# Public Health Reaching Across Sectors

## Mapping the Gaps between How Public Health Experts and Leaders in Other Sectors View Public Health and Cross-Sector Collaboration

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A FrameWorks Map the Gaps Report

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# Introduction

The National Academy of Medicine defines public health as "what we as a society do collectively to assure the conditions in which people can be healthy,"[1] and experts in the field recognize that means addressing the upstream factors, especially social and environmental influences, that shape health outcomes. For this reason, the field of public health is actively working to transform and adapt its role and functions to meet the health challenges and needs of the 21st century. A vision of "Public Health 3.0" has emerged to drive toward that goal through partnerships with sectors that have a direct impact on upstream influences and that are considered essential to "creating health, equity, and resilience in communities."[2] While many sectors have potential roles to play in improving health outcomes and building healthier communities, the Housing, Education, Business, and Health Systems sectors are the focus of this report.

There are, unfortunately, significant barriers to collaborations between public health and these sectors. Some are institutional, as funding streams, lines of governmental authority, and policymaking processes often treat each sector not only as distinct but also unrelated. The perceptions that other sectors have about public health also stand in the way of effective collaborations. As detailed in this report, leaders and professionals in Housing, Education, Business, and Health Systems associate the field of public health with a very narrow set of traditional functions related to preventing disease and protecting health and generally do not recognize its value as an effective partner. These perceptions undermine the willingness of these sectors to collaborate with public health when possible and the desire to come together to shift institutions and policy to better support and facilitate collaborations.

Overcoming unproductive perceptions of public health held by other sectors requires an effective communications strategy that can foster a fuller understanding of the field of public health and why collaborations with public health professionals are valuable. This report represents the first step in research designed to develop such a strategy and the tools to put it into practice. This work is funded by the de Beaumont Foundation and the Aspen Institute's Health, Medicine and Society Program as part of the Public Health Reaching Across Sectors (PHRASES) initiative.[3] This work is a broad effort to better understand what decisionmakers in other sectors need and to improve how public health professionals communicate about the impact and value of their field, foster cross-sector collaborations, and generate sustainable support for public health problem-solving approaches.

This report begins with the "untranslated expert view" of public health as it considers how best to reach across sectors. This view, distilled from interviews with leading experts in public health (from local and state health departments, academia, advocacy, etc.) represents a vision of public health's mission and its role in the 21st century. It comprises a set of core ideas about public health that these experts want leaders and professionals in other sectors to understand and support.

We then describe the cultural models[4]—common but implicit patterns of thinking and assumptions—that underlie how leaders from other sectors reason about health, cross-sector collaborations, and the role of public health. These findings come from an analysis of in-depth, one-on-one interviews with leaders in Housing, Education, Business, and Health Systems, and peer-discourse sessions[5] with Business professionals. In describing the different ways of thinking available to leaders and professionals in these sectors, we explore how they impede or facilitate understanding of public health and how they might affect professionals' willingness to engage with the field.

Finally, we "map the gaps" between perspectives of public health experts and leaders from other sectors, identifying points where understandings overlap and where they diverge. This analysis highlights the key challenges that must be overcome to foster better understanding of public health and greater willingness to engage in cross-sector partnerships with the public health field. Gaps in understanding provide a target for further reframing research (currently underway) to support the field of public health as it reaches across sectors.

A description of the research methods used in this report, as well as participant demographic information, can be found in the Appendix.

**A Note on Terminology**

In the rest of this report, the one-on-one interviewees will be called "Business leaders" and the participants in the peer discourse sessions will be called "Business professionals." When both groups of participants from the Business sector are referred to at the same time, they will be called "Business participants" or "Business leaders and professionals."

# Executive Summary

## Introduction

Because health and wellbeing are largely driven by upstream social and environmental factors, collaborations between public health and other key sectors are essential for change. Unfortunately, there are significant barriers to cross-sector collaborations. While some barriers are institutional, others relate to communication: indeed, public health professionals face significant challenges in communicating the value of their work to potential partners in key sectors. This report summarizes the first phase of research into how to overcome these challenges; it is the first step toward developing an overarching strategy to reframe collaborations between public health and other key sectors and develop tools to put the strategy into practice. This work is funded by the de Beaumont Foundation and the Aspen Institute's Health, Medicine and Society Program as part of the Public Health Reaching Across Sectors (PHRASES) initiative.

Based on interviews and peer discourse sessions with leaders and other professionals in the fields of Housing, Education, Business, and Health Systems, this report covers three broad areas:

- The "untranslated expert view" of public health: how public health perceives its mission and role and what it wants other sectors to know about the field.

- The cultural models that underlie how leaders from other sectors reason about health, cross-sector collaborations, and the role of public health.

- A comparison that maps the gaps and overlaps between perspectives of public health experts and leaders in other sectors and identifies points where understandings overlap and where they diverge.

## The View of Public Health Experts

The following points comprise the content that public health experts wish to communicate about the value of their field and of cross-sector collaborations to leaders in other sectors. Together, these points represent the "untranslated expert view" of public health. This expert view was generated through:

- An analysis of 16 one-on-one, one-hour phone interviews with researchers, practitioners, and policy experts working on the issue.

- A set of in-person feedback sessions with public health experts to verify and refine the elements of the expert view.

## What should leaders in sectors outside public health know about health?

To fully appreciate why health is relevant to their own sectors' missions, public health experts believe that leaders in Housing, Education, Business, and Health Systems should have a broad understanding of what it means to be healthy, how health is influenced by upstream social and environmental factors, and what it takes to generate better health. Experts explain that in a healthy society, everyone has the opportunity to experience mental and physical wellbeing; that health is shaped by social and environmental factors; and that solving current health challenges requires addressing the root causes of poor health.

## What should leaders in sectors outside public health know about public health?

According to public health experts, if leaders in other sectors are to ascribe greater value to public health and understand why it matters, they need to know what assets are embedded in the field, how public health has contributed to a healthier population over time, and how it is evolving to meet the changing needs of society. Experts explain that the field of public health works to ensure that all communities have the opportunity to be healthy and that it has played a leading role in producing health for more than a century. Public health engages a network of professions that use evidence to promote living and working conditions that promote good health. In government, public health includes federal, state, tribal, territorial, and local agencies whose traditional role has been to defend the population against health threats and respond to community health needs. Finally, experts stress that public health is evolving to adapt to current health challenges in the United States.

## What value does public health bring to other sectors?

According to experts in the field, public health professionals have skills and competencies that are well suited to advance the missions of other sectors. Public health experts see cross-sector collaborations as a strategy to meet interdependent goals and believe that healthy communities can support Housing, Education, Business, and Health Systems leaders in meeting their own sectors' priorities.
Experts explain that these sectors need healthy communities to achieve their own goals and that strong partnerships with the field of public health can help realize interdependent goals. According to experts, public health professionals can use their expertise to address key issues in other sectors; partnerships with public health can help community institutions become community anchors that promote health and wellbeing; and public health professionals can act as effective participants and strategists in cross-sector collaborations.

## What would be helpful in forging partnerships between public health and other sectors?

Access to data, sound public policies, and adequate funding are among the resources that public health experts consider essential to building effective cross-sector partnerships. Experts underscore that it is important to:

- Share data across sectors to better understand and address interrelated issues;
- Incorporate health-fostering practices into policy;

- Allocate more funding to support the preventive and health-creating goals of cross-sector partnerships.

## The View of Sector Leaders and Professionals Outside Public Health

Leaders from the sectors of Housing, Education, and Health Systems, as well as leaders and professionals from the Business sector, draw on a complex set of professional cultural models to make sense of health, public health, and cross-sector collaborations. To identify these models, FrameWorks researchers analyzed transcripts from 38 in-depth, one-on-one interviews with prominent leaders from these sectors, as well as two peer discourse sessions with Business professionals.

In the rest of this report, the one-on-one interviewees will be called "Business leaders" and the participants in the peer discourse sessions will be called "Business professionals." When both groups of participants from the Business sector are referred to at the same time, they will be called "Business participants" or "Business leaders and professionals."

The analysis revealed the following implicit understandings and assumptions:

### Health as Full Life vs. Health as Absence of Illness

When asked to define health, leaders in Housing, Education, and Health Systems often provided an expert-like definition, *explicitly* explaining that health is more than the absence of illness. They argued that health allows people to move forward in life, seize opportunities, and achieve goals. However, when discussing health indirectly, participants often *implicitly* defined health as the absence of illness or the default state of the body and the mind before the inevitable accumulation of pathologies and dysfunctions over time.

The *Absence of Illness* model was one of the main models that participants from the Business sector relied on to define, and to talk about, health.

### Health Is Medical

Leaders in the Housing and Education sectors, as well as leaders and professionals in the Business sector had a dominant tendency to associate health with medical care. They understood health deeply and implicitly as a medical issue, which placed the health care system and health insurance at the forefront of their thinking. While Health Systems leaders consistently recognized that access to care shapes people's health in significant ways, they tended to focus less on health care than Housing, Education, and Business participants did.

### Public Health Is Not Top-of-Mind

When asked to define the term "public health," some sector leaders, as well as the Business professionals, were initially surprised and stumped. They had a hard time defining the concept and the field, and needed time to access what they knew about public health.

### Public Health Is the Health of the Population

Most participants from all four sectors thought about public health first and foremost as a concept rather than a field, which led them to define the term as "the health outcomes of the public." They often explained that a public health issue is one that affects the health of the population, not simply of one individual.

### Public Health Is the Provision of Health Care

Leaders in Housing and Education sometimes talked about the role of public health in providing preventive and curative health care to communities and, specifically, to underserved individuals. In those instances, they typically thought about public health as a function—caring for the health of the public—rather than as an organized field of practice, and they assumed that this function was performed by the health care sector. Business participants often associated the phrase "public health" not simply with the *function* of caring for the health of the public but with the *concept* of a "government-run health care system."

### Public Health Is the Department of Health

Leaders in Housing, Education, Business, and Health Systems associated public health with health departments and a traditional set of prevention and protection functions (e.g., immunization campaigns, environmental inspections, and awareness campaigns about healthy behaviors).

Business professionals placed a strong emphasis on public health's regulatory functions and on safety inspections; infectious disease surveillance was also particularly salient among this group.

### Negative Stereotypes of Public Health: Siloed and Book Smart

Leaders from other sectors reasoned that public health is heavily bureaucratic and territorial and that while public health professionals could, in theory, provide a wealth of resources and information to other sectors, in practice they lack the necessary orientation and incentives to convene cross-sector collaborations. Public health professionals are also widely assumed to be impractical researchers, not practical problem-solvers; their findings are perceived as too abstract to be actionable, and they are seen as not understanding the realities of business.

### Social Determinants of Health: Different Levels of Expertise, Focus on Harmful Environments

Leaders in Housing, Education, and Health Systems recognize that social and environmental factors can directly affect health and constrain behaviors in ways that critically shape health outcomes for the

population. However, our findings also show that these leaders differ from public health experts—and from one another—in how familiar they are with the term "social determinants of health." They also focus primarily—and, in some cases, exclusively—on how negative factors harm health and on the need to remove damaging influences rather than build environments that actively support health.

Business leaders and professionals, on the other hand, did *not* think about the influence of upstream factors and focused extensively on the role of individual behaviors in shaping health outcomes (see below).

### Individuals and Communities Are Responsible for their Own Health

Unlike leaders from other sectors, Business leaders and professionals focused on the crucial role played by individual choices, such as those relating to diet, exercise, smoking, and drinking, in determining health outcomes. They reasoned that because individual choice determines health outcomes, individuals are responsible for their own health.

Business participants also sometimes appealed to cultural norms. They argued that certain professional cultures or communities set norms that are fundamentally harmful to health, which, in turn, shape personal choice and individual behavior for members of those groups in a way that is virtually inescapable.

### Environments Have Direct Effects on Health

Business participants assumed that environments affect health largely by exposing people to conditions that directly cause injury or illness and that living and working environments should keep people safe. Participants adopted a fairly limited definition of the term "environments," which only encompassed working conditions as well as characteristics of the natural world (e.g., water and air).

### Understandings of the Role of Health in Leaders' Work Is Sector-Specific

When sector leaders reason about their own work, they have well-established ways of thinking about the goals of their sectors and how health interacts with them. Each of the following models are therefore specific to a single sector.

- Housing leaders think that housing is the first basic need and must be satisfied before other needs can be effectively addressed (e.g., employment, food, etc.). As a result, they primarily understand health as an *outcome* of their work; ensuring decent housing, in other words, is a way to improve health.

- Education leaders argue that health is a necessary *input* for their work. They advocate for a "whole child" perspective that takes into account the social, emotional, and cognitive development of each student. As a consequence, Education leaders understand health—both mental and physical—as a prerequisite for effective learning.

- Business leaders assume that health is either a selling point (to attract customers and qualified employees) or a means to increase the bottom line by saving health care costs and reducing absenteeism.

- Health Systems leaders think about their work in the context of the sector's transition toward population health management: promoting health by moving beyond traditional health care and fostering community conditions that keep more patients healthier at a lower cost.

### Different Sectors Are Different Worlds

Leaders in Housing and Education assume that their sectors are self-sustained microcosms that hold the keys to their own success—or failure. From that perspective, they think about sectors as separate *worlds*, with different priorities and goals and with distinct characteristics that are not easily grasped by outsiders. As a result, they reason that people must have direct experience and expertise in all the sectors involved in collaborations to effectively facilitate a shared effort.

### The Health Systems Sector Is a Big Tent

Health Systems leaders recognize that collaborations with other sectors are essential to achieve good health outcomes for their patient populations. And, because they think of population health as central to their own mission, they see themselves in the role of convener and leader of collaborations. They also believe that it is possible for all sectors to speak a common language and that they can all agree on the importance of health in the "big picture."

### Cross-Sector Collaborations Are Transactions

Leaders in Housing and Education, who think that their sectors suffer from a chronic lack of financial and other resources, often reasoned that successful cross-sector collaborations require all parties to be able to easily identify the costs and gains of collaborations.

By and large, Business participants were unfamiliar with the concept of cross-sector collaborations beyond those that involve business transactions with clients or customers or contractual collaborations with people from other industries. At a fundamental level, they assumed that interactions with other sectors were inevitably and necessarily business transactions conducted at the level of their own firm. For Business professionals, the only way of interacting with other sectors in the community without "charging" for it was through charity work, which meant providing communities with a free service.

### Cross-Sector Collaborations Require Values and Individual Leadership

Leaders in Housing, Education, and Health Systems often assume that collaborations are built either on individual champions and personal relationships, or on shared values and an organically evolving culture. This makes it harder for them to see that collaborations are most effective and sustainable when they are supported institutionally and strategically.

### Action Is Key in Cross-Sector Collaborations

For leaders in Housing, Education, and Health Systems, the value of cross-sector collaborations is seen as a function of their ability to produce concrete, actionable solutions. Action is prioritized over planning and reporting, which are understood as the absence of action and rejected as a poor motive for cross-sector collaboration.

Business participants used a similar rationale when explaining why they thought it best to keep their interactions with the world of politics—and, by extension, government—to a minimum. Business professionals thought that getting involved in any form of politics would prevent them from doing their work as efficiently as possible and would often be an impediment to their firm's success. This type of argument can contribute to a negative bias against collaborations with public health among Business leaders and professionals, who often associate public health with government (see the *Department of Health* cultural model above).

### Data Are Descriptive, Specific, and Sometimes Burdensome

Housing, Education, and Health Systems leaders have many ways of thinking about data, some of which can likely be leveraged to highlight the value of collaborating with the field of public health.

- Data play a descriptive, not predictive, role in the work of sector leaders; they are primarily used to evaluate *existing* actions and programs, not to plan for *future* actions and programs;
- Data must be specific to one sector, one place, and often one organization to be relevant;
- While scientific data might be useful in confirming initial hypotheses, lived experience is a source of key evidence and insight on which sectors should rely;
- Collecting and analyzing data are sometimes perceived as burdens created by outside pressures, a distraction from the mission of a sector or organization, rather than as a way to achieve it better and faster.

### Data Informs Business Forecasts

Business professionals reason that data collection and analysis are the best ways to predict future trends and make informed decisions about future investments. Importantly, most data mentioned in discussions with Business professionals were strictly business-related (e.g., advertising, sales, budgets) and rarely reached across the sector's boundaries.

### Data Systems Are Complex

Participants often recognized that how data are processed, used, and, in some cases, shared, matters as much, if not more, than what is initially collected. Yet they found it difficult to identify the best systems or the best people to manage and process data and the best ways of effectively sharing them.

## Gaps in Understanding

Analysis revealed several major gaps in understandings of the value of public health between public health experts on one hand and leaders in other sectors and Business professionals on the other.

- **Health: Integrated Wellbeing vs. Integrated Wellbeing *or* Absence of Illness.** Public health experts argue that health is not simply the absence of disease but rather a positive state of wellbeing that can be actively promoted. Housing, Education, and Health Systems leaders are able to define health positively but frequently fell back on an implicit understanding of health as the absence of illness. Business professionals understood health almost exclusively as the absence of illness.

- **Public Health Functions: Broad and Rapidly Evolving vs. Narrow and Traditional.** Public health experts explain that forward-thinking professionals in the field are leading a push to expand the scope of their practices to address the social determinants of health broadly. Sector leaders and professionals are not aware of this transformation.

- **Public Health Professionals: Strategists and Valuable Collaborators vs. Book-Smart Researchers and Siloed Bureaucrats.** According to public health experts, professionals in the field can use their understanding of the big picture of health to think innovatively about key issues in other sectors. Sector leaders and professionals, on the other hand, do not think that public health professionals have the necessary skills, orientation, or incentives to do this.

- **Social Determinants of Health: Risk Factors and Protective Factors vs. Risk Factors Only (*Housing, Education, Health Systems*) or Off the Radar (*Business*).** While public health experts emphasize that the social determinants of health can alternately promote or undermine health, sector leaders tend to focus on harmful influences. Participants from the Business sector are unfamiliar with the role that socioeconomic factors play in shaping health outcomes and typically reason that individuals are responsible for their own health.

- **Whose Health? Whole Community vs. Population of Direct Interest.** Public health experts focus on the health of whole communities, while sector leaders think first about the health of the specific populations relevant to their missions: tenants, students, employees, or patients.

- **Cross-Sector Collaboration: Natural Partners vs. Different Worlds *(Housing and Education)* or Out of Mind (*Business*).** Public health experts explain that professionals in their field have developed effective models for collaboration across sectors and that sectors' overlapping goals and functions make them natural partners. Leaders in Housing and Education, by contrast, think of different sectors as fundamentally distinct and separate worlds that are difficult to bridge. Participants from the Business sector understand collaborations strictly as business transactions

at the level of the firm, which makes it even harder for them to think about the value or need for cross-sector collaborations.

- **Strategists at the Table: Public Health vs. Health Systems *(Health Systems*).** Public health experts say they believe their field is ideally positioned to make valuable contributions in cross-sector partnerships. Health Systems sector leaders, by contrast, think that their sector is best positioned to lead cross-sector collaborations because health is at the core of their mission and they have access to key resources.

- **Building Partnerships: Institutionalized Support vs. Individual Leadership and Organic Cooperation.** Public health experts argue that strong partnerships across sectors depend on institutional support to get off the ground and sustain themselves in the long run. Leaders in Housing, Education, and Health Systems, on the other hand, assumed that successful partnerships are primarily the result of the individual leadership and natural cooperation that grows out of shared values.

- **Data Sharing and Management: Critical and Attainable vs. Complex and Difficult.** Public health experts argue that closer cross-sector collaboration on data management and sharing is essential and that professionals in their field have the data-related skills to help all partners collect and use data effectively. While sector leaders in Housing, Education, and Health Systems agree that collecting, managing, and sharing data can be valuable in advancing their goals, many lack a clear vision of how to achieve that.

This concludes the executive summary of this report. The full version of the report starts on the next page with the 'View of Public Health Experts'.

# The View of Public Health Experts

This section presents the themes that emerged from analyzing 16 one-hour interviews with leading experts in the field of public health whose work includes research, practice, and policy and who hold senior-level positions in local and state health departments, academia, advocacy, etc. This "untranslated view" of public health comprises a set of core principles upon which successful cross-sector collaborations can be built. This expert view is not intended to replace literature reviews or white papers that exhaustively detail the state of the art of public health. Rather, it serves as an important communications tool: a simple and clear set of principles that public health experts want leaders in other key sectors (e.g., Housing, Education, Business, and Health Systems) to fully incorporate into their thinking and decision-making to facilitate more successful cross-sector collaborations in the future.

The public health expert view is organized around the following four foundational questions:

1. What should sector leaders and professionals outside public health know about health?
2. What should sector leaders and professionals outside public health know about public health?
3. What value does public health bring to other sectors?
4. What would be helpful in forging partnerships between public health and other sectors?

## 1. What should sector leaders and professionals outside public health know about health?

To fully appreciate why health is relevant to their own sectors' missions, public health experts believe that leaders and professionals in Housing, Education, Business, and Health Systems should have a broad understanding of what it means to be healthy, how health is influenced by upstream social and environmental factors, and what it takes to generate better health.

- In a healthy society, everyone has the opportunity to experience mental and physical wellbeing. Public health experts describe health in positive terms, arguing that it is more than the absence of disease. In a healthy society, people can make meaning of their lives and have a sense of control as they confront challenges and pursue goals. From that perspective, health is best promoted by proactive strategies that foster a positive state of wellbeing rather than solely by treating diseases or injuries.

- Health is shaped by social and environmental factors. The conditions in which people live and work are significant contributors to health risks and outcomes, rivalling personal responsibilities and behaviors in importance. These "social determinants of health" are far-ranging and include: income, access to education, the level of discrimination experienced in the community, access to

safe recreational spaces, housing conditions, the availability of clean air and water, and access to transportation. Public health experts argue that the social determinants of health not only co-occur but are also often causally linked to each other, which reinforces their effect on health outcomes.[6] This means that the drivers of good health are best understood and addressed at the *community* level as well as at the *individual* level.

- Solving current health challenges requires addressing the root causes of poor health. Experts explain that the United States has among the highest rates of health disparities in the Western world along dimensions including race, ethnicity, income, and gender.[7] Moreover, the incidence of chronic disease is increasing as the population ages, obesity rates remain very high, and Americans' life expectancy at birth stopped rising in 2014.[8] In addition, the high cost of health care remains a significant challenge. Public health experts argue that these trends can only be reversed by addressing the social determinants of health, which requires enlisting the help of the many sectors whose work influences health outcomes at the community level. Engaging in cross-sector partnerships that value and advance the goals and objectives of all stakeholders is the path to ensuring that the conditions in which people live are healthy.

## 2. What should sector leaders and professionals outside public health know about public health?

According to public health experts, if other sector leaders are to ascribe greater value to public health and understand why it matters, they need to know the assets that are embedded in the field, how public health has contributed to a healthier population over time, and how it is currently evolving to meet the changing needs of society.

- Public health works to ensure that all communities have the opportunity to be healthy. Public health focuses on improving the health of *communities* (as defined, for example, by geography, gender, age, race, ethnicity, sexual orientation, etc.), in contrast to the field of medicine, which focuses on providing medical care to *individuals*.

- Public health has played a leading role in producing health for more than a century. Public health has significantly contributed to a staggering increase in Americans' life expectancy (from an average of 47 years in 1900 to 77 years in 2000) and to significant advances that have improved health for the whole population. The field has achieved these outcomes by leading efforts to reduce the incidence of vaccine-preventable diseases, control and prevent infectious diseases, regulate tobacco more stringently, improve maternal and infant health, enhance motor vehicle safety, improve occupational safety, prevent childhood lead poisoning, and improve preparedness and response to natural and human-made disasters.

- Public health engages a network of professions that uses evidence to promote living and working conditions in which people can be healthy. The field draws on various disciplines (including epidemiology and statistics, biomedical sciences, social and behavioral sciences, environmental health sciences, and health policy and administration) to foster healthy communities. Public health professionals are highly effective problem-solvers: whatever their disciplinary background, they are trained to "connect the dots" in communities to identify and implement solutions by:

    - Analyzing data to detect and respond to outbreaks and trends;
    - Conducting research (e.g., assessing needs, evaluating impact);
    - Providing and administering relevant health-related services;
    - Designing and implementing educational programs; and
    - Developing and recommending policies to advance the common good.

- Governmental public health includes federal, state, and local agencies whose traditional role has been to defend the population against health threats and respond to community health needs. Federal agencies, especially the U.S. Centers for Disease Control and Prevention (CDC), play a key role in identifying disease outbreaks and tracking infectious diseases. The federal government also provides significant funding to state and local health agencies and establishes national policies that promote health (e.g., food labeling and environmental protection). At the state and local levels, public health agencies handle a variety of tasks, including emergency preparedness and response, as well as links to resources that address food insecurity and lack of affordable health care.

- Public health is evolving to adapt to current health challenges in the United States. Many governmental public health agencies and others in the field are actively working to broaden public health practice beyond its traditional approaches. This includes empowering "chief health strategists" who bring people in a community together to address the social determinants of health. This transformation—referred to as "Public Health 3.0"—involves workforce training to develop coalition-building skills among public health professionals; managing and sharing data; and designing innovative strategies that address the social determinants of health. The field of public health is also exploring models for funding and governance structures that promote strong cross-sector partnerships.

## 3. What value does public health bring to other sectors?

According to experts in the field, public health professionals have a package of skills and competencies that are well suited to advance the missions of other sectors. Public health experts see cross-sector collaborations as a strategy to meet interdependent goals and believe that healthy communities can support Housing, Education, Business, and Health Systems leaders in meeting the priorities of their own sectors.

- Sectors such as Housing, Education, Business, and Health Systems need healthy communities to achieve their own goals. Public health experts explain that other sectors not only influence community health but are also influenced by it. They argue that healthier students learn better, miss fewer days of school, and are more likely to graduate on time. Similarly, if a community is healthier due to public health initiatives, talented employees are more likely to want to work for local businesses and stay in the area, and people who live in the area are more likely to provide a consistent client base.

- Strong partnerships between public health and other sectors help them realize interdependent goals. Cross-sector collaborations are mutually beneficial because partners' goals are often linked. For instance, when community developers partner with the public health sector, both parties are in a stronger position to address correlated issues in the communities they serve, such as the association between poor housing conditions and asthma triggers.

- Public health professionals can use their expertise to address key issues in other sectors. Public health professionals understand the "big picture" of health—the complex factors that contribute to health, and the many implications that a health issue can have in a community and across sectors. By analyzing key indicators (e.g., mortality rates, environmental health data, disease incidence) from various sources of data (e.g., surveys, electronic health records, consumer information, emergency department admission records), they can identify the macro-level risks that a given social determinant or behavior poses to the health of a community. This expertise can help other sectors address specific challenges that are tied to health. For instance, public health professionals can use their expertise to collaborate with Housing to ensure compliance with housing health codes and regulations; with Education to design interventions that improve graduation rates in a community's public schools; and with Business to enhance workforce productivity.

- Partnerships with public health can help community institutions become "community anchors" that promote health and wellbeing. Public health can support housing agencies, schools, health systems, and others in providing supports and programs that enhance community wellbeing, including initiatives that promote goals such as educational opportunities and workforce development. Integrating those services within community institutions ensures the wellbeing of the whole community and advances the goals of all sectors.

- Public health professionals can act as effective participants and strategists in cross-sector collaborations. Drawing on their problem-solving skills, public health professionals can help other sectors convene key partners and identify the resources necessary to implement and maintain joint interventions in the community. They can also use their strong ties to community institutions and stakeholders to engage the community and generate support for interventions and health-improving activities (e.g., *Healthy KC*,[9] an initiative in Kansas City that brought more

than 100 local stakeholders together to identify ways for the business community to become active leaders in health).

## 4. What would be helpful in forging partnerships between public health and other sectors?

Access to data, sound public policies, and adequate funding are among the resources that public health experts call out as essential to building effective cross-sector partnerships.

- Share data across sectors to better understand and address interrelated issues. Collaborating across sectors to manage and share data will help stakeholders achieve interdependent goals. By integrating varied sources of data, public health can work with partners to identify and characterize relevant community challenges; give partners a sharper picture of how various social determinants of health affect communities over time; and act on that information in ways that help other sectors achieve interdependent goals. For instance, if public health is able to link data on family eligibility for the Supplemental Nutritional Assistance Program (SNAP) to education-specific data on absenteeism or academic achievement, the potential of a partnership between public health and education becomes more evident.

- Incorporate health-fostering practices into policy. According to public health experts, policies can facilitate partnerships by requiring programs in other sectors to explicitly consider and address health outcomes. In an affordable housing initiative, for example, this could mean requiring data collection to track health outcomes or providing funding to hire a health coordinator to work in a housing complex. Building health into policies that focus on other sectors fosters partnerships between these sectors and public health.

- Allocate more funding to support the preventive and health-creating goals of cross-sector partnerships. Public health experts argue for an altered balance between public health initiatives and medical care for individuals. Increases in current funding for public health would support cross-sector partnerships that are prepared to pursue community-based interventions but that lack the resources to fully carry them through.

## The Expert View of Public Health Reaching Across Sectors

### What should sector leaders and professionals outside public health know about health?

- In a healthy society, everyone has the opportunity to experience mental and physical wellbeing.
- Health is shaped by social and environmental factors.
- Solving current health challenges requires addressing the root causes of poor health.

### What should sector leaders and professionals outside public health know about public health?

- Public health works to ensure that all communities have the opportunity to be healthy.
- Public health has played a leading role in producing health for more than a century.
- Public health engages a network of professions that uses evidence to promote living and working conditions in which people can be healthy.
- Governmental public health includes federal, state, and local agencies whose traditional role has been to defend the population against health threats and respond to community health needs.
- Public health is evolving to adapt to current health challenges in the United States.

### What value does public health bring to other sectors?

- Sectors such as Housing, Education, Business, and Health Systems need healthy communities to achieve their own goals.
- Strong partnerships between public health and other sectors help them realize interdependent goals.
- Public health professionals can use their expertise to address key issues in other sectors.
- Partnerships with public health can help community institutions become "community anchors" that promote health and wellbeing.
- Public health professionals can act as effective participants and strategists in cross-sector collaborations.

### What would be helpful in forging partnerships between public health and other sectors?

- Share data across sectors to better understand and address interrelated issues.
- Incorporate health-fostering practices into policy.
- Allocate more funding to support the preventive and health-creating goals of cross-sector partnerships.

# The View of Sector Leaders and Professionals Outside Public Health

In this section, we present the dominant cultural models—the shared but implicit understandings, assumptions, and patterns of reasoning—that shape how leaders and professionals from four key sectors (Housing, Education, Business, and Health Systems) think about public health and cross-sector collaborations. To gather this information, we conducted 38 in-person, in-depth interviews, 10 with leaders in the field of Education (e.g., school superintendent, senior position at a teachers' union, member of state board of education); 11 with leaders in the field of Housing (e.g., housing commissioner, non-profit developer, director of housing policy and development); 11 with leaders in the field of nonprofit Health Systems (e.g., presidents and CEOs of nonprofit hospitals, children's hospitals, and community health centers), and 6 with leaders in the field of Business (e.g., CEOs of companies and chambers of commerce). Our Business sector sample was complemented by two 50-minute group discussions (peer discourse sessions) with business professionals in Atlanta and Chicago (e.g., chief financial officers, small business owners, human resource managers).[10]

When we investigate cultural models, we consider leaders and professionals from a given sector to be members of a particular professional culture. Every profession is characterized by its own discourse—that is, its ways of seeing, talking, and understanding—that are shared through communication and other social practices. This discourse facilitates common ways of thinking that allow members of the profession to work together productively.[11]

**CULTURAL MODELS**

Cultural models are deep-seated patterns of thinking about a given topic that are shared across a culture (in this case, a professional culture). They are taken-for-granted, automatic assumptions that people rely on to interpret, organize, and make meaning of the world.

People hold multiple cultural models about any given issue. Some more consistently shape thinking (*dominant* models) and some are more often in the background (*recessive* models).

As we discuss below, the professional cultural models of the sectors we explored influence the interest and willingness of members of these sectors to collaborate with public health. These models frequently impede collaboration by leading members of these sectors to think that collaborating with public health is not worthwhile. However, these sectors also have ways of thinking that can potentially be leveraged to promote collaboration. This speaks to an important feature of cultural models: they are multiple. In other words, members of each sector can think about health, public health, and collaboration in different and sometimes conflicting ways. People toggle between models, thinking with different ones at different times, depending on context and conversational cues. Some models are dominant and more consistently and predictably shape leaders' thinking, while others are recessive and play a less prominent role. Some models are productive, facilitating a fuller

understanding of health, public health, and support for cross-sector collaborations, while others are unproductive, impeding understanding and getting in the way of leaders' interest in collaborating with public health.

It is important to note at the outset that the sector leaders in Housing, Education, and Health Systems we interviewed for this project represent a group of potential allies for the field of public health; most have not yet engaged in long-standing collaborations with public health but would be ideal partners for public health looking forward.[12] While we treat these leaders as representative of their respective professional cultures, we also acknowledge that they may think about issues in slightly different ways than their colleagues, especially less senior members of these professions. The next phase of the research, currently underway, is exploring the views of additional members of the Housing, Education, and Health Systems sectors to complement this investigation of leaders' views. Our sample of participants from the Business sector, on the other hand, is more diverse and already includes less senior members of the professions.

We begin by describing the cultural models that sector leaders and professionals use to think about health and public health—broadly, and in their own work. We then explore how sector leaders and professionals think about collaborations and data. Many of the models are characteristic of two to four sectors, while others are specific to a single sector. For clarity, we indicate next to the name of each model which sectors hold it.

The findings from our analysis are organized along six key questions:

1. What Is Health?
2. What Is Public Health?
3. What Shapes Health?
4. How Is Health Connected to the Work of Other Sectors?
5. How Do Cross-Sector Collaborations Work?
6. How Do Other Sectors Think About Data?

## 1. What Is Health?

Leaders and professionals from other sectors rely on three main cultural models to think and talk about health. While one of them is expert-like in nature and is used in answers to explicit questions about health, the other two have more unproductive implications and are relied on by sector leaders when health is discussed more implicitly in conversation.

### The *Full Life* Cultural Model (Housing, Education, Health Systems)

When asked to define health, leaders in Housing, Education, and Health Systems often provided an expert-like definition, explaining that health is more than the absence of illness. They explained that

health is, in essence, what allows people to move forward in life, to seize opportunities, and to achieve goals. Sector leaders talked about the ability to "live a full life," as one participant put it, in two related ways. First, having good health means being able to take advantage of all opportunities in life—in other words, to live the best possible version of life. Second, having good health means being able to realize one's own goals and one's full potential—in other words, to be the best possible version of oneself.

> **Researcher**: How would you define what health means?
> **Health Systems Sector Leader**: I would say it's the ability for a child to live to their fullest potential. I think of it broadly because physical health and mental health are so intertwined, but to reach the full potential they have to be at the highest level of health.[13,14]
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> **Housing Sector Leader**: Better health means people can obviously have better quality of life, but also they live longer, communities are more stable, people can keep working, they can continue with their family responsibilities and community or civic responsibilities.

When leaders in Housing, Education, and Health Systems understood health in positive terms, they could also see that it can be proactively fostered, notably through the work of their own sector.

> **Health Systems Sector Leader**: In one way or another, I'd say I've always been searching for ways to create conditions in people's lives and in communities that will really support their health in the broadest sense, rather than just help address their needs when they're ill.

Participants often relied on the expert-like *Full Life* model when explicitly asked to define health. It was, however, less frequently used when interviewers moved on to other questions. This suggests that sector leaders likely hold this model because they have *learned* this understanding of health in the course of their professional life but that it is not one of their deepest, most fundamental ways of thinking about health.

This cultural model was all but absent from interviews and discussions with participants from the Business sector, who consistently reasoned about health as an absence of illness, as detailed below.

### The *Absence of Illness* Cultural Model (Housing, Education, Business, Health Systems)

This model defines health by what it is *not*, rather than by what it is. When thinking with this model, people understand health as the absence of illness. Health is assumed to be the default state of the body and the mind before the inevitable accumulation over time of pathologies and dysfunctions.[15]

*Absence of Illness* was the main model that participants from the Business sector relied on to define, and to talk about, health.

> **Business Sector Leader**: I would tell you that health is that feature that you never think of until it's going bad.
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> **Business Sector Leader**: Health is what is available to the people today, whether it is just […] high blood pressure, or cancer, that is what is health today. And what are the treatments? And what are the options out there to improve health? Health is just a big broad subject. Health means many things to different people.

While participants from the Housing, Education, and Health Systems sectors relied on the *Full Life* cultural model when *explicitly* asked to define health, they often *implicitly* relied on the *Absence of Illness* model[16] when discussing health indirectly—in the context of their work and collaborations with other sectors. The *Absence of Illness* model can be seen in participants' frequent focus on illness and poor health, or on what limits health rather than on what promotes and generates it.

> **Education Sector Leader**: When you're not feeling well mentally or physically, you're compensating, sometimes overcompensating. You're not at your best. Your mood changes. You're not as responsive to certain things. You don't want to see certain things because you're paying more attention to yourself and how you can heal. Or it may play itself out that because of your own affliction or illness, you take it out on somebody who might be healthy.
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> **Housing Sector Leader**: I think about health as the opportunity to live a fulfilled and productive life without being limited by conditions that are avoidable.

### The *Health Is Medical* Cultural Model (Housing, Education, Business, Health Systems)

Leaders and professionals in Housing, Education, and Business tended to associate health with medical care. They understood health to be deeply and implicitly a medical issue, which places the health care system and health insurance at the forefront of their thinking. This model was particularly prevalent in discussions with participants from the Business sector; when asked about health, they immediately expressed serious concerns about the rising price of medical care and health insurance for their organizations and their employees, which they saw as a burden on their overall operating costs.

> **Business Sector Professional (Chicago peer discourse session)**: Our organization is family-oriented. It's about 100 employees, but I've worked there for 26 years and it's very cozy, and I'm our health ambassador. It's important to me that everybody is ergonomically situated, and whatever health insurance plan, there's always some points-based rewards program, and I'm the person in our organization that rallies everybody and gets them excited about whatever our health care plan is offering, in terms of healthy living for weight or for lowering different things like cholesterol. […] And getting them excited about using accessories like a Fitbit or an Apple watch, to remember to drink water, leave your desk. I know it's annoying, but I do it anyway.
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> **Business Sector Professional (Atlanta peer discourse session)**: The price of health care has become such a big issue. We reward employees that stop smoking, for example; we bought everyone in the company Fitbits; we use contests and things like that, because health care cost is so expensive, so outrageous, that people's health is obviously important, but the dollars and cents is huge too.

When thinking with this model, leaders in Housing and Education also assumed that collaborations focused on improving health would necessarily center on medical care professionals.

> **Researcher**: Would you say that a school has a responsibility to care about the health of the broader community, or is that kind of outside its purview?
> **Education Sector Leader**: I think, to a certain extent, depending on what might be available in the schools. So, for example, if a school-based clinic is located in the school, I believe that that clinic should be open and available to the families in the surrounding community. Particularly to the families of the students in the school. […] That's if there's a school-based clinic. If there's not a school-based clinic, I'm just trying to figure out how that would work.

This model was strikingly more recessive in our interviews with Health Systems leaders. It did surface at times, as the following quote illustrates.

> **Health Systems Sector Leader**: The American Hospital Association has an institute. It is called The Institute for Diversity and Health Equity. It is the national organization that specifically exists to address the concept, the notion, the reality that we have inequitable delivery of health care across our country.

While Health Systems leaders consistently recognized that access to care shapes people's health in significant ways, they tended to focus less on health care than did participants from other sectors. They were particularly cognizant that health care is only one factor among many shaping health, and recognized that it often plays a less significant role than someone's economic situation or zip code. We might expect Health Systems leaders to strongly associate health with medical care, since this lies at the heart of their own work, but this was not the case. A potential explanation for this lies in how forward-thinking health care leaders understand their own profession and related market and policy forces, which we explore further down.

### Implications for Communicators

- **The *Full Life* cultural model can be leveraged to build support for cross-sector collaborations.** This model generates productive thinking about how health must be proactively fostered by building the conditions that allow people to be healthy, which naturally opens space for the idea that health must be actively fostered in the various spaces in which people live and work. Communicators should emphasize this positive understanding of health when explaining the need for cross-sector collaborations.

- **The *Absence of Illness* cultural model makes it difficult to think of health as something that can be actively fostered, and minimizes the role that collaborations can play in fostering it.** When health is defined as the *absence* of illness, rather than as a positive state, it is harder for sector leaders and professionals to recognize it as something that can be proactively fostered. In turn, this undermines the need for cross-sector collaborations to nurture health in the community. Public health professionals

should avoid overly stressing illness and disease in their communications to avoid triggering this unproductive model.

- **The *Health Is Medical* cultural model sidelines the field of public health.** When reasoning with this model, sector leaders and professionals focus most of their attention on access to quality health care and the cost of health insurance. As a result, they are likely to see the Health Systems sector and the insurance industry as central to health outcomes and are unlikely to think of public health as having a primary role. This will make collaboration with public health seem largely unnecessary. To build support for cross-sector collaboration with public health, public health professionals must minimize the *Health Is Medical* model by stressing aspects of health that are not directly tied to medical care.

## 2. What Is Public Health?

Leaders and professionals from other sectors rely on a series of cultural models to think and talk about public health, some of which are based on a narrow understanding of the traditional roles of the field, and some on very negative stereotypes of public health professionals. Most of these models have unproductive implications for how leaders and professionals from other sectors see—or don't see—the value of engaging in collaboration with public health professionals.

### Public Health Is Not Top-of-Mind

When asked what the term "public health" means, some of the leaders we interviewed were initially surprised and stumped. They had a hard time defining the concept or the field and needed time to access what they knew about public health. This initial reaction was more prevalent among participants from the Housing, Education, and Business sectors than among Health Systems leaders.

> **Researcher**: When I say public health, how would you define what that is?
> **Housing Sector Leader**: Wow. How would I explain public health? I don't know. I feel like you stumped me.
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> **Researcher**: How would you define public health?
> **Education Sector Leader**: You certainly do ask open-ended questions.
> **Researcher**: [LAUGHTER]
> **Education Sector Leader**: Public health to me is any kind of health that is going to impact someone besides yourself. So, for example, if I were to be diagnosed with a melanoma, a skin melanoma that only pertains to me, it's not contagious; I have to deal with it. But if I have the flu, if I have pneumonia—anything that pertains to someone outside myself, which includes my family, becomes public. But I haven't actually thought about that question, to be really honest. [LAUGHTER] I'm just winging it.
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> **Health Systems Sector Leader**: That is interesting. I have never— I haven't had this— I didn't give that enough thought. That is interesting, let me think.
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> **Business Sector Leader**: I would say that as engaged as we are in this topic [of health] and as much as we feel that we have some really innovative and leading programs, that I spend a lot of time working on this and thinking about it and talking about it. The fact that I really have no idea what you're talking about, no real orientation to […] who's in public health and what they'd be trying to accomplish, I would say it's a long journey.

As interviews progressed, participants were able to bring to mind several different ways of thinking about public health. While it took some effort to access these ideas, participants from all four sectors were, upon reflection, able to think about public health in specific—if partial and sometimes problematic—ways.

### The *Health of the Population* Cultural Model (Housing, Education, Business, Health Systems)

Once sector leaders and professionals were able to access their ideas about public health, most thought about it first and foremost as a concept rather than a field, which led them to define the term as "the health outcomes of the public." This model was particularly salient when participants were asked to define a public health *issue*: invariably, they explained it as one that affects the health of the population as a whole, not simply the health of one individual. When sector leaders and professionals drew on this model, public health as a *field* remained entirely out of view.

> **Researcher**: What does it mean to describe an issue as a "public health issue"?
> **Housing Sector Leader**: I think my only answer would be that it's something that's more related to the community or the population as a whole, or maybe components of a population, or something that may affect anyone in the population, if it's related to opioid use, HIV/AIDS, smoking, alcoholism, obesity.
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> **Education Sector Leader**: Public health is the wellbeing of the citizens, citizenry of the city, the county, the state, the country.
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> **Health Systems Sector Leader**: I think public health is an outlook that looks at populations—so, not necessarily individual child by child, or family by family, but the impacts on health across broad populations.
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> **Business Sector Leader**: I don't know that I do understand [what public health means], but I'll give you my hypothesis. I think public health means how can the society at large be healthier over time and healthier defined in a myriad of different ways, as we've already said. Mental, physical, emotional, etc. But also how does the society sort of take some degree of ownership for its health? I'll stop there and let you keep driving.

### The *Health Care Provision* Cultural Model (Housing, Education, Business)

When thinking about what public health is and what it does, leaders in Housing and Education sometimes talked about its role in providing preventive and curative health care to the community, and to underserved individuals specifically. Participants who relied on the *Health Care Provision* model typically thought about public health as a function—caring for the health of the public—rather than as an organized field of practice. They often, though not always, assumed that this function was performed by the health care sector, which led them to see public health as a sub-function of health care instead of a distinct—but related—field of practice.

> **Housing Sector Leader**: Do I work with public health providers? We are a public health provider, I consider. We take public dollars and provide health in a regulated world to direct recipients. So I think we are kind of the conduit to what I would consider the public health regime and then the recipients.
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> **Housing Sector Leader**: The public health agency has, as I said, provided resources through mobile clinics that come onsite to our properties to serve our residents. And so, we and our residents benefit from the access to that care because residents now are getting both primary care and behavioral health.

Participants from the Business sector—in the peer discourse sessions specifically—often associated the phrase "public health" not simply with the *function* of caring for the health of the public but with a "government-run health care system." This is consistent with their reliance on the *Health Is Medical* model, with a strong focus on health care and health insurance. The word "health" was understood as "health care" and the adjective "public" as "services provided by the government."

> **Business Sector Professional (Atlanta peer discourse session)**: Public health, I think of Scandinavia, socialized medicine, and in these countries, they love it. I think there's reasons why it doesn't work so well here, but I do think of these public health initiatives.
> **Business Sector Leader**: When you talk about public health in China, it is a little bit different than public health in the UK or public health in the UK or Scandinavia is different from what it is in the US or in Mexico. So, it is hard to define it. I mean, and some are— It is just hard when we are dealing with public health, but public health is out there. I mean, it is hard to put it in a box and say, "This is public health."

### The *Department of Health* Cultural Model (Housing, Education, Business, Health Systems)

When thinking with this model, leaders and professionals from other sectors associate public health with health departments and a traditional set of prevention and protection functions. Immunization campaigns, environmental inspections, and awareness campaigns about healthy behaviors were particularly salient for participants. Business participants—especially those working in hospitality or construction—placed a strong emphasis on public health's regulatory functions and on safety inspections,

which was often the only way in which they saw public health and government health departments interacting with their work.

> **Education Sector Leader**: How do educators feel about public health people? This is kind of the same as any government agency. Schools are very used to people coming in and saying, "We're here to help," but many of those same agencies also have some regulatory role. […] The Department of Public Health can come in and shut you down if you have rodents.
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> **Health Systems Sector Leader**: There are the public health officials who are professional public health folks who work for various levels of government whose job it is to either inspect or otherwise evaluate specific public health threats. We work with them when they uncover specific licensure or public health threats.
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> **Business Sector Leader**: I guess it's not something that's very present in my life. I don't really think about it other than the health department and ratings at restaurants and whether or not pools are clean, and those kinds of things.

Public health's role in infectious disease surveillance was particularly top-of-mind for Business participants. They evoked various types of health threats in the United States, from E. coli outbreaks to infectious diseases, such as the flu, shingles, Ebola, and AIDS.[17] This is consistent with the high prevalence of the *Absence of Illness* model of health among Business professionals, and sets the sector apart from Housing, Education, and Health Systems in this respect. When focusing on disease surveillance, Business professionals reasoned that the role of public health professionals was primarily to *collect* and *analyze* data to make sense of public health crises as they happen, and this was what they were particularly skilled at. While participants also talked about public health playing a role in *managing* crises, this was less central to their understanding of public health expertise than data collection and analysis.

> **Business Sector Professional (Atlanta peer discourse session)**: I think of diseases and the Center for Disease Control, and mass population errors that might happen.
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> **Business Sector Professional (Atlanta peer discourse session)**: If you work for the NIH or CDC, you must be great at determining what's an outbreak versus an epidemic, and they must have ways to get their data from emergency rooms. It's the only thing I can figure.
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> **Business Sector Professional (Chicago peer discourse session)**: I think of the CDC gathering a lot of data, implementing new strategies, having a hand in a lot of areas of public health.

For leaders in Health Systems, the *Department of Health* model reinforces the assumption that population health—broadly defined—falls within *their* area of expertise and responsibility. The association of public health with a narrow set of traditional functions of federal and state departments of health leaves leaders in the Health Systems sector assuming that they must take responsibility for coming up with a

comprehensive strategy for population health; they do not see the field of public health as responsible for this, capable of it, or even interested in it.

> **Health Systems Sector Leader**: When I think about public health, I'm thinking about some of the more broad components of things that are typically handled by what I would call the country, the government, that are good, basic things, like water, the sources of food and their safety, immunizations, reproductive health, and infection prevention, and then also, a lot around disaster preparedness. To me, that's public health as opposed to population health, which is something else that we've been talking about.
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> **Health Systems Sector Leader**: I've never thought of population health as a subset of public health, I have to say. That's sort of been a new thought for me. […] I think of population health— I actually think of them as quite separate, and maybe that's my upbringing, but it's just how my brain works right now. I think of public health in the more traditional sense. I think of population health as what we've been talking a lot about in the past five or ten years.

When the field of public health is equated with federal and state departments of health, it is also assumed to be chronically underfunded. For Housing sector leaders in particular, the ongoing lack of funds was assumed to make the field largely irrelevant in practice.

> **Housing Sector Leader**: [Public health professionals] bring a perspective on community health that's very valuable. Sadly, they tend not to bring very much money. […] If they had money, everybody would go find them, but they mostly don't.
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> **Health Systems Sector Leader**: I think they typically are poor cousins. They have so little money compared to health care, so much money goes into health care. This society is incredibly unbalanced in the resources that go to health care delivery versus more community-based health, or community-based housing or food or transportation.

### The *Siloed* Cultural Model (Housing, Education, Health Systems)

Sector leaders in Housing, Education, and Health Systems often assumed that governmental public health is heavily bureaucratic and that the field approaches its work territorially. As a consequence, participants reasoned that the field of public health is too siloed to be able to connect with other sectors in meaningful ways. While in theory, the logic went, public health professionals could provide a wealth of resources and information to other sectors, in practice they lack the necessary orientation and incentives to convene cross-sector collaborations.[18] They saw public health professionals as incapable of proactively initiating dialogue or being responsive to other sectors because they approach their work as a self-contained enterprise.

> **Education Sector Leader**: If we look at these fields as being siloed, I think that's part of the problem. Public health and public education, you know, should be connected fields. Public health, public

education, and public safety should be connected. Oftentimes, they're siloed. And so we only talk when there's pressure, or we only talk when it's a situation that gets out of hand.

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**Health Systems Sector Leader**: We're the small minority that's talking about [population health]. And in that article we wrote, the one letter that was written back was from one of the schools of public health who was saying, "You're trespassing and it's our territory." The public health leaders should be embracing [this] and in fact should be finding ways to tap more into this $3.5 trillion enterprise as partners. And I can just tell you I have experienced more than once this notion of, "You are trespassing on our responsibility." And I think that's silly.

### The *Book-Smart* Cultural Model (Housing, Education, Business, Health Systems)

Public health professionals are widely assumed to be impractical researchers, not practical problem-solvers: their findings are too abstract to be actionable, and they do not understand the realities of other sectors. When thinking in terms of the *Book-Smart* model, participants reasoned that public health researchers are too far removed from reality to meaningfully apply their findings to the concrete challenges of other sectors. Sector leaders and Business professionals see public health professionals as book smart but lacking the practical knowledge and skills that would make them street smart and actually useful to others outside their own field.

**Housing Sector Leader**: One of the things we've found, especially with public health, is that they don't understand the difference between funding and finance. So they're very interested in funding, which is spending and programmatic, as opposed to thinking about interventions like housing, which require financing. […] They don't have enough expertise about community development or finance or economics to insert themselves into those projects in ways that are very common or very effective.

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**Researcher**: How would you describe the people who can help identify who can have impact on a given issue? Is that a public health person who helps with that?

**Education Sector Leader**: I mean, not that I'm aware of. I think it's the person who understands the relations of power. Understanding who can decide what is pretty basic to starting any change effort.

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**Health Systems Sector Leader**: Our relationship with [REDACTED][19] University, in which there is a whole school of public health. We work with the academic researchers who are there, who, in fact, gather data, analyze the data, and opine as to what it is they think is affecting a community. That's helpful, but certainly not necessarily as instructive as getting down into the how-to-do-it execution phase.

## Implications for Communicators

- **The *Health of the Population* and *Health Care Provision* cultural models make collaborations with the field of public health hard to consider.** When sector leaders and professionals rely on these models, they understand public health as a concept, a function, or a health care system, rather than as a field. Even the provision of onsite health care is not automatically associated with the *field* of public health, as sector leaders and professionals often see it as a function of the Health Systems sector. Public health professionals must be explicit in talking about public health *as a field* and describe the range of professionals who are part of it to help other sectors understand who their potential collaborators are inside the field of public health.

- **The *Department of Health* cultural model leads to a narrow understanding of the role that public health can play in cross-sector collaborations**. This way of thinking prevents sector leaders and professionals from recognizing how public health can partner with other sectors to address issues in the community that go beyond vaccination campaigns, restaurant inspections, and epidemic management. Communicators must be intentional about broadening understanding of the field. Further research, currently underway, aims to identify the most effective way to accomplish this.

- **The *Department of Health* cultural model reinforces worries about the field's financial resources.** When thinking with the *Department of Health* model, sector leaders and professionals assume that public health is chronically underfunded. Given the assumption that money is the most effective incentive for new partnerships (see the *What's In It For Me?* model below), this will likely lead people to think that public health professionals are not desirable partners. As noted above, effectively explaining how public health adds value and addressing concerns about resources are threshold requirements for possible partnerships.

- **Business professionals' focus on disease surveillance can be leveraged to highlight public health professionals' data skills.** The fact that business professionals sometimes see public health professionals as competent data experts can potentially be leveraged to generate interest in collaborations with public health. However, in order to avoid reinforcing a narrow view of public health and help Business professionals recognize the field's relevance for their own work, communicators need new strategies to expand their discussion of public health professionals' data expertise beyond disease outbreak monitoring.

- **The *Health Care Provision* cultural model can help Housing and Education leaders think about the value of developing their sectors' roles as "community anchors."** Based on this model, sector leaders already see the value of delivering health care onsite. Public health professionals could leverage this understanding and show how collaborating with the *field* of public health can help sectors like Housing and Education strengthen their positions as community anchors by providing services that support health in a broader sense. This model is less productive for Business leaders and professionals. Because they assume that public health means a "government-run health care system," they are much less likely to look favorably on the prospect of a collaboration with public health or even be able to think productively about what that might look like.

- **The *Siloed* and the *Book-Smart* cultural models impede recognition that public health professionals can be strategists with a key role to play in building cross-sector collaborations.** Sector leaders and professionals think that public health professionals lack the necessary skills, orientation, and incentives to help build cross-sector collaborations and see them as impractical researchers who do not understand the realities of other sectors. Getting other sectors to recognize that public health professionals can be valuable participants and strategists in cross-sector collaborations will require overcoming deep and highly unproductive ways of thinking about the field. Further research, currently underway, aims to figure out how best to address these problematic stereotypes.

## 3. What Shapes Health?

Most leaders from the Housing, Education, and Health Systems sectors saw and understood that social and environmental factors play a key role in determining health outcomes for communities. They did, however, differ from one another in their familiarity with the concept of the social determinants of health, and the term itself. They also differed from public health experts in the conclusions they drew from knowledge of the value of cross-sector collaborations.

Our findings for the Business sector stand in sharp contrast to our findings for these other sectors: we found that Business leaders and professionals think about health in much more individualistic terms, consistently assuming that individual choice and strength of will are the primary—if not the only—determinants of people's health in the United States.

When Housing, Education, and Health Systems sector leaders consider what determines health outcomes, the influence of upstream factors like housing, income, and social capital is top-of-mind: they all have some knowledge of the term "social determinants of health" and of how upstream factors shape health outcomes. But interviewees from the different sectors differed in their level of expertise:

- Leaders in Housing were generally knowledgeable about "social determinants of health" as a term and concept and were able to quote recent research about this.
- Leaders in Education, by contrast, were less familiar with the term, even though they spoke about taking upstream factors into account in their daily work.
- Health Systems leaders were the most knowledgeable about the term "social determinants of health" and the variety of upstream factors that contribute to shaping health outcomes for the population.

> **Health Systems Sector Leader**: The truth is, the health of the community is a result of genetics, 10 percent, and the result of clinical services like we provide, 30 percent, and the other 60 percent are social determinants like unemployment and various elements of poverty, which we are now trying to address.

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**Housing Sector Leader**: We've pretty much bought the [idea] that […] the environment that you're in, the built environment and the services that are available to you, and the income that you have at your disposal, shape the choices that you can make. And so probably the biggest determinants of health are around where people live, work, and play.

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**Researcher**: You've been talking all this time about some social determinants of health, but I'm wondering how you would define or describe those?
**Education Sector Leader**: I'm not up to speed on that, I have to be honest. So, I don't want to— I'm not sure I can. I don't want to answer because I'm just going to be making it up.

When asked what shapes health outcomes for the US population, Business participants did *not* think about the influence of upstream factors and focused instead almost exclusively on individual behaviors (see below). For instance, when discussing the key challenge of workforce retention, they reasoned that it was fundamentally an issue of individual—or generational—work ethics and discipline. They did not see the role that community health and upstream factors like housing and access to quality education could play in helping them address this challenge. Moreover, Business leaders and professionals had generally never heard the term "social determinants of health," and those who had were unsure what it meant.

**Researcher**: Have you heard the phrase, the social determinants of health?
**Business Sector Leader**: No. It has not registered with me.

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**Researcher**: What are some of the key challenges in your work?
**Business Sector Professional (Chicago peer discourse session)**: Retaining trained individuals. I have a niche business, and a lot of people aren't going into baking anymore; they don't have that artisan feel anymore.

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**Business Sector Professional (Chicago peer discourse session)**: Employees. It's hard to find people who know what they're doing in our particular industry and hard to find people that can show up on time, for instance.

### The *Harmful Environments* Cultural Model (Housing, Education, Health Systems)

When thinking with this model, sector leaders focused on the *harm* that environments and upstream factors cause to people's health much more than on the ways in which those same factors can be leveraged to *generate* better health outcomes in the community. They talked about how social and environmental factors *negatively* affect health outcomes, either directly (e.g., mold in the home triggering asthma) or indirectly, by limiting healthy choices or reinforcing health-harming behaviors (e.g., lack of access to safe parks, which impedes the ability to exercise).

**Education Sector Leader**: Kids come in with problems, issues, and challenges, and then, sometimes the school environment exacerbates that. […] If the air quality is bad, if the diesel buses are running, if

there's pesticide exposures, or cockroach dust, or if the food is unhealthy, or a kid is being told to sit still for six hours, how the heck can they learn?

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**Housing Sector Leader**: For me, housing is a basic need of life, just like air and water. It is something that people need in order to be able to take their medication, because if they don't have a place to store it that's temperature controlled, then it is going to go bad. And then they are not going to be able to take care of themselves. […] You can't even entertain the idea of any type of recovery if you are living under an overpass or on the street.

The phrase "social determinants of health" was often seen as referring to social and environmental risks rather than factors that can be productively leveraged. This reinforced sector leaders' emphasis on how upstream factors undermine good health.

**Researcher**: Have you heard the term "the social determinants of health"?
**Health Systems Sector Leader**: I think it means the influences that affect health but are things that people typically don't think of as causes of a disease. So it may be [something] that makes it worse or creates the condition for a problem or disease developing, so that poverty or hunger may produce nutritional issues that then create what we say are more classical health issues or diseases.

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**Researcher**: What's your sense of that phrase, "the social determinants of health"? How do you think about this?
**Education Sector Leader**: Oh, I think that's a kind of euphemism for politically correct language to talk about things like poverty, hunger, you know, environment, whatever.

### The *Health Individualism* Cultural Model (Business)

At the core of this model is the fundamental assumption that health outcomes are driven by individual choice. *Health Individualism* leads people to focus on the crucial role played by individual choices, like diet, exercise, smoking, and drinking. According to *Health Individualism*, individual choice determines health outcomes, which, in essence, means that individuals are responsible for their own health.

Business participants also reasoned that the choices individuals make are primarily, if not exclusively, determined by individual discipline and will.[20]

**Researcher**: Who's responsible for people's health?
**Business Sector Professional (Chicago peer discourse session)**: Yourself and physicians. A lot of people have to take responsibility for themselves.

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**Business Sector Professional (Atlanta peer discourse session)**: You are responsible for your health. You can get the best health care in the world, but if you don't go to the doctor or you avoid your problems, and know your limits…

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> **Business Sector Leader**: Well, I think it is your attitude in life, positive or negative. If you are positive, I think you tend to have a healthier life. It is obviously your lifestyle, your lifestyle being everything from what you eat to your exercise, to do you live a life, are you working 24/7 or do you have a healthy life of balance in life. I mean, all of those things. But the positive attitude is almost No. 1 in that whole thing.

### The *Cultural Norms of Health* Cultural Model (Business)

When explaining differences in health outcomes, Business participants sometimes appealed to cultural norms. According to this assumption, certain professional cultures or communities can set norms that are fundamentally harmful to health, which in turn shape personal choice and individual behavior for the members of that group in a way that is virtually inescapable. For instance, one Business participant explained that employees in the restaurant industry were known for their poor health behaviors.

> **Business Sector Professional (Chicago peer discourse session)**: If kids aren't taught [about healthy eating], they will eat chips and pop and will become adults who eat chips and drink pop, and they will put Mountain Dew in their baby's bottle. So we have to make the changes so that everybody has a choice to be healthy.
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> **Business Sector Professional (Atlanta peer discourse session)**: For me, it's a lot about culture. Corporate culture is very important, creating a corporate culture that is lower stress. But it's also the culture in the US. I've travelled, and to see how other cultures handle stress and how they view wellness, I think it's important. Some culture[s] do a great job of it.
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> **Researcher**: Would you say that the community someone lives in affects their health, or not so much?
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> **Business Sector Leader**: I would say it does. We know by the data that we've collected that certain of our populations are living much less healthy lifestyles than others. And I think that there are certain cities and communities where, especially in the mountains and places where kind of that healthy lifestyle is part of the community. Whereas we have other communities that we operate in where fried cheese and beer are a big part of the community.

### The *Direct Effects* Cultural Model (Business)

When Business professionals were asked more pointedly about how environments shape health, they relied on a simple model in which environments have direct and tangible effects—which are often harmful. Participants focused on risks of accidents in the workplace, on air and water pollution, and on the risk of food scares. The tacit assumption is that environments undermine health by exposing people to conditions that directly cause injury or illness and that living and working environments should keep people safe. Importantly, even in these cases, participants still adopted a fairly limited definition of the term "environments," which only encompassed working conditions and characteristics of the natural world (e.g., water and air).

> **Business Sector Professional (Chicago peer discourse session)**: [The influence of environments] depends on where you are. In Michigan, you really don't want that water. […] Just like the landfills, people are getting high levels of carcinogens because it's leeching into the water.
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> **Business Sector Professional (Atlanta peer discourse session)**: I just lost a guy because of illness. There are things I can do to help keep people healthy [in the construction business]: provide masks, earplugs…

Business participants were sometimes able to use this model to think more expansively about the role of stress at work in influencing health outcomes and to talk about how organizational cultures can contribute to alleviating stress. But talk about stress was fairly thin, both in terms of the process through which stress influences health and of what could be done at the organizational level to alleviate stress, apart from encouraging better individual behaviors among employees.

> **Business Sector Professional (Atlanta peer discourse session)**: In our industry, there's a lot of coverage of unhealthy activities and choices, pressure, mental health, drug use.
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> **Business Sector Professional (Atlanta peer discourse session)**: You walk into a place and people complain about employee morale and then you see that they're working in a basement with no light. I think that's also part of [health], the environments and studying where you are, how you live.

### Implications for Communicators

- **Public health professionals can build on existing knowledge about upstream factors (in Housing, Education, and Health Systems) to highlight how public health can help other sectors achieve their goals.** Housing, Education, and Health Systems leaders recognized that social and environmental factors directly affect health and constrain behaviors in ways that critically shape health outcomes for the population. Public health professionals looking to approach potential allies generally do not need to focus their communications efforts on explaining the influences of social and environmental forces on health. Rather, they can emphasize how public health can help them effectively address the upstream factors that affect both health outcomes and the outcomes that are the central concern of other sectors.

- **The *Health Individualism* and *Cultural Norms of Health* cultural models make it difficult for Business participants to recognize the influence of social determinants of health.** Because these models focus attention on individual-level factors (e.g., choices, behavior), they obscure the critical role played by social determinants and systemic factors. As a result, they also make it difficult for some Business participants to see the value of cross-sector collaborations focusing on health. Cultivating a full understanding of the social determinants of health requires weakening the influence of these individualistic models in Business professionals' thinking so they can better see the role of social and systems-level factors in shaping health and health outcomes.

- **The *Direct Effects* cultural model provides a productive starting point for engaging the Business sector.** While this model does not provide ways of understanding the more complex ways in which upstream factors shape health, it can be leveraged and expanded. For instance, communicators can build on the link Business participants already see between air and water quality and health outcomes by explaining the broader ways that physical environments can shape health (for example, by supporting social connections, facilitating employment opportunities and educational success, and reducing stress linked to safety, housing insecurity, and discrimination).

- **The *Harmful Environments* and the *Direct Effects* cultural models make it hard to think about fostering health.** Because these models focus solely on how negative factors harm health, sector leaders and professionals are more likely to think about removing damaging influences rather than building environments that actively support health. The models thus significantly constrain thinking about how interventions—including cross-sector ones—can support health. To open up thinking, communicators should be sure to explain how environments can build health.

- **When approaching potential allies in other sectors, public health professionals should ensure all parties have a common language to talk about upstream factors.** This is especially true when it comes to the term "social determinants of health," which should not be taken for granted in conversations with potential allies. Our findings show that leaders from other sectors differ from public health experts—and from one another—in their familiarity with this term (e.g., some Education sector leaders are likely to be less familiar with the term, while Business participants are not familiar with it at all). As a result, when discussing upstream determinants of health with potential allies, public health professionals should make sure that all parties involved actually speak the same language.

## 4. How Is Health Connected to the Work of Other Sectors?

When sector leaders and professionals reason about their own work, they have well-established ways of thinking about the goals of their sector and how health interacts with them. Each of the following models is therefore specific to a single sector.

### The *Housing as Foundation* Cultural Model (Housing)

Housing leaders think that housing is the first basic need that must be satisfied before any other need can be effectively addressed (e.g., employment, food, etc.). As a result, they primarily understood health as an *outcome* of their work; ensuring decent housing, in other words, is a way to improve health. In turn, they think that those looking to improve health outcomes in the community should focus more attention on improving housing.

> **Housing Sector Leader**: Housing is clearly a key foundational aspect. Without housing you can't have any other [good] life outcomes.

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**Housing Sector Leader**: [For] some of the problems that are the most vexing to health and public health experts, you're going to have to walk through—excuse me for my metaphor, but you're going to have to walk through the doorway of housing if you're going to solve them.

Housing leaders had a harder time thinking of health as an *input* for their work. They rarely spoke about how poor health can undermine housing security. Some participants had a hard time speaking about this, even when directly asked about it.

**Researcher**: Do you see the health of the communities that you work with affecting the way that you do your work or that your partners do their work?
**Housing Sector Leader**: I'm not sure I understand the question. We have a collaborator who's allergic to everything on God's green earth; that has a direct influence on our work. No, I would not say most of the time that's a very direct effect.

Housing leaders also focused almost exclusively on the health of the specific population they serve: the families and individuals who benefit from their housing developments or programs. The health of their staffs or of the community at large was not seen as a priority in their work.

### The *Whole Child* Cultural Model (Education)

Whereas Housing leaders talked about health as an outcome of their work, Education leaders argued that health is a necessary *input* for theirs. They advocated for a "whole child" perspective that takes into account each student's social, emotional, and cognitive development. As a consequence, Education leaders understood health—both mental and physical—as a prerequisite for effective learning in school.

**Education Sector Leader**: People see high school graduation rates as a key measure. […] But health problems can complicate kids' lives and their ability to be in school. And there's certainly a whole host of mental health issues that need to be addressed.
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**Education Sector Leader**: We believe that when students are physically active, they are going to be healthier and more ready to learn. We believe when they eat nutritious foods, if they have healthy eating behaviors, they're going to be healthier and more ready to learn.

Just as Housing leaders' emphasis on health as an outcome made it hard for them to think of it as an input as well, Education leaders' primary focus on health as a prerequisite for learning made the broad and complex ways in which education can affect health outcomes for communities less salient in the interviews. They often explained that the main way in which education shapes health outcomes is by providing people with more knowledge about what is healthy and what isn't and by empowering them to advocate for themselves in a health care context.

> **Researcher**: How would you explain to somebody why education is a social determinant of health?
> **Education Sector Leader**: [My father] was astute enough to know that education would allow me the opportunity to not always be interrogated but do the interrogation myself. If I go to a doctor's office, and the doctor is asking me questions about how I feel and the last time I took this, took that, I can also ask the doctor, "How do you feel? When's the last time you did this?" which I do. […] Whereas people who are uneducated—not ignorant, but uneducated in the formal sense—don't necessarily understand their right to ask questions. Education has allowed me to do that.

Much like Housing leaders, leaders in Education focused almost exclusively on the health of the specific population they serve: students and their families. The health of their staffs and of the community at large was not described as a priority.

### The *Selling Point* Cultural Model (Business)

Because Business professionals reason that their main goal is to turn a satisfying profit every year—by being better than the competition and keeping their customers satisfied—they see the health benefits of their products or services as a selling point. When thinking with this model, participants argued that health could be used as a marketing tool for the products or services they offer.

> **Business Sector Professional (Chicago peer discourse session)**: My business is based on health: quick breads that are made the old-fashioned way but all natural ingredients [like] honeys instead of high fructose. I grow zucchini for my zucchini breads. […] People come to me because our motto is "Baked goods with a healthy twist."
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> **Business Sector Professional (Atlanta peer discourse session)**: My husband likes to think that [by doing hardscape and outdoor pools], we create environments that allow people to de-stress.
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> **Business Sector Professional (Chicago peer discourse session)**: My business is an environmental company that makes environmentally friendly products, so that's the market we go after, where people are using harsh chemicals in their facilities and are causing health issues, and we develop products that compete against those.

Because a key concern for Business professionals was employee retention in a low-unemployment environment, they also reasoned that a healthier work environment (e.g., one that provides access to a gym, good health care benefits, etc.) improved employee retention. While this model places attention on the work environment, it is premised on the idea that health is ultimately individuals' responsibility. For instance, having access to a gym, a yoga ball instead of a chair, or a Fitbit at work were discussed as incentives for employees to be healthier; it was then up to individuals themselves to use the gym, the ball, or the Fitbit. The goal of these initiatives was to provide health opportunities as a selling point for employees, not to dramatically change working conditions, much less address issues in the broader community.

> **Business Sector Leader**: In a low-unemployment environment, businesses are trying to lure employees when they offer healthy alternatives at their places of business. That's the consumer you know, the potential employee making a choice based on marketplace marketing of the value of that environment. So I look around and I just see a lot of consumer-oriented businesses offering those healthy solutions. But the one thing I do want to say is it comes because the individual has in some way expressed a desire to have that option.

### The *Bottom Line* Cultural Model (Business)

Business participants thought that their main goal was to achieve good profit margins and increase their "bottom line," and that they should use all strategies at their disposal to do so. As they reasoned that health care costs are expensive and that chronic absenteeism weakens their bottom line, they believed that focusing on employee health is an effective strategy to protect their profit margins. Employee health, in other words, was not seen as an end in and of itself but rather as a means to an end.

When thinking with this model, Business participants also focused on health as a negative and a challenge; they talked a lot about what it costs their business when employees are sick—and how to make sure they don't get sick—as opposed to what their businesses gain from employees who are happy and productive.

> **Business Sector Professional (Atlanta peer discourse session)**: If my employees get sick, I've got to find someone to cover for them, or I have to do it. Are they sick, do they have health care, can they see a doctor, can he get them to come back to work?

Business participants focused almost exclusively on the health of their existing employees, as opposed to the health of their customer base in the community or the health of the community as a whole.

### The *Population Health Management* Cultural Model (Health Systems)

Health Systems leaders thought about their work in the context of the sector's transition toward population health management: as promoting health by moving beyond traditional health care and fostering conditions in communities that keep more of their patients healthier at a lower cost. Some participants discussed broadening the *mission* of their organization, while others talked about a more significant transition from a fee-for-service to a value-based *model of care*, which they were either preparing for or starting to implement.

> **Health Systems Sector Leader**: Another important piece [in my work] is preparing us for the next iteration of health care, which is really about population health, more about health as opposed to health care, and making sure that we have an organization that's prepared to make that change. […] And to really work on our convening of the community and involving the community in our work, because only 20 percent of a person's health is related to their health care. So, it's important that, as an organization, that we help our colleagues here understand that shift.
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> **Health Systems Sector Leader**: We describe population management as "the things we do to promote health of the patients who are in our health system, whether they come into our clinics or whether they're just under our care by assignment, to focus on things we know improve their health."

Health Systems leaders explained that population health management is the best way to reconcile mission-driven objectives with the need for cost-efficiency. They recognized that the health of their patient population directly affects their work and mission; due to an aging population and rising rates of chronic, noncommunicable diseases like diabetes, a healthier population of patients means fewer costs for Health Systems in the long run. They also understood that a movement toward population health management allows them to shape health outcomes by addressing upstream factors beyond the four walls of their organizations.

This way of thinking explains why the *Health Is Medical* model is not dominant in Health Systems leaders' thinking. Because they increasingly understand health care in a broader context, they recognize that health care is neither the only, nor the most powerful, determinant of health for the population they serve.

> **Health Systems Sector Leader**: Take this hospital. On one side, within a mile, I have a population of people who have an average income over $100,000 and have a health status that is incredible compared to the US average. The same distance away, on the other side of the hospital, is the exact opposite. The average income is probably about $19,000 per year, and health status is absolutely horrible compared to the US average. Both of those are my populations. Both of those are my community. But yet the expectation here is within these four walls of this hospital and outside the four walls of this hospital that we are engaging them in mind, body, and spirit.

While the primary focus of the Health Systems sector leaders (who see themselves as forward thinkers within their sector) is the health of the population they serve, they were sometimes able to think more broadly about the health outcomes of the *whole* community, *beyond* the limits of their patient population. Combining a population health management approach with the IRS community benefit requirements (which are part of the obligation of nonprofit health systems) pushes these leaders to think about the community as a whole.

> **Health Systems Sector Leader**: We're in the business of taking care of people, of humans, which together make up a community, or a society. So, again, you cannot separate what I do as a hospital from the homelessness initiative in the community. And I'll tell you, especially at [my hospital], because […] 78 percent of the disadvantaged population in [the city] go to [my hospital] for their care. […] We are becoming truly the [city's] sole safety net hospital. They have nowhere else to go.

Health Systems leaders agreed that the sector must focus on the social determinants of health and adopt a population health *model of care,* and that their sector is slowly moving in that direction. But they also stressed that this is still very much a work in progress and that they do not yet have the right set of processes and systems in place, or the right partners, to fully advance this model.

> **Health Systems Sector Leader**: The bottom line is, practice transformation is important, transitioning from volume to value is extremely important. […] But being in the midst of it, there's a certain element of frustration because I feel that it's not all— You know, it's not necessarily crafted in the best possible way to get your end goal. […] I'm not convinced that we've landed the plane on the best possible processes. I do think globally the whole concept of transitioning from volume to value makes enormous sense. I'm just not personally convinced if the process is there yet.

## Implications for Communicators

- **The *Housing as Foundation* cultural model enables recognition of housing's effects on health but may obscure the value of collaboration with public health.** Housing leaders understand that housing is a key determinant of health outcomes in the community, which should help them realize why public health professionals would be interested in partnering with them. However, because they primarily see health as an outcome of their work and do not recognize how the health of the community affects housing outcomes, Housing leaders are unlikely to recognize how cross-sector collaborations focusing on health would help them advance their goals.

- **The *Whole Child* cultural model creates an opening for collaboration with Education leaders.** Because Education leaders recognize that good student health is a prerequisite for the success of their sector, public health professionals can easily make a case that collaboration benefits both parties. Of the four sectors, Education leaders' understanding of the role of health in their own work is most conducive to collaboration with the field of public health.

- **The *Selling Point* cultural model leads to a narrow understanding of the Business sector's role in producing health.** Business professionals see health as a selling point to stay competitive and keep both customers and employees satisfied. According to this cultural model, Business professionals' role in fostering good health in the community is limited to producing healthy goods or services for customers and offering health-related perks to employees. This makes it difficult to see that health should be driven by community-wide efforts to address upstream factors in fundamental ways.

- **The *Bottom Line* cultural model can potentially be leveraged by public health professionals looking to build collaborations with the Business sector.** Public health professionals can build on the *Bottom Line* model to make a case for collaboration by explaining how public health can help businesses improve employee health and, in turn, grow profits. But to do so, they need effective strategies to expand this model beyond a narrow focus on health care provision and behavioral incentives; otherwise Business professionals will continue thinking that what needs to be done to ensure good employee health is entirely within their—and their individual employees'—control.

- **The *Population Health Management* cultural model fosters support for cross-sector collaborations while sidelining public health in the process.** Because leaders in Health Systems see the transition to a value-based system as the future of their sector, they understand the importance of convening cross-sector collaborations focused on health. This means, however, that Health Systems leaders are likely to

think that addressing the social determinants of health is primarily *their* mission, which renders public health irrelevant. In further research, which is ongoing, a key challenge is identifying ways to position public health so that its distinctive value is clear to the Health Systems sector. Public health professionals may be able to raise their profile by highlighting the field's ability to assist the Health Systems sector in making the transition to population health management—notably through use of their data and systems management skills.

- **All five cultural models yield a narrow understanding of what *population* means, which may undermine support for collaborations focused on the health of the whole community.** In their thinking about how health is connected to their work, leaders from Housing, Education, and Health Systems, as well as Business leaders and professionals, all tend to focus on the population they directly serve or employ: tenants, students, employees, or patients. Public health professionals advocating for collaborations directed toward the broader population need effective strategies to get sector leaders and Business professionals to see why they should care about the health of the whole community.

## 5. How Do Cross-Sector Collaborations Work?

The sectors have different ways of thinking about interrelationships and how to cultivate collaborations. While leaders in Housing, Education, and Health Systems have clear models of what it means to collaborate with other sectors, Business participants have more limited models of engagement that make cross-sector collaboration hard to think about, as explained below. All cultural models in this section have profound implications for sector leaders and professionals' thinking about whether collaborations with public health are feasible and, if so, how they might happen.

### The *Different Worlds* Cultural Model (Housing, Education)

When thinking with this model, leaders in Housing and Education consider their sectors' work and priorities as fundamentally distinct from those of other sectors. Housing and Education leaders assume that their sectors are self-sustained microcosms that hold the keys to their own success—or failure. From that perspective, they think about sectors as separate *worlds*, with different priorities and goals and with distinct characteristics that are not easily grasped by outsiders.

> **Housing Sector Leader**: Another challenge is just getting the people who are more transaction- and deal-oriented to talk to the people who are more systems- and program-focused. They speak different languages. They don't have any actual opportunities to collaborate, and so getting those groups together in a way that allows them to accomplish something is a challenge.

This model was particularly dominant in our interviews with the Education sector. Leaders in Education often explained that the complexity of the education system makes it difficult for people in other sectors to navigate.

> **Education Sector Leader**: One sure way to piss people off is to go in and demand that a principal do something that's so clearly not in their authority. […] "Oh, you don't like the time of lunch? Okay, that's a principal's decision. You don't like what's served? That's a district decision. Oh, you don't like the price? That's a federal decision." I mean, it's ridiculous. "You don't like what's in the vending machines? That's actually a state regulation."

Because leaders in Housing and Education think of sectors as separate worlds whose boundaries are not easily crossed, they assume that the most effective way to build bridges—in the form of cross-sector collaborations—is to turn to individuals who speak their language. They reason that people must have direct experience and expertise in all sectors involved in a collaboration to effectively facilitate a shared effort.

> **Housing Sector Leader**: It's their universe, and people know what they know, but when you're doing cross-sector work, you actually have to figure out how to learn a lot about something you don't know, that's organized in a completely different [way]. It's like, I know English, but I need to learn Russian and Japanese in order to solve this problem. It's not even the same alphabet. [But] if I'm sitting at a table between a public health expert and a housing expert, can I help the two of them understand each other more than they would if I weren't sitting there? I think so.
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> **Housing Sector Leader**: There really wasn't a connection between the housing world and the services world. I came from the services side […]. [This housing organization] hired me, and they said, "Okay, we're having trouble accessing the Medicaid world, the Department of Children and Families world, helping human services. Will you help us enter those worlds?"

### The *Big Tent* Cultural Model (Health Systems)

Because they understand the importance of the social determinants of health, Health Systems leaders recognize that collaborations with other sectors are essential to achieve good health outcomes for their patient populations. They also assume that because other sectors have a stake in health, they will be willing to collaborate. And because they think of population health as central to their own missions, they see themselves in the role of convener and leader of collaborations.

> **Health Systems Sector Leader**: We built a large physician group. We were a leader in the state in terms of community engagement. […] The size of the health system created just this immense presence and influence that, as a leader, I needed to dilute a bit to ensure that the other partners coming to the table— whether it's housing coalitions, federally qualified health clinics, etc.—felt that they were active participants and the presence of my personality or my organization didn't dominate everything. Classic community development strategy, right?

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**Health Systems Sector Leader**: I think that [convening] is the role that we try to play because we have a good brand, and we're large, and we have a lot of resources and expertise.

While they do not reason in terms of the *Different Worlds* model in the way that professionals in the Housing and Education sectors do, leaders in the Health Systems sector acknowledge that getting other sectors to come under their "big tent" of health is a complicated and ongoing task.

**Health Systems Sector Leader**: We were going to the sectors to say, "Here are two or three areas over the next three, four, five years where we really want to make a big push. And let's work across this platform of this multisector coalition." I can tell you, this is a great deal of work. It has been much more work than I certainly envisioned. Certainly it has not moved as fast as we thought it would. It's two steps forward, but it is a step backwards. I wouldn't say we're struggling, but we're still stumbling as we're trying to get this platform organized around the big factors.

Because leaders in Health Systems assume that all sectors share an interest in the health of the community where they operate, they also assume that it is possible for all sectors to speak a common language and that they can all agree on the importance of health in the "big picture." And because of their growing commitment to a value-based approach, they believe they are the ideal catalyst for these conversations.

**Health Systems Sector Leader**: Everyone has to be humble, and everyone has to have the same mission, which is doing the best that we can for children and families and their health, or adults and their health, however you want to frame it. […] And it's not quick. It takes developing relationships in some instances, but once you have it, what you can do is so much more powerful.

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**Health Systems Sector Leader**: I have a tremendous team of leaders, and we are also advocates within our community, so we interact with the community's leaders, legislative leaders, the business community, and the front-line leaders of families and neighborhoods to try and understand, first of all, their needs, and also develop the relationships that generate additional resources.

### The *What's In It for Me* Cultural Model (Housing, Education)

Within this model, cross-sector collaborations are understood as transactions from which partners expect to take from the table as much as they bring. Leaders in Housing and Education, who think that their sectors suffer from a chronic lack of resources—financial and otherwise—frequently reason that successful cross-sector collaborations require that all parties be able to easily identify the costs and gains of collaboration. They focus primarily on the benefits of collaboration and are often less attentive to whether their own contributions are attractive enough for other sectors to be willing to collaborate.

**Housing Sector Leader**: Sometimes we get asked to do things and it then becomes a lot of demands on us. Versus, as we talked through this [collaboration on data management] with the team, this really

> seemed like it was going to help us and provide us with some additional support. So, we were excited about that.

### The *Transaction* Cultural Model (Business)

By and large, Business participants were unfamiliar with cross-sector collaborations that are not business transactions with clients or customers or contractual collaborations with people from other industries. At a fundamental level, they assumed that interactions with other sectors were inevitably and necessarily business transactions conducted at the level of their own firm.

> **Researcher**: And what other fields or institutions do you interact with most often?
> **Business Sector Leader**: I'm on the executive leadership team here so I definitely interact with all the leaders of our business. I'm responsible for the health and wellbeing of the organization. So, it would get right back with a lot of vendors, and supplier[s], and providers on that side of things. Our organization is full of engineers and manufacturing people, so I'm actually an engineer myself, and I interact with people in all different disciplines across our organization. Investors, board members, so pretty broad.
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> **Business Sector Professional (Chicago peer discourse session)**: We sell to people, schools.
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> **Business Sector Professional (Atlanta peer discourse session)**: Gas and mining in South America, so it's definitely something different [from a software company], but that's what they want to do. […] These are my clients.

This model makes it hard for Business participants to think about cross-sector collaborations because they think at the level of individual businesses—or, at most, at the level of industries (e.g., real estate, construction, restaurant, telecommunications, or health care.). But they do not think of the Business "sector" as a relevant unit in the way that Education leaders see themselves as belonging to the Education sector, for instance. This is most likely due to the fact that Business participants thought of their main goals (profit and growth) as firm-specific; as a result, they reasoned that other firms in their industry were primarily competitors who might prevent them from achieving their goals and that anyone outside of their own industry was first and foremost a potential client or customer who could help them become more profitable through business transactions.

> **Researcher**: What do you see as the main goals and challenges in business right now?
> **Business Sector Professional (Atlanta peer discourse session)**: Enterprise agreements, what visibility we have into what those contracts look like, are they looking at other vendors, are they being forthright with us, is there an incumbent, and if so, can we beat them? Blocking and tackling 101.
> **Business Sector Professional (Atlanta peer discourse session)**: Customer management, getting the customers to have a reason to re-sign a contract with us through our vendors.

### The *Charity* Cultural Model (Business)

The counterpart to the *Transaction* model above, this model was used to explain the cases in which interactions with other sectors did not involve a business transaction. For Business participants, the only way of interacting with other sectors in the community without "charging" for it was through charity work, which meant providing the community with a free service. Charity-based interactions were also thought of at the level of the firm, or sometimes at the level of a smaller group of volunteers within the organization.

> **Business Sector Professional (Chicago peer discourse session)**: Twice a year we go around Lake Michigan to pick up the trash. We volunteer at the marathons, hot cocoa and hot chocolate, and we pass out literature and zucchini bread, we do a lot of community-based products because I sell to the schools. I make all-natural products, and we donate that, so we do a lot of giving back to the community. We don't charge.
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> **Business Sector Leader**: In one of our businesses, we even had a group called the Care Team, which had nothing to do with management, but a group of folks who said, "We think we can do good work in the community around us and we just want the organization's approval to do so." […] And they actually asked us not to create a budget and to let them raise their own money even for doing it. So they would have bake sales and hot dog sales and raffles and things which, of course, we supported. […] They put in their time and their hearts. They read to kids in schools. They danced with children who had developmental disabilities at a local organization. They did canned food drives. Just unbelievable reach and touch into our community. That only happens if the business is successful.

### The *Individual Leadership* Cultural Model (Housing, Education, Health Systems)

Members of these three sectors often assumed that the success of cross-sector collaborations is primarily a function of strong individual leadership. The thinking goes that collaborations across sectors happen because of the work of one key individual (or sometimes several) who has the required interpersonal skills and connections to make them happen. When thinking with this model, leaders from these three sectors often—though not always—believe that they should play this leadership role themselves. Within this model, failure to collaborate is attributed to a lack of leadership: the reason collaboration wasn't successful, the logic goes, is that the right leader could not be identified.

> **Health Systems Sector Leader**: It starts with this role of the convener. It's got to be an individual that is senior enough and respected enough and has got the time to make this happen. The reason why it's truly a challenge here is because early on I played that role. […] And we've made a couple of attempts with other people or other configurations, and it just hasn't been quite the same. And I'm not trying to be immodest here, but that convener role, moving to organization-level, but also at the individual level, it's critical in order to make this happen.
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> **Housing Sector Leader**: I think the first thing is leadership. You can imagine that some of this is individual leadership. You have to have the interpersonal skills to connect with other people and make them your friends.

### The *"Just Do It"* Cultural Model (Housing, Education, Business, Health Systems)

For leaders in Housing, Education, and Health Systems, the value of cross-sector collaborations was seen as a function of their ability to produce concrete, actionable solutions. This model prioritizes action over planning and reporting, which they understood as absence of action and rejected as a poor motive for cross-sector collaborations. This model is grounded in the worry that collaborations will involve long-winded meetings that lead nowhere.

> **Education Sector Leader**: When people of means—global leaders and entrepreneurs and wealth merchants—want to talk about the next phase of development, they go to Aspen. They go to Davos. And they have a summit. And they come out of that with some plan that, in many ways, changes the shape of the world or the nature of the next phase of things. I believe the same thing has to be true of people who are not of that stature. If they have interest in healthy communities for all, there have to be regular convenings in the right spaces with the agenda being to come away with solutions—not with just more white papers, but with solutions.
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> **Health Systems Sector Leader**: We also try to make it clear that we're not interested in planning as much as we're interested in action. And so it's been our experience that many communities have long and elaborate planning processes that don't result in very much to show for it at the end of the process.

While Business participants were often unclear about what cross-sector collaborations entailed exactly, they used a similar rationale to talk about why they thought it best to keep their interactions with the world of politics to a minimum. They reasoned that the world of politics—and, by extension, of government—is contrary to business in that it is not action-oriented and does not function on the basis of straightforward transactions. Rather, they said it was characterized by inefficiency and long-winded negotiations that don't have clear outcomes. Business professionals thought that getting involved in collaborations with politicians and government would prevent them from doing their work efficiently and would impede their firm's success. As a result, they argued that it was best to keep business activities as apolitical as possible. While this argument was not made directly about public health, it contributes to a negative bias against collaborations with public health among Business leaders and professionals who primarily associate public health with government (see the *Department of Health* cultural model above).

> **Business Sector Professional (Chicago peer discourse session)**: I'd never seen how local government works and, according to the stereotype, I thought there wouldn't be any politics in local volunteering. I was way wrong! I thought national government—politics—but not for a small city of 26,000. [But there was actually] a lot of politics.

> **Business Sector Leader**: [We're] interacting with politicians only to the degree that it's helpful for society. [CHUCKLE]. And trying to avoid all the degrees that it's not.

### The *Culture of Collaboration* Cultural Model (Housing, Education, Health Systems)

In this model, cross-sector collaborations are assumed to emerge organically from a professional or regional culture or from a sense of trust shared by all partners. When thinking with this model, leaders recognize that collaborations require effort and work, but they do not see the need for specific governance strategies or conveners to kickstart or sustain the partnerships, because collaborations were thought to grow naturally out of trust, moral values, or necessity.

This way of thinking about collaboration as an organic outgrowth rather than a deliberate construction was particularly salient when participants discussed disaster recovery (e.g., Hurricane Katrina, Superstorm Sandy, or the 9/11 terrorist attacks). In these cases, collaborations were understood to stem from a shared survival instinct on the part of the partners, which then became part of their respective professional cultures and practices—or, as one participant put it, "muscle memory" for all involved.

> **Researcher**: What is it that makes collaborations work so well in [your state]?
> **Housing Sector Leader**: I think when your state goes through disaster after disaster after disaster, you are really forced to learn how to work together because you just simply can't do it all on your own. […] And maybe it is the disaster that pulls people together. People from [my state] are extremely resilient, and in the time of a disaster they come together to help each other out. And so maybe it is just in that same type of vein that it carries forward in our everyday work even when it is non disaster related. […] I don't think there is any specific person like, "Hey, your role is to facilitate this and make it happen." I think we all just come together and make it happen.
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> **Health Systems Sector Leader**: When [the hurricane] happened […], there was suddenly a very large influx of folks with a lot of needs and not a lot of resources. […] So, what we did in response to that, and at a cost to us, but we really felt it was the right thing to do, we gave them one of our care coordinators one day a week. […]. And in the process of all of this, strong bonds have developed between the two organizations.

#### Implications for Communicators

- **The *Different Worlds* cultural model renders cross-sector collaborations hard to consider.** Housing and Education leaders' understanding of different sectors as separate worlds whose inhabitants speak different languages makes it difficult for these leaders to see how cross-sector collaboration could become a widespread, regular practice. Research is currently underway to identify the best ways of helping members of the Housing and Education sectors recognize the possibility of collaboration despite differences across sectors.

- **The *Different Worlds* cultural model will likely prevent sector leaders from seeing public health as a strategist or convener.** Because Housing and Education leaders assume that cross-sector collaborations need people who are well versed in each of the worlds involved and who can translate between them, they are unlikely to see the value of public health professionals—who come from yet another world—in such partnerships. Further research, currently underway, aims to identify effective ways of framing public health to overcome these default understandings and enable the Housing and Education sectors to appreciate public health's contribution in cross-sector collaborations.

- **The *Big Tent* cultural model opens the door for productive thinking about cross-sector collaborations but also sidelines public health professionals.** This model enables Health Systems leaders to understand that cross-sector collaborations focused on health are critical to their own success but also leads them to assume that they are best positioned to convene and lead those collaborations, which inevitably sidelines public health professionals in their thinking. Further research, currently underway, aims to identify communications strategies that foster thinking among Health Systems leaders about a distinctive role for public health.

- **The *What's In It for Me?* and "*Just Do It*" cultural models make it hard for sector leaders to see the benefits of collaborating with public health.** These models lead sector leaders and professionals to think that collaborations are worthwhile only if they come with money or are likely to produce immediate action. As discussed above (see, for instance, the *Department of Health* model on page 27, sector leaders and professionals assume that public health is underfunded and ill-equipped for action on the ground, so these models again prevent sector leaders and professionals from seeing public health professionals as valuable partners. Communicators must carefully navigate them. They should explain how public health can benefit other sectors, even if the benefit is not financial, and explicitly offer strategies to address funding issues early on (e.g., joining forces to advocate for policies that alter funding streams, where necessary). Public health professionals must explain both the value of planning and reporting and how these steps lead to action and results.

- **The *Transaction* and the *Charity* cultural models make cross-sector collaborations hard to think about for Business professionals.** Cross-sector collaborations of the type public health professionals are aiming to foster are currently out-of-mind for Business professionals, who only understand reaching across sectors in terms of business transactions. When attempting to build a collaboration with members of the Business sector, public health professionals should always rely on concrete examples of what such collaborations look like and what they aim to achieve.

- **Talking of the "Business sector" in general terms is likely to reinforce stereotypes of public health professionals as an out-of-touch, impractical group.** Because Business professionals do not automatically think of "business" as a uniform sector in the way that Housing or Education professionals do, public health professionals hoping to forge collaborations with Business leaders and professionals should avoid making arguments that refer to the "Business sector" at large lest they reinforce unproductive models of public health, such as the *Book-Smart* cultural model. They can, for instance, refer to specific firms or specific industries as they make a case for collaboration.

- **The *Culture of Collaboration* and *Individual Leadership* cultural models sideline the intentional, systematic work of convening and strategizing in cross-sector collaborations.** When sector leaders assume that collaborations are built either on shared values and organically evolving cultures or on individual champions and personal relationships, they have a hard time seeing the need for structural supports and long-term strategies for creating and maintaining partnerships. As these are key elements that public health professionals can provide, sector leaders thinking with these models are unlikely to see the value of inviting public health to the table. Communicators need strategies for explaining that collaborations are most effective and sustainable when they are supported institutionally and strategically.

## 6. How Do Other Sectors Think About Data?

Because data provide a measurable framework for interventions and policy, public health professionals' expertise in data collection and analysis is one of their key assets. Sector leaders and professionals have many ways of thinking about data, some of which can be leveraged to highlight the value of collaborating with public health.

### The *Lay of the Land* Cultural Model (Housing, Education, Health Systems)

Most leaders in these three sectors tended to assume that data can only be used to learn about the past and the present, not the future. From that perspective, data play a descriptive, not predictive, role in the work of sector leaders: data are primarily used to evaluate *existing* actions and programs, not to plan for *future* actions and programs. Using data to manage risks and predict future trends in the population was not top-of-mind for most leaders interviewed.

> **Housing Sector Leader**: Data describing the scope of the problem certainly, and what we need to do, and I think data showing successes. By successes, I mean it's kind of whatever we mean it to mean. Success can be people housed, it can be people mainstreamed back out into the private sector, or it could be people who graduated out of subsidized housing.
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> **Education Sector Leader**: You want to know whether student achievement is improved. You want to know if graduation rates are up. But, we also look for data on participation in afterschool programming, so we know whether kids are getting opportunities that they deserve. We also are interested in the extent to which families are engaged in the lives of their kids. Sometimes, we use things like tardiness as a measure, because if you involve families more, you're more likely to see less tardiness.

### The *Business Forecast* Cultural Model (Business)

Because competition and the need to "stay ahead of the curve" are key for Business leaders and professionals, they reason that data collection and analysis are the best ways to predict future trends and make informed decisions about future investments. Participants explained that they collect and analyze different types of data to know what is working or not working and to predict which way their industry is headed so they know what their next investment should be. Importantly, most data mentioned in discussions with Business participants were strictly related to business and rarely reached outside the boundaries of the sector.

> **Business Sector Professional (Atlanta peer discourse session)**: Market analysis, finding comparative sales, I need to know what other companies are doing so that I'm ahead of the curve. I can't compete with the big boys, but I have to remain competitively priced, and I need to know what those margins are.
> **Business Sector Professional (Atlanta peer discourse session)**: You have to counsel buyers and sellers based on rents and marketplace for certain types of space. You have to find out how much people pay to be able to evaluate the lease, look at sales for properties.

### The *Every Community Is Different* Cultural Model (Housing, Education, Health Systems)

According to this way of thinking, there are irreducible differences between each community in the country as well as between sectors. As a result, data must be specific to one sector, to one place, and often to one organization to be deemed relevant. When thinking with this model, sector leaders rejected data aggregated across multiple locations, which they felt masked differences across groups and communities. Because they sought specificity, they also thought that the most reliable and useful data had to be collected and analyzed in-house by their own organizations.

> **Health Systems Sector Leader**: I'm not interested in how that averages out with 27 other communities around the country. I need to understand the data of the specific subject population that I'm talking about.
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> **Housing Sector Leader**: Our legislators and our policymakers say, "We don't care what the benefits and cost-savings are in [this] or [that state]. What is it for us here in [our state]?" And we felt we didn't have enough studies, or the studies that we had we weren't really comfortable enough with either the methodology or the size. So, we developed our own cost/benefit study and are currently in that process. We have preliminary findings. Over the next couple of years, we will be generating a report from that research.

### The *Lived Experience vs. Data* Cultural Model (Housing, Education, Health Systems)

At times, sector leaders valued lived experience over data, suggesting that the best way to understand what is happening within a sector is to rely on the intuition of the professionals in the field. Scientific data

might be useful in confirming these initial hypotheses, but, according to this model, lived experience is viewed as the source of the key evidence and insight on which sectors should rely.

> **Researcher**: How do you know that school lunches are going to make a difference?
> **Education Sector Leader**: Good question. A lot of it relies on the expertise of our members' lived experiences in their work.
> —
> **Health Systems Sector Leader**: Before I need data, I need a story. I need to understand the story. […] If I can't understand the story, then I don't know what the right data is to ask for. […] But I don't start with the data to build the story.

### The *Data as Burden* Cultural Model (Housing, Education, Health Systems)

Collecting and analyzing data are sometimes perceived as burdens created by outside pressures—a distraction from the mission of a sector or organization rather than a way to achieve it better and faster. Leaders in Housing, for instance, explained that they collected data to "keep up" with their peer organizations and contend for future grants. Similarly, even those professionals who did not draw on the *Every Community Is Different* model explained that they had to collect hyper-local data to get the support of policymakers and government officials, who think about data in such terms.

> **Housing Sector Leader**: The reality for us is that we have to be able to compete with other service providers for philanthropic dollars to be able to provide the different kinds of services that we offer. So, we need to show the same kinds of outcomes and impacts that other providers do.
> —
> **Health Systems Sector Leader**: We spend so much time focusing on these measures because— That's why we're paid in some cases, there's money tied to it, and other cases it's just how you present yourselves both to the public, to your regulatory agencies, etcetera. So, you spend your time doing what it is prescribed and less time looking at the things that you think might be more efficacious.

### The *Data Systems Are Complex* Cultural Model (Housing, Education, Health Systems)

Participants often recognized that how data are processed, used, and—in some cases—shared—matters as much, if not more, than what is initially collected. Yet they found it difficult to identify the best systems or the best people to manage and process data or the best ways to effectively share them.

While sector leaders saw the need for effective data management and analysis, very few said they already had such systems in place, and many remarked that there is already too much data available. They often explained that they knew good data systems were important, but that they had not found a way to create them, were in the process of improving them, or were thinking about how to improve current ones.

> **Housing Sector Leader**: We do collect data and use it. One of the things that we are actually looking at doing right now is how we can do a better job with that.

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**Education Sector Leader**: Love data. I mean, I know we have all this stuff, but if we're going to have a handle on how we're doing with all students, we need to be able to have that breakdown of all that information. And we need to be able to interpret the progression in their subject areas. […] Or, if you want to do a school finance formula, where you give more money to kids who have a tougher time learning, if you don't have the data, how do you figure that out?

Leaders in Health Systems also recognized that data-sharing across organizations and sectors is critical but were unsure how to make the right connections and break down existing siloes. They emphasized that there are major challenges to sharing data both within their own fields and across sectors. They indicated that the necessary communications channels do not yet exist and identified legal and other barriers to data-sharing.

**Health Systems Sector Leader**: There are frequently unintended barriers and consequences. For example, […] the information that's in the school system about children is kept private and separate from information in the health system. It's kept private, and those laws that govern that are two separate and distinct laws, so it's hard for the school system to talk directly with the health system around children that are being impacted by a health issue in both dimensions. So maybe it's asthma that's keeping a kid out of the classroom, the hospital and the doctors are seeing them, but, because of the privacy laws, it's hard to pass [that information] back and forth.

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**Health Systems Sector Leader**: The question is, who owns this? The city government or county government owns some of it. There are a couple not-for-profits, more than a couple, that own some of it. […] And so, it's less that we need more data than, right now, I can't point to a person or to a group that I can call and say, "Okay, how is it going? What are we doing? I could name four or five people that I can call and get pieces of it.

## Implications for Communicators

- **The *Lay of the Land* cultural model produces a recognition of the value of data, but minimizes the risk management skills that public health professionals can bring to a collaboration.** While this model is generally productive, it does not enable sector leaders to appreciate the distinctive value of data in managing health risks, which is a strength of public health professionals. The prevalence of this model indicates a strategic opening for public health professionals to show how their skills in data analysis and management can help other sectors. Communicators should seek to build on this model and expand it to include greater appreciation of the predictive value of data and the benefits of leveraging data in this way.

- **The *Business Forecast* cultural model creates an opening to highlight public health professionals' risk management skills.** Business leaders and professionals already appreciate the predictive power of data, which may be used to public health's advantage given the field's expertise in data. Public health

professionals can develop strategies to build on Business leaders' and professionals' current understanding of data to explain the value of collaboration with public health. But they should make sure to clearly explain what types of data public health professionals typically work with and how they benefit the Business sector, to expand Business leaders' and professionals' current understanding of what data might be relevant—or irrelevant—to their own goals.

- **The *Lived Experience vs. Data* and *Every Community Is Different* cultural models make it hard to see how the data skills of public health practitioners can serve sector-specific goals.** These models give preference to anecdotal examples over data that represent whole communities and to community-specific metrics over aggregate data. These models thus downgrade the multiple types of data that public health is equipped to collect, analyze, and manage to best inform evidence-based solutions. When communicating about their data skills in potential collaborations with other sectors, public health professionals should explain how both community-specific and aggregate data can provide useful insights for partners' goals.

- **The *Data as Burden* cultural model can lead to unproductive thinking about data, but it can also be leveraged to highlight the value of public health in collaborations.** This model drives sector leaders to think of data collection and analysis as yet another chore. However, it can be leveraged to the advantage of public health. By showing how public health can relieve sectors from at least part of this "chore" by providing required data and highlighting the value of sharing data across sectors, public health professionals can position themselves as indispensable partners.

- **The *Data Systems Are Complex* cultural model creates an opening for public health.** When thinking with this model, sector leaders agree that data are valuable in advancing their own goals, but they recognize that they do not know how data can be most effectively processed and used. For this reason, the *Data Systems Are Complex* model provides public health professionals with a key opportunity to demonstrate that they have the skills to address sector leaders' concerns and questions about the "how" of data management and data-sharing. When engaging with other sectors, public health professionals should highlight their expertise in designing and managing data systems to foster an appreciation of this distinctive skill, which meets a felt need among other sectors.

# How Leaders in Other Sectors View the Value of Public Health and Cross-Sector Collaborations

## What Is Health?

- Full Life
- Absence of Illness
- Health Is Medical

## What Is Public Health?

- Not Top-of-Mind
- Health of the Population
- Health Care Provision
- Department of Health
- Siloed
- Book-Smart

## What Shapes the Health of the Population?

- Different Definitions of Social Determinants
- Harmful Environments
- Health Individualism
- Cultural Norms of Health
- Direct Effects

## How Is Health Connected to the Work of Other Sectors?

- Housing as Foundation
- Focus on the Whole Child
- Health as Selling Point
- Health Helps Bottom Line
- Population Health Management

## How Do Cross-Sector Collaborations Work?

- Sectors Are Different Worlds
- Health as Big Tent
- What's In It for Me?
- Transaction
- Charity
- Individual Leadership
- "Just Do It"
- Culture of Collaboration

## How Do Other Sectors Think About Data?

- Lay of the Land
- Business Forecast
- Every Community Is Different
- Lived Experience vs. Data
- Data as Burden
- Data Systems Are Complex

# Mapping the Gaps: Key Communications Challenges

In this report, we have reviewed how public health experts think about their field and cross-sector collaborations in the 21st century and described how leaders in Housing, Education, and Health Systems, as well as Business leaders and professionals, understand the same topics. In this final section, we identify points of overlap between these perspectives and map the gaps between them to reveal important communications challenges and opportunities.

## Overlaps in Understanding between Public Health Experts and Leaders in Other Sectors

There are important points of overlap in how public health experts and leaders from other sectors understand public health and cross-sector collaborations. These overlaps represent the common ground on which public health professionals can build to increase understanding of their field and what it brings to collaborations. Public health experts and other sector leaders and professionals share the following understandings:

- Health is a positive concept, and it can be proactively promoted. (However, as we note below, sector leaders only sometimes think this way.)
- Upstream factors like housing, income, and education, shape health outcomes in significant ways. (This is true for Housing, Education, and Health Systems, but not for Business. The Health Systems sector has a particularly full understanding of how social factors create specific health challenges in the United States today, such as wide health inequalities, high obesity rates, and plateauing longevity.)
- The health of communities intersects with other sectors' goals in critical ways:
- Housing deeply affects people's health.
- Good student health is a prerequisite for success in Education.
- Good employee health is a means to achieve the profit goals of Business.
- Health Systems can affect the health of the community beyond health care and increasingly have a financial stake in the ongoing health of their patient populations.
- Cross-sector collaborations can potentially benefit all partners involved (for Housing, Education, and Health Systems).
- Housing complexes, schools, and health systems can function as community anchors that contribute to community health.
- Smart use of data can help sectors achieve their objectives and make a case for funding.
- Public health governmental agencies have a role to play in preventing health problems and promoting community health.

In these areas, where the thinking among leaders in other sectors is productively aligned with public health experts, public health professionals can leverage existing ideas to make the case for collaborating across sectors.

## Gaps in Understanding between Public Health Experts and Leaders in Other Sectors

There are also significant gaps in understanding between public health experts and leaders from other sectors. These gaps represent key areas that must be addressed in a reframing strategy to underscore the value of public health:

- **Health: Integrated Wellbeing vs. Integrated Wellbeing *or* Absence of Illness.** Public health experts argue that health is not simply the absence of disease but rather a positive state of wellbeing that can be actively promoted. While sector leaders are able to define health positively, they frequently fall back on an implicit understanding of health as the absence of illness. Business professionals understand health almost exclusively as the absence of illness. This way of thinking undermines the ability of other sectors to think productively about how they can proactively support health-building activities.

- **Public Health Functions: Broad and Rapidly Evolving vs. Narrow and Traditional.** Public health experts explain that forward-thinking professionals in the field are leading a push to expand the scope of their practices to more broadly address the social determinants of health. Because sector leaders and professionals are not aware of this transformation and lack knowledge about the full scope of public health's competencies, they do not consider collaborating with public health in many of the areas that public health practitioners could and would like to be involved.

- **Public Health Professionals: Strategists and Valuable Collaborators vs. Book-Smart Researchers and Siloed Bureaucrats.** According to public health experts, professionals in the field can use their understanding of the big picture of health to think innovatively about key issues in other sectors; they can use their skillset to identify the best interventions; and they can use their strong ties to community institutions to support implementation and maintenance of strategic practices. Sector leaders and professionals, on the other hand, do not think that public health professionals have the necessary skills, orientation, or incentives to achieve these goals. Rather, they tend to think of public health professionals as book-smart researchers or siloed bureaucrats who are incapable of collaborating effectively to create real-world change.

- **Social Determinants of Health: Risk Factors and Health-Promoting Factors vs. Risk Factors Only (*Housing, Education, Health Systems*) or Off the Radar (*Business*).** While public health experts emphasize that the social determinants of health can alternately promote or undermine health, sector leaders in Housing, Education, and Health Systems tend to focus on harmful influences. This gives those sector leaders a reactive orientation; they are more likely to see the need to put out fires than to engage in a comprehensive strategy to create positive conditions for health. Business leaders and professionals are unfamiliar with the role that socioeconomic factors play in shaping health outcomes and typically reason that individuals are responsible for their own health.

- **Whose Health? Whole Community vs. Population of Direct Interest.** Public health experts focus on the health of whole communities, while sector leaders and professionals think first about the health of the specific populations relevant to their mission: tenants, students, employees, or patients. Health Systems leaders sometimes think about the health of the community at large, but even they tend to focus on patient populations. This emphasis on specific populations can limit the extent to which sector leaders and professionals think about the scope of cross-sector collaborations.

- **Cross-Sector Collaborations: Natural Partners vs. Different Worlds *(Housing and Education)* or Out of Mind (*Business*).** Public health experts explain that professionals in the field have developed effective models for collaborations across sectors and that sectors' overlapping goals and functions make them natural partners. Leaders in Housing and Education, by contrast, think of the different sectors as fundamentally distinct and separate worlds that are very difficult to bridge. This understanding is a major barrier to collaborations, because it leads sector leaders in Housing and Education to assume that cross-sector collaborations are extremely challenging and require well-positioned people who have a foot in each world. Business leaders and professionals understand collaborations strictly as business transactions at the level of the firm, which makes it even harder for them to think about the value or the need for cross-sector collaborations.

- **Strategists at the Table: Public Health vs. Health Systems *(Health Systems)*.** Public health experts believe their field is ideally positioned to contribute to partnerships. Public health professionals can draw on their problem-solving and strategic skills to work with key partners across sectors, identify resources for collaboration, and engage communities. Health Systems sector leaders, by contrast, think that their sector is best positioned to lead cross-sector collaborations because health is at the core of their mission and because they have access to key resources. They do not see public health as an effective partner that can make valuable contributions to cross-sector collaborations.

- **Building Partnerships: Institutionalized Support vs. Individual Leadership and Organic Cooperation (*Housing, Education, Health Systems*).** Public health experts argue that strong partnerships across sectors depend on institutional support to get off the ground and sustain

themselves in the long run. Sector leaders in Housing, Education, and Health Systems, on the other hand, assume that successful partnerships are primarily the result of individual leadership and the kind of natural cooperation that grows out of shared values. This leads to an underappreciation of the importance of building governance structures and other institutional arrangements necessary to sustain collaboration.

- **Data-Sharing and Management: Critical and Attainable vs. Complex and Difficult (*Housing, Education, Health Systems*).** Public health experts argue that closer cross-sector collaborations on data management and sharing are essential and that professionals in the field have the data-related skills to help all partners collect and use data effectively. While sector leaders in Housing, Education, and Health Systems agree that collecting, managing, and sharing data can advance their goals, many lack a clear vision of how that can be achieved. Some leaders lack a clear understanding of what public health data can do, and none are aware that public health professionals have the skills to help with data management and sharing. This gap is a key opportunity: there is a recognized need across sectors for better data management and sharing, so public health professionals can demonstrate their value in cross-sector collaborations by communicating their expertise in these areas.

# Conclusion

The findings presented in this report indicate that public health professionals in the United States face significant, durable challenges in communicating with leaders and professionals in the Housing, Education, Business, and Health Systems sectors. The central finding of this report is that even when sector leaders understand that upstream factors shape health outcomes in more significant ways than individual medical profiles, characteristics, and behaviors, they do not think that cross-sector collaborations with the field of public health are the best way to address these fundamental challenges.

Other sectors' perceptions of public health and cross-sector collaborations are an obstacle to developing and maintaining collaborations with public health. These perceptions profoundly limit recognition of the field's value. Leaders and professionals from Housing, Education, Business, and Health Systems alike associate public health with a narrow set of traditional functions and tend to see public health professionals as impractical researchers and siloed bureaucrats who make unhelpful partners. Moreover, while Health Systems leaders see cross-sector collaborations on health as feasible and important, their understanding of their own work positions them as leaders and conveners and sidelines public health. For their part, Housing and Education leaders think of collaboration across sectors as extremely challenging, which is bound to impede interest in pursuing collaborations with public health. As for Business professionals, they currently do not think about cross-sector collaborations that are not based on business transactions.

Yet these unproductive ways of thinking sit alongside more constructive ones, which can be leveraged and expanded to shift sector leaders and professionals' thinking. Many of the sector leaders we interviewed already recognize that health is tied to social and environmental context and that their goals are tied to the health of the people they serve. Public health professionals can appeal to this understanding to make a case for the mutual benefit of collaborations. Moreover, widespread recognition of the need for better ways of managing and sharing data—as well as Business leaders' and professionals' understanding of the predictive value of data—are openings for public health professionals to explain how their data skills can help solve problems of mutual interest.

While further research is currently underway to identify a comprehensive reframing strategy, the findings presented here provide the foundation for developing a strategy capable of supporting more productive thinking about the value that the field of public health can bring to other sectors in the 21st century.

# Appendix: Research Methods and Demographics

## Strategic Frame Analysis®

The research methods for this report are based on Strategic Frame Analysis®, a multimethod process pioneered by the FrameWorks Institute in 1999 and refined over time to reflect cutting-edge innovations in the social sciences over the past 20 years. It takes a multi-disciplinary approach to evaluate the effects of various frame elements on support for social policies. Recognizing that there is more than one way to tell a story, Strategic Frame Analysis® taps into decades of research on how people think and communicate. The result is an empirically driven communications process that makes academic research understandable, interesting, and usable to those working to solve social problems.

## Expert Interviews

To explore experts' knowledge about public health's goals and mission in the 21st century, FrameWorks conducted 16 one-on-one, one-hour phone interviews with participants with expertise in research, practice, and policy. Interviews were conducted from September to November 2017 and, with participants' permission, were recorded and transcribed for analysis. FrameWorks compiled the list of interviewees, who reflected a diversity of perspectives and areas of expertise, in collaboration with the Aspen Institute's Health, Medicine and Society Program and the de Beaumont Foundation.

Expert interviews consisted of a series of probing questions designed to capture expert understandings of the principles that drive public health; what public health is; what the benefits of cross-sector collaborations with the field of public health are; and what future cross-sector collaborations with public health look like. In each conversation, the researcher used a series of prompts and hypothetical scenarios to challenge experts to explain their research, experience, and perspectives, and to break down complicated relationships and simplify complex concepts. Interviews were semi-structured in the sense that, in addition to pre-set questions, researchers repeatedly asked for elaboration and clarification and encouraged experts to expand on concepts they identified as particularly important.

Analysis used a basic grounded theory approach.[21] Researchers pulled common themes from each interview and categorized them. They also incorporated negative cases (what was absent from interviews and discussions) into the overall findings within each category. This procedure resulted in a refined set of themes, which researchers supplemented with a review of materials from relevant literature.

## Interviews and Peer Discourse Sessions with Other Sector Leaders and Business Professionals

The cultural models findings presented in this report are based on a set of interviews with key leaders in the sectors of Housing, Education, and Health Systems. As with the public health expert interviews, FrameWorks compiled the list of interviewees in collaboration with the Aspen Institute's Health, Medicine and Society Program and the de Beaumont Foundation, seeking the perspectives of important potential allies for public health. FrameWorks conducted 38 in-person, in-depth interviews (10 Education leaders; 11 Housing leaders; 11 nonprofit Health Systems leaders; 6 Business leaders). Our Business sector sample was complemented by two 50-minute group discussions (or peer discourse sessions[22]) with business professionals in Atlanta and Chicago.

Professional cultural model interviews—one-on-one, semi-structured interviews lasting approximately one hour—allow researchers to capture the broad sets of assumptions, or cultural models, that participants use to make sense of a concept or topic area. These interviews are designed to elicit ways of thinking and talking about issues—in this case, issues related to public health and cross-sector collaborations. Interviews covered thinking about leaders' work in their own sectors, their experience of cross-sector collaborations, and their understandings of health and public health. The interviews touched on professional culture, definitions, causes and effects, and relationships among actors. The goal of these interviews was to examine the cultural models that sector leaders and professionals used to make sense of public health and cross-sector collaborations, so researchers gave them the freedom to follow topics in directions they deemed relevant. Researchers approached each interview with a set of topics to cover but left the order in which these topics were addressed largely to participants. All interviews were recorded and transcribed, with participants' written consent.

Findings were based on an analysis of these interviews and peer discourse session discussions. To analyze the interviews, researchers used analytical techniques from cognitive and linguistic anthropology to examine how participants understood issues related to public health.[23] First, researchers identified common ways of talking across the samples to reveal assumptions, relationships, logical steps, and connections that were commonly made, but taken for granted, throughout an individual's talk and across the set of interviews. In short, the analysis involved patterns discerned from both what *was* said (how things were related, explained, and understood) and what was *not* said (assumptions and implied relationships). In many cases, analysis revealed conflicting models that people brought to bear on the same issue. In such cases, one conflicting way of understanding was typically found to be dominant over the other, in the sense that it more consistently and deeply shaped participants' thinking.

# About the FrameWorks Institute

The FrameWorks Institute is a think tank that advances the nonprofit sector's communications capacity by framing the public discourse about social problems. Its work is based on Strategic Frame Analysis®, a multi-method, multidisciplinary approach to empirical research. FrameWorks designs, conducts, publishes, explains, and applies communications research to prepare nonprofit organizations to expand their constituency base, build public will, and further public understanding of specific social issues—the environment, government, race, children's issues, and health care, among others. Its work is unique in its breadth, ranging from qualitative, quantitative, and experimental research to applied communications toolkits, eWorkshops, advertising campaigns, FrameChecks®, and in-depth study engagements. In 2015, it was named one of nine organizations worldwide to receive the MacArthur Foundation's Award for Creative & Effective Institutions. Learn more at www.frameworksinstitute.org.



Please follow standard APA rules for citation, with the FrameWorks Institute as publisher.

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# Endnotes

[1] National Academy of Medicine (formerly Institute of Medicine). (1988). *The future of public health*. Washington, DC: National Academy Press.

[2] DeSalvo, K.B., et al., (2017, September 7). "Public health 3.0: A call to action for public health to meet the challenges of the 21st Century." *Preventing Chronic Disease* 14. Retrieved from https://doi.org/10.5888/pcd14.170017.

[3] See http://www.phrases.org/

[4] Quinn, N. & Holland, D. (1987). *Culture and cognition*. In D. Holland & N. Quinn (Eds.). *Cultural models in language and thought* (pp. 3–40). Cambridge: Cambridge University Press.

[5] For a detailed description of Frameworks' peer discourse sessions, see Manuel, T., and Kendall-Taylor, N. (2009). "From focus groups to peer discourse sessions: The evolution of a method to capture language, meaning, and negotiation." *New Directions for Youth Development*, no. 124 (2009): 61–69, https://doi.org/10.1002/yd.325.

[6] Poor educational attainment, for example, can generate chronic stress, which affects students' short- and long-term health outcomes. Poor educational outcomes can also limit an individual's opportunities for further education and employment. In turn, this limits housing opportunities and access to healthy food and green spaces, which increases the risk of poor health and limits possibilities for fostering health.

[7] See for instance Marmot, M. (2015). "The health gap: The challenge of an unequal world." New York; London: Bloomsbury); see also DeSalvo, K.B., et al., "Public health 3.0"; and Chetty R., et al., (2016, April 26). "The association between income and life expectancy in the United States, 2001-2014." *JAMA* 315, no. 16: 1750–66.

[8] DeSalvo, K.B., et al., (2017, September 7). "Public health 3.0: A call to action for public health to meet the challenges of the 21st Century." *Preventing Chronic Disease* 14; Ahmad, F.B., and Bastian, B. (2017). "Quarterly provisional estimates for selected indicators of mortality, 2016-Quarter 4, 2017." National Center for Health Statistics. National Vital Statistics System, Vital Statistics Rapid Release Program, 2018.

[9] See https://www.kcchamber.com/what-we-do/healthy-kc.

[10] In the rest of this report, the one-on-one interviewees will be called "Business leaders" and the participants in the peer discourse sessions will be called "Business professionals." When both groups of participants from the Business sector are referred to at the same time, they will be called "Business participants."

[11] For more on professional discourses, see Goodwin, C. (1994, September)."Professional vision." *American Anthropologist* 96, no. 3: 606–33. Retrieved from https://doi.org/10.1525/aa.1994.96.3.02a00100.

[12] Most of the Housing, Education, and Health Systems leaders who participated in these interviews come from nonprofit organizations within their sectors and believe that the missions of their organizations encompass more than profit-making. In particular, the leaders in Health Systems we interviewed saw themselves as the most forward-thinking in their sector, leading the way toward the future of health care. No assumptions can be made about how for-profit leaders in Housing, Education, and Health Systems—whose mission is fundamentally different from nonprofit groups in their sectors— think about health, cross-sector collaborations, and public health.

[13] All participant interview excerpts have been edited to remove any personally identifying information and improve readability. To conduct the analysis, researchers worked from verbatim transcripts of the interviews.

[14] To avoid overly lengthy exposition, we do not always provide a quote from each sample to illustrate the cultural models that are shared across all four sectors (Housing, Education, Business, and Health Systems). The quotes featured in this report are representative of the overall data we analyzed for this project.

[15] See Crawford, R. (1984). "A cultural account of 'health': Control, release, and the social body." In McKinlay, J. *Issues in the Political Economy of Healthcare* (pp. 133–143). London: Tavistock.

[16] For a detailed discussion of the prominence of this cultural model in the British public's thinking about health, see L'Hôte, E., et al. (2018). *Seeing upstream: Mapping the gaps between expert and public understandings of health in the United Kingdom.* Washington, DC: FrameWorks Institute.

[17] For a detailed analysis of how this cultural model is consistent with the CDC's long-term communications strategy, see Chapter 3 in Siegel, M., and Doner, L. (1998) *Marketing public health: Strategies to promote social change* (Jones & Bartlett Learning).

[18] For a detailed discussion of this issue from the point of view of public health practitioners, see notably Castrucci, B., Leider, J.P., and Sellers, K. (2015). "Perceptions regarding importance and skill at policy development among public health staff." *Journal of Public Health Management and Practice* 21: S141–50. Retrieved from https://doi.org/10.1097/PHospitals.0000000000000324.

[19] Whenever needed, quotes were redacted to preserve the anonymity of participants.

[20] For a historical discussion of health as a reflection of character, see Sontag, S. (1979). *Illness as metaphor*. New York, NY: Vintage Books.

[21] Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory; Strategies for qualitative research*, *observations*. Chicago, IL: Aldine PubCo; Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.

[22] For a detailed description of Frameworks' peer discourse sessions, see Manuel, T., and Kendall-Taylor, N. (2009). "From focus groups to peer discourse sessions: The evolution of a method to capture language, meaning, and negotiation." *New Directions for Youth Development*, no. 124 (2009): 61–69. Retrieved from https://doi.org/10.1002/yd.325.

[23] Quinn, N. (Ed.). (2005). *Finding culture in talk: a collection of methods*. New York, NY: Palgrave Macmillan.