Reliance on digital health information and at-home health equipment, like blood pressure monitors, medical alert systems, and telemedicine platforms often require reliable service or electricity. These services can be disrupted by climate events like heatwaves, storms, or floods. **How can we consider low-emission electrical grid resilience in connection with maintaining access to critical at-home or digital health services?**



### EQUITABLY LEVERAGING AI

As digital health information grows, AI becomes crucial for quickly sorting through health data and providing valuable insights. However, data used to train algorithms can be more than 75% male and 80% white, which is not representative of the full population.<sup>17</sup> **How can the U.S. ensure AI analyses of health are representative of full populations?**

AI’s ability to exponentially increase the spread of misinformation poses a major health threat, especially for those with low health literacy. **How might policymakers guard against AI tools spreading health misinformation through their services?**



## Global Learnings

### ✓ POLICY SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Invest in policies and programs that empower individuals to be more informed navigators of the health information environment.** As individuals rely more on finding their own health information, governments and health systems need to “level the playing field”, reaching out to communities who may encounter obstacles to navigating health information. The U.S. can look to other countries for health education strategies that enable individuals to identify health misinformation, as well as build overall health literacy for populations who may face barriers.



Photo: Vesa Laitinen for The New York Times



### FINLAND'S MISINFORMATION EDUCATION

[READ MORE](#) 

Beginning in preschool, media literacy is part of Finland's national core curriculum. The Finland government launched an anti-fake news initiative in 2014 to teach students, journalists, and politicians to spot and counter false information. Then, in 2016, Finland launched a “critical thinking curriculum” in schools to teach students the skills needed to spot disinformation.<sup>18</sup> For the past five years, Finland has ranked as the most resilient of European countries against misinformation and disinformation.<sup>19</sup>



### NORWAY'S SUNN START HEALTH LITERACY PROGRAM

[READ MORE](#) 

Norway is the first and only country in the Nordic region to have a national strategy for health literacy. Their strategy is part of the government's effort to create a “patient's health service” to enable patients to take care of their own health as well as possible.<sup>9</sup> In addition to the national strategy, Sunn Start, launched in 2017, is a free preventative health literacy guide geared towards improving health literacy among migrants, refugees, and those with low language skills in Norway. It can be used by these individuals themselves or by employees and volunteers who work with them. It was developed in collaboration with migrants and focuses on food, health, mental health, and dental health literacy skills.<sup>20</sup>



Photo: Sunn Start

Global Learnings 
 COMMUNITY-LED SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Engage marginalized communities to co-create representative and accessible health information services.** By centering minority communities in health information services, there are opportunities to build equity across health information systems. The U.S. can learn from health information services that prioritize personalized care for particular groups (i.e., communities of color, immigrants, people for whom English is not a first language, etc.) to better support marginalized populations in accessing and engaging with their own healthcare.



Photo: Nivi


**"ASKNIVI" WHATSAPP CHATBOTS IN INDIA, NIGERIA, AND KENYA**
[READ MORE](#) 

askNivi, a digital conversational platform, enables health promoters, healthcare providers, payers, and pharmaceutical manufacturers to reach, understand, and serve patient populations at scale. Using AI, the chatbot makes evidence-based health information accessible by customizing it to individuals at different reading levels, tailoring it to different local contexts, and offering care options based on the individual's location.<sup>21</sup>


**VENEZUELA'S AYA CONTIGO – ABORTION SELF CARE**
[READ MORE](#) 

In early pregnancy, abortion can be safely self-managed at home.<sup>22</sup> Aya Contigo is an app that provides tailored services to women seeking to safely manage early pregnancy abortion at home. Services include information, one-on-one virtual chat support, and guidance to users to self-manage their abortions. End-to-end encryption protects users' privacy, and the app can connect users with external reproductive health providers, local feminist organizations, and domestic violence help services.<sup>23</sup>



Photo: Stand Maldives

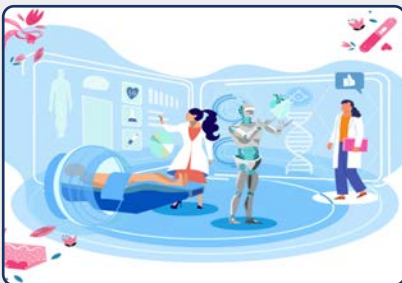


Photo: Pinky Promise


**INDIA'S PINKY PROMISE – INSTANT REPRODUCTIVE HEALTHCARE**
[READ MORE](#) 

The Pinky Promise app features a chatbot that takes a user's symptom and brings them to a preliminary diagnosis for that symptom. The AI-based system makes personalized care accessible using an individual's medical history and representative health information. There are also chatrooms in the app, allowing women to anonymously connect with others on health issues. The organization's mission is to make women's healthcare in India judgment-free and accessible.<sup>24</sup>


**CONNECTION TO CARE**

Increasing access to health data and information can better equip caregivers to provide care, as seen in Jacaranda Health's model (see page 25). This may contribute to task shifting as individual's health needs are managed by those close to them, and direct interactions with medical professionals are reduced.


**CONNECTION TO LONGEVITY**

Access to health information over a lifetime may allow individuals to better prevent and manage health conditions independently. For instance, sleep or fitness tracking applications can support individuals to develop habits that will improve their longevity in the long term.







# Surge in digital health information impacting wellbeing

## Jacaranda Health in Kenya

### Innovation

In Kenya, delays in care-seeking contribute to 33% of all maternal deaths. Jacaranda Health combats this by empowering mothers to seek informed care at the right time and place. This gives mothers greater agency in the health system.

Through the free digital platform, PROMPTS, delivered by Jacaranda Health via SMS messages, new and expecting mothers receive easy, ongoing access to prenatal and post-natal health information tailored to their pregnancy stage. This includes appointment reminders, information about danger signs, and postpartum checklists, empowering mothers with relevant knowledge and influencing health-seeking behaviors. For more specific questions, mothers can turn to a central “help desk,”

where an AI-based system provides personalized responses and triages to a clinical help desk agent. When a risk is identified, the AI-enabled help desk sparks a rapid referral chain. However, most questions are non-urgent and receive a call back within 15-20 minutes.

Jacaranda continues to improve its system’s representation of the populations it serves by asking mothers questions and aggregating information on their lived experience (e.g., were you offered folate, treated with respect, etc.). By listening to patient feedback, Jacaranda Health paints a picture of mothers’ experiences within the health system, elevating their concerns to health officials and giving them a voice.<sup>25</sup>

[READ MORE](#) ↗

### Scale and Impact<sup>25</sup>

- More than 2.4 million new and expecting mothers are enrolled in PROMPTS
- 90% of high-risk mothers flagged by PROMPTS get care at the hospital
- 20% increase in mothers attending more than four prenatal care visits
- 89% of PROMPTS mothers exclusively breastfeed for the first six months after delivery



Photo: Jacaranda Maternity

### Enabling Elements

- **Co-creation with an underserved population:** Jacaranda Health has solicited feedback from hundreds of thousands of mothers to improve respect and resource allocation. This patient-centered approach ensures PROMPTS meets historically marginalized people where they are by bringing them clinically accurate information
- **Use of existing digital tools:** By using digital tools (e.g., SMS messaging) that were already used by community members, Jacaranda enhanced its accessibility and uptake

“ In the global context, resource constraints drive experimentation ... the resulting innovations can be useful in terms of designing equitable solutions for vulnerable populations in the U.S.”

– Founder and co-Executive Director of Jacaranda Health

### Jacaranda Health multisolves\* for other trends and themes:



**Care work:** Jacaranda Health provides mothers with easy access to personalized health information for themselves and their child, enabling them to provide better quality care for their baby.

**Rise in AI:** Jacaranda Health is backed by a health-specific LLM. This AI system gives mothers customized messages based on their specific questions, prioritizing those with the highest risk levels.

# Compounding housing crisis



Intensifying forces of inflation, climate change, migration, and urbanization are **exacerbating the global housing crisis**, with significant implications for health outcomes due to **unsafe, unhealthy, or unstable living conditions**.

“**Stability in housing is one of the most needed healthcare interventions.**”

— Zubaida Bai, Advisory Board member

## Global Trend

### WHAT IS CHANGING?



**One in four people globally live in conditions harmful to their health and safety**<sup>1</sup>



**Not enough affordable, quality houses are being built** to meet population needs. By 2030, three billion people will need access to adequate housing, requiring the building of 96,000 new homes per day until then<sup>1,2</sup>



In most countries the **cost of housing has grown faster than incomes**.<sup>3</sup> This crunch hits hardest in cities, where migration, urbanization, and population growth coalesce



**Housing that is not responsive to the changing climate** will directly contribute to injuries and deaths during extreme weather events. Unsafe housing could expose two billion people to extreme heat by 2100<sup>4</sup>

### HOW ARE SPECIFIC GROUPS IMPACTED?



**Migrant communities often have fewer support networks** for emergency housing and are frequently the first to be displaced in climate and conflict emergencies



**Low-income populations are more at risk of losing housing or living in locations that are not safe for their health.** 716 million of the world's lowest-income people reside in areas with unsafe levels of air pollution<sup>5</sup>

### We need to ensure quality housing for the most vulnerable

“Housing has been a problem for a long time. However, as populations react to climate change, urbanization, migration, and inflation, it will become even more strained. There are lots of opportunities in housing for innovation and creativity. There are novel opportunities in finance (e.g., real estate investments trusts), in building technologies (e.g., 3D printing and prefabrication), in regulation (e.g., housing surveys for livability), in considering the communities around housing (e.g., building in healthcare and public spaces to housing developments), and in flexible use housing (e.g., housing migrants in hotels). It is also important to think about the scalability of solutions—this often lives in policy. We need participatory planning laws, accessible subsidized housing, and housing options that are not constrained by migration status. It's not just about the quantity of houses, but how they enable the health of their inhabitants—the livability, and factors like ventilation, overcrowding, or mold. Whilst green certification of buildings continue to build momentum, livability certification grounded on health factors has yet to see widespread adoption, but there are interesting developments in places like Poland. There's a need for rigorous standards in housing—here we need better global best practices to ensure quality housing for the most vulnerable.”

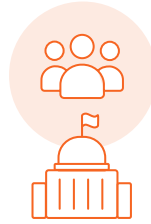
— **Bright Simons**, Advisory Board member

# Compounding housing crisis



## U.S. Context

- **Housing affordability in the U.S. was the worst it has ever been in 2022<sup>6</sup>**
- **Homelessness has been increasing in the U.S., with over 540,000 individuals currently homeless.** Black people make up over 40% of the U.S.' homeless population<sup>7</sup>
- **78% of homes built in the U.S. in the last two years are at risk of increased storms from climate change.**<sup>8</sup> Minority groups are more likely to live in areas with heightened heat exposure (e.g., urban heat islands) or in areas at risk of flooding<sup>9,10</sup>
- **Housing for migrants is increasingly a U.S. problem.** A surge in migrant arrivals led to more than a 140% increase in shelter entries in New York City in 2023<sup>11</sup>



**Discriminatory housing practices have contributed to Black and Hispanic households having lower rates of homeownership.** In 2022, white households had a homeownership rate of 75%, while Hispanic households were at 48%, and Black households were at 45%<sup>12</sup>

- **More than 75% of land zoned for housing in the U.S. is for private, single-family homes only.**<sup>13</sup> Single-family homes are more expensive than multi-family and apartment options, making them increasingly out of reach for low-income families<sup>14</sup>
- **Public housing has often been underfunded and unsuccessfully implemented**<sup>15,16</sup>

“ There’s a lot of work looking at how indoor temperatures are rising to unsafe levels ... the resiliency of a household to heat, sea level rise, and storms are all important.”

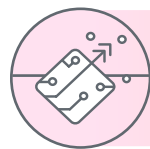
— George McGraw, Advisory Board member



### MULTISOLVING FOR CLIMATE CHANGE

New programs are working to ensure homes are protected from climate events, such as floods and wildfires. The Australian Bushfire Resilience Rating Home Self-Assessment app allows individuals to measure the resilience of their home and receive a customized action plan, reducing the likelihood of their home igniting in a bushfire by an average of 67%.<sup>17</sup> **Beyond wildfire resilience, what other tools might allow individuals to increase their home’s resilience to climate events?**

Often homes that account for changing climate through improved air conditioning, heat retention, or energy efficient systems are catered towards high-income individuals.<sup>18</sup> **How might low-income communities, migrants, and homeless populations be included in the transition to climate-smart housing?**



### EQUITABLY LEVERAGING AI

Landlords have used AI to screen their tenants. These algorithms may amplify existing biases, particularly against renters of color.<sup>19,20</sup> **How might we prevent AI tools from leading to increased housing discrimination?**

Affordable housing applications are often lengthy and complicated, adding significant barriers for those trying to navigate the housing system. AI-based technology can be used to automate the housing application process, simplifying it for tenants and allowing applications to be processed more quickly.<sup>21</sup> **How might AI be best used to streamline housing applications, particularly for low-income, migrant, and homeless populations?**



## Global Learnings

### ✓ POLICY SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Increase housing supply by implementing less restrictive zoning laws and bolstering climate resilience in housing.** Around the world, having a variety of housing options has allowed communities to evolve in response to changing needs, including demographic change, climate change, and new economic and social designs. As a majority of the U.S. is zoned for single-family use, looking towards other nations' zoning policies that allow multi-family and multi-use spaces can open up opportunities for new housing solutions. The U.S. can also look towards countries that have historically managed high-heat environments, fire risk, or coastal erosion to integrate strategies that ensure housing is safe through increasing climate events.



Photo: AARP



### JAPAN'S INTERGENERATIONAL, MIXED-USE HOUSING

[READ MORE](#) 

Kashiwa City's Toyoshikidai housing complex revitalization project rebuilt 103 apartment buildings on 80 acres to create 4,666 units of housing that intentionally addressed the health of multiple generations, from single older adults to families with young children. The revitalized buildings were equipped with design elements for older adults including elevators, a care coordination center, and assisted living spaces. The redevelopment includes a library, a post office, and a children's center, to cater to needs across all generations and encourage intergenerational connection.<sup>22</sup>



### CONNECTION TO LONGEVITY

Multigenerational housing concepts or housing designed for social cohesion can facilitate healthy aging through increased socialization and opportunities for community care. For example, cities can provide funding for families to live close together or assist older adults in opening their homes to young people, encouraging multigenerational living.



### CONNECTION TO PUBLIC SPACES

Low-income individuals are excluded from living in neighborhoods that have an abundance of safe public spaces because these are largely in high income areas. Integrating public spaces such as outdoor areas, children's play areas, and shared working spaces into public housing developments provides residents with safe spaces to play, meet, and socialize, improving health outcomes.





## Global Learnings

### ✓ COMMUNITY-LED SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Bolster holistic programming for homeless populations.** Homelessness in the U.S. is at a record high and increasing.<sup>23</sup> Though various supportive housing models originated in the U.S., they have not reached sufficient scale to match the need.<sup>24</sup> The U.S. can learn from new community-led strategies that address homelessness holistically by prioritizing prevention and providing supportive housing services.<sup>25</sup>



#### NEWCASTLE'S APPROACH TO HOMELESSNESS PREVENTION

[READ MORE](#) 

The Active Inclusion Newcastle (AIN) is a partnership bringing together local organizations to coordinate support, information consistency, and accommodation for those facing homelessness. AIN's prevention strategy uses existing services to connect with those at risk of homelessness as early as possible and provides individuals with targeted advice and support on housing and welfare issues. Since its inception, AIN's approach has prevented over 24,000 households from becoming homeless. Beyond this, AIN provides crisis services, including emergency accommodation and food. The partnership has trained 700+ social service staff to identify and respond to residents at risk for homelessness. Newcastle's approach has been successful due to its evidence-based, holistic focus on prevention and the interagency partnerships between community-led organizations working towards to same goal.<sup>26</sup>



Photo: World Habitat

**Flexibly integrate migrants into communities.** Despite being the main destination for immigrants worldwide since 1970,<sup>27,28</sup> the U.S. often views housing migrants as zero-sum. The U.S. can learn from other countries that see migration as an asset and support their housing needs accordingly.



Photo: Leen Qashu/NRC



#### JORDAN'S URBAN SHELTER PROJECT

[READ MORE](#) 

The high number of Syrian refugees in Jordan has put pressure on the housing and job markets, creating tension between refugees and their Jordanian hosts. The Urban Shelter Project aims to address this by providing shelter to refugees and investing in the local economy. It works with Jordanian property owners to build out unfinished properties, bringing them up to acceptable standards. These homes are then leased rent-free to Syrian refugees for 18 months. The refurbishing process increases the availability of housing and creates jobs, positively impacting the economy and reducing intra-group tensions. This ongoing project has sheltered over 18,000 refugees, created over 20,000 short-term employment opportunities, benefitted local landlords, and revitalized local economies.<sup>29</sup>



#### TORONTO'S HOUSING HELP CENTRE

[READ MORE](#) 

The Housing Help Centre is a community organization that provides one-on-one counseling to sponsored immigrants, permanent residents, and refugees to assist them in finding housing and acclimating to life in Toronto. The Help Centre supports immigrants in applying for subsidized housing, provides a Rent Bank program to help individuals pay rent or utility bills, and hosts information sessions on navigating housing and other social systems. Beyond housing support, they develop customized settlement plans, run a financial literacy program, and connect people with employment and social service organizations.<sup>30</sup>



Photo: The Housing Help Centre



# Compounding housing crisis

## Vienna's social housing program

### Innovation

For residents of Vienna, safe and affordable social housing is not just a government program, it's the norm. The city has been building social housing for a hundred years and its social housing program is known for architectural innovation, quality, and financial sustainability. Today, over 60% of Vienna's population lives in social housing,<sup>31</sup> compared to less than 3% of the U.S. population.<sup>32</sup>

In Vienna, low-income renters experience high-quality housing through a program centered on government-subsidized housing managed by the municipality or by housing non-profits. In addition to quality living spaces, tenants enjoy well-appointed communal spaces, with amenities ranging from saunas to childcare rooms to communal kitchens.<sup>31</sup>

The city's model is characterized by:

- **An adequate quantity of public housing:** Vienna is committed to building 10,000 new public housing units each year<sup>33</sup>

- **Government subsidies:** The government owns and manages about 25% of the city's housing stock, and rents are regulated so that no residents pay over 20-25% of their household income<sup>34</sup>
- **A high proportion of renters:** 80% of residents rent, largely due to a large portion of units being subsidized and the fact that residents are never required to move out, even if their income increases<sup>31</sup>
- **No zoning for single-family housing:** Flexible zoning allows social housing projects to be integrated into the core of the city<sup>35</sup>
- **Sustainable design:** Vienna's social housing developments incorporate various climate-friendly practices. See the climate change multisolve callout below<sup>36</sup>

[READ MORE](#)

### Enabling Elements

- **Continued political prioritization:** From the 1920s onward, the Viennese government has made providing affordable housing a priority<sup>37</sup>
- **De-stigmatization of social housing:** Vienna's social housing is designed to be indistinguishable from private buildings, adorned with beautiful design elements that draw the middle class, removing the stigma surrounding social housing projects<sup>37</sup>

**“The scale of a solution depends on whether housing is seen as a social good tied to other critical social services such as healthcare, rather than a commodity on the stock exchange. We should all want to live in Vienna.”**

— Housing expert



Photo: Herta Hurnaus

### Vienna's social housing program multisolves\* for other trends and themes:



**Public spaces:** Social housing developments in Vienna often contain communal green spaces, playgrounds, gardens, and fitness centers.<sup>36,38</sup> For example, a 2021 subsidized housing development focused on upgrading existing buildings to integrate 12 pockets of high-density greenery to provide leisure space, filter fine dust particles, and reduce noise for residents.<sup>39</sup>

**Climate change:** Vienna's social housing strategically incorporates climate-resilient aspects. For example, one housing development recycles rainwater to flush toilets and irrigate gardens. Another housing project is car-free, replacing what would typically be car parking spaces with a bicycle repair shop and a children's play area.<sup>36</sup>

# Increasing risks to nutrition security



Accelerating climate change, price inflation, and global shocks are **undermining nutrition security**, worsening nutrition-related health outcomes such as **non-communicable diseases**, as well as impacting livelihoods and local environments. A focus on nutrition security allows for consideration of how the **nutritional value of food**, or lack thereof, impacts health.

## NOTES ON TERMS

**Food security** focuses on the availability and access of food, in general.

**Nutrition security** considers the availability and access to food which provide essential nutrients. Food security is a prerequisite to nutrition security.

However, individuals may be food secure but not nutrition secure if they are only able to access non-nutritious foods.

## Global Trend

### WHAT IS CHANGING?



**Eight of the last 10 harvest seasons have faced extreme episodic events**, including the Covid-19 pandemic, the Russian-Ukraine war, and severe droughts<sup>1,2</sup>



During price shocks, **the cost of nutrient-dense foods increases more than nutrition-poor food options**<sup>3</sup>



More than **three billion people in the world were unable to afford healthy food** in 2020<sup>4</sup>



**Nutrient-poor diets increase the risk for non-communicable diseases (NCDs)**, such as diabetes, high cholesterol, obesity, and cardiovascular disease<sup>5</sup>

### HOW ARE SPECIFIC GROUPS IMPACTED?



**Low-income consumers are less likely to feel they can afford healthy foods**, often being forced to turn to cheaper, less nutritious options



**Food insecurity is projected to affect nearly twice as many women and girls than men and boys** by 2050 (236 million compared to 131 million)<sup>6</sup>

“It’s not just if you can fill your plate, but what you fill it with.”

– NGO practitioner

### Our society has focused on improving availability of calories, rather than nutrients

“Globally, there has been a widespread increase in the consumption of processed and non-nutritious foods and we are starting to see the results in health outcomes. Unhealthy diets and the resulting malnutrition, which includes undernutrition, obesity, and overweight, are the major drivers of non-communicable diseases (NCDs) such as diabetes, cardiovascular disease, and high cholesterol, among others. NCDs lead to increasing healthcare costs for society, both in direct and indirect ways. They reduce productivity and wellbeing of populations while also increasing costs for economies. If we don’t take action on nutrition, it will only get worse.

Traditionally our society has focused on improving availability and access to calories, rather than nutrients. Most government subsidies are focused on calories. And major market actors are advocating for ultra-processed and unhealthy foods. In this scenario, it’s hard for nutritious foods to compete. This makes nutrition security a particular challenge for low-income communities, where decades of discriminatory policy and planning decisions have perpetuated inequities in access to healthy foods. Nutrition is also rooted in cultures and traditions and very personal to the individual and their community. When thinking about improving nutrition security, especially strategies around adoption, we must include conversations on culturally specific foods and diets.”

– **Saswati Bora**, Advisory Board member

Note, the nutritional value of food is difficult to measure at a population scale, so a number of proxy measurements, including food insecurity, are used below (e.g., availability of nutritious foods, obesity rates, etc). Where data on nutrition is not available, food security metrics are used. Sources: See annex



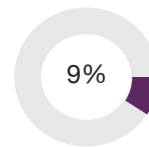
## U.S. Context

- While food security is tracked in the U.S., **nutrition security is not regularly measured**<sup>7</sup>
- **The percent of the population that cannot afford healthy food is five times as large in the U.S.** as in Germany, France, or Denmark<sup>8</sup>
- Poor nutrition contributes to obesity. **Nearly 74% of adults in the U.S. are overweight or obese**, which costs the U.S. healthcare system nearly \$173 billion annually<sup>9</sup>

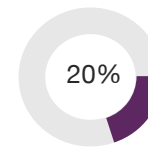


**People of color are more likely to live in food deserts**,<sup>10</sup> reducing access to nutritious food options. Only 8% of Black people live in a census tract with a supermarket, compared to 31% of white people<sup>11</sup>

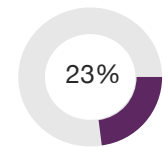
Percentage of Americans experiencing food insecurity, by race in 2022<sup>12</sup>



White Americans



Latino Americans



Black Americans

- **The U.S. food system often optimizes for highly processed food.** Routine consumption of highly processed food has been associated with increased risks of obesity, type 2 diabetes, and all-cause mortality.<sup>13,14</sup> Processed food components (e.g., soy, wheat) have twice as many federal subsidies as fruits and vegetables<sup>15</sup>
- **The Supplemental Nutrition Assistance Program (SNAP) is the main governmental provision of nutrition assistance to low-income families in the U.S.** While SNAP contains an incentive program for buying nutritious foods, it does not restrict the purchase of unhealthy foods and beverages. Over 20% of SNAP purchases are spent on sweetened drinks, desserts, salty snacks, and candy<sup>16,17</sup>



### MULTISOLVING FOR CLIMATE CHANGE

Many populations around the world, including in the U.S., are already dependent on monocrops for their food supply.<sup>18</sup> Monocrop systems are less resilient to climate change and often do not provide consumers necessary dietary diversity. **How might agricultural systems be transformed to foster a diverse and resilient range of nutrients for consumers?**

The production of animal products is known to have comparatively higher emissions than many other food sources.<sup>19</sup> Innovators have created plant-based products that replicate these food sources (i.e. Beyond Meat). However, these meat alternatives primarily cater to higher-income consumers. **How might affordable, sustainable meat substitutes be made more accessible to low-income communities?**



### EQUITABLY LEVERAGING AI

AI-backed personalized nutrition tools can help individuals understand how different foods affect their health.<sup>20</sup> DayTwo uses AI and individually tailored data to predict blood sugar levels for those with type 2 diabetes based on different foods they might eat.<sup>21</sup> **How might personalized AI nutrition tools address other NCDs?**

AI has the ability to bring together data and information from many different sources. **How might AI be leveraged by policymakers to easily compare and evaluate global food policies and their impacts?**





## Global Learnings

### ✓ POLICY SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Advocate for targeted economic policy incentives to spur demand for healthy food.** In the U.S., highly processed foods and non-nutritious foods are often notably cheaper and better publicized than healthy foods.<sup>22</sup> The U.S. can learn from other countries with policies that aim to drive consumer demand for healthy foods, such as subsidies for nutritious foods, junk food taxes, and marketing regulations.



Photo: NPR, Mauricio Palos/Bloomberg via Getty Images



#### MEXICO'S JUNK FOOD TAX

[READ MORE](#) 

Mexico struggles with very high levels of obesity and increasing rates of type 2 diabetes. In response, in 2014, the Mexican government implemented an 8% sales tax on non-essential foods high in sodium, added sugars, or solid fats, as well as a 1 peso per liter excise tax on sugar-sweetened beverages. In the first year after implementation, household purchases of these foods and beverages declined: the mean volume of purchased tax foods decreased by 25 grams per capita per month. The impact was greater on households with low socioeconomic status, who purchased over 10% less taxed foods than expected.<sup>23</sup> Similar tax incentives have been applied in other countries such as Colombia.<sup>24</sup>



#### SOUTH AFRICA'S HEALTHY FOOD SUBSIDY PROGRAM

[READ MORE](#) 

Discovery Health, the largest private insurer in South Africa, provides a rebate of up to 25% on healthy food purchases in over 400 designated supermarkets across the country. Discovery launched this as part of Vitality, its health promotion program. Members receive the benefit for free but must activate it online or by phone. Activation guarantees a 10% rebate for healthy foods, which increases to 25% upon filling out an online health risk assessment questionnaire. Analyses of this rebate program suggest that reducing the cost of healthy food purchases meaningfully changes purchasing patterns. It is important to note that this program is only available to those who have Discovery Health insurance, which are predominantly higher income populations.<sup>25</sup>



Photo: Marisol Benitez via Pexels.com

“**Poor nutrition is leading to rising healthcare costs. As healthcare costs for society increase, action to improve nutritional outcomes becomes unavoidable.**”

– Saswati Bora, Advisory Board member



Photo: UNC Gillings School of Global Public Health



#### CHILE'S BAN ON TV JUNK FOOD ADS TARGETED AT CHILDREN

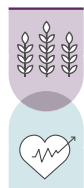
[READ MORE](#) 

In 2016, Chile enacted marketing controls to create a healthier food environment and reduce childhood obesity. Initially, TV ads for food and drinks with high levels of sugar, salt, and unsaturated fat were banned on programs with children's audiences. In 2018, this was extended to a full daytime ban across all TV, making it one of the world's most ambitious regulatory frameworks tackling harmful marketing practices. These marketing regulations led to a 77% decrease in exposure to unhealthy food ads during children's programming and a 64% decrease in unhealthy food ads on all TV programs. The law also created warning labels on packages for unhealthy foods and banned their sale or promotion in schools.<sup>26</sup> These policies have been effective across the country; after 2016, purchased sugar declined by 10.2%, saturated fat by 3.9%, and the sodium content of purchases declined by 4.7%.<sup>27</sup>

### CONNECTION TO LONGEVITY

Studies show that sustained shifts from unhealthy to “longevity-associated” diets can extend life expectancy by over ten years.<sup>28</sup> Conversely, lack of access to nutritious food throughout one's lifetime can increase the risk of non-communicable diseases such as

hypertension and obesity, which negatively impact longevity. Health problems linked to poor nutrition also increase the cost of healthcare as people look to manage nutrition-related diseases over longer lifetimes.





## Global Learnings

### ✓ COMMUNITY-LED SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Increase equitable local food distribution by bringing healthy food options into low-income communities.** At a community scale, the U.S. can look towards urban agriculture and community garden initiatives, which bring fresh, healthy foods to local communities. Given that many low-income communities in the U.S. reside in food deserts, these localized initiatives can supplement nutritional needs.



Photo: Biashara TV



#### ONE MILLION KITCHEN GARDENS IN KENYA

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The Kenyan Ministry of Agriculture, Livestock, Fisheries and Cooperatives launched the One Million Kitchen Gardens initiative in early 2020. The goal of the initiative is to support urban and peri-urban households to grow fruits, vegetables, and herbs at their homes through provision of a “kitchen garden kit”. By growing food within households, the One Million Kitchen Gardens Plan supplements the strained Kenyan food system and improves diets for participants.<sup>29,30</sup>



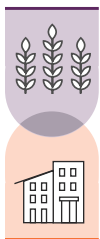
#### URBAN AGRICULTURE IN SINGAPORE

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Only 1% of Singapore’s land area is farmland, meaning that Singapore has imported 90% of its food. However, Covid-19 and the Russia-Ukraine war disrupted their food supply, causing many families to fall into food insecurity. Now, Singapore aims to produce 30% of the country’s food supply locally by 2030. Produce and herbs are being planted inside buildings, on rooftops, and in walls.<sup>31</sup>



Photo: Bloomberg



### CONNECTION TO HOUSING

Affordable housing often coincides with areas that are food deserts, where individuals’ abilities to access nutritious food options are negatively impacted by limited availability of grocery stores.<sup>10</sup> For large grocery

chains, there are risks associated with locating in low-income neighborhoods given the lower purchasing power of the local populations. This perpetuates the lack of grocery options in low-income neighborhoods.<sup>32</sup>



## Increasing risks to nutrition security

### Finland's Nutrition Programming

In the U.S., the share of the population who cannot afford healthy food is 15 times higher than in Finland.<sup>9</sup> As a result, Finland is outpacing the U.S. in meeting key global nutrition targets for diabetes, high blood pressure, and low birth weight, which are proxies for nutrition security.<sup>33</sup> As nutrition security is influenced by food security, it is important to note that Finland ranks first on the 2022 Global Food Security Index.<sup>34</sup>

Although some of Finland's practices are already in place in the U.S., the U.S. can learn from Finland's long-standing strong social welfare policies, emphasis on local production, and sustainable agriculture practices.

[READ MORE](#) ↗

### ⚙️ Various factors contribute to Finland's overall food and nutrition security including:

- **The longest running free school feeding program in the world:** Since 1948, Finland has mandated providing school meals to all students for free, regardless of their family's income or socioeconomic status.<sup>35</sup> Lunchtime is a compulsory part of the educational curriculum, teaching students about the importance of eating a balanced diet and making healthy food choices<sup>36</sup>
- **A long history of science-based national dietary guidance:** The National Nutrition Recommendations and Nordic Nutrition Recommendations contain information on healthy diets and are distributed to all age groups—from those in maternity counseling to schools, families, and old age services. The Nordic Nutrition Recommendations have been an internationally recognized nutrition benchmark for 40 years.<sup>35</sup> The 2022 version will assist countries around the world in creating nutrition guidelines that benefit people and the planet<sup>37</sup>
- **The National Climate Food Program:** The National Climate Food Program's goals are to increase the share of plant, fish, and seasonal products in the average Finnish diet, and to reduce the consumption of meat to a moderate level, among other goals that both advance nutrition and support a climate-sustainable food system. It also aids Finland's target to achieve carbon neutrality by 2035<sup>35</sup>
- **Self-sufficiency:** Finland is self-sufficient in most major agricultural products, and the Finnish food system is strongly based on domestic agriculture production, which reduces reliance on imported goods and promotes sustainability<sup>35,38</sup>
- **Small-scale, diverse agriculture:** 85% of Finnish farmer subsidies go to family farms, promoting small-scale farming and sustainable production<sup>39</sup>

#### *Finnish school feeding programs:*



Photo: Fishman / ullstein bild via Getty Images

### 🧩 Finland's nutrition programming multisolves\* for other trends and themes:



**Care work:** The provision of free lunches in school alleviates some caregiving responsibilities for parents, who know their children will always receive a nutritious meal at school, as well as learn about healthy eating.

**Climate change:** Finland's nutrition system promotes both nutrition security and sustainable food production by providing subsidies for small-scale farming and increasing plant-based products in diets.

# Growing demands for healthy public spaces



The Covid-19 pandemic sparked a **redefinition of public spaces**, with communities calling for more equitable, healthy public spaces. The healthy use of public spaces can **increase social connection and promote healthy habits**. Public spaces can include streets, sidewalks, neighborhood gardens, parks, edge space between buildings, parking lots, public transportation, and more.<sup>1</sup>

“ While we’ve been talking about public spaces for a long time, [since Covid-19] we’ve seen an awakening and a wide understanding that **public spaces are not a ‘nice-to-have’ but a necessity.**”

— Private sector practitioner

## Global Trend

### WHAT IS CHANGING?



**In response to Covid-19 social distancing guidelines, cities looked towards public spaces for safe socialization and recreation.** For example, many cities, including Buenos Aires, Dublin, and Melbourne, altered the allocation of street and sidewalk space<sup>2,3</sup>



**The Covid-19 pandemic sparked an increased demand for urban green spaces of up to 70%**<sup>4</sup>



**Quality public spaces provide increasingly recognized health benefits** through opportunities for physical activity, play, stress reduction, and social engagement<sup>5,6</sup>

### HOW ARE SPECIFIC GROUPS IMPACTED?



While high-income residents may have access to private yards or clubs, **for low-income residents, public spaces may provide critical areas for play, community building, and economic activity**<sup>7</sup>



**People with disabilities may feel excluded from and face barriers to accessing public spaces** that are not designed for inclusive use, and that lack physical infrastructure, effective signage, and/or community support<sup>8,9</sup>

“ **Middle to lower income populations benefit the most from having access to public space** because sometimes they don’t have as much space at home—public spaces provide economic and social opportunities they otherwise wouldn’t have.”

— Private sector practitioner

### Public spaces are the connective tissues of urban areas

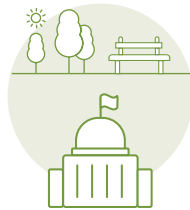
High-quality public spaces are often viewed as a luxury. But in reality, these are the connective tissues of urban areas—they are essential to have healthy, accessible, and functional communities for all. While many might restrict their thinking of ‘public spaces’ to parks or playgrounds, the reality is that public spaces should be a very broad term—encapsulating streets, sidewalks, parks, community centers, playgrounds, and much more. We saw this during the Covid-19 pandemic as a wide range of public spaces were used in innovative and imaginative ways. For example, roadways closed due to lockdowns in Lagos were used for fitness and sidewalks were repurposed for outdoor dining in New York City. These sorts of changes point to the need for flexible and participatory design of public spaces. By bringing the community into the creation and use of critical spaces, there’s a greater chance of fostering responsive and usable space. By shaping and influencing the quality of the air we breathe, the safety and inclusivity of mobility and accessibility of healthy food environments, healthy public spaces bring with them a world of possibilities for supporting health equity. From opening opportunities for intergenerational connections and providing spaces for fitness to supporting community enterprises, like gardens or activity centers, and ensuring safe commutes for women and children, healthy public spaces are a foundation for many critical components of health within communities.”

— Dr. Tolullah Oni, Advisory Board member



## U.S. Context

- **During the Covid-19 pandemic, over 30 of the largest cities in the U.S. adopted “slow-street” or other public space projects.** However, many low-income communities and people with physical disabilities did not experience the benefits of these interventions<sup>10,11</sup>



### The creation of new public spaces in the U.S. often displaces communities of color.<sup>14</sup>

For example, the development of Atlantic Yards in New York City, which included eight acres of public space and an indoor arena, displaced many residents of a predominately Black community<sup>15,16,17</sup>

- **Low-income neighborhoods have access to 42% less park acreage, fewer playgrounds, and half as many sidewalks,** compared to high-income neighborhoods in the U.S.<sup>11,12,13</sup>

- **Exclusionary zoning, or the separation of land uses by type, limits how public spaces might be used.** For instance, most zoning in the U.S. does not allow for mixed-use public spaces,<sup>18</sup> resulting in limited integration of different types of public spaces

“ [People sometimes think] public space is a square or a park, but it’s much more... sidewalks and community centers and other shared spaces are all public spaces.”

– Dr. Tolullah Oni, Advisory Board member



### MULTISOLVING FOR CLIMATE CHANGE

As climate events become more frequent and severe, public spaces can integrate climate resilience solutions. For instance, a new “climate park” in Copenhagen can prevent flooding by capturing up to six million gallons of water during sudden storm surges.<sup>19</sup> **How else might public spaces be leveraged to foster community climate resilience?**

Frequent use of unhealthy public spaces can expose individuals to air pollution. To combat this, the World Athletics Air Quality Project monitors air quality and identifies routes where runners can train with low air pollution, providing an incentive to reduce emissions and raising awareness about the impact of air pollution on health.<sup>20</sup> **What other opportunities exist at the nexus of emissions policies, health, and public space use?**



### EQUITABLY LEVERAGING AI

AI-based tools, such as publicly-available renders, can aid the design of public spaces and empower citizens to advocate for transformations. For example, Dall-E AI produces realistic re-imagined cityscapes from text and image prompts and encourages citizens to use it to advocate for infrastructure changes.<sup>21</sup> **How else might AI be best used to solicit active input from communities on public space design?**

AI can be used to parse data on the demographics of public space users to understand how spaces are used by different groups. **How might this be leveraged to better tailor public spaces to the needs of a community?**



## Global Learnings

### ✓ POLICY SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Open zoning to provide multi-use public spaces.** The U.S. can capitalize on zoning restrictions that were relaxed during the Covid-19 pandemic to create inclusive, mixed-use public spaces. In other countries, multi-use public spaces allow for easy access to services that meet multiple needs (e.g., food, fitness, education, culture, etc.), while also facilitating interactions between diverse community members.



Photo: Wendy Venegas



### BOGOTÁ'S "HAPPINESS CENTERS"

[READ MORE](#) 

A Centro de la Felicidad, or "Happiness Center" is a cultural and recreational community space made for people of all ages, genders, and economic statuses.<sup>22</sup> There are four in Bogotá with one more under construction. The Happiness Center in the El Tunal neighborhood receives over 45,000 visitors on Sundays. This location partners with the city's art department, hosting music and art classes for school children, and providing transportation for children from schools. It also focuses on physical activity and contains a gross-motor play space for young children, various spaces to practice and learn about sports, and pool classes for elders.<sup>23</sup>



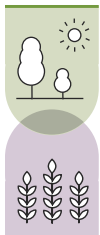
### COPENHAGEN'S SUPERKILEN PARK

[READ MORE](#) 

Superkilen park is a linear park connecting two different neighborhoods in Copenhagen, previously in an area known as one of the most dangerous in the city. Copenhagen City Council joined forces with a non-profit real estate association to bring the community together by showcasing diverse cultures and encouraging interaction between different communities.<sup>24</sup> Taking suggestions from residents, designers brought in elements from over 60 nationalities to this park, including basketball hoops from Japan and a fountain from Morocco. This public space has encouraged connection across cultures and helped to create a more harmonious community.<sup>25</sup>



Photo: Iwan Baan



### CONNECTION TO NUTRITION

Urban farming, community gardens, and farmers' markets all use public spaces to grow or provide nutritious foods to their local communities. This can increase equitable local food distribution by bringing nutritious foods into low-income neighborhoods.



## Global Learnings

### ✓ COMMUNITY-LED SOLUTIONS: THE U.S. CAN LEARN FROM OTHER COUNTRIES TO...

**Increase the presence of healthy public spaces in marginalized communities, incorporating community support and participation.** Well-designed public spaces can provide marginalized communities with room for safe recreation, socialization, and economic development. Including the local community in public space design is crucial for ensuring that the development reflects the racial, class, gender, and age differences of the people who will use the space.<sup>1</sup> Although the U.S. has already engaged in participatory design projects for public spaces, there are opportunities to look to other countries for new methods to integrate community input when designing public spaces for marginalized communities.



Photo: Block-By-Block




#### KOSOVO'S MINECRAFT-DESIGNED SKATEPARK

[READ MORE](#) 

UN Habitat's "Block-by-Block" program used Minecraft for participatory design, raising awareness on public space development, and engaging citizens in urban solutions. The initiative, involving over 220 Minecrafters, delivered Pristina's first skate park, reaching marginalized groups and encouraging local participatory urban design.<sup>26</sup>



#### SÃO PAULO'S "MIND THE STEP"

[READ MORE](#) 

Mind the Step revitalized staircases in São Paulo through physical interventions, transforming them from abandoned and unsafe spaces to public spaces for leisure, recreation, and pedestrian mobility. The Mind the Step initiative has been replicated in other cities, with community participation—through hands-on workshops and interviews—prioritized throughout the process.<sup>27,28</sup>



Photo: Cida de Ativa



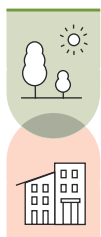
Photo: Next City



#### COPENHAGEN'S FOLKETS PARK

[READ MORE](#) 

In a densely populated, low-income neighborhood of northern Copenhagen, "The People's Park" serves Northern African migrants, homeless individuals, activists, and high-income families alike. After decades of contention, artist Kenneth Balfelt led a redesign process focused on community engagement and inclusivity. Balfelt organized small group meetings and community gatherings to ask what users needed from the space. The resulting design, featuring elements such as zone lighting, allows homeless individuals to feel safe in dark corners of the park, while children can simultaneously play without fear. The renovation has fostered coexistence among these diverse groups, bringing a greater sense of unity and ownership into the neighborhood.<sup>29</sup>



### CONNECTION TO HOUSING

Homeless populations often spend time in public spaces—parks, squares, sidewalks, libraries, etc.—and thus benefit from public spaces that are designed for inclusive use. However, fear of homeless individuals occupying public spaces has led to many cities reducing investment and/or usability of public spaces by introducing "no loitering" signs, high fences around

public parks, and hostile architecture, such as spiked or barred public benches—or lack of benches altogether.<sup>30,31</sup> Incorporating homeless individuals' input into public space design can improve usability not only for homeless populations but also for other users of the space, as seen by the design of Folkets Park in Copenhagen.<sup>29</sup>



# Growing demands for healthy public spaces

## Bogotá's TransmiCable

### Innovation

Before the construction of the TransmiCable cable car, residents of Ciudad Bolivar would travel for two hours down the steep hills of their neighborhood to access Bogotá's broader public transit system. Now, the TransmiCable allows residents to access the rest of the city in just 19 minutes—cutting their commute time by over an hour and a half.

While taking the cable car, riders travel over colorfully painted houses and murals that have been funded in connection to the TransmiCable. At each passing stop on their way down, riders can access various services such as a Care Block (See page 15) or social service offices, such as tax and education services. Upon arriving at the final stop, riders can pick up their bikes from secure bike parking spots at the TransmiCable station. From there, many people bike-commute to work via Bogotá's pedestrian

pathways. When returning to Ciudad Bolivar after work, residents may gather for a community meal in a new public square, or they may tend to vegetables growing in one of the neighborhood's community gardens that were constructed in conjunction with the TransmiCable, at the community's request.

Over 760,000 people of Ciudad Bolivar benefit from this project, with 25,000 people using the TransmiCable on weekdays and 5,000 using it on weekends.<sup>32,33</sup>

[READ MORE](#)

**“For each pylon, where the cable would be built, the community pushed for special infrastructure. So each pylon has a park, a social services station, or a gym built right by it.”**  
– TransmiCable employee

### Enabling elements

- **High levels of community support:** The TransmiCable was not only welcomed but embraced by Ciudad Bolivar residents. Community-led initiatives such as public art installments, colorfully painted houses, and the upkeep of the system have further promoted the use of the cable cars, allowing the project to thrive
- **Diverse funding sources:** Funding support for the TransmiCable was a collaboration between secretaries within the Bogotá government and the International Finance Cooperation (IFC), as well as other international development finance institutions

**“We needed community approval for the project. They wanted input and now that it's built, they understand that it's for them and take care of the facilities.”**  
– TransmiCable employee



Photo: Wendy Venegas

### TransmiCable multisolves\* for other trends:

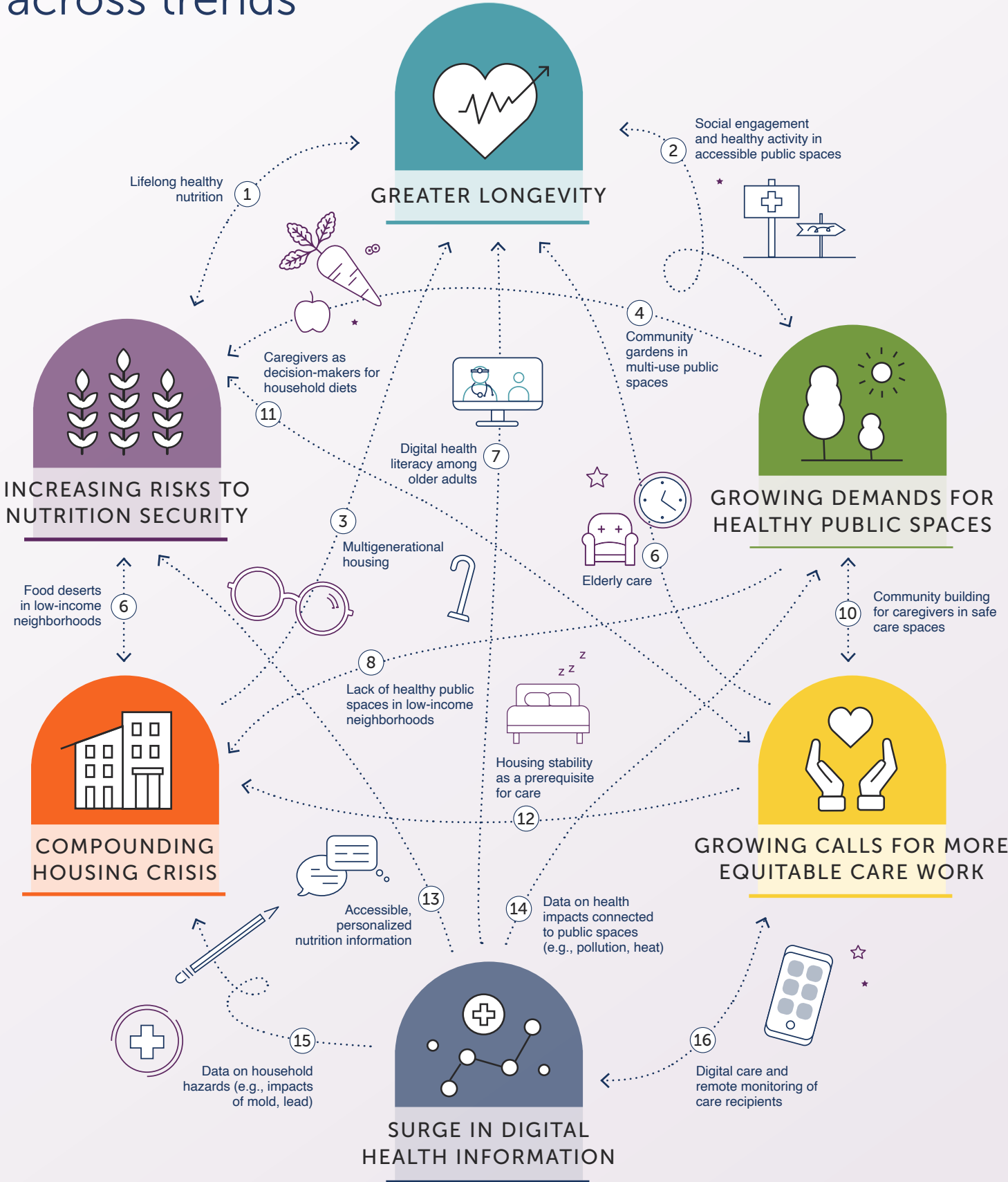


**Care work:** There is a Care Block at one of the TransmiCable stations. The installation of the cable car system reduced commute times for many caregivers, making it easier for them to access services, not only at the Care Block but also in the rest of the city.

**Longevity:** The cable care system is fully accessible for individuals with limited mobility and for wheelchair users.<sup>32</sup> This improves inclusivity for elders, who may also have physical disabilities, facilitating their integration with their community.



# Connections across trends\*



Notes: \*Connections are non-exhaustive

# What is next?

**This report provides a window into the many approaches other countries are taking to improve health equity.** We are witnesses to a world in motion, where demands for equitable care, extended lifespans, an explosion of health information, intensified housing challenges, imperiled nutrition security, and the collective calls for safe, nurturing public spaces herald a new era of challenge, yet possibility. Climate change and AI will interact with each of these trends, transforming and challenging social systems and impacting the health equity landscape for years to come.

**The examples spotlighted throughout this report are more than isolated illustrations; they are embers of inspiration for different choices we could make.** Communities around the world have taken steps to anchor health equity within institutions, systems, and social practices that have previously obstructed equal opportunity. We see sweeping policy solutions that have fundamentally altered cities' or countries' approaches to social determinants of health—for example, Vienna's housing policies made it a global model for social housing. We also see smaller-scale, community-led solutions, such as the Neighborhood

Network for Palliative Care, which trains individual community members to care for their elderly neighbors in India.

**From using AI to connect mothers to maternal health information to nurse-run community care models to elder-led local resilience efforts, there is no shortage of innovative solutions emerging from around the world.** We have seen that other countries are making progress in tackling many of the pressing challenges that the U.S. faces. How might we inspire action based on these learnings?

**Global learning requires the honest recognition that health equity in the U.S. has room to improve, and there are opportunities for us to learn from others.** Looking beyond our borders can spark ideas for how to value and address health equity issues successfully. We hope you come away from this report feeling inspired by the programs, policies, and practices that are effective in other countries, and with a new view to advancing health equity in the U.S.

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Take this report as an invitation to imagine your work, and the world, differently.

We urge you to seek out inspiration both locally and globally, with your eyes open to both the familiar and the foreign—you may just come across an idea that changes everything from somewhere unexpected.

To get started—or to continue—on your global learning journey try one of these resources:



# Advisory Board members

## The work was guided by an interdisciplinary Advisory Board of leading thinkers

The team is grateful for the time, guidance, and expertise that the Advisory Board members dedicated to shape this report. The team selected individuals with expertise in health equity, systems thinking, and cross-cultural experience, who are from a mix of regions and demographics. Collectively, the Advisory Board has a

wealth of knowledge across a range of disciplines and geographies. The Advisory Board guided the research and writing of this report by contextualizing emerging global health equity trends, providing feedback on potential relevance for the U.S. context, and uplifting trends from historically marginalized communities.



**Zubaida Bai** is the President and CEO of The Grameen Foundation. She is a social entrepreneur and women's health advocate with more than 18 years in the social impact space. She is the founder of ayzh®, a social enterprise based in India that designs vital healthcare products to improve the health and happiness of women and girls across their reproductive lives. Prior to Grameen Foundation, she was the managing director of social ventures at CARE. Zubaida has been recognized as a Young Global Leader by the World Economic Forum, a Maternal Health Champion by Ashoka, a TED Fellow/ Speaker, and named United Nations SDG 3 Pioneer by the United Nations Global Compact (UNGC).



**Saswati Bora** is the Global Director of Regenerative Food Systems at The Nature Conservancy (TNC). At TNC, Saswati leads the development of an emerging set of regenerative foodscapes for TNC as a crucial part of accelerating the transition of food systems from degrading and extractive to productive and restorative for nature and people. Saswati brings almost two decades of experience in developing and leading ambitious agendas related to food systems, sustainable agriculture, and rural development. Saswati has previous experience with food systems innovation at the World Economic Forum, the World Bank, the International Food Policy Research Institute, and the UN Development Programme.



**Dr. Ivor B. Horn** is the Chief Health Equity Officer at Google. She has 20+ years of experience as an executive in health systems, academic, and venture-backed entrepreneurial environments. She is a sought-after advisor for health technology companies and has served on advisory committees and boards for several academic, philanthropic, government, and for-profit organizations. As a strategic leader, Ivor has demonstrated expertise in driving organizational change within technology and product innovation and implementing efforts to drive quality improvement and stakeholder engagement. Ivor has implemented programs to improve health outcomes, reduce regulatory compliance risk, and establish partnerships with community-based organizations to better serve at-risk populations.



**Chintan Maru** is Managing Director at the Global Development Incubator (GDI). At GDI, he leads a portfolio of initiatives focused on compassion, dignity, and kindness. He is Founder and Principal of Leapfrog to Value, a global collective expanding financing for compassionate and high-quality health systems. Chintan serves on the founding team and governing board of the Dignity Restoration Project, a frontrunner in the American race reparations movement.



**George McGraw** is the Founder and CEO of DigDeep. DigDeep is the only non-profit focused on closing the Water Access Gap in the U.S. It has brought clean, running water to thousands of families on the Navajo Nation, Appalachia, and Texas border colonias. DigDeep conducts groundbreaking research, empowers communities to advocate for their rights, and teaches Americans to use our resources more intelligently. George also serves on the Board of Water and Power Commissioners for the city of Los Angeles. He is a leading queer voice in social entrepreneurship, environmental justice, and water, both globally and in the U.S. He is also an avid speaker and writer, and co-authored the first national report on water access, *Closing the Water Access Gap in the United States* (2019).



**Dr. Tolullah Oni** is a Clinical Professor at the University of Cambridge and CEO of UrbanBetter. She is a leader on researching how urban development and the built environment impact public health in low-and-middle income countries. Her work focuses on generating the evidence and participatory infrastructure and mechanisms needed to support diverse actors to increase the supply of health from place and the demand for healthy climate resilient places. She is passionate about Africa-led, Youth-privileged, Science-based, and Equity-centered approaches to healthy, inclusive, sustainable urban development.



**Maria Clara Pinheiro** co-leads Ashoka's New Longevity initiative, which aims to create a new architecture for lifelong contribution - creating a world where the wisdom, experience, and potential of older generations are acknowledged and harnessed to accelerate positive change in society. Maria Clara has worked in leadership roles in Brazil, India, and the United States. She has supported social innovators, built entrepreneurial teams, and led global programs and partnerships for Ashoka.



**Bright Simons** is the Founder and President of mPedigree, a social enterprise working on three continents to safeguard human health and food security using technology. He is also a research executive at IMANI, a think tank in Ghana. His 20+ years in activism reinforce systems thinking approaches to multi-stakeholder innovation. He is passionate about the interplay between social housing policy, food access, civic identification, and technological developments, and is particularly interested in new models of social housing provision. Bright is a Skoll Awardee, World Economic Forum Young Global Leader, TED Fellow, and Aspen Braddock Fellow, among others.

# Methodology

## APPROACH

The findings in this report leveraged a new approach to “trend sensing” that mixes both quantitative Google search data and qualitative insights from experts on what trends were bubbling to the surface in their work. Dalberg validated these perspectives through a set of surveys and supported the identified trends with desk research and interviews with experts from around the world.

**Dalberg convened an Advisory Board** to contextualize and prioritize health equity trends for the report. These individuals were selected from a long list of 100+ candidates and assessed across criteria including health equity expertise, systems thinking expertise, cross-cultural experience, geographic diversity, and demographic diversity.

The work took part over two key phases:

## PHASE 1

**Phase 1 focused on leveraging Google search data** to identify the leading trends in health equity primarily across low- and middle-income countries, following the process below.

1. The project commenced by focusing on 13 countries, selected because they have made progress advancing various outcomes related to health equity and represent a diverse portfolio to generate novel and wide-ranging learnings.
2. A search association language model identified 51 initial keywords based on a social determinants of health framework and translated them to the local languages of the 13 countries of study.
3. The model then expanded the short list of 51 keywords into a long list of over 33,000 keywords.
4. The team analyzed the search volume and growth of searches from January 2020 to December 2022 of the long list of keywords. This identified 123 country-level trends, which were narrowed into 12 global trends.
5. Finally, the team used desk research, interviews, and Google Trends data to test the validity of the trends and understand their potential implications.

## PHASE 2

**Phase 2 employed a modified Delphi survey approach.** The Delphi method is an iterative survey model used to draw upon the wisdom of a group of experts to arrive at a consensus view on a particular topic or issue.

**Dalberg used surveys, desk research, expert interviews, and Advisory Board member insights to shape the trends,** following the process below.

6. The team used a series of sequential surveys to the Advisory Board to refine the long list of trends identified in Phase 1. These surveys identified priority trends/themes to guide primary and secondary research.
7. Dalberg matched Advisory Board members with a trend/theme and engaged them through one-on-one conversations to shape the research and provide case studies.
8. The team conducted desk research and 60 interviews, with both global and domestic experts, across trend and theme areas to explore the priority trends in detail.
9. The Advisory Board convened for a virtual workshop to guide the research, transitioning from focusing on the global aspects of the trends to applying them to the U.S. context.
10. The Advisory Board also gathered for an in-person workshop in Bogotá, Colombia. During the workshop, the group finalized content for the report and learned from local health equity practices and innovations—some of which are highlighted in this report.

Throughout Phase 2, the team refined the trends, identified spotlight examples of innovations from around the world, and explored how these global trends were either already manifesting—or were likely to manifest—in the U.S. This process resulted in the emergence of six trends: (1) increasing risks to nutrition security, (2) growing demands for healthy public spaces, (3) compounding housing crisis, (4) growing calls for more equitable care work, (5) greater longevity, (6) surge in digital health information impacting wellbeing, and two themes: climate change and the rise in AI.

We greatly appreciate the time and expertise that individuals and organizations dedicated to developing this report.

**The Robert Wood Johnson Foundation:** Karabi Acharya, Karely Hernandez, and Martina Todaro

**Burness:** Ben Milder, Ryann Cohen, and Eugenia Blaubach

**Dalberg Advisors:** Laura Herman, Ben Wise, Laura McEown, Sophie Gardiner, Jeff Levine, Emma Nichols, Mallory Byrd, Cassie He, and Haley Grieco-Page

### Expert Interviewees:

- Karl Astbury, Malcolm Campbell, and Key Hill, Resilient Cities Network
- Thijs de Blok, Buurtzorg International
- Pernille Bussone and Ole Kassow, Cycling Without Age
- Rebecca Carter, Climate Resilience Project
- Dixon Chibanda, Friendship Bench
- Dr. Eric Cioè-Peña, Northwell Health and the Zucker School of Medicine
- Dr. Pamela Collins, Johns Hopkins Bloomberg School of Public Health
- Shane Cross, Centre for Youth Mental Health, University of Melbourne and Orygen Digital
- Meg Davis, University of Warwick
- Caroline Dilts, The Research Program on Children and Adversity, Boston College School of Social Work
- Sarah Franz and Jen Kelly, Food Systems for the Future
- Zainab Garba-Sani, The Commonwealth Fund and Stanford University
- Philippa Howden-Chapman, University of Otago, Wellington, New Zealand
- Andrea Hurtado Epstein, Health Care Without Harm
- Vijeth Iyengar, AARP
- Jihoon Jeong, Asia2G Capital
- Megan Jones Bell, Google
- Suresh Kumar, Institute of Palliative Medicine
- Christelle Lahoud, UN Habitat
- Florence Lasbennes, 4SD Foundation
- Rachel MacCleery and Matt Norris, Urban Land Institute
- James MacDonald-Nelson, DemocracyNext
- Peiman Milani, The Rockefeller Foundation
- Paavo Monkkonen, UCLA Luskin School of Public Affairs
- Nick Moran, Johns Hopkins Bloomberg School of Public Health
- Glen Moriarty, 7Cups
- Dr. Martin Muchangi, Amref Health Africa
- Roshni Nuggehalli and Dulari Parmar, Youth for Unity and Voluntary Action
- Anil Patil, Carers Worldwide
- Nick Pearson, Jacaranda Health
- Ai-jen Poo, The National Domestic Workers Alliance and Caring Across Generations
- Azeeza Rangunwala, groundWork
- Alok Ranjan, The Power of Nutrition
- Andrew Rzepa, Gallup
- Helle Søholt, Gehl
- DY Suharya, Alzheimer's Indonesia
- Genevieve Tam, Vitala Global
- Uchita Vaid, University of Wisconsin-Madison
- Dr. Waruguru Wanjau, International Digital Health and AI Research Collaborative
- Christine Whitehead, The London School of Economics and Political Science
- Daisy Wolf, Andreessen Horowitz
- Derek Yach, Global health advocate



## CROSS-CUTTING THEME: ACCELERATING CLIMATE CHANGE

1. IPCC, “[Global Warming of 1.5°C](#),” 2023; 2. The World Bank, “[Social Dimensions of Climate Change](#),” 2023; 3. Vivid Maps, “[How is climate will change in the U.S. \(2030 – 2100\)?](#)” n.d.; 4. Köppen-Geiger, “[USA](#),” n.d.; 5. Köppen-Geiger, “[Shifts](#),” n.d.; 6. Matthew Woodward, “[Artificial Intelligence Statistics for 2024](#),” 2024; 7. Matleena S., “[27 AI Statistics and Trends in 2024](#),” 2024; 8. Springer, “[Ethics in Artificial Intelligence](#),” 2023; 9. IBM, “[Shedding light on AI bias with real-world examples](#),” 2023; 10. World Health Organization, “[WHO outlines considerations for regulation of artificial intelligence for health](#),” 2023; 11. WHO, “[WHO and partners launch world’s most extensive freely accessible AI health worker](#),” 2022; 12. Orygen, “[Clinical Services](#),” 2023; 13. 7cups, “[Considering Therapy](#),” 2023; 14. Walley, Simon, “[What can AI do for affordable housing in emerging markets?](#)” 2023; 15. UC San Diego Today, “[New AI Platform Addresses challenge of Food Deserts in Low-Income Communities](#),” 2023; 16. Turner Lee, N., Resnick, P., & Barton, G., “[Algorithmic bias detection and mitigation: Best practices and policies to reduce consumer harms](#),” 2019; 17. be my eyes, “[About](#)”; 18. Katerine Devine, “[Move over, ChatGPT: AI is coming for food waste, too](#),” 2023

## 01. GROWING CALLS FOR MORE EQUITABLE CARE WORK



1. UN Women, “[A Toolkit on Paid and Unpaid Care Work: From 3Rs to 5Rs](#),” 2022; 2. UN Economist Network, “[New Economics for Sustainable Development Purple Economy \(Care Economy+\)](#),” 2021; 3. UN Women, “[Whose Time to Care?](#),” 2020; 4. OECD, “[Caregiving in Crisis: Gender inequality in paid and unpaid work during Covid-19](#),” 2021; 5. ILO, “[Fewer women than men will regain employment during the Covid-19 recovery says ILO](#),” 2021; 6. ILO, “[Care work and care jobs for the future of decent work](#),” n.d.; 7. OECD, “[Time to Care: Recognizing the truth behind the economy of unpaid care](#),” 2022; 8. ILO, “[The Unpaid Care Work and the Labour Market. An analysis of time use data based on the latest World Compilation of Time-use Surveys](#)” 2019; 9. FCA, “[Caregiver Statistics](#),” n.d.; 10. NDWA, “[Coronavirus’ Economic Impact on Domestic Workers](#),” 2020; 11. PHI National, “[PHI Launches Institute to Address Inequities in the Direct Care Workforce](#),” 2022; 12. National Alliance for Caregiving, “[Caregiver Nation Summit Drives Action for Family Caregivers on Capitol Hill](#),” 2023; 13. Kuli Kuli, “[Surviving Pandemic Motherhood](#),” 2021; 14. Soraya Seedat and Marta Rondon, “[Women’s wellbeing and the burden of unpaid work](#),” 2021; 15. Urban Institute, “[Child Care Challenges for Medicaid Work Requirements](#),” 2019; 16. Frye, Jocelyn, “[Rejecting Business as Usual: Improving Employment Outcomes and Economic Security for Black Women](#),” 2023; 17. Medicare, “[What isn’t covered by Part A & Part B?](#)” n.d.; 18. PEW Research Center, “[Among 41 countries, only U.S. lacks paid parental leave](#),” 2019; 19. KFF, “[Paid Leave in the U.S.](#),” 2021; 20. American Progress, “[The State of Paid Family and Medical Leave in the U.S. in 2023](#),” 2023; 21. PRB, “[Women more vulnerable than men to climate change](#),” 2012; 22. UN Women, “[The National Integrated Care System in Uruguay: An Opportunity for the Economic Empowerment of Women](#),” 2019; 23. Uruguay Government Care System, “[Telecare at home](#),” 2023; 24. ILO “[How a new law in Uruguay boosted care services while breaking gender stereotypes](#),” 2018; 25. The American Project, “[What the U.S. Can Learn About Caregiving From the World](#),” 2020; 26. NRCNA, “[Caregiver Nutrition Education Toolkit](#),” 2020; 27. Zhai, S., et al, “[Digital health interventions to support family caregivers: An updated systematic review](#),” 2023; 28. Carers Worldwide, “[About Carers Worldwide](#),” n.d.; 29. Noora Health, “[Our Impact](#),” n.d.; 30. Ideo.org, “[A New Brand of Women Entrepreneurs](#),” n.d.; 31. Bogotá’s District Care System, On-site tour, January 2024.

## 02. GREATER LONGEVITY



1. UN “[2022 Revision of World Population Prospects](#),” 2022; 2. US Census Bureau, “[A Long Life Does Not Always Mean a Healthy Life in Old Age](#),” 2021; 3. Discovery ABA Therapy, “[49 loneliness statistics: how many people are lonely?](#)” 2023; 4. Fakoya, OA, et al., “[Loneliness and social isolation interventions for older adults: a scoping review of reviews](#),” 2020; 5. WHO, “[Ageing and Health](#),” 2022; 6. Minority Rights Group, “[Afro-Brazilians in Brazil](#),” 7. United States Census Bureau, “[Older people projected to outnumber children for first time in U.S. history](#),” 2018; 8. United Health Foundation, “[America’s Health Rankings Population – Adults Ages 65+ in United States](#),” 2022; 9. National Council on Aging, “[Get the facts on economic security for seniors](#),” 2023; 10. National Council on Aging, “[Older Adult Poverty Continues Upward Trend, Reaching an Unacceptable 14%](#),” 2023; 11. Anash, JP and Chiu, C., “[Projecting the chronic disease burden among the adult population in the United States using a multi-state population model](#),” 2022; 12. KFF, “[What is driving widening racial disparities in life expectancy?](#)” 2023; 13. CDC, “[Loneliness and social isolation linked to serious health conditions](#),” 2020; 14. CMS, “[Chronic condition special needs plans](#),” 2019; 15. Harvard Health Publishing, “[Is our healthcare system broken?](#),” 2021; 16. The Aging, “[AI in Finding Meaning and Purpose During the Golden Years](#),” 2023; 17. Voegelé, “[Rethinking silver: lessons from Japan’s age-ready cities](#),” 2022; 18. World Bank, “[Silver Hues: Building Age-Ready Cities](#),” 2022; 19. AARP International, “[Japan](#),” n.d.; 20. I am Expat, “[Long-term care insurance in Germany \(Pflegeversicherung\)](#),” n.d.; 21. Lee, Hocheol, et al., “[Effect of a Digital Literacy Program on Older Adults’ Digital Social Behavior: A Quasi-Experimental Study](#),” International Journal of Environmental Research and Public Health, 2022; 22. Friendship Bench Zimbabwe, “[What We Do](#),” n.d.; 23. Friendship Bench Interview, December 2023; 24. Buurtzorg, “[The Buurtzorg Model](#),” n.d.; 25. The BMJ, “[Learning from developing countries – Neighborhood Network in Palliative Care](#),” 2004; 26. ProACT, “[Advanced Proactive digital integrated care](#),” 2020; 27. Global Coalition on Aging, Home Instead, and OECD, “[Key Insights & Proposed Solutions From the Future of Care and the Caregiving Workforce: Lessons and Insights from the Covid-19 Experience](#),” 2021; 28. Ibasho, “[Japan](#),” n.d.; 29. Yasuhiro, Tanaka, “[Ibasho House: A Communal Place in an Aging Local Community](#),” 2016; 30. Ibasho, “[Need and Rationale: Global challenges](#),” n.d.; 31. UN Department of Economic and Social Affairs, “[Leaving No One Behind in An Ageing World: World Social Report](#),” 2023; 32. Karasawa, Mayumi, “[Cultural Perspectives on Aging and Wellbeing: A Comparison of Japan and the U.S.](#),” The International Journal of Aging and Human Development, 30 Sep 2011. 33. AARP, “[The Impact of Disasters on Older Adults](#),” 2022.

## 03. SURGE IN DIGITAL HEALTH INFORMATION IMPACTING WELLBEING



1. RBC Capital Markets, “[The healthcare data explosion](#),” 2020. 2. Jia, et al., “[Online Health Information Seeking Behavior: A Systematic Review](#),” 2021; 3. Tech Report, “[15 Wearable Technology Statistics](#),” 2023; 4. CBS Statistics Netherlands, “[More online searches for health and lifestyle information](#),” 2021; 5. Yu and Meng, “[Impacts of the Internet on Health Inequality and Healthcare Access: A Cross-Country Study](#),” 2022; 6. Suarez-Lledo and Alvarez-Galvez, “[Prevalence of Health Misinformation on Social Media: Systematic Review](#),” 2021; 7. ITU, “[Bridging the Gender Divide](#),” 2022; 8. Schwartz, et al., “[Why Diverse Clinical Trial Participation Matters](#),” The New England Journal of Medicine, 2023; 9. Nordic Welfare Centre, “[Health literacy in the Nordic region](#),” 2021; 10. Finney Rutten, et al., “[Online health information seeking among US adults: Measuring progress toward a healthy people 2020 objective](#),” Public Health Reports, 2019; 11. NIH, “[Study reveals wearable device trends among U.S. adults](#),” 2023; 12. KFF, “[Poll: Most Americans encounter health misinformation, and most aren’t sure whether it’s true or false](#),” 2023; 13. Whyte, “[Racial and Ethnic Representation of Participants in US Clinical Trials of New Drugs and Biologics](#),” JAMA, 2022; 14. National Partnership for Women & Families, “[Black Women’s Maternal Health](#),” 2023; 15. Pitts and Freeman, “[Health Literacy: The Common Denominator of Healthcare Progress](#),” 2021; 16. Stanford University Department of Psychology, “[Health in the United States: Are Appeals to Choice and Personal Responsibility Making Americans Sick?](#),” 2020; 17. Brookings, “[Algorithmic bias detection and mitigation: Best practices and policies to reduce consumer harms](#),” 2019; 18. CNN, “[Finland is winning the war on fake news. What it’s learned may be crucial to Western democracy](#),” n.d.; 19. Canada’s National Observer, “[Finland’s visionary fight against disinformation teaches citizens to question what they see online](#),” 2023; 20. Sunn Start, “[Sunn Start – Adapted and free health information for immigrants](#),” n.d.; 21. Nivi, “[Conversations that create connections](#),” n.d.; 22. WHO, “[WHO recommendations on self-care interventions: self-management of medical abortion](#),” 2022; 23. Aya Contigo, “[Aya Contigo. Your digital companion for abortion and contraception care](#),” n.d.; 24. Pinky Promise, “[Safe Reproductive Healthcare by Judgment Free Gynecologists](#),” n.d.; 25. Jacaranda Health, “[Empowering mothers to seek care at the right place and time](#),” n.d.

## 04. COMPOUNDING HOUSING CRISIS



1. UN Habitat, "Housing," 2023; 2. World Bank, "3 reasons why 'Housing for All' can happen by 2030," 2016; 3. OECD, "Affordable housing is a basic necessity," n.d.; 4. Le Monde, "Over two billion people could be exposed to extreme heat by 2100," 2023; 5. Rentschler and Leonova, "Global air pollution exposure and poverty," 2023; 6. CBPP, "Priced Out: The State of Housing in America," 2022; 7. National Alliance to End Homelessness, "Racial inequalities in homelessness, by the numbers," 2020; 8. RedFin News, "America is increasingly building homes in disaster-prone areas," 2022; 9. Wilson, B., "Urban heat management and the legacy of redlining," 2020; 10. UPI, "Study: minorities more likely than white people to live behind subpar levees," 2023; 11. Turcios, Axel, "NYC sees spike in homeless population due to influx of migrants," 2024; 12. U.S. Department of the Treasury, "Racial Differences in Economic Security: Housing," 2022; 13. CNN Business, "The invisible laws that led to America's housing crisis," 2023; 14. Urban Institute, "Rethinking homeownership as 'the American Dream,'" 2023; 15. NPR OPB, "Private opulence, public squalor: How the U.S. helps the rich and hurts the poor," 2023; 16. Matthew Desmond, "Poverty, by America," Crown Publishing Group, 2023; 17. Australian National Emergency Management Agency, "Protecting Australian homes with free Bushfire Resilience Rating app", 2023; 18. Brookings, "The U.S. needs better, more accessible home weatherization programs," 2022; 19. Smith NMTC Associate LLC, "Housing Discrimination: Big Data, AI, and Algorithmic Models", 2023; 20. Bedayn, J., & Associated Press, "AI is already screening job resumes and rental apartment applications and even determining medical care with almost no oversight", 2024; 21. Simela, Siphon, "Affordable housing policies leave renters out in the cold. This is how AI can fix it", 2023; 22. AARP, "Intergenerational housing at scale: lessons from Japan," 2019; 23. National Alliance to End Homelessness, "State of homelessness:2023 edition," 2023; 24. Daniel Neiditch Charitable Foundation, "Can NYC use Finland's model to solve homelessness?" 2019; 25. European Commission, "Homelessness," 2023; 26. World Habitat, "ZERO evictions from 27,000 social housing tenancies: How Newcastle is leading the way," 2022; 27. PEW, "Key findings about U.S. immigrants," 2020; 28. Statista, "The countries that attract the most migrants," 2023; 29. World Habitat Awards, "Urban Shelter Project," 2016; 30. The Housing Help Center, "Newcomers," n.d.; 31. Mironova, Oksana, "Reflections on Vienna's Social Housing Model From Tenant Advocates," 2023; 32. Stasistocier, "Section 8 Statistics," 2023; 33. Spectrum News, "Los Angeles looks to Vienna for solutions to housing crisis," 2023; 34. EDGE, "Vienna's Unique Social Housing Program," n.d.; 35. Azure, "Vienna's radical approach to social housing," 2023; 36. Forrest, Adam, "Vienna's Affordable Housing Paradise," 2018; 37. Hernández-Morales, Aitor, "How Vienna took the stigma out of social housing," 2022; 38. Greening the cities, "Project: Car-free housing ('Autofreie Mustersiedlung)," n.d.; 39. Balgaranov, Denis, "Affordable housing or green spaces? Vienna says yes to both," 2021.

## 05. INCREASING RISKS TO NUTRITION SECURITY



1. IPCC, "Special report on climate change and land", 2019; 2. WEF, "How can we protect food systems against global shocks? Here's what business leaders say", 2022; 3. Lewis, Meron et al. "Healthy Food Prices Increased More Than the Prices of Unhealthy Options during the Covid-19 Pandemic and Concurrent Challenges to the Food System." International Journal of Environmental Research and Public Health, 2023; 4. FAO, IFAD, UNICEF, WFP and WHO, "The State of Food Security and Nutrition in the World 2022", 2022; 5. NCD Alliance, "Unhealthy diets and malnutrition," n.d.; 6. UN SDG, "Press Release: The world is failing girls and women, according to new UN report", 2023; 7. USDA, "Food Security in the U.S. Measurement," n.d.; 8. GAFS, "Global Food and Nutrition Security Dashboard," n.d.; 9. CDC, "Overweight & Obesity"; 10. Regeneration, "Food Apartheid," n.d.; 11. Alexa Spencer for Word in Black, "Food Deserts Are Deliberate, But Black Farmers Are Fighting Back", 2022; 12. Feeding America, "Hunger hits Black communities harder," n.d.; 13. Lancet, "Ultra-processed foods and human health: from epidemiological evidence to mechanistic insights," 2022. 14. Sarah Moore for Healthy Places By Design, "The Roots of America's Broken Food System", 2019; 15. Farm Action, "References: Federal Farm Subsidies," n.d.; 16. USDA, "SNAP-Ed Connection," n.d.; 17. USDA, "Foods Typically Purchased by Supplemental Nutrition Assistance Program (SNAP) Households (Summary)," 2016; 18. Food Revolution Network, "Monocropping: A Disastrous Agricultural System," 2022; 19. Ritchie, "You want to reduce the carbon footprint of your food? Focus on what you eat, not whether your food is local," Our World in Data, 2020; 20. New York Times, "Here Come the Artificial Intelligence Nutritionists," 2022; 21. DayTwo, "A new life for people with diabetes without restrictive diets," 2022; 22. Kern, et al., "Neighborhood Prices of Healthier and Unhealthier Foods and Associations with Diet Quality: Evidence from the Multi-Ethnic Study of Atherosclerosis" International Journal of Environmental Research and Public Health, 2017; 23. Batis, et al., "First-Year Evaluation of Mexico's Tax on Nonessential Energy-Dense Foods: An Observational Study," PLoS Med, 2016; 24. Global Health Advocacy Incubator, "Colombia enacts two major healthy food policies," 2023; 25. Sturm, et al., "A cash-back rebate program for healthy food purchases in South Africa: results from scanner data" 2013; 26. Open Access Government, "Unhealthy food advertising decreased by 64% in Chile after policy change," 2023; 27. Health Policy Watch, "Chile's Comprehensive Food Policy Offers Global Lesson in Tackling Unhealthy Foods," 2023; 28. Fadnes, Lars T et al. "Life expectancy can increase by up to 10 years following sustained shifts towards healthier diets in the United Kingdom," Nature Food, 2023; 29. Kilimo News, "One Million Kitchen Gardens Plan launched", 2020; 30. Scaling Up Nutrition, "Implementation of nutrition-sensitive interventions to improve food and nutrition security in Kenya and Honduras," n.d.; 31. Singapore Food Agency, "Stakeholder Engagement Report for Lim Chu Kang Master Plan," n.d.; 32. AECF, "Food Deserts in the United States," 2021; 33. Global Nutrition Report, "Country Nutrition Profiles," n.d.; 34. Economist Impact, "Global Food Security Index," 2022; 35. Food Systems Summit Dialogues, "National Pathways – Finland," 2021. 36. Finland Education Hub, "School Lunches in Finland: Healthy and Free," 2023; 37. Nutralredients Europe, "Ground-breaking Nordic Nutrition Recommendations spotlight overlooked nutrients," 2023; 38. Karoliina, Rimahanen et al., "The elements of resilience in the food system and means to enhance the stability of the food supply," Environment Systems & Decisions, 2 Jan 2023; 39. Finnish Food Authority, "Finnish Food Authority as paying agency," n.d.

## 06. GROWING DEMANDS FOR HEALTHY PUBLIC SPACES



1. UN Habitat, "Public Space," 2018; 2. Combs and Pardo, "Shifting streets Covid-19 mobility data: Findings from a global dataset and a research agenda for transport planning and policy," 2021; 3. Urban Land Institute, "The pandemic and the public realm," 2023; 4. Yap, et al, "The influence of the Covid-19 pandemic on the demand for different shades of green," 2022; 5. UN Habitat, "Global Public Space Toolkit," 2016; 6. Cohen, et al. "The Health Benefits of Parks and their Economic Impacts", 2022; 7. Bloomberg, "To Build a Great Public Space, You Need More Than Good Design," 2017; 8. The Journal of Public Space, "What is Inclusive and Accessible Public Space?," 2022; 9. Salman, S. "What would a truly disabled-accessible city look like?," 2018; 10. Smart Growth America, "Shared Spaces and Health Equity" 2022; 11. Bloomberg, "The inequality of American Parks," 2021; 12. PBS, "Nonprofit tackles inequities by building playgrounds in low-income neighborhoods," 2022; 13. Bridging the Gap Research, "Income disparities in street features that encourage walking," 2012; 14. Socio-Ecological Practice Research, "Examining privilege and power in US urban parks and open space during the double crises of antiblack racism and Covid-19," 2020; 15. We Act for Environmental Justice, "Public Green Spaces: Racism, Heat, and Barriers to Access," 2018; 16. Poblete, Gabriel, "Auction of Atlantic Yards Sites Endangers Hard-Fought Housing Promises", 2024; 17. Brooklyn Speaks, "Community groups and local residents reach historic accord with New York State and developers of Brooklyn's Atlantic Yards Project", 2014; 18. Planetizen, "What is Euclidean zoning?," n.d.; 19. Peters, Adele, "This 'climate park' in Copenhagen now doubles as flood infrastructure", 2020; 20. World Athletics, "What is the World Athletics Air Quality Project?," n.d.; 21. Al Kaitlyn Levinson, "Urban spaces get an AI makeover", 2022; 22. IDR, "Happiness Centers Bogotá," n.d.; 23. Happiness Center, Bogotá, on-site tour, January 2024; 24. Public Space, "Superkilen," n.d.; 25. The Urbanist, "Copenhagen's Superkilen: A model for culturally diverse public spaces," 2023; 26. UN Habitat, "Block by Block," 2015-2018; 27. United Nations Sustainable Development, "Mind the Step," 2014-2019; 28. Cidadaetiva, "Mind the Step," n.d.; 29. Next City, "In Copenhagen, a 'People's Park' Design Includes Dark Corners," 2017; 30. The Neighborhood Design Center, "Understanding Hostile Architecture: the cause and effect of restricting public space," 2023; 31. ArchDaily, "Where did all of the public benches go?," 2022; 32. TransmiCable On-site Tour, January 2024; 33. CAF, "TransmiCable, the new inclusive mass transportation system to improve mobility in Bogotá," 2018.



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