

**Ethical Concerns in an Era of Population Health:  
A Challenge of Identity for Tomorrow's Hospitals**

by

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## **Abstract**

**Background:** After focusing on episodic, clinical encounters, U.S. health care is beginning to acknowledge the need for population-level, preventive health strategies. Largely driven by new regulatory measures, new payment programs, and greater appreciation for the social determinants of health, this shift aims to reduce per capita cost and improve population health. In addition to the financial, clinical, and operational challenges, population health strategies raise new ethical questions.

**Methods:** This study used an exploratory sequential mixed methods design. Qualitative data were based on interviews (n=38) with supervisors of Community Benefit or population health management at nonprofit hospitals across the country, recruited through chain referral and stratified sampling methods. The interviews solicited information on organizational structures, community engagement, and ethical concerns in population health work. Ten focus groups in five cities with hospital employees and community partners (n=43) provided examples of ethical concerns in hospital-community collaboration and helped define the characteristics of community health projects for a conjoint analysis. Interviews and focus groups were analyzed with open coding text analysis. Quantitative data were generated from an online survey completed by a convenience sample of hospital employees (n=225) and leaders of nonprofit community organizations (n=136). The survey included a discrete choice experiment, which asked respondents to choose between funding one of two community health initiatives based on the characteristics of those projects. The characteristics of projects were: priority from community need assessment; time until measureable impact; kind of community partnership;

type of intervention; evidence of intervention effectiveness; and target population. Discrete choice results were estimated with an effects coded, conditional logit model. The survey included questions on how often respondents have faced certain ethical dilemmas. Sensitivity analyses and latent class analysis were conducted to determine differences between respondent subgroups.

**Results:** Interviews revealed a complex process for Community Benefit and also provided evidence that those in the field do not readily frame population health work in ethical terms. After being prompted, most interviewees gave examples of ethical challenges, and survey respondents indicated they regularly experience ethical dilemmas. The interviews also provided information to map the many challenges nonprofit hospitals face as they allocate limited resources for community health initiatives, including how to best involve community members in the process. The discrete choice experiment showed strong agreement between hospital employees and community members as to what kind of community health initiatives are most important to fund. Projects were more likely to be selected if they included a top priority from the community health needs assessment, were supported by a coalition of community partners, and there was some evidence of intervention effectiveness. Latent class analysis revealed four respondent subgroups who differed on project priorities but who did not differ by demographic characteristics.

**Discussion:** As we enter an era of population health, hospitals must grapple with their changing identity in the community. They are no longer just experts in clinical care; they must also contribute to population-level, preventive strategies. The study identifies several implications for both policy and practice, such as the need to include investment in social determinants of health as part of the Community Benefit portfolio and the need to build educational infrastructure for

population health ethics. Rather than using existing ethical principles, this study proposes virtue ethics and a new concept called structures of virtue as resources for evaluating ethical challenges in population health.

## **Introduction**

### ***Rationale and Significance***

The Patient Protection and Affordable Care Act (ACA) may be the most significant piece of social policy in a generation. One of the most critical aspects of the ACA is its emphasis on population health – the strategy that moves medicine from episodic, clinical care to a situation where entire populations become the patient.<sup>1,2</sup> The growing emphasis on population health is not just a technical challenge; it also creates a challenge of identity. Health care organizations that have built their identity around expertise in clinical care are now asked to display expertise in a connected, but very different area. Many kinds of health care organizations will be required to develop this new expertise, but here I study nonprofit hospitals and health systems. I believe the key un-asked question underlying the shift to population health is, “What do we want hospitals to *be*?” Studies that consider the financial, managerial, and clinical challenges associated with a move to population health are common in health services research journals, but few are asking how the emphasis on population health raises new questions of what role we want hospitals to play in their communities. This dissertation studies the question of evolving identity by exploring the new ethical questions hospitals face in an era of population health.

One of the challenges of this project is that the system under investigation is in the process of being built. In my definition of population health, I include both population health management – the clinical care strategies for patients for whom an organization bears some financial risk – as well as community health – the investment in population-level, preventive programs, often focused on social determinants of health. Given its size and complexity, the U.S.

health care delivery system may not truly incorporate population health for several decades. How then does one ask about organizational identity and ethical values in a system that has not yet been constructed? Fortunately, there are pockets of activity that already exist to provide the starting point needed to map this new terrain.

Nonprofit hospitals have a historical connection to the community health part of population health. There are over 2800 nongovernmental nonprofit hospitals in the U.S., which account for over half of all hospitals in this country.<sup>3</sup> Nonprofit hospitals are given tax-exempt status because of the benefit the public expects them to bring to the communities they serve. The amount of effort nonprofit hospitals put into this work is called Community Benefit (CB) and it is delivered in any number of ways, including charity care, community health improvement, and health professional education. Nonprofit hospitals spend over \$60 billion annually on CB, of which 85% is devoted to charity care and Medicaid payment shortfalls.<sup>4,5</sup> Of the remaining amount, over \$4 billion goes toward community health improvements and donations to community groups.<sup>5</sup> And yet, the process by which those dollars are allocated is relatively unknown. We know *how much* money they spend because nonprofit hospitals must submit documents to the IRS detailing annual spending. We also have information about how hospitals identify needs in their communities and plan to respond to those needs because of new requirements in the ACA, as described in detail in the next chapter. At the same time, little is known about the inner workings of allocating over \$4 billion for community health improvement. Because this money is a major investment by hospitals in community health strategies, knowing this process better is one of the keys to understanding how hospitals see their role in the coming era of health care delivery.

Questions of ethics have often been at the center of identity in health care. Public health ethics has long asked questions about the role of the state in promotion of health, such as quarantine, public resource allocation, and many other questions of health policy. For example, public health ethics asks: Should a community ban sugary drinks in order to reduce obesity? As public health ethics' precursor, traditional medical ethics help clarify the role of health care providers by focusing on the provider-patient relationship. Traditional medical ethics might ask: What conditions allow a clinician to perform a procedure without the patient's consent? The modern hospital has forged its identity in caring effectively for individuals and the ethical questions with which it has been concerned have largely focused on matters of clinical ethics. However, the emerging role of traditional hospitals in keeping populations healthy requires a hospital to consider how individual *and* community health indicators can best be achieved. Therefore, the rise of population health brings ethical questions that these organizations have not faced in the past. Questions may be along these lines: To what degree is it ethical to direct resources away from individual patients for the sake of community health? Is it ethical to invest in a community health program that is less cost-effective but redresses an important health inequity? How does a hospital improve the health of the surrounding community without being paternalistic or coercive? Many hospitals that have specialized in clinical outcomes within the hospital's walls will now concern themselves with social determinants of health, such as housing, social networks, literacy, and transportation.

The premise of this research study is that hospital identity in an era of population health is intimately connected to matters of ethics. Just as physician identity is clarified with medical ethics and the role of public health is refined through public health ethics, so too, population health ethics will help clarify hospital identity in the years to come. Population health ethical



questions related to population health management have similarities with medical ethics; and population health ethical questions related to community health may be quite similar to public health ethics. However, in order to answer the core question of hospital identity, ethical questions must be asked of the hospital itself – not of the provider, as medical ethics does; not of the government, as public health ethics does. Therefore, this study takes the hospital as the starting point of analysis.

The gaps in knowledge about CB provide an ideal entrée into studying identity and ethics in an era of population health. Instead of the beginning-of-life and end-of-life questions that often dominate health care ethics, the ethical questions of CB – and the ethical questions of population health – consider the ways in which disease is prevented and health is promoted during the many decades in between. CB is a small corner of population health efforts, but it is a defined reality within health care, which makes it possible to draw boundaries for specific research aims. Studying all aspects of population health simply would not be feasible.

CB may not generate the kind of ethical dilemmas featured on the nightly news, but the organization's structures and processes – where money goes and why, who has a voice in the decision, the goals of a program and how they are measured – are the ethically laden aspects of everyday life that are too often ignored. Seemingly innocuous characteristics of organizations are quite revelatory as we seek to answer, “What do we want hospitals to be in an era of population health?” Organizational structure and process form the *ethics of the ordinary* or *microethics* that receive much less attention than dramatic dilemmas of bioethics, and yet these ethical concerns are consequential for the organization and the people it serves.<sup>6</sup>

### ***Specific Aims***

This study will identify the influence of ethics in existing CB efforts as a way to begin mapping the ethics of population health. The specific aims of this project are to:

1. Describe the process by which nonprofit hospitals allocate resources for community health improvement.
2. Identify the ethical concerns that have arisen among hospitals and community partners as hospitals become more engaged in community health improvement, especially related to Community Benefit activities.
3. Explore implications for health policy and health care practice related to the ethics of population health.

### ***Summary of Research Design***

This study uses an exploratory sequential mixed methods design. In so doing, the quantitative methods are able to supplement the knowledge gained in the qualitative parts of the research plan.<sup>7</sup>

#### ***Phase 1: Interviews***

Semi-structured in person or telephone interviews were conducted in fall 2016 with hospital CB managers and population health managers to ascertain organizational response to population health needs, CB position in organization, CB process for decision-making, and ethical concerns in population health

#### ***Phase 2: Focus groups***

Separate semi-structured focus groups with (a) hospital CB managers and (b) community partners to identify key characteristics for community-based programs and ethical concerns of hospital-community partnerships

### *Phase 3: Survey with discrete choice experiment*

Online survey with (a) nonprofit hospital employees, especially CB managers and ethicists, and (b) community partners, namely employees of United Way, YMCA, and Catholic Charities, to determine most important attributes of community health projects as well as ethical concerns of hospital-community partnerships

### ***Key Topics***

#### *Organizational Structure*

Where are Community Benefit managers currently located within the organizational structure? To whom do they report? Does the organizational location influence the goals or priorities of CB employees?

#### *Organizational Process*

What are the key Community Benefit activities between assessing community needs and reporting on spending (i.e., selecting priorities, allocating, and implementing)? Who is involved in those activities? How are they involved?

#### *Organizational and Community Priorities*

What influences the way resources are allocated to improve community health? What ethical concerns emerge during this process? How do community members think community needs should receive priority? What do community members believe should influence the way resources are allocated to improve community health? How do these results compare to those of hospital employees?

#### *Explicit ethical concerns*

What are the most significant ethical concerns raised by hospital employees related to Community Benefit programs? What are the most significant ethical concerns raised by

community leaders related to hospital engagement in community health? How do these ethical concerns get negotiated either within the hospital or in the community partnerships?

## ***Summary of Results***

### *Process of Community Health Improvement*

This study offers evidence of a process for community health improvement that is highly variable across nonprofit hospitals. Some aspects of the process, such as developing a Community Health Needs Assessment and building community coalitions to implement programs, are far more developed than other aspects. For example, budgeting, allocating resources, evaluating progress, and communicating results, are much more uneven and often treated as afterthoughts. The location of community health improvement within the organizational structure is also highly variable across organizations and is currently undergoing significant change in many hospitals. Some organizations are starting to integrate community health with population health management, without, it seems, fully appreciating the difference in goals of these two efforts. That is, the former attends to community-wide efforts while the latter focuses attention on patients for whom the organization bears financial risk. These two efforts can align, but they can also compete for financial and human resources within the same organization. Further, staff members charged with community health improvement often feel torn between many obligations, including compliance, community health, and public relations. Overall, the data on organizational processes for community health improvement, described in detail in Chapter 3, support the conclusion that hospitals have yet to determine how best to invest in the new goals of population health.

The specific task of resource allocation for community health improvement is a new dilemma for hospitals. Results from a discrete choice experiment showed remarkably similar priorities between hospital employees and community leaders about how to allocate resources for community health projects. The strongest predictors of project selection included: the degree of hospital-community collaboration; the health need's presence on a Community Health Needs Assessment; and evidence of intervention effectiveness. Weaker predictors of project selection included: the time to observe results; target population; and type of intervention. These results, described in detail in Chapter 4, raise questions about the degree to which hospitals and their communities see hospitals as responsible for long-term, equity-oriented projects.

#### *Ethical Concerns for Population Health*

This study also provides evidence of several specific underappreciated ethical issues associated with community health improvement. First, there are the structural questions mentioned above. Second, there are concerns of power and voice. For example, how much influence should community members have in deciding how hospital CB dollars are spent? Third, there are issues of resource allocation. As an example, to what degree should hospitals focus on clinical interventions versus interventions on housing, food security, or violence prevention? Fourth, there are questions of evidence. We might ask, when is it acceptable to fund a program that addresses an important need but does not have a strong base of evidence that it will improve population health? Fifth, there are uncertainties about population health's relationship with population health management. In other words, we should consider the degree to which hospital efforts are directed toward the entire community versus toward patients for whom the hospital bears some financial risk. We must also ask whether it is acceptable to have different standards of care for a patient for whom the hospital bears risk and a patient for whom

the hospital does not bear risk? Sixth, there are issues related to the consolidation of nonprofit health care. For example, which functions of community health should stay at the local level and which can be moved to a system office several states away? Finally, there are questions of cooperation and competition. As an example, should competing hospitals share data with each other in efforts to improve population health? The study indicated that very few interview subjects were able to name these situations as ethical concerns without some prompting, but that a majority of interview subjects and survey respondents experience such situations on a regular basis. These results, described in Chapter 5 in greater detail, support the conclusion that ethical concerns in population health are quite frequent, but these concerns are not immediately evident to hospital employees. Identifying these questions and providing resources for their resolution will be central to clarifying the identity of hospitals in an era of population health.

#### *Implications for Policy and Practice*

This study has several important implications for policy and practice. First, hospitals must take more seriously their organizational investment in community health improvement. This requires that they ask questions about where efforts should fit within the organizational structure, what processes are necessary to effectively accomplish key goals, and what staffing is required to do this work well. Second, the CHNA process, which currently is required every three years, should be required every five years. This would align the hospital's needs assessment with local public health department's needs assessments, increasing the likelihood of collaboration and allowing a longer window to actually observe changes in population health measures. Third, investment in the social determinants of health should be explicitly included as Community Benefit for nonprofit hospitals if there is a documented need and the link to health is well established. Fourth, the health care community should require health equity, or remediation

of health differences that are avoidable and unfair,<sup>8</sup> to be a more central part of efforts in population health. Right now, there is some evidence that commitment to health equity comes more in words than in deeds. Finally, practitioners and scholars should consider ways to build the infrastructure needed to develop the field of population health ethics. There is significant overlap between population health ethics, clinical ethics, public health ethics, and organizational ethics, but a concerted effort will be needed to raise the population health ethical concerns to the point where they receive the attention they deserve.

### *Ethical Theory*

This study also suggests that the ethics of population health is distinct from existing ethical fields in health care in two important ways. First, the actor in population health ethics is typically the organization, which differs from clinical and public health ethics, where the actor is either an individual or a government, respectively. Second, the usual ways of evaluating ethical concerns in health care are not as useful for matters of population health ethics. Clinical and research ethics rely on the classic bioethical principles of autonomy, beneficence, and justice. Public health ethics typically balances liberty and achieving a public health goal.

For population health ethics, I propose *virtue ethics* as a way to cultivate right action within organizations. More specifically, I offer *structures of virtue* as a way to conceptualize virtue at the organizational level and evaluate whether a given structure or process is leading an organization and its members away from or toward ethical behavior. For example, a hospital wishing to cultivate the virtue of collaboration would have to seriously consider whether it has hired people with the skills for community collaboration, whether it has adequately funded collaborative efforts, whether it measures and evaluates employees on metrics that truly assess collaboration, and so on. If steps are taken to create the organizational structures and processes

that encourage collaboration, the hospital has created a virtuous cycle where collaboration is habituated within the organization and the virtue is deepened over time. If steps are not taken to build the virtue into the organization, other less desirable values will likely become dominant. Virtue is an ideal ethical framework for those who believe being and doing are intimately connected. The central question of this study – “What do we want hospitals to *be* in an era of population health?” – is manifested in what they *do*. And what they *do* tells us who they *are*. Therefore, this route of ethical analysis – evaluating the degree to which structures either habituate a given virtue or fail to do so – is a promising framework for population health ethics.



## Chapter 1 – Background

Those shaping the U.S. health care systems are slowly realizing that more clinical care will neither solve the burden of mental illness, diabetes, hypertension, and other chronic diseases, nor bend the cost curve; we must consider how to keep populations healthy. Yet, moving from a sick care to a health care system carries significant challenges. Many scholars are rightly considering what the shift means for the financial, operational, and clinical strategies of hospitals and health systems: forming organizational boards;<sup>9,10</sup> identifying metrics; building data systems; finding strategic partners in the community;<sup>11-13</sup> shaping mission statements<sup>14</sup> and more. Some prominent health care systems, including Trinity Health and Henry Ford Health System, have already begun tying at-risk executive compensation to population health metrics.<sup>15</sup> There are some topics, however, that are conspicuously absent when considering the transition of our health care system. At a high level, there is little exploration of what role we want our hospitals – proven experts in clinical, episodic care – to be in this new era of population health. How do new expectations change the very identity of traditional health care delivery organizations? To begin answering this question, I explore what population health means for an organization's *ethics*. As described later in this chapter, ethics is key to questions of identity because who one is and what one does are inextricably linked. But how does one study the ethics of a system that has yet to be built?

In order to study the ethics of population health, I examine where hospitals have long been engaged in work beyond clinical care. Community Benefit (CB) is a regulatory measure that requires tax-exempt, nonprofit hospitals to spend money to meet the health needs of its

community (such as charity care or community health activities). To maintain their tax-exempt status, nonprofit hospitals are also bound under the Affordable Care Act (ACA) to assess the most pressing health needs of their community by producing Community Health Needs Assessments (CHNAs) and to develop Community Health Implementation Plans (CHIPs), specifying how they will address those needs. Many nonprofit hospitals have been promoting community health for decades through their CB programs. This historical relationship between hospitals and their communities provides a unique opportunity to study the values, goals, and conflicts that emerge when traditional clinical care organizations take on the mission of improving community health.

Ultimately, this project uses CB as a lens through which to understand larger questions. What ethical considerations guide the hospital's venture into population health? How does the hospital conceive population health as an ethical endeavor? Ultimately, what does the addition of population health do to a hospital's identity? Admittedly, CB is only one aspect of any hospital's work in population health. Yet by focusing on CB, this study serves two purposes. First, the project names and begins to detail the new field of population health ethics, which will become increasingly important in the years to come. This field will also be essential to answering questions of changing identity. Second, the study expands the research agenda for CB to include aspects of the process that are poorly understood and are consequential to the health of many communities. A review of the existing literature allows one to see more clearly how this project begins to map the ethics of population health.

### ***Population Health***

This research study takes an atypical approach to the subject of population health. Much of the literature, especially that targeting clinicians and health administrators, defines population

health as efforts to improve the health of an attributed population or a population for which a health care organization bears some financial risk.<sup>16</sup> Instead, I start with a broader definition that first appeared in 2003 wherein the population is defined primarily in terms of geographic regions but can also be subpopulations such as ethnic groups, disabled persons, or prisoners.<sup>1,17</sup> Recognizing the confusion generated by different terminology, some have offered *total population health* as a way of describing this broader concept.<sup>18</sup> I prefer to push against the narrowing of population health and, quite frankly, to resist the medicalization of language that was initially used to describe the health of entire communities. Admittedly, the narrower definition is more popular within health care organizations.<sup>19</sup> Nevertheless, because I am interested in the breadth of population health's influence across health care delivery, and not simply the way to manage attributed populations, a broad definition of population health is asserted throughout this project. In this study, I define population health as having two related subsets of activities. First, population health includes community health, or the investment in population-level, preventive health programs, often focused on the social determinants of health. Second, it includes population health management, or the clinical strategies for patients for whom the organization bears some financial risk. Together, these two areas constitute the majority of new activities health care organizations are adopting in the era of population health.

### *Population Health Management*

All hospitals are looking beyond traditional, volume-based clinical care. One prominent example is the Hospital Readmissions Reduction Program, begun October 1, 2012, which exacts a financial penalty on hospitals that fail to prevent excess 30-day readmissions. To succeed financially, hospitals must consider a wider range of support for patients than was typical before this regulation. Other examples include new payment programs, including Medicare's phase-in

of value-based payment<sup>20</sup> and partial capitation in Accountable Care Organizations (ACOs). To adjust to new reimbursement models, systems are now investing in interventions that go beyond the clinical encounter, such as community-based education and building social support.<sup>21</sup> Expertise in episodic, clinical care is being paired with home health visits, education, and resources to overcome common social barriers to health. Although no one is certain how exactly this shift from fee-for-service to value-based care will occur, many consider the guidepost for the future of US health care to be the Triple Aim of care quality, population health, and cost containment.<sup>22</sup> This study focuses on community health rather than population health management, but the latter is important for understanding how clinical organizations often conceive of population health.

One of the reasons population health is often equated with population health management is due to the early prominence of Accountable Care Organizations (ACOs). While this project is not about ACOs, it is worth understanding how these organizations influence the thinking around population health. Many ACOs use a payer strategy of partial capitation, attempting to motivate health care organizations to prevent serious illness among their patients, thereby reducing cost and increasing profits. In addition to cost-effective clinical care, one of the strategies for these organizations can be addressing the social determinants of their patients' health. A 2015 study of nine ACOs by Costich, Scutchfield, and Ingram, however, found that most ACOs are still devoting their energies to developing basic governance and organizational structures as well as meeting short-term cost and quality metrics.<sup>23</sup> Noble and Casalino correctly observed that ACOs will generally be too small to truly influence the health of large geographic areas and will interpret their responsibility in terms of clinical realities.<sup>24</sup> In a more recent article, Casalino and colleagues suggest that coalitions between ACOs, hospitals, and public health agencies is the

most reasonable way to imagine health care organizations entering into the population health space, but that creating and funding such coalitions will not be easy.<sup>25</sup> Both the goal of building such coalitions and the associated concerns are acknowledged in bulletins for health administrators.<sup>26</sup> Despite the early prominence of ACOs, they have lost some of their luster and the realities of value-based care are entering the health system more broadly.

A dissertation that focused on the ethics of population health management would offer fuller background on new payment strategies, but this project focuses instead on hospitals' efforts in the area of community health. Hardcastle and colleagues rightly observe that the ACA missed several opportunities to more fully shift the health care system beyond clinical care, largely by ignoring the Health in All Policies approach to create a more integrated system.<sup>27</sup> While there is a general recognition that we must invest in the social determinants of health and other community health strategies,<sup>28</sup> there is also a systemic resistance to doing so.<sup>29</sup> Nevertheless, just as there are external forces moving hospitals into population health management, there are external forces pushing many hospitals into more robust community health effects as well.

### *Community Health*

Some efforts in population health management include community-based programs, but for financial reasons those interventions specifically target the organization's attributed patients. Community health programs, on the other hand, do not make a distinction between patients and other members of the community. A large subset of U.S. hospitals – namely, nonprofit hospitals – has a particular commitment to community health through their CB requirements. With the ACA, CB requirements have become more stringent and have pushed hospitals to invest more time and resources in meaningful community engagement. For example, when creating the

CHNA and CHIP every three years, nonprofit hospitals are now required to collaborate with several specific community partners: at least one governmental health department; those from medically underserved, low-income, and minority populations; and persons with special knowledge of public health.<sup>30</sup> This is a very specific way in which a nonprofit hospital must build relationships with the broader community and is one of several different ways in which the community health part of population health is an emerging trend for traditional hospitals. The public availability of many CB-related documents also provides some baseline knowledge of community health efforts.

I believe one of the most important observations from the studies on CHNAs is that they reveal a high degree of variability on how the hospital understands health needs. Some hospitals see health needs through distal root causes such as poverty or racial discrimination. Others look at proximate causes of morbidity and mortality such as diabetes and hypertension. Many hospitals fall somewhere in between. More than just a technical disagreement, these differences reveal something about how the hospital sees itself in promoting health and preventing disease. In other words, it reveals something of the hospital's self-identity. One of the first studies to consider CHNAs was conducted by Pennel and colleagues on 95 Texas hospitals. The authors found that only 7% of the CHNAs referenced the root causes or the social influences of disease.<sup>31</sup> A case study from Trenton, NJ, however, shows that such root causes can emerge from the CHNA process. In that city, four hospitals, an FQHC, and 40 community organizations developed a single CHNA, which identified poverty as the community's central priority.<sup>32</sup> A similar strategy emerged from the CHNA conducted by the H. Lee Moffitt Cancer Center in Tampa, FL. Among other priorities, cultural competence and health disparities were identified as areas of focus for the organization.<sup>33</sup> The range of needs identified through CHNAs show that

there is some meaningful difference in how some nonprofit hospitals see their place in the community health ecosystem.

The differences in CHNAs' priority needs might also demonstrate the importance of population health literacy. It may not be that those putting together a CHNA are committed to a disease-model of need over a root cause-model. Instead, it might be that the hospital or some of its key partners are not aware of the range of possibilities before them. Advocates of population health will miss a vital opportunity if they assume that hospital employees or the general public already knows that population health and health disparities are driven by social and economic determinants of health. This knowledge, although not new to scholars of public health, is generally not thought of when discussing health literacy. If the CHNA process is going to avoid the same myopic medical perspective that dominates much of health care, practitioners will need to improve population health literacy in the process of conducting CHNAs.<sup>34-36</sup> This education may also change the way hospitals and the public view the hospital's role in community health promotion.

In promoting community health, hospitals have a responsibility for both a trustworthy process and meaningful outcomes. By process, I mean the method in which decisions are made; by outcomes, I mean the impact of the decisions on community health. At the same time, community-wide decision-making on a topic as complex as health is easier said than done. One prominent example that takes into account both process and outcomes is Choosing Healthplans All Together (CHAT), which uses a deliberative democracy simulation to understand how individuals make tradeoffs related to health and health care.<sup>37,38</sup> Some nations have more experience than the U.S. in this regard, such as the United Kingdom's National Institute for Health and Care Excellence (NICE).<sup>39</sup> NICE includes a long-standing process by which priorities

for health resource allocation are publicly vetted. Australia, too, has done a great deal of work in public deliberation. Researchers attempt to understand the degree to which citizens want public preferences to be incorporated into priority setting and the best methods for eliciting such preferences.<sup>40-43</sup> These studies generally suggest both citizens' juries and discrete choice experiments are helpful in establishing public opinion on health care priorities but that public opinion must be balanced with expert opinion. Three review articles from 1999, 2009, and 2014 offer methodological overviews of eliciting public values in health care prioritization.<sup>44-46</sup> The most recent systematic review identified 39 studies using 40 elicitation methods, the most common of which were versions of discrete choice experiments. What is striking about all three reviews is that elicitation of public values, at least in the area of health care, has only taken questions of health care provision as its subject matter and has not considered matters of population health. Even when asking questions about the health care system, the studies focus on quality of health care delivery or resource allocation within health care delivery.<sup>47</sup> The discrete choice experiment in this study is meant to determine several stakeholder groups' opinions on matters of community health activities.

Value elicitation is one way of connecting community engagement (process) with community prioritization (outcome). A recent article by Santilli, Carroll-Scott, and Ickovics provides an example of how the Yale-New Haven Hospital adopted community-organizing principles in conducting its CHNA. They found that such a process led to better leverage with the community for subsequent interventions.<sup>48</sup> Although community coalitions have received renewed attention because of CHNA requirements, they are not new. What does seem to be new is the desire to more closely study the outcomes associated with these coalitions and to determine the degree to which they influence health prioritization and health outcomes. One review of



collaborative partnerships for health looks specifically at their impact on population health outcomes. However, all 10 of the studies that presented such outcomes are case studies, making it difficult to draw any conclusions about the details that make collaborations successful or not.<sup>49</sup> The methodological challenges to studying the effectiveness of community-based coalitions on health have been noted for some time.<sup>50-53</sup> Ultimately, if we are to achieve the goal of advancing population health, and if the community is to play a part in its progress, identifying how and why collaborations are effective will have to be part of the larger agenda. But doing so falls outside the scope of the proposed project.

The proposed research suggests that CB is a natural, if untapped, connection between the existing hospital and its entrance into population health. Over \$4 billion flow from traditional hospitals into community health programs under the auspices of CB, giving insight into how hospitals see their role in promoting health outside of their walls. Still, the connection between nonprofit hospital identity, CB, and population health is only becoming more complicated with the emergence of divisions of population health management within health care organizations. A 2013 survey from the Association for Community Health Improvement found great variance in the administrative infrastructure for population health management, from the departments in which it is located to the training administrators have to the time dedicated to such efforts.<sup>54</sup> A recent interview of 24 hospital leaders found a similar level of uncertainty.<sup>55</sup> Ultimately, the organizational relationship between community health and population health management will offer insight into how health care organizations understand the intersection of these areas. That relationship will also offer insight into the overarching question of identity that is at the heart of this project.

The extant literature on population health reveals a notable absence of studies on the ethical challenges in this work. As we move in the direction of population health, we will need to rethink ethics in the same way that we are rethinking other aspects of health care delivery. This is important because it can identify ethical lapses before they become crises. But we do not just study ethics so that we know what to do. We also study ethics so that we better understand who we are. Therefore, if we are to understand what we want health care organizations to be in an era of population health, we must invest in questions of ethics. Fortunately, even though this particular area of health care delivery is fairly new, we have a rich history of ethical inquiry in health care upon which we can draw.

### ***Ethics in Population Health***

This current project is not a study in bioethics, but no work on the ethics in health care can stand apart from the modern history of medical bioethics. Largely responding to Nazi-led research during World War II and other mid-20<sup>th</sup> century medical experiments that violated individual autonomy, the foundation of bioethics have been and remain the Belmont Report principles: autonomy, beneficence, and justice.<sup>56</sup> The work of bioethics fills a vital role in clarifying the proper relationship between the provider of medical care or researcher and his or her patient or research subject. At the same time, we ought not ask medical bioethics to do something it was not designed to do. The ethics of population health may have similarities to medical bioethics, especially for those questions emerging from population health management. However, much of the work of population health is largely distinct from medical care and medical research. Therefore, its ethical concerns and frameworks will likely be distinct as well.

### ***Public Health Ethics***

Over the past 15 years, the field of public health has recognized the need for ethical frameworks distinct from those in the medical community. Some of the most important early work focused on clarifying the concept of equity in health. Margaret Whitehead's 1991 article began this conversation, proposing inequity not merely as an inequality, but health differences that are avoidable and unfair.<sup>8</sup> This definition has served as the foundation for subsequent attempts at operationalizing equity, such as that by Braveman and Gruskin.<sup>57</sup> Perhaps what is most striking about Whitehead's article are the principles for action she believed stemmed from equity. First, policies addressing equity must be concerned with living and working conditions, or what we now call the social determinants of health. Second, equity policies should enable people to adopt healthier lifestyles. Third, equity policies require that people have real power and can actively participate at every stage of decision-making. And fourth, equity policies require intersectoral action driven by impact assessments.<sup>8</sup> As policy makers and health care organizations devote more attention to population health it is probably no coincidence that their recommendations are similar to those Whitehead laid out over 25 years ago.

The field of public health ethics began more clearly defining itself about a decade following Whitehead's article. In 2001, Nancy Kass published an accessible and widely-used framework for the emerging field.<sup>58</sup> Although the six-step framework is applicable for many public health actions, its analysis centers on the distribution of benefits and burdens. While such a framework has the benefit of requiring data and building public trust, a framework meant for public health practitioners is unlikely to meet the needs of health care organizations involved in population health. For example, such organizations do not have the authority to infringe on liberty and therefore the related ethical concern is not the most pressing. Shortly after Kass's framework was published, Marc Roberts and Michael Reich described three philosophical

approaches public health ethics could take: utilitarianism, liberalism, and communitarianism.<sup>59</sup>

Again, this work is meant more for governmental public health agencies. The noteworthy dimension of this paper is that they included views that emphasize character or virtue as a possible approach to ethical dilemmas. Although it has not been employed as much as utility or duty, virtue continues to be a valuable resource not only for public health ethics, but also for population health ethics.

Much like medical ethics, where general frameworks give way to specific analyses, there is no shortage of specific questions to be answered in public health ethics. For example, Norman Daniels has regularly tackled questions about the distribution of goods as well as questions of procedural justice.<sup>60,61</sup> Robert Field and Arthur Caplan addressed questions of vaccine mandates before it became the topic *du jour*.<sup>62</sup> My hesitance to simply reapply these frameworks is because they are most applicable for public health questions, where infringing on liberty is a pressing issue and the individual is often aggregated into a larger whole. Liberty and autonomy may not be at the center of population health ethics. However, public health ethics is helpful in the way it helps us turn our gaze away from clinical care and orients us toward the broader array of social goods we pursue. Population health requires a similar mapping of ethics that public health enjoyed more than a decade ago.

Many scholars have attempted to ‘map the terrain’ or ‘define the agenda’ for public health ethics. James Childress and colleagues described the general moral considerations of public health without taking a position on the ethical lens to evaluate those moral considerations.<sup>63</sup> By describing the meaning and scope of these moral considerations, the authors gave future scholars a starting point for evaluating existing ethical concerns and anticipating those that may emerge. Jennifer Prah Ruger addresses the ethics of social determinants of health

in a 2004 article, but her work is rather limited – to a debate between a Rawlsian approach to fairly distributing primary goods and an approach advocated by Sen and others that focuses on human capabilities.<sup>64</sup> Daniel Callahan and Bruce Jennings took a different approach to mapping the terrain and described the variety of ethical challenges in public health as well as four types of ethical analysis that may be used: professional ethics, applied ethics, advocacy ethics, and critical ethics.<sup>65</sup> Without taking a stance on a particular philosophical approach, the authors raised the important reality that people may approach ethical questions quite differently – some advocating for social justice, others seek particular applications of general concepts, and others seeking to identify principles for practitioners. This is a valuable lesson as population health ethics is mapped; hospital administrators, community members, policy makers, and scholars may have different philosophical lenses and may approach ethics with quite different goals. James Wilson also contributed to public health ethics in a way that could be adopted by population health. In a 2009 article he identified three factors that must be discussed to develop a normative framework for the field: recognizing that health is affected by the distribution of other goods; clarifying the specific goals of public health; and determining the relative importance of health when compared to other social goods.<sup>66</sup> Wilson rightly acknowledged that the complexity of social systems must be central to any consideration of public health ethics. The delivery of population health rests in similarly complex systems, with multiple organizations seeking multiple goals connected to multiple social goods. Clarifying the factors at work in population health will be necessary before any semblance of ethics can emerge.

Additional lessons for population health ethics can be learned from more specific applications of public health ethics. A 2007 article by Baum and colleagues observed that many public health frameworks failed in two regards. First, the frameworks were primarily designed to

resolve dilemmas rather than give the tools to prospectively prevent such challenges. Second, the frameworks were often narrow in focus and failed to recognize the multidisciplinary nature of public health, its professionals, and its objectives (a failing, I believe, the Callahan and Wilson articles cited above both avoid).<sup>67</sup> These observations are well taken and the same risks should be anticipated for the field of population health ethics. In a study that followed-up on these stated concerns, Baum and colleagues conducted 45 semi-structured interviews with public health officials in the state of Michigan.<sup>68</sup> The authors were able to identify five broad categories of concerns that these practitioners considered ethically laden. Of the many interesting findings, they discovered a divergence in theory and practice wherein practitioners were much less likely to directly identify social justice as foundational to their work in the same way that scholars certainly have. Instead, the practitioners used concepts such as fairness to resolve ethical challenges. Baum, et al. also found few examples of a simple utilitarian calculation, although such a lens is widely presented in the ethics literature. I suspect a similar dissonance would emerge if communities, scholars, and hospital administrators were asked separately about population health – a supposition which helps inform this project’s sampling methodology.

### *Population Health Ethics*

In addition to work from public health ethics, I briefly offer two other starting points for population health ethics. First, many of the questions arising in population health are organizational in nature. As someone who is interested in organizational identity, I find myself drawn to questions of organizational ethics. While there is a good deal of literature on corporate ethics and business ethics, there is less on organizational ethics within health than one might expect. Given the outsized role health care organizations play within most communities, it seems that organizational ethics should be a more central concern for those within health care. The

ethics of health care not only affects its patients and its employees, but can affect the surrounding community as well. For example, decisions at a hospital on employee unionization or wages are not only important in their own right, but can influence surrounding businesses as well. Or questions about how much financial risk a hospital that serves a low-income, urban area or critical access, rural area should bear is certainly a business decision, but it is also an ethical question that has profound consequences for those outside of the health care organization itself.

What exactly falls within the scope of organizational ethics in health care is a matter of debate.<sup>69</sup> By being too expansive, every decision within an organization is considered a matter of ethics, which risks losing the important role ethics can play. In clinical care, every interaction between a patient and provider has an ethical dimension, but not every interaction is a matter for ethics consultation. Just so, much of what occurs in the daily life of an organization has ethical elements, but not everything should fall under the scrutiny of ethical analyses. Some scholars imply that organizational ethics is the same as organizational culture.<sup>70</sup> But I tend to agree with the more expansive notion of others, who suggest it is: external relationships; internal cultures; and the decision-making of employees, especially around resource allocation.<sup>71</sup> This study on the ethics of population health explores questions in each of these three areas. In addition to the complexity of where exactly to draw the line, despite encouragement by the Joint Commission on Accreditation of Health Care Organizations, many organizations do not have the experience or processes in place to deliberate on matters of organizational ethics even if they want to.<sup>72</sup> Nearly two decades after Goold and colleagues outlined a process for organizational ethics consultations, my study found that major gaps remain in both identifying and responding to non-clinical ethical challenges.

The second starting point is a small amount of scholarly work related to population health, although it is population health conceived more narrowly than proposed in this project. In 2009, Arah offered what I believe is the first attempt to carve a space for population health in the philosophical / ethical literature.<sup>73</sup> The author emphasized the contextual nature of health and proposed that the context is both individual and social in nature. This inseparability of individual and population health is the cornerstone of his proposal, suggesting that we cannot discuss one without the other. I believe his instinct is right. Clinical care occurs within a larger health system and the patient comes from and returns to his or her broader social context when the episodic care concludes. The ultimate goal of population health cannot be understood apart from the health status of the individuals in that population, but it is not just the sum of individual health. Population health is also community-level factors, such as walkability and safety of neighborhoods, availability of food and medicine, and the disparities in health across populations. In a practical application of ethical questions that arise when the patient is seen in his/her social context, a *JAMA* Viewpoint from 2016 suggests that screening for some social determinants of health raises unique ethical challenges.<sup>74</sup> The article helpfully draws attention to the prospect that hospitals will have to grapple with important ethical challenges in an era of population health, such as whether it is ethical to screen for a social determinant for which the hospital does not have a remedy. Although neither of these works suggests that the work of population health creates its own ethical space, they both name unique challenges that occur when we think of health part of a larger social context. In an attempt to move slightly beyond these works and actually name population health as needing its own category of ethics, I propose looking beyond than usual suspects in frameworks for health care ethics.



## *Virtue Ethics*

This project is not bound by just one ethical framework, but I did wish to explore whether virtue ethics could be helpful in mapping population health questions. Virtue is already covered in major textbooks on bioethics,<sup>75</sup> but its traditional notion must be expanded if it is to have much currency within public health or population health. Because virtue ethics has historically been situated at the individual level, I have written that a new concept—structures of virtue<sup>76</sup>—offers a way of explaining the goals of public health policy and can be located at the population level where public health largely operates.<sup>77</sup> I suspect virtue could be particularly helpful in the routine, everyday work of population health, whereas the majority of ethical frameworks emphasize resolving dilemmas. I also believe it is the best framework for questions that seek to link action and identity in the way that this project seek to do.

At its core, virtue ethics is concerned with building character. It asks three simple questions: “Who am I?” “Who ought I become?” and “How ought I get there?” These questions recognize the dynamic between being and doing. The ethical frameworks we currently use help us answer “is this intervention ethical or not?” Virtue ethics can do that, but its strength is elsewhere. Structures of virtue as a framework answers the question of whether the intervention is ethical by also answering “does this cultivate virtuous people or not?” It contends that people who are encouraged through social structures to be prudent, temperate, industrious, and more, will also tend to be healthier. It also attempts to connect what we do with who we are. A virtuous person does right action, and right action characterizes a virtuous person – with both the definition of right action and virtue left open to debate. The primary struggle in bringing virtue to bear in public health is the challenge of connecting individual virtue with population-level activities. Justin Oakley presents Phillipa Foot’s 1977 article on euthanasia as the first to use

virtue ethics to inform a bioethical dilemma.<sup>78,79</sup> Yet despite a few notable applications in bioethics, Oakley suggests there has been relatively little work by virtue ethicists on various questions situated at the population or public levels.<sup>79</sup> In more recent studies, Gardiner explored two ethical dilemmas through the lens of virtue—a case of a Jehovah’s Witness refusing a blood transfusion and another about organ markets—where he accounts for health systems, but the primary unit of analysis is the individual.<sup>80</sup> And while Wendy Rogers’ article on virtue ethics in public health practice places a greater emphasis on the value of virtue in communal activities, she does not apply it to any specific case.<sup>81</sup> Given the historical emphasis of individual virtue, it is understandable why population-level bioethics has not often sought the wisdom of virtue ethics. Nonetheless, I contend that the dynamic between being and doing can be a useful way of understanding organizational-level ethics. Do hospitals take actions that reflect what kind of organization they want to be? Is the kind of organization a hospital wants to be reflected in its organizational structure? And does that structure make it more likely that certain ethical behaviors take place? While my article on structure of virtue was more directed toward public health practice, its central idea can be applied to the questions of population health.

In addition to the general theoretical strength of virtue ethics for questions of ethics and identity, structures of virtue has the added advantage of speaking to the moral character of both individuals and organizations. On the micro level, social structures influence individual behavior and identity. For example, an organization with clear procedures for reporting sexual harassment and consequences for perpetrators is likely to have an environment where sexual harassment occurs less often than in other organizations. The organizational structure cultivates certain individual behavior, which in turn shapes the character of the individual. At the same time, it is not just the individuals who are the moral actors. At the macro level, the organization itself is a

moral actor.<sup>82</sup> An organization with clear structures for dealing with sexual harassment is meeting its ethical obligation as an institution and one without such structures is failing to meet its ethical obligation. In other words, in many ways people interact with the organization as an organization and not just with the people who make it up. Having the right structures in place makes it more likely that the organization itself will take the right action. Right action, then, shapes the very identity of the organization as a place that is either hostile to or open to dealing with harassment. The ability to consider action and identity at both the individual and organizational levels is yet another attractive dimension of structures of virtue as a central framework for population health ethics.

### *Empirical Ethics*

As important as the normative aspect of ethics is, this project is not designed to develop a normative framework for population health ethics. Rather, it uses empirical methods to draw out ethical issues present in the promotion of population health. Several recent projects offer starting points for what we might find. The BEST (Best Ethical Strategies) Project used a grounded theory approach with virtue ethics to explore pressing issues of an ethical nature for U.S. health care organizations.<sup>83</sup> They also avoided asking direct questions that named ethics as ethics and instead allowed interviewees to speak of concerns about the operation of the organization that could then be explored as ethically laden. Ultimately, they referred to the virtues that emerged as ethical domains (i.e., confidentiality, care for vulnerable populations, consumer empowerment).<sup>83</sup> Sarah Clark and Albert Weale identify social values in health priority setting, dividing them into process values (i.e., the rules of decision making and the accountability for decisions) and content values (i.e., cost and effectiveness of interventions).<sup>84</sup> Andrew Tannahill has proposed a decision-making triangle for health care organizations working in population

health. Importantly, his work recognizes that values underpinning decisions are often left implicit. Tannahill's tool attempts to make these values more explicit.<sup>85,86</sup> Finally, a recent review article recognizes the need for blending empirical projects with normative ethics in population and public health.<sup>87</sup> The author divides the type of data that can be generated in empirical public health ethics into five categories: description and analysis of the actual conduct of a group with respect to a morally relevant issue; description and analysis of the actual moral opinions and reasoning of those involved in a certain practice; making ethics more context-sensitive through thick description; description of facts relevant to normative arguments; and showing the normative aspects of science, technologies, or organizations. This project generates evidence in the first two categories – actual conduct and actual moral opinions – and the project provides the starting point for developing thick descriptions of population health ethics in the near future.

To develop this description of population health ethics, I believe the most natural place to turn is Community Benefit (CB). Although it has not held a very prominent place within most hospitals, CB's location at the intersection of hospital and community makes it a sensible, focused point for exploring the intersection of population health and ethics.

### ***Community Benefit***

#### *History of Community Benefit*

In 1956, the United States formalized the tax-exempt status for nonprofit hospitals. The most prominent aspect of the IRS ruling was that hospitals would be tax-exempt if they provided charity care or uncompensated care within their financial ability to do so.<sup>88</sup> Less than a decade later, with the passage of Medicare and Medicaid in 1965, there was concern that there would be less need for charity care and tax exemption based on the provision of charity care would no

longer be justifiable. Therefore, in 1969 the IRS issued another ruling, which started the conversation about broadening community benefit.<sup>89</sup> With this ruling, the IRS established a broader notion of charity, wherein “the promotion of health is considered to be a charitable purpose” and where acceptable activities went beyond charity care as long as the activities were “deemed beneficial to the community as a whole.”<sup>90</sup> This ruling granted tax-exempt status to those organizations who met six specific criteria, including: operating an emergency department that cares for anyone regardless of ability to pay; participating in Medicare and Medicaid; creating a governing board that represents the community; and reinvesting surplus funds rather than disseminating them as dividends.<sup>91,92</sup> These 1969 criteria were slightly relaxed in 1983 with a ruling that would remain the primary guidance on the tax-exempt status of hospitals until the United States Senate took up the issue in the mid-2000s.<sup>91</sup>

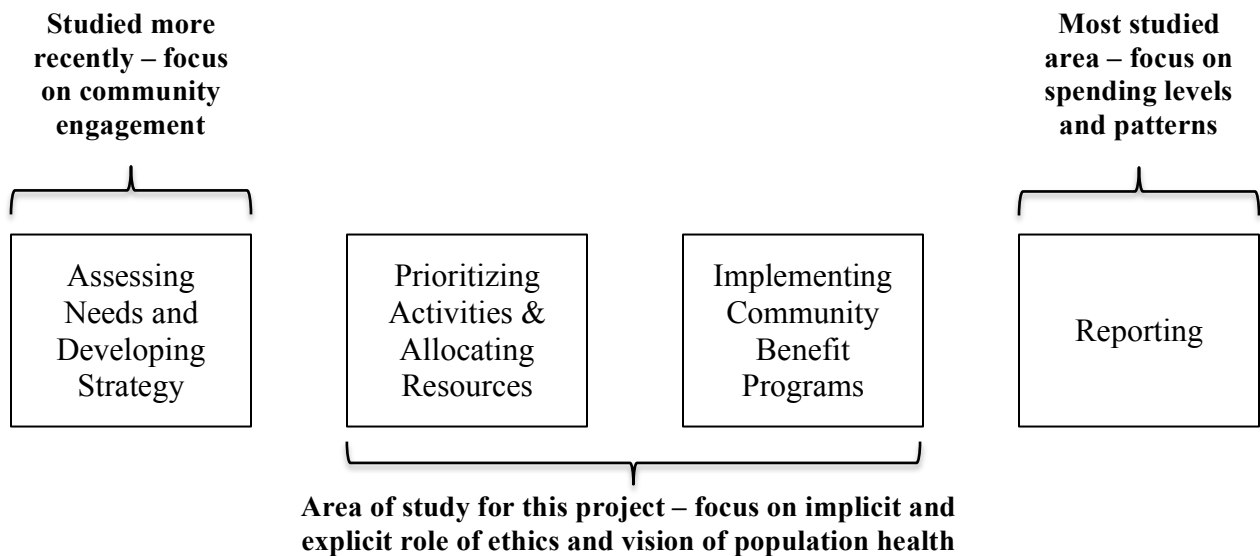
Hospitals’ tax-exempt status and the benefit they provide their communities were the subjects of several years of hearings with the Senate Committee on Finance, chaired by Senator Charles Grassley (R-IA). These hearings resulted in a 2008 revision to the IRS code, which requires hospitals to submit a more detailed accounting of their community benefit activities as part of their tax return (IRS Form 990). This form, known as Schedule H, now accompanies the hospital’s Form 990 that is submitted annually to the IRS by nonprofit health care organizations. On the form, hospitals indicate CB spending in eight separate categories: financial assistance at cost; shortfall from Medicaid patients; shortfall from other means-tested government programs; community health improvement; health professions education; subsidized health services, such as free clinics or mobile units; research; cash or in-kind community contributions. They also indicate spending on community-building activities and bad debt, but those categories do not count as Community Benefit. Community Benefit received further attention in the Patient

Protection and Affordable Care Act (ACA), signed into law in March 2010. The increased scrutiny has spurred research in the area of CB, but this is not just an academic matter. The combination of Senate hearings and the ACA has raised CB to a much higher profile than it had previously held within nonprofit health care organizations. Recent court cases are evidence of this change. For example, a November 2015 court decision in Morristown, NJ, required a single nonprofit hospital to pay \$26 million in taxes to its local government,<sup>93</sup> further evidence that the controversy over hospitals' tax-exempt status can have very real consequences for health care organizations. With the tax-exempt status of hospitals under greater scrutiny, many observers have noted that this new environment requires that hospital boards become much more involved in the process.<sup>94,95</sup> Filling the gap of knowledge on the CB process can benefit both communities and their hospitals in significant ways.

Three connections between the ACA and CB are worth noting. First, the ACA requires that nonprofit hospitals conduct Community Health Needs Assessments (CHNA) and develop Community Health Improvement Plans (CHIP) to address the most important identified needs at least once every three years.<sup>96</sup> Many nonprofit hospitals in the U.S. conducted their first legally required CHNA in 2013 and completed their second round in 2016. Second, the expansion of Medicaid and the inclusion of guaranteed issue creates an environment similar to that following the expansion of Medicare and Medicaid, wherein many question whether tax-exempt status is justified given the decreased need for charity care. Data on CB spending after 2012 (when the first major insurance provisions of the ACA went into effect) are not widely published, yet there is emerging literature on how CB spending may change due to provisions in the ACA.<sup>4,97-100</sup> Given the substantial decrease in charity care reported by nonprofit hospitals in states where Medicaid has expanded, this concern is likely to persist.<sup>101</sup> Third, the ACA's promotion of

population health, primarily through new payment mechanisms, creates a possibility of expanding the notion of CB to include social determinants of health,<sup>102</sup> as we saw with a December 2015 notice that some efforts on low-income housing could rightly be considered a community benefit.<sup>103</sup> Moreover, population health may increasingly intersect with CB in the form of new technology such as telehealth for many rural and underserved communities.<sup>104</sup> Hospitals currently report many activities related to social determinants, known as community building activities, on Part II of Form 990 Schedule H. Activities listed on Part II do not count toward CB, but many advocates hope the definition of CB can be expanded to do so.<sup>105</sup>

**Figure 1.1: Community Benefit in Existing Literature**



*Community Benefit's Black Box*

I think of CB as occurring in four main stages and there are gaps in knowledge throughout (see Figure 1.1). We know the most about the first and last aspects of this process, largely because there are public documents available for researchers to study. Due to the lack of

easily accessible data, we know little about how hospitals prioritize and allocate discretionary CB funds for community health activities. We do not know *who* within the organization ultimately makes the decisions, *how* the decisions are made, or *why* one activity is prioritized over another. We also do not know how community members are involved in these decisions or how they perceive the decisions. Yet these processes are central to the work of population health. These middle stages – prioritizing, allocating, and promoting activities – are the center of this research project.

Most of the existing CB research concerns what goes in (CHNAs) or what comes out (spending patterns). This project will shift the conversation about CB from “do they do enough” to “what do we actually expect of our nonprofit hospitals”. Amidst major changes in U.S. health care, CB provides a \$62 billion fulcrum for leveraging health care organizations’ move into population health. When investing in community health, do we want hospitals to engage mainly in clinical interventions? Should they provide financial resources to other organizations that work on social determinants? Or should they be working directly on social determinants of health themselves? Would we prefer that they be an anchor institution that brings others to the table and advocate for changes in public policy?<sup>106</sup> CB provides a unique lens through which to view these possibilities because a hospital’s decisions on how and where to direct resources are largely up to the hospital itself. Therefore, the process and goals of CB reveal quite a bit about how the hospital views its role in advancing population health. Both the *process* and *purpose* of allocating CB resources are considered in this project. I study organizational structure, organizational processes, and levels of community engagement to reveal organizational ethics implicitly. Prioritization strategies reveal organizational ethics more explicitly. Altogether, this



information helps open a black box where billions of dollars in foregone tax revenues are allocated by health care organizations.

### *Community Benefit Spending*

The majority of academic literature on CB has appeared since 2008, when information on spending was gathered in a more uniform way and expectations on spending were on the national health policy radar. To judge merit of tax exemption, the amount of CB spending is often compared to the value of tax exemption, which the most recent national analysis puts at \$24.6 billion for the year 2011.<sup>4</sup> Studies on spending use the publicly available Form 990 Schedule H submitted at the federal level; some also use state tax documents. In an analysis using 2009 data of 1800 nonprofit hospitals from across the country, Young and colleagues found that on average hospitals spent 7.5% of their operating expenses on CB, with .4% allocated to community health improvement (or 5.3% of total CB spending going to community health improvement). The variation of total CB spending among hospitals was also quite large, ranging from 1.1% of operating expenses for the lowest decile to 20.1% for the highest decile.<sup>5</sup> A multi-year study by another group of researchers found that this figure increased from 7.6% to 8.3% from 2009-2012.<sup>107</sup> An analysis of 2009 data from 127 Wisconsin hospitals found strikingly similar results – 7.5% of operating expenses were devoted to CB, with about .4% of operating expenses allocated to community health improvement.<sup>108</sup> Another national analysis on spending, also using 2009 data, assessed whether CB spending was correlated with community health needs. Singh and colleagues created standardized measures of county health needs using the 2010 County Health Rankings and found that overall CB was higher for hospitals in counties with higher health needs, but that spending on community health improvement was not.<sup>109</sup> This raises a question of whether there may be trade-offs between spending on charity care and other spending such as

community health improvement. In an analysis of Maryland hospitals from 2006-2010, Singh found that there was no evidence of such a trade-off. Despite the fact that hospitals in the poorest areas of the state bear a larger burden of uninsured patients, they did not show evidence of such a trade-off. Moreover, a trade-off was not seen during the 2008 recession, wherein one may expect to see a reduction in spending on community health programs to compensate for the increase in charity care.<sup>110</sup> Maryland and California have state CB regulations and make data available for researchers, which lead those two states to often be at the center of studies.<sup>111-114</sup> Other studies on CB spending have compared investor-owned and nonprofit hospitals.<sup>115,116</sup> Nearly all such studies are directed at shaping public policy and asking whether tax exemption can be justified based on CB spending.

The fact that so many studies on CB rely on Form 990 Schedule H raises at least two important questions. First, are these reports valid? Second, are these reports a good measure of the degree the hospital benefits the community? To answer the first question, Rauscher (Singh) and Vyzas compare the self-reported CB expenditures from these forms for 218 nonprofit California hospitals with other measures of charitable activity. These measures included charity care as reported in financial statements (adjusted with the cost to charge ratio), the Medi-Cal inpatient load, and measures of community orientation and provision of community health services constructed from data in the annual AHA survey. The authors found a strong correlation between the self-reported spending and these other measures, indicating that despite strict standardization, the self-reports are likely an accurate measure of community benefit.<sup>117</sup> The second question –whether these reports are a sufficient or good measure of community benefit – remains largely unanswered.

## *Community Benefit and Community Health*

The ACA may yet provoke a pivot in thinking about CB – from a narrow focus on spending to a broader consideration of how best to measure benefit to community health. In fact, many of the studies on spending conclude with just such an observation and recent articles have been explicit about what that might entail. The theme of most recommendations centers on the desire to better measure inputs, including degree of community participation and to include outcomes, especially related to community health metrics. Rubin, Singh, and Jacobson make a case for the latter, specifically suggesting that the IRS assess population-health performance measures which are already included in the required CHIPs.<sup>92</sup> Rubin, Singh, and Young also include this recommendation as well as recommendations for greater availability of data and clearer standards for what counts toward community benefit when targeting community health.<sup>98</sup> Another possible outcome to measure is the effect of CB spending on other funding streams. A very recent study using 2009 and 2013 data found that local public health spending did not affect the amount of nonprofit hospitals' investment in community health activities, which the authors suggest should raise the concern of whether efforts are as complementary as they could be.<sup>118</sup> The underlying question of these recommendations and much other literature from organizations such as Community Catalyst is coming to terms with the fact that we really do not know to what degree CB spending is truly improving community health.<sup>119</sup>

A review of literature on community health programs linked to CB provide further insight into what could be done to improve the regulations and research around CB. Several recent commentaries have suggested that CB programs be reoriented toward the social determinants of health and that they take a regional outlook rather than focus on a narrow provider area.<sup>97,120,121</sup> Importantly, there is movement within many systems on both of these

fronts. A far more specific recommendation – mandating community health spending based on profitability – was offered by Bakken and Kindig after noticing a wide variability in such spending.<sup>122</sup> Olden and Hoffman conducted a literature review on hospitals’ health promotion services. Interestingly, their review revealed trends as to when health promotion programs were more common based on hospital characteristics and community characteristics; they also reviewed the external demands and internal demands of hospitals engaged in such activities. Nowhere in this literature review, however, was the concept of evaluation or impact raised.<sup>123</sup> Similarly, a literature review by Burke, et al. on the types of CB programs hospitals have in place showed that out of 106 programs that met inclusion criteria, only 33 of them were done with a community partner and very few of them included rigorous evaluation.<sup>124</sup> These literature reviews, and the call for evidence-based community benefit programs,<sup>125,126</sup> only reinforce the notion that there is much room for growth in understanding the impact of community health improvement programs run by our nonprofit hospitals.

One starting point for better understanding the impact of CB programs is the assessment of CHNAs and CHIPs. These documents, like Form 990 Schedule H, are publicly available, and each nonprofit hospital is required to produce a CHNA and CHIP at least every three years. Nearly every example I have reviewed has published the two as a single document, which is why I use CHNA as the shorthand for both. Several recent studies have focused on the level of community engagement described in CHNAs,<sup>127</sup> especially the level of collaboration with local health departments.<sup>128-130</sup> These studies found significant variation in cooperation and no strong predictors of collaboration between the nonprofit hospital and other organizations. A more recent study found that hospitals operating as part of health systems were making greater progress in CHNA implementation while hospitals with a greater number of uninsured were making less

progress in implementation.<sup>131</sup> Still, little remains known about whether a fuller implementation of the CHNA actually improves population health. At the very least, CHNAs and CHIPs may pull us away from a narrow focus on spending. At their best, studies that evaluate these documents can give us insight into the kind of collaboration hospitals have with their community, what they see as the most pressing community health needs, and what they believe can be done in the course of a couple years to improve population health where they serve.

The ACA positions CHNAs and CHIPs as cornerstones of the work to advance population health and they carry an expectation of community collaboration. In 2011, the IRS issued a bulletin stating, “a CHNA must take into account input from persons who represent the broad interests of the community served by the hospital facility.”<sup>132</sup> At a minimum, this includes, “persons with special knowledge of or expertise in public health; federal, tribal, regional, State, or local health or other departments; ... leaders, representatives, or members of the medically underserved, low-income, and minority populations, and populations with chronic disease needs.”<sup>132</sup> Many studies in this area have employed case-study methodology to describe hospital-community engagement to create a local needs assessment. Sampson, Gearon and Boe describe a process largely motivated by the ACA and meaningful use requirements, wherein 1800 Polk County, WI residents were involved at some stage in developing the CHNA and many of whom continue to be involved in workgroups to address the identified needs.<sup>133</sup> Kuehnert, Graber, and Stone used a web-based survey, generating both quantitative measures with Likert scales and qualitative insights from open-ended questions, to demonstrate that those community members who were directly involved in the CHNA process were more satisfied with the final product than those who did not participate.<sup>134</sup> These results suggest that community engagement can increase community support for the final product. Another looked across multiple examples using the

Rural Community Group Model to determine challenges and opportunities for community engagement in rural settings.<sup>135</sup> In an analysis of community engagement, Becker found group think to be particularly strong in rural communities where people know each other well,<sup>135</sup> which may signal an important risk to be aware of in those instances where strong community health networks exist. Sabin and Levin also provide a case study of a rural hospital meeting CB requirements and conclude that collaboration and identifying existing community assets are key to a successful program.<sup>136</sup> Yet another qualitative study of 21 hospitals in the Appalachian region of Ohio found that hospitals have been formalizing their CHNA processes, are cultivating local partnerships, and developing an evidence base for their work.<sup>137</sup>

The institutional knowledge on CHNAs and other aspects of the CB are largely held by administrators whose responsibilities include various stages of the CB process –from developing a CHNA through reporting on CB activities and spending. What is not known is the degree to which their responsibilities may also include directing resources for community health improvement or actually implementing such programs. These CB administrators have little discretion over the large amount of CB expenditures that go to charity care and uncompensated care. Therefore, this study focuses on the areas where administrators may have more influence over the direction of CB activities, a so-called ‘active portfolio’. Although once estimated to be 8% (community health improvement and donations to community organizations), or over \$4 billion of annual CB expenditures,<sup>5</sup> the discretionary portfolio is almost certain to increase with the provisions of the Affordable Care Act aimed at reducing un-insurance and under-insurance. This means that the scope over which CB administrators may have discretion is poised to increase.

Previous literature has laid groundwork for extending research to include all the activities surrounding CB. The most poorly understood aspect of the process – the allocation of resources – is central to the research project and, I believe, the richest area for ethical exploration.

### *Bringing Together Three Fields of Knowledge*

The literature presented in this proposal comes from three disparate fields: population health; health ethics; and Community Benefit. This research project asks questions at their intersection and considers each one naturally informing the others. Population health is a growing trend in US health care. It is changing the way care is delivered and it is also changing the way hospitals engage their communities. One part of the change in community engagement is the increased prominence of CB in our nation's 2000 nonprofit hospitals. As hospitals take on new activities, they will inevitably encounter new questions of right behavior, or ethics. By studying the ethics and values that underlie the work of population health, we will begin to understand both what hospitals should do and what they should be in the coming era of health care delivery.

The research questions at the center of this study are both empirical and theoretical. They gather information about what is actually occurring and seek to give others the ability to articulate what ought to be taking place. Therefore, the research design has both empirical and theoretical components. The empirical work is explained in greater detail in the following chapter and it provides the general terrain of population health ethics as it is currently taking place in health care. The theoretical work steps back and asks, given what we know about the ethical challenges, how might we want to approach them in the future? Because I believe the challenges are not just isolated ethical dilemmas, but are also questions of identity, I suggest virtue ethics as the lens through which we view these emerging questions. Virtue ethics, as

described above and in greater detail in Chapter 5, has a unique ability to tie action together with identity. Neither the empirical nor the theoretical work answer all the questions on the topic of population health ethics, but I hope they build on the solid foundation of scholarly work described in this chapter.

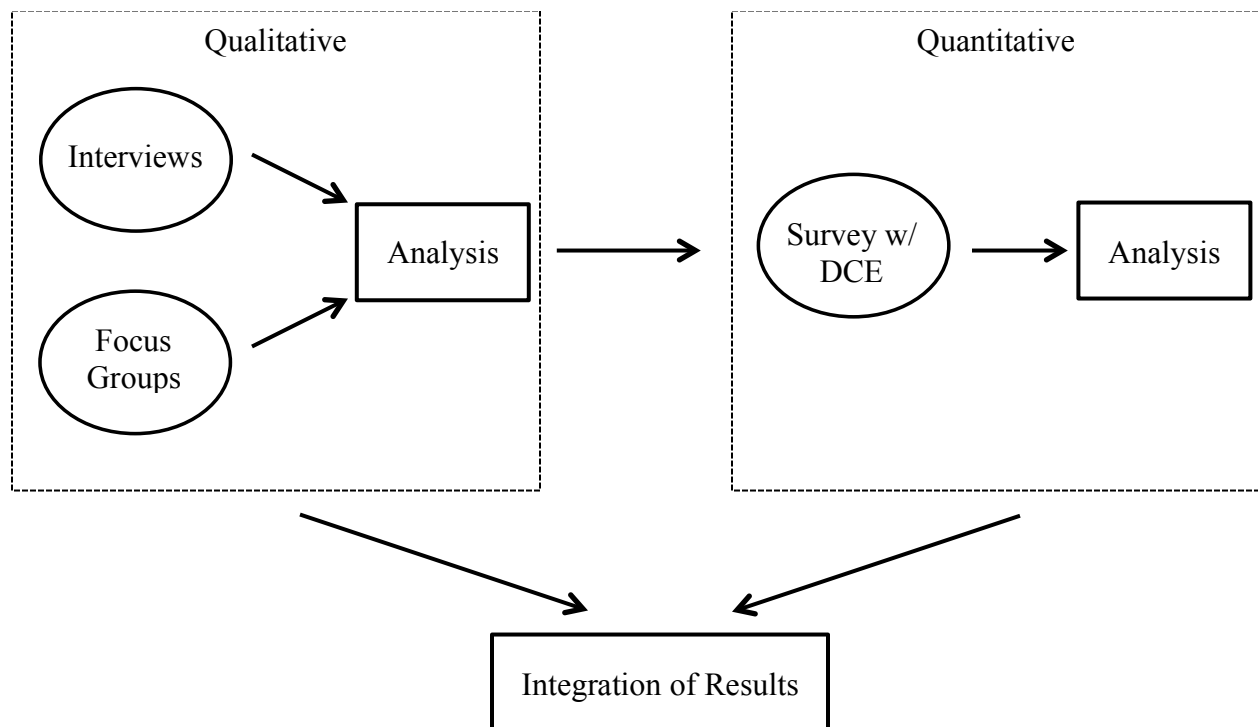


## Chapter 2 – Research Design

This study employs a sequential exploratory methodology (see Figure 2.1). I chose this method because the qualitative work in the first stage allows a broad exploration of the understudied area of ethics in population health. The qualitative data from interviews and focus groups also provide the foundation for a survey and choice experiment that produce quantitative data on resource allocation and frequency of encountering ethical concerns.

The Institutional Review Board at the University of Michigan approved the study (HUM00117287).

**Figure 2.1 Study Design**



## *Interviews*

In order to answer basic, yet understudied questions about CB, I began this study with semi-structured, qualitative interviews. This allowed me to map the CB process and to determine the most pressing ethical concerns for those charged with its execution. I conducted the interviews without a prevailing theoretical framework and instead employed grounded theory,<sup>138</sup> which allowed the experience and insight of those working in the field to lead the way in thematically organizing the ethical dimensions of their work. Given the tremendous diversity of how CB is situated within hospitals, I did not anticipate reaching saturation in that topic area. I did, however, attempt to reach saturation on the subjects of organizational process and ethical concerns.

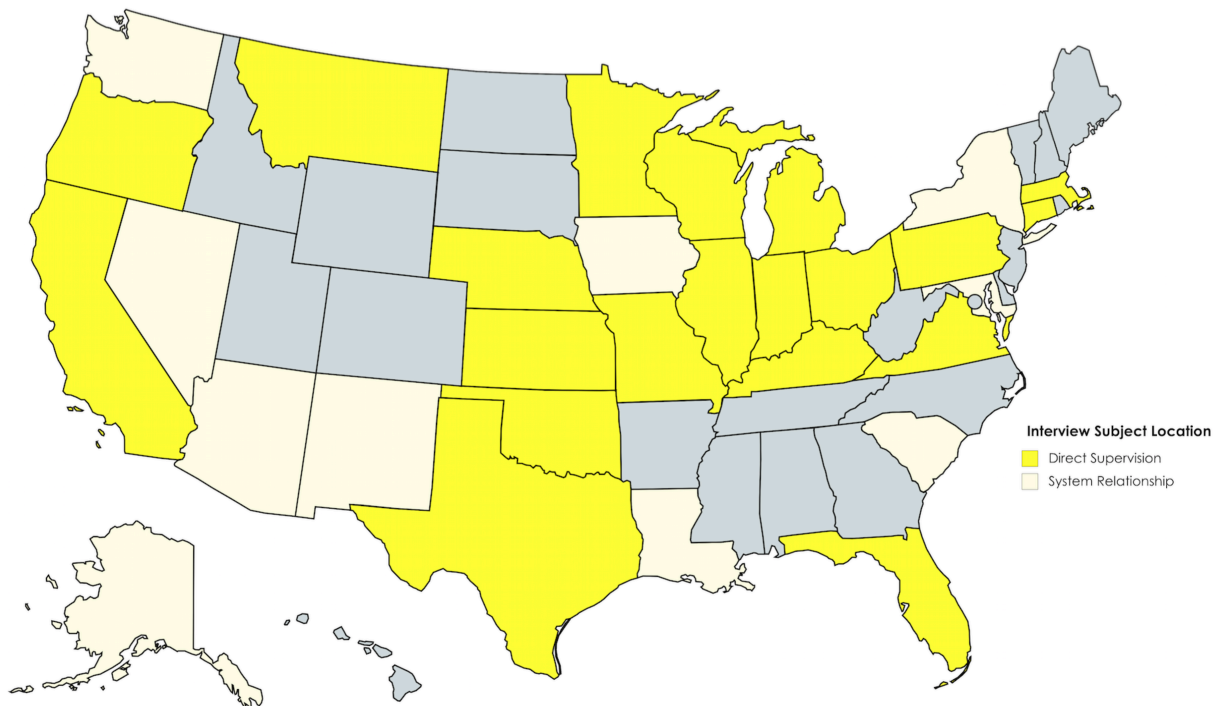
The majority of the interviews were with CB managers (n=33) from 27 different organizations. Those interviews were supplemented with interviews of administrators overseeing population health management (n=5) from five of the same organizations in which CB managers worked. This distribution allowed me to devote the majority of time to basics insights of CB, but also to triangulate any comments on CB's relationship to divisions of population health management with those charged with overseeing population health management itself.

**Table 2.1 Demographic Characteristics of Interview Subjects**

<b>Geographical Service Area</b>		<b>Level Within Organization</b>	
Large Metro	5	Local Facility	14
Medium or Small Metro	10	Region	8
Micropolitan / Non-Core	5	System	16
Multiple	18	<b>State Status of Medicaid Expansion</b>	
<b>Religious Affiliation of Organization</b>		Expansion	21
Religious Affiliation	22	No Expansion	10
No Religious Affiliation	16	Both (regional supervisors)	7
<b>Hospital Size (for 14 at local facility):</b>		<b>System Size (for 16 at system level):</b>	
Range=15-1000 beds		Range=6-39 facilities	
Mean=366 beds		Mean=20 facilities	

I stratified interview subjects in four key areas: (a) religious affiliation and not; (b) rural and urban/semi-urban; (c) hospital size based on number of beds; (d) level within the organizational structure (see Table 2.1 and Figure 2.2). I originally intended to balance along states that had expanded Medicaid and those that had not, assuming that Medicaid expansion would have a significant impact on CB resources, but that suspicion was not borne out in the early data. Therefore, I became less concerned with that particular distribution over time. The initial recruitment of interview subjects began with a Community Benefit Advisory Board, which includes members from both Catholic Health Association and Vizient. This is a group of 30 administrators considered leaders in this field and coming from a variety of hospitals and health systems. I selected several key informants (index respondents) from this group and used chain referral to identify additional interviewees.<sup>139</sup>

**Figure 2.2 Location of Interview Subjects**



Interview subjects were recruited with an e-mail that explained the intent of the research study and requested a 45-60 minute interview. All but one e-mail request was returned and I was able to schedule an interview with all interviewees who responded to the initial request. Interview subjects received no compensation for their time. The interviews were semi-structured (see Appendix 1 and Appendix 2) and were conducted either in-person or over the telephone. Before each interview, I reviewed the publicly available CHNA of the hospital where the interviewee was employed. For a regional or system-level employee, I reviewed several CHNAs from the region or system. This allowed me to frame questions in a way that were more readily understood by the interviewee. For example, when asking about priority, I would often reference the specific health needs identified in their CHNA. When asking about collaborations, I would often reference community partners named in their CHNA. Interview subjects were sent a consent form in advance of the interview and gave verbal consent before the interview began.

Interviews were audio-recorded and transcribed verbatim by a professional company. I then anonymized the transcript by removing any identifying characteristics including individual names, organization names, and geographical locations if there were fewer than three hospitals associated with an area. All interviews took place between August and November 2016.

Analysis of interviews included two rounds of coding, which began after the final interview was completed. The first round utilized provisional and open coding techniques,<sup>138,140</sup> with the code book revised after every tenth interview. A final list of codes was used for the second round of coding of all interviews. I entered all codes into NVivo 11.0 for further analysis.

Like any inductive approach to research, this part of the study has many threats to validity, the most significant of which is confirmation bias. I took several steps to avoid these threats. First, I had the interview script reviewed by other researchers before beginning interviews and had conversations with them during the interview process as revisions were needed. Second, I maintained a journal throughout the interview and coding process. The journaling process itself ensures a more self-critical approach to the research and can be reviewed by other researchers as needed.<sup>140,141</sup> Third, the interviews with population health management and the review of public documents helped triangulate much of the information received during the interviews. Fourth, I regularly discussed the research material with my advisor and another colleague familiar with my research questions.<sup>141,142</sup> Fifth, I conducted several member checks at the beginning of the analysis. One opportunity took place at a conference of community health professionals. Another opportunity occurred at the same Community Benefit Advisory Board meeting that served as the index group for the interview recruitment. All of these strategies provided checks on quality throughout the process. Before

publishing any results based on interviews, a second coder will interpret data and we will assess agreement on coding.<sup>143</sup>

### ***Focus Groups***

The focus groups served two primary functions. First, they helped identify and define the attributes and levels needed for a discrete choice experiment (DCE). Using focus groups for this purpose is standard practice in developing conjoint analyses.<sup>144</sup> Second, they allowed for group-level conversation about the ethical concerns that come from community engagement work. Using focus groups for this second objective is ideal because group dynamics can often generate discussion on and uncover information about poorly recognized issues such as ethics. Half of the focus groups (n=5 groups; n=20 individuals) were with hospital employees who had at least part of their job in community outreach or community health. The other focus groups (n=5; n=23 individuals) were with community leaders who collaborate with hospitals. Both types of focus groups followed similar scripts (see Appendix 3 and Appendix 4).

**Figure 2.3 Location of Focus Groups**



I selected five cities across the country for focus groups (see Figure 2.3). There was a convenience factor of each city, but they were also balanced across size of metropolitan area and region of the country. My primary contact in each city was a hospital employee who assisted in recruiting participants for both focus groups. Participants were offered a \$25 gift card for one hour of their time. Participants received a consent form at the beginning of the focus group and gave verbal consent before proceeding. Participants were told that their identity would not be disclosed as a part of the research, but that I could not promise other focus group participants would not reveal information shared during our time together. Audio recordings were made of the focus groups and I also took hand-written notes that were typed immediately following each focus group. Each focus group had 4-5 participants.

To achieve the first aim of the focus group – identifying attributes and definitions for the DCE – I followed recommendations offered by researchers doing similar work.<sup>144-147</sup> I began with a list of attributes, levels, and definitions that I understood to be important from my own work in the area of resource allocation as well as the sorting filters (e.g., risk factors, populations, outcomes) put forth in the Community Health Navigator developed by the Centers for Disease Control and Prevention.<sup>148</sup> Following each set of focus groups, I revised the list to reflect what was unimportant, missing, or needing clarification. Often, there were diverging opinions. For example, hospital employees preferred the terminology of “vulnerable population” whereas community members preferred the terminology of “at-risk population.” The final two focus groups were not just a discussion of attributes and levels, but a mock set of discrete choice experiments that each participant completed. This iterative process led to a list of six attributes, each with three or four levels, which were ultimately used in the survey (see Table 2.2).

**Table 2.2 Attributes, Levels, and Definitions for Discrete Choice Experiment**

<b>Attribute</b>	<b>Level</b>	<b>Brief Definition</b>
<i>Priority on Community Health Assessment</i>	Priority Need	Need <b>identified as a top priority</b> based on severity of problem
	Secondary Need	Need <b>identified as a secondary priority</b> based on severity of problem
	Other Need	Need <b>not identified as a top or secondary priority</b> based on severity of problem
<i>Focus of Intervention</i>	Clinical Focus	<b>Clinical approach</b> or medical intervention
	Social Determinant Focus	<b>Upstream determinants of health</b> – housing, education, food access, etc.
	Advocacy / Public Policy	<b>Advocacy effort</b> aimed at changing public policy
<i>Time to See Impact</i>	Immediately	Impact possible to measure <b>almost immediately</b>
	1-2 years	Impact possible to measure <b>in 1-2 years</b>
	3-5 years	Impact possible to measure <b>in 3-5 years</b>
<i>Population of Interest</i>	Vulnerable / At-Risk Group	<b>Vulnerable or at-risk population</b> in a culturally-competent manner
	Children / Adolescents	<b>Children or adolescents</b>
	Entire Community	<b>Community as a whole</b>
<i>Partnership for Implementation</i>	Coalition of Partners	<b>Coalition of partner organizations</b> , including other health care organizations and/or public health
	Established Partner	Partner organization the hospital <b>has worked with before</b>
	New Partner	Partner organization the hospital <b>has not worked with before</b>
	No Partner	Hospital itself <b>without a community partner</b>
<i>Evidence of Effectiveness</i>	Strong Evidence	<b>Strong evidence</b> that the program is effective; considered a best practice
	Growing Evidence	<b>Growing evidence</b> that the program is effective; considered a promising practice
	No Evidence Yet	<b>No evidence yet</b> the program is effective

The second aim of the focus group – identifying the ethical concerns that arise when engaging in community health work – took place after the discussion on allocation criteria. Participants were asked to discuss any ethical concerns they had encountered while working in



the area of community health improvement. When needed, subtle probes asked about concerns that had been raised by previous groups or in the interviews. Following the focus group, I generated a list of ethical concerns to consider including in the survey.

Because the survey depended on the data from the focus groups, it was essential to avoid the major threats to validity that often arise in qualitative research. The risks were three-fold: using an unrepresentative group of CB administrators and community members for the focus groups; gathering responses that reflect socially desirable answers; and imposing a confirmation bias upon the criteria that emerge from the focus groups. In recruiting subjects for the hospital focus groups, I chose to allow my contact to take the lead in recruiting other research subjects. While this was convenient, it admittedly may have excluded voices that differ on which criteria are important or what ethical concerns arise. In recruiting subjects for the community leader focus groups, I chose to recruit leaders who already worked with the local hospitals. This strategy ensured participants had the knowledge of and experience with the subject matters of interest. Nevertheless, this strategy leaves two major categories of people without voice in this part of the project: community leaders who, for whatever reason, do not work with the hospital; and community members who are not leaders within community organizations. Both of the groups not included may have had different perspectives on my questions.

The best way to avoid the other threats to internal validity – social desirability and confirmation bias – is to follow established methods for focus groups and qualitative data analysis. I followed a script that was reviewed by researchers familiar with the project to ensure questions were not leading. As moderator, I monitored my body language, tone, and facial expressions to remain as neutral as possible. When moderating, I also made efforts to confirm that the entire group understood questions similarly and that dominant answers did not crowd out

dissenting opinions. I maintained a journal throughout the research process, documenting changes to the attribute list and thoughts on the ethical concerns that arose in conversation, so that other researchers may review my thought process if needed.

### ***Survey with Discrete Choice Experiment***

The survey assessed key concerns of population health ethics with a DCE as well as questions asking about frequency of encounter with ethical dilemmas (see Appendix 5, question 15). In addition, the survey contained two free-text responses, which allowed for additional qualitative data to be integrated into the final results of this study.

DCE is a type of conjoint analysis, which is a method premised on the idea that the utility of any good or service can be determined by assessing the relative utility of that good's combined component parts.<sup>149</sup> Dividing the good into its key components or characteristics allows one to quantify the relative importance of each characteristic. In the current study, I divide community health projects into their key characteristics in order to determine which of those characteristics is most important to the project's perceived utility. The method does its best to identify the most important characteristics but is limited in that one can never fully capture the full nuance of all attributes that make up a good or service. The method is also limited by the fact that it assumes mutually exclusive attributes when that is often not the case. An additional challenge with my application of DCE is that the method has typically been used to assess a single discrete choice (e.g., to vaccinate or not; to purchase health insurance or not; to have surgery or not). Organizations involved in community health projects may make decisions to support dozens of projects or not. Therefore, the decision offered in this study's DCE may be far more connected and influenced by many other decisions than most other applications of this method.

This study's use of conjoint analysis was a DCE profile case method<sup>150,151</sup> and followed the checklist established by the ISPOR conjoint analysis task force.<sup>144,152</sup> Stated preference experiments are increasingly used in health services research and have been used to show that physicians require a substantial pay increase to participate in coordinated care,<sup>153</sup> that cost and coverage are the primary drivers of health plan choices,<sup>154</sup> and that cost, trust, and shared decision making are the highest values of a health care delivery system.<sup>155</sup> These experiments are also used to determine underlying values for health policy, such as determining priority for liver transplantation,<sup>156,157</sup> patient preferences for health treatments,<sup>158</sup> and balancing the many aspects of cancer genomics research.<sup>159</sup> In fact, these experiments have been shown to reproduce the relationship of social values that were first generated by much more time-consuming survey methods.<sup>160,161</sup> Choice experiments have also been used for explicitly ethical questions,<sup>162,163</sup> but this study is the first application of this method in the area of Community Benefit or population health ethics.

A stated preference experiment such as a DCE generates clear, quantifiable relationships between criteria and each research participant receives equivalent information to make decisions. The dependent variables are the relative importance of decision criteria. Given the number of attributes and levels, the experimental design required 36 full-profile choice sets. After consulting others, I determined that each respondent could consider up to six choice sets (see Appendix 5, question 41 for example of a choice set), which required the 36 profiles to be divided into six sets of six. These sets were then randomly allocated to respondents. I wanted to keep the total response time to 15 minutes or less, which required asking fewer basic demographic questions than is typical (for example, I did not ask age or race/ethnicity). Nevertheless, I was able to include those I believed could have a significant impact on survey

responses: profession; gender; years working in the field; urban / rural location; and education level.

The survey was self-administered online through Qualtrics. Fellow researchers reviewed the initial draft of the survey and recommended changes. In December 2016, I conducted three cognitive tests with one hospital employee and two community leaders to determine how questions were interpreted and whether there were any confusing elements to the survey. In January 2017, I pre-tested the survey with a total of five hospital employees and four community leaders, making revisions after every second respondent. These respondents covered a range of ages, experience, and education levels.

The two populations of interest were: employees of nonprofit hospitals who worked in or supervised activities in Community Benefit, community health, or community engagement; and leaders of community organizations who may collaborate with hospitals in community health improvement. I fielded the survey between February and May 2017 and employed a convenience sampling method to recruit respondents from both of the target groups. I sent 390 requests via e-mail, with an overview of the research study, a link to the survey, and a description of the incentive. Respondents were asked to forward the survey request and link to colleagues who fit within the populations of interest. For hospital employees (n=225; 32 of whom were ethicists), I contacted CB managers from lists provided by Catholic Health Association and Vizient. For community leaders (n=136), I took three approaches: I gathered information on United Way chapters from the Guidestar database; the national office of Catholic Charities sent an e-mail to health liaisons of local chapters; and the national office of YMCA sent an e-mail to health liaisons of local chapters. The ability to forward the survey to others makes it impossible to determine a response rate for the survey. Any personal information (such as the name and e-mail

included for the incentive) was kept separate from survey responses. All respondents were eligible for a random drawing of one of ten \$100 gift cards.

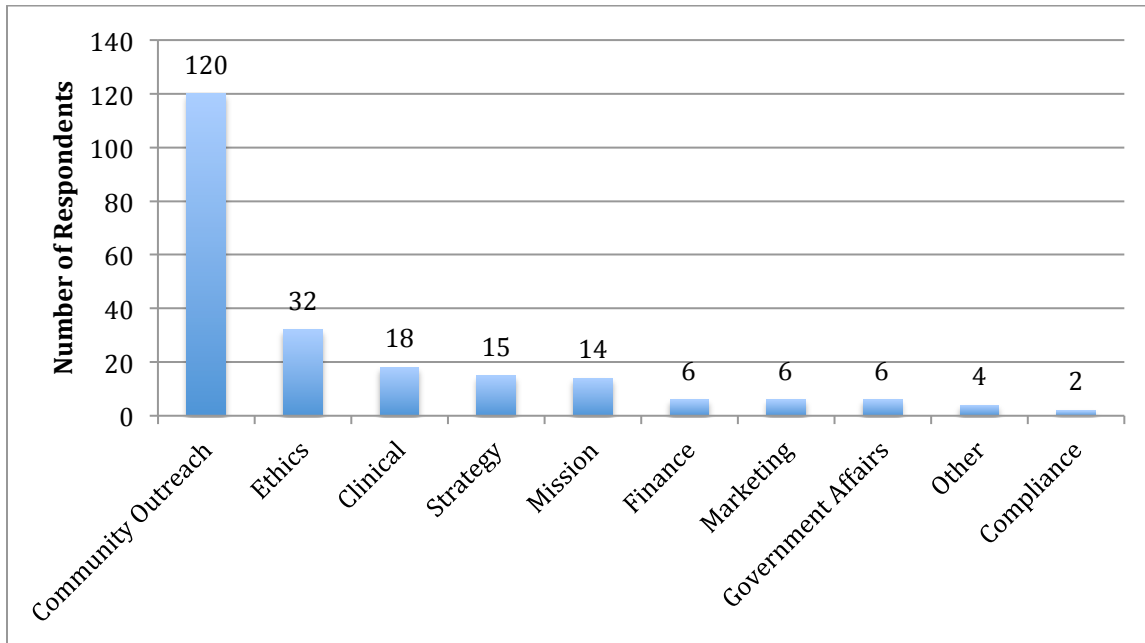
The quantitative elements of the survey required several different analyses. For the DCE, I used an effects-coded conditional logit model and clustered standard errors to adjust for each respondent answering multiple questions.<sup>149,151,164</sup> This analysis produces results where one can determine whether any level of an attribute positively or negatively impacts decision-making and where one can determine the change of impact across levels within a given attribute. Further, I conducted a market segmentation or latent-class analysis to determine whether certain subgroups of decision-makers existed within the respondents. For the questions on frequency of encountering ethical concerns, I used a standard chi-square test to determine if there were any differences between respondent populations. The conditional logit and the chi-square tests were analyzed using Stata 13. The market segmentation was conducted using Latent Gold 5.1. The qualitative, free-text responses in the survey were analyzed using standard content analysis strategies.

**Table 2.3 Demographic Characteristics of Survey Respondents**

	Hospital	Community		Hospital	Community
<b>Gender</b>			<b>Education</b>		
Prefer Not to Answer	3 (1%)	0	Prefer Not to Answer	2 (1%)	0
Female	169 (77%)	111 (82%)	High School Graduate	0	1 (1%)
Male	47 (22%)	24 (18%)	Some College / Technical Training	4 (2%)	6 (4%)
			College Graduate	44 (20%)	46 (34%)
			Post-Graduate Training	169 (77%)	82 (60%)
<b>Urbanicity</b>			<b>Faith Affiliation</b>		
Micropolitan / Non-Core	42 (19%)	29 (22%)	Faith-Based	142 (65%)	13 (10%)
Small or Med Metro	79 (26%)	63 (47%)	Not Faith-Based	77 (35%)	122 (90%)
Large Metro	98 (45%)	42 (31%)			

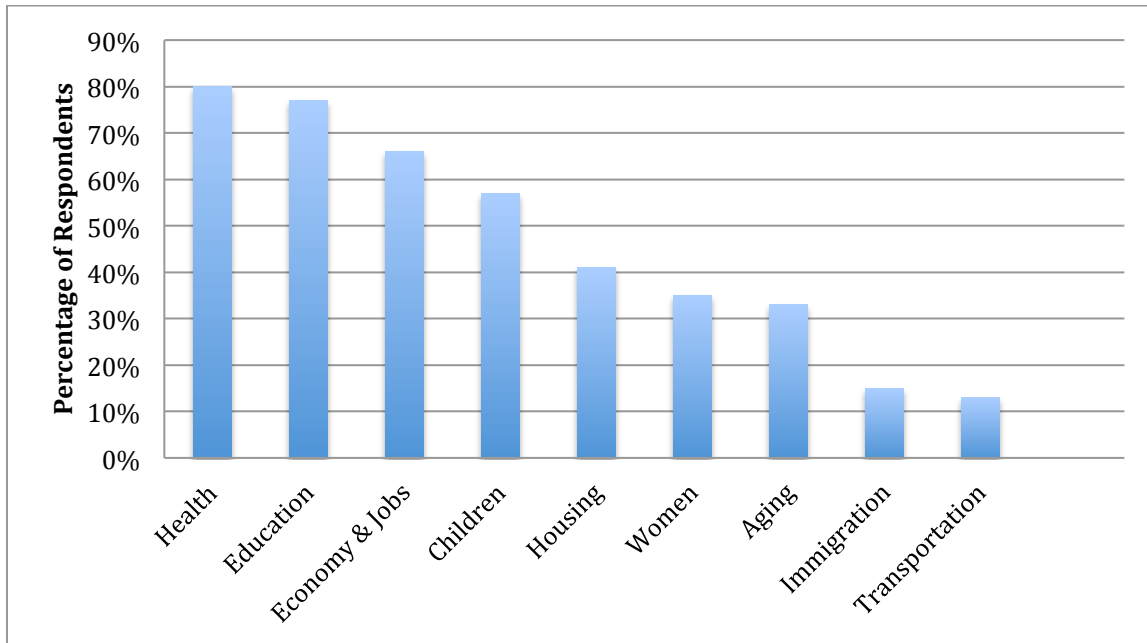
Some details related to survey respondents are worth noting (see Table 2.3). Over three-quarters of the respondents were female, but this percentage may not be that different from the true population working in this area. Nearly all of them were college-educated which, again, may not be that different from the true population. Unfortunately, there is no population-level data of employees in this area to which I can compare these figures. Nearly two-thirds of the respondents from hospitals work in faith-based organizations. This is much greater than the 10% of respondents from community partners who work in faith-based organizations.

**Figure 2.4 Current Position of Survey Respondents from Hospitals**



Respondents from hospitals were asked to select their primary area of responsibility (see Appendix 5, question 3). These categories were generated by listening to interview subjects describe their own positions and the positions of their key internal collaborators. I revised the list as part of pre-testing with hospital employees. Just over half of the respondents from health identify primarily as employed in community outreach (see Figure 2.4). The other top areas of responsibility from hospital respondents were: ethics, clinical care, strategy, and mission.

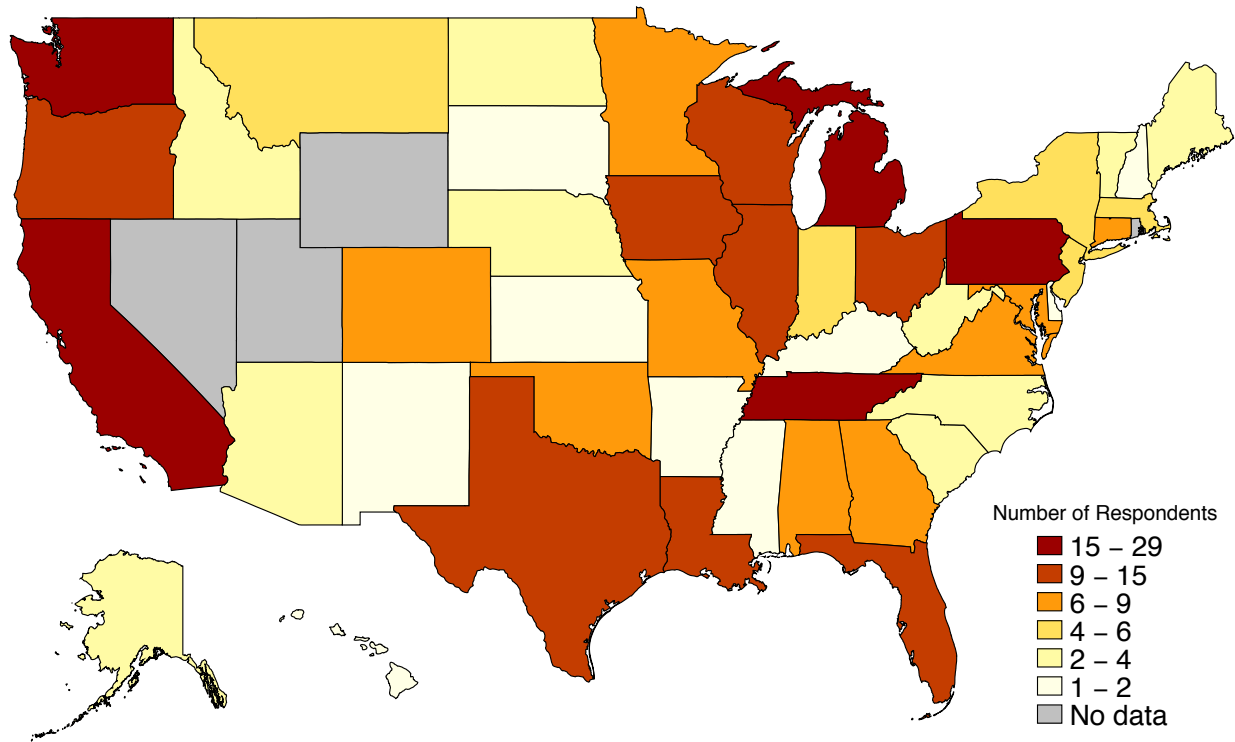
**Figure 2.5 Organizational Priorities of Survey Respondents from Community**



Respondents from community organizations were asked to select the priorities of their organization (see Appendix 5, question 5). These categories were generated by listening to focus group participants from community organizations describe their work. I revised the list as part of survey pre-testing with community leaders. Fourth-fifths of respondents included health as an organizational priority, which was the top response (see Figure 2.5). Over two-thirds of community respondents selected education and employment as priority areas.



**Figure 2.6 Location of Survey Respondents**



Survey respondents were based in 47 of the 50 U.S. states (see Figure 2.6).

The survey and choice experiment are subject to several threats to generalizability and validity. First, the results are almost certainly skewed toward the opinion of those who are most active and engaged in population health activities, making it possible that the results do not generalize to all those working in the field. It is hard to know how the convenience samples might skew the data, however. It is possible those from hospitals who responded to the survey are more faithful to the regulations than others, given the possibility that rule-followers respond to survey requests more readily. It is also possible that those from the community who responded have greater experience with or interest in working with local hospitals for community health improvement. Even though community partners were contacted through organizational list-serves, the survey was framed as ‘collaboration on community health.’ Second, the main threats

to internal validity are threefold: several types of response bias; a social desirability bias, especially among CB administrators; and construct validity. In order to manage the response bias inherent with any survey, the respondents were told their answers would be anonymous, they were informed their responses would not impact their relationship with me or the University of Michigan, and I did my best to explain the value of honest answers. The threats against construct validity were minimized through pilot testing. Finally, like the other stages of the research, I maintained a journal throughout the process of building and revising the survey to facilitate self-reflection on decision-making and so that my decisions can be revisited as needed.

The survey and choice experiment have some additional limitations that are inherent to the research questions themselves. For example, prioritizing projects for community health is a complicated process. It was not possible to fully account for all the possible criteria in the DCE. Nor was it possible to account for the fact that community health projects are not isolated choices but are part of larger organizational portfolios. For example, organizations in the same community may divide and conquer health issues based on expertise and the DCE treats each decision as an isolated judgment. In addition, some may view the survey questions about ethics as leading. Survey respondents were asked how often they experienced an ethically concerning situation (e.g., how often is there insufficient data) rather than positive situations (e.g., how often is there sufficient data). Ideally, there would have been time to ask questions in multiple ways, but given the aim of this study to identify ethical challenges, it was better to know how often people encountered ethical concerns than how often people felt things went well.

## **Chapter 3 – Ethics of Structure and Process**

### ***Introduction***

Despite the effect that organizational decisions can have on the health outcomes of patients and population, organizational ethics often receives only cursory attention from those in health care professions. There are some excellent examples of scholars who survey the landscape of organizational ethics in health care,<sup>165-167</sup> as well as specific analyses on questions of organizational ethics.<sup>168,169</sup> Additionally, many CB articles about community engagement or justifying tax exemption make implicit ethical claims. Nonetheless, there has yet to be a robust ethical analysis of the structure and process of CB and its potential impact on the organization and the surrounding community.

This is an ideal time to study the structure and process of CB as a way to understand the challenges of population health. CB is newly regulated and population health is just beginning to emerge as a core strategy for hospitals and health systems. Unlike other aspects of organizational structure that have been standardized in health care over time, it is possible that the organizational elements of CB and population health can be shaped by scholarship before they become entrenched. Moreover, this study provides some baseline data on important organizational structures at the beginning of their evolution.

### ***Structure***

Organizational structure is important for population health ethics because it communicates what skills are sought for population health work, who has authority over the work, and what the goals of the work are. These organizational decisions demonstrate what the

hospital believes is the right way to proceed in the area of population health. The interviews demonstrated a changing landscape in the structure of CB within hospitals and health systems. The 38 interviewees were employed by 27 different organizations. Of these 27 organizations, 14 were in the midst of reorganizing CB and its associated functions. One interviewee captured the reality of many others when she said,

*“I’m not sure if you’re getting this from other people, but we’re in a state of a lot of dynamic change. If you were to speak to me a year ago, I would be able to ship you an organizational chart and you could get a sense.”*

This dynamism makes it difficult to answer some of the initial questions of this project, such as whether organizational structure influences the goals of a CB department. Nevertheless, the changes themselves provide data points worth noting.

Community Benefit managers were located in many different departments, with the majority located in a variation of Department of Mission (e.g., Mission Integration, Mission and Values). Other departments included: Health Education; Population Health; External Relations; Communication and Marketing; Urban Health; and Strategic Planning. CB programs undergoing change were found in all of the above departments.

Interviewees did not always find this state of change to be negative. Many of them were quite enthusiastic about the changes that were taking place within their organizations. One person employed by a large, regional system shared,

*“Just last week, there was a decision that our department which is Community Outreach Engagement, we will start reporting to our Vice President of Mission and Values, which I’m super excited about just from the idea that I really think ... I feel that we’ve been able to do a lot of good and it will be helpful to have the same reporting structure within the same department.”*

While many CB managers expressed concern about the low staffing levels for CB activities, comments about reorganization were largely positive.

Interview subjects offered several reasons for the dynamic state of CB structure. The most common reason had little to do with CB and more to do with the broader state of health care in the U.S. Of the 14 interview subjects who were in the middle of reorganization, seven stated it was due to system-level expansion and an attempt to standardize CB throughout the new health system. One interviewee shared,

*“There's some concerns about whether or not Community Benefit should be standardized across a specific discipline throughout all of [Company] or whether they just leave things alone and let each of our hospital ministries decide for themselves where it best fits within their organization. I've heard conversations from [system headquarter's city] that it could be fit under finance, it could be fit under strategic planning. It would be a good fit with population health, so I think it's just a matter of them discussing where it should land. Right now, for us, it's split between advocacy and mission.”*

A small number mentioned the financial challenges of their facility and that staff reductions had caused a need for reorganization.

*“I now report to the Vice President of Human Resources and the Patient Experience Officer. I was moved under him probably, after there was some reductions [in staff].”*

A small number of other interviewees stated CB was being integrated with new divisions of population health management.

*“What we have done a little over a year and a half ago was to create a new position that reports part to community health to the VP for community health and half to the population health side. This was a very intentional bridge.”*

These data suggest currently there is no dominant model of CB within an organizational structure, although a long-standing connection to mission and a new relationship with population health seem the most common.

### ***Ethical Concerns About Structure***

The interview results on organizational structure include two ethical concerns. First, the emerging relationship between CB and population health raises a question about whether

hospital efforts are benefiting the community as a whole (CB) or only the hospital's patients (population health management). Interviewees had very mixed reactions to this possibility. A large majority of interviewees said that they or their organization were confused about the relationship between CB and population health. The thoughts of two CB managers are fairly representative of this opinion.

*"I remember years ago, the first time me hearing about this move toward population health in a large room, and I was sitting near the back, and I just wanted to stand up and scream, 'Wait, that's Community Benefit you're talking about. That's what we've always been about.'"*

*"I get asked this question a lot. How does this align with our population health efforts? The answer at this point is not really sure, but I know it does."*

At the same time, many interviewees' reactions to population health were also quite positive. In fact, many of those who conveyed confusion also expressed excitement about the possibility of population health raising the profile of CB within the organization or otherwise enhancing the work of CB.

*"We used the 2012 Community Health Needs Assessment and said, 'Okay. Here's what the communities think is important. The data supports it.' We convinced our colleagues in population health management to look at patient level data on patients from those communities who are hospitalized, and no surprise. Those patients were sicker, had higher length of stay, higher 30-day readmission."*

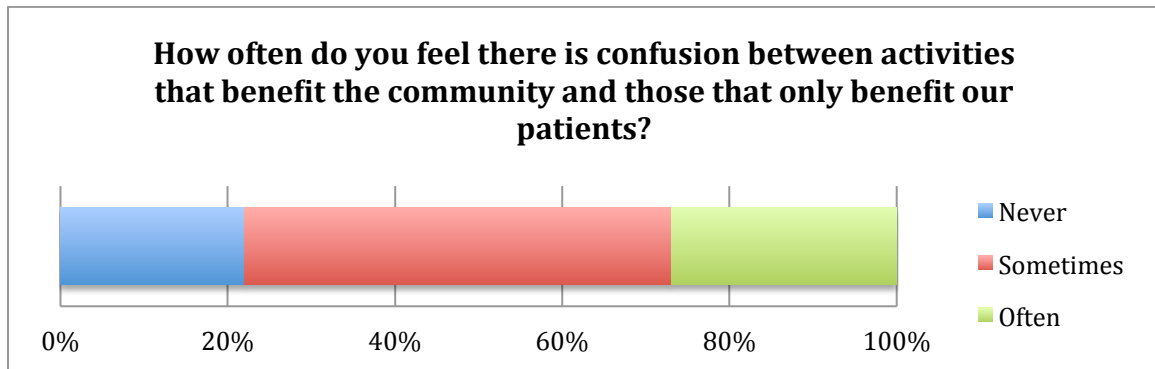
*"The big opportunity is again on that frame of improving health, and healthy communities, and minimizing barriers, and creating assets. I think we're in the space philosophically at least that that work will have some additional resources behind it and the financial incentive to invest in again, that community level care coordinator to reduce readmissions."*

Finally, a small number of interviewees were negative about the possibility of CB and population health aligning for positive change.

*"I think the leadership feels like it would be a good fit, but I'm not buying into that yet because the whole purpose of population health is to keep people out of the hospital to avoid penalties, so they're looking at a different population than what I'm looking at."*

The mixed feelings on the relationship between CB and population health management, although not expressed in ethical terms by interview subjects, seems to be rooted in a conflict of goals, which is a classic kind of ethical dilemma.

**Figure 3.1 Frequency of Ethical Concern with Population Health Management**



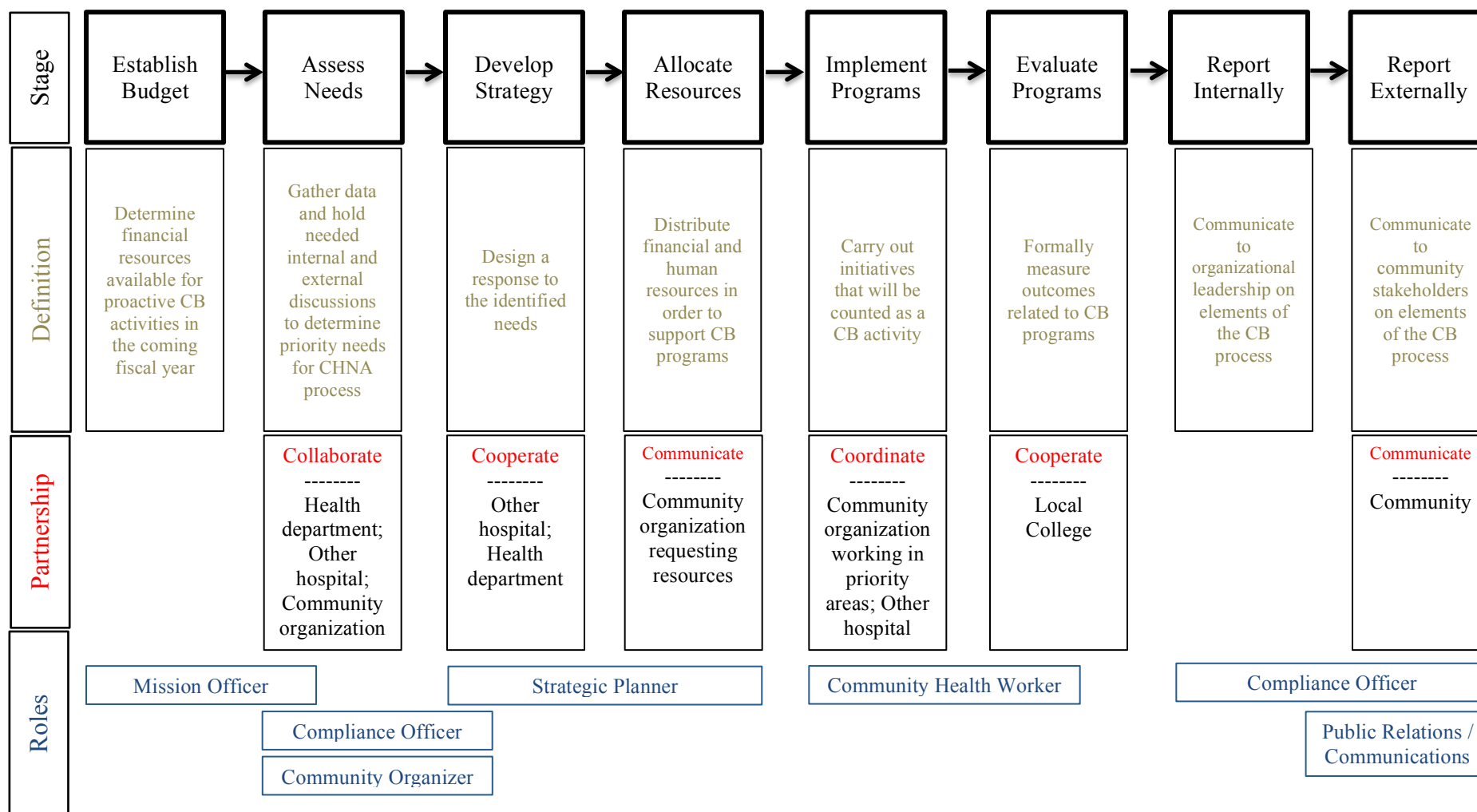
In order to understand the frequency of this ethical concern, survey respondents from hospitals were asked, “How often do you feel there is confusion between activities that benefit the community and those that only benefit our patients?” (See Figure 3.1) Nearly 80% of survey respondents indicated that they either sometimes (50%) or often (27%) feel there is confusion in their organization between population health management and CB. As the structures of hospitals are moving to integrate these two operations that employ similar strategies but have very different goals, the interviews and survey show there is concern about designing organizational structures so that the intention of CB remains clear and community-wide efforts are not overwhelmed by population health management efforts.

The second ethical concern that arises from the results on organizational structure comes from the fact that none of the interviewees indicated they were looking at other organizations to determine the best structure for CB. This is an ethical concern insofar as we are obligated to

investigate the best possible course of action, especially when other people's lives are on the line. The lack of investment in developing the best possible organizational structure is best understood not as a major ethical violation, but as an ethical deficit or not striving to act as ethical as possible. While some organizations have a strong commitment to CB, there is little reputational or financial reward for doing anything above the minimum required by law. It seems there is little social pressure as to what the structure of CB should be, thereby conveying either that multiple structures are equally suitable, that we are too early in implementation for isomorphic forces to have taken hold, or that we simply do not know how effective any structure actually is at helping achieve its goals. Again, while not expressed in ethical terms, we often look to others for insight into the right or ethical action. That does not seem to be occurring in this situation.



**Figure 3.2 Stages of Community Benefit with Key Collaborators, Type of Partnership, and Roles Fulfilled by Employees**



## ***Community Benefit Process***

Organizational process is important to study for population health ethics because it illuminates the key decisions in community health work that might have ethical concerns. This information – what the decisions are, who is at the table for those decisions, and what the goal of each decision is – is the same information we seek for any ethical dilemma, and it offers insight into how the ethical values of the organization are lived out. As described in Chapter 1, there is significant research on CB spending and CHNAs, but there is less available on other stages of this process (see Figure 1.1). The data from interviews allowed me to map a more detailed process for this work (see Figure 3.2). Interview subjects did not always describe the stages in as linear of a fashion as shown in the Figure. This is because some steps occur every three years (e.g., assess needs) while other steps occur quarterly or are ongoing (e.g., report internally or implement programs). Nevertheless, interview subjects named the following stages for community health improvement.

*(1) Establish budget.* Prospective budgets are not always developed for CB. Instead, many organizations rely solely on retroactive accounting, giving less authority to those in charge of CB and less predictability to those who rely on hospital resources for their community health activities. One system level CB supervisor described the change she has experienced over time in budgeting for CB. Many others offered similar observations.

*“When I started with Community Benefit back in 2009, 2010, I soon realized that some hospitals had zero dollars budgeted to really do anything proactive in the area of community health improvement services. Essentially, people were having to take dollars out of their marketing budget to do something Community Benefit related. As a result of asking and pushing, most, I think almost like every hospital now has a dedicated budget to do Community Benefit or community health improvement services in their community.”*

A majority of interviewees indicated they had recently begun a similar transition from retroactive accounting to proactive budgeting, though a minority of interview subjects indicated CB was entirely retroactive accounting.

*“There's not a budget. It is a really interesting question and something that we're definitely going to have to work on over the next three years to figure out how we create and design some sort of budget around this work.”*

(2) *Assess need.* Government regulation determines the baseline for this stage, requiring an unspecified level of collaboration with community partners. It often includes gathering secondary data, conducting surveys and focus groups, and working with a community coalition to generate a CHNA. The final product of this stage (a CHNA) requires approval from an authorized body (e.g. a board of directors or a group delegated authority by the board) at least every three years.<sup>30</sup> It was frequently the stage described in greatest depth by interview subjects.

*“The needs assessment, our process took about a year in total. We started last September and we are now just finalizing all of our reports for the next cycle. They'll go to our board in December. ... The actual assessment process is an engagement strategy we do. We did twenty-two different community dialogues or focus groups out in the community. We had a stakeholder group for each hospital that helped review all the data and set the priorities, so it's a very external facing process that in and of itself is an engagement strategy to talk to people in the community about what they think is most important and what [company] should be doing.”*

The majority of interview subjects described how assessing needs had changed in the short time since the ACA. For example, one CB manager shared,

*“I would say one of the things the CHNAs have brought to bear is to be much more oriented towards recognizing what's occurring on a macro level through data. By way of example, our CHNAs processes caused us to be more attentive to public health data and state-wide incidents of data, whereas, prior to that, I think it was more we were being responsive to a condition that we could identify, not only anecdotally, but with some internal data.”*

Every interview subject, regardless of where they were situated in the organization, was able to share specific details regarding this stage of the process.

(3) *Develop strategy.* Fewer interview subjects were able to speak in detail about the process they used to develop a strategy for responding to established needs, although the majority could still do so. Collaboration at this stage is not required, but an authorized body such as a board of directors must also approve this strategy (known as a CHIP). Very often, the collaboration is inward facing and attempting to identify what resources the hospital already has that can be used as part of the strategy. Two different interview subjects describe the internal focus that a majority of respondents had.

*“Right now, we're working on our CHIP, so now I get to say, ‘For this next three years, [facility] has chosen to really focus on obesity and on tobacco prevention. I'll be coming to see you guys to say, ‘How can your department fit into this? How can you be part of this endeavor?’”*

*“I basically pulled them together, sat them down and said, ‘What is the hospital already doing in this area we're talking about today. What are we already doing that I may not know about?’ Right there, we may already have a strategy that we're getting ready to do and we could say that's one of our strategies. I actually identified a lot of things we were doing that because we're such a big organization, we didn't know we were doing all the way across the board. ... Secondly, we talked with partners to find out if there were initiatives that they would like to do with us and if that was something that we could then work together on an initiative.”*

Other interview subjects shared a much more outward facing process for developing a strategy.

In one community, developing strategy looked quite similar to assessing needs.

*“Just a brainstorming session right there about those things. Also brainstormed who in the community needs to be engaged in this work, which was probably the most important takeaway from those first conversations. Who's not at this table who should be at this table? ... The next step was then inviting people back together for more detailed planning about what should our intervention look like and what do we want to accomplish.”*

Following the example of how assessment of needs has improved over the past decade, a large number of interview subjects expressed a desire to improve this part of the process. The need for an improvement at this stage is also expressed in one study of 15 Philadelphia hospitals that found poor alignment between needs assessments and implementation strategies.<sup>170</sup>

(4) *Allocate resources.* Much like establishing a budget, some organizations do not have a formal allocation method and the distribution of resources may be too diffuse and uncoordinated to actually consider this a stage in this process. This stage is described in detail in Chapter 4.

(5) *Implement programs.* Those charged with CB may have programs of their own and/or may run programs through other departments.

*“We have five wellness education specialists who do programming related to identified needs, primarily behavioral issues like lifestyle issues, nicotine, physical activity, healthy aging, stress management and identify needs like that. We do programming for our own employees and other work sites, the community at large and of course, our patients. ... Then, when we start thinking about the community and specifying more on the community, we also reach out and are partners with a variety of organizations in the community in a different community collaborative or community committees focused on diabetes, nicotine cessation, reducing binge drinking, parenting, stress management, mental health and so on and so forth.”*

The level of collaboration with external partners is equally variable, but generally involves a large number of community organizations. When describing an activity around physical fitness, one interview subject shared,

*“We have multiple community partners in that project. We have our local newspaper. We have our local Greenway. We have our local University. We have our trade school, [Name], involved with that. We have our local bus system. We have our YMCA. All those partners all had an interest in coming together for a community project that was unlike any other before.”*

The variation within and across organizations at this stage is significant, although interview subjects often indicated a desire to standardize this stage of the process. In particular, many interview subjects hoped to implement programs in a more strategic way than they had in the past. One interviewee spoke of the challenge she had with focusing programs.

*“We had been doing a lot of programs, kind of shock and approach, and in a lot of ways we still are because we've had programs that have been going on for so many years. We decided let's either sunset those or, like I said, refine them so they actually fit with our*

*CHIP. We did a lot of refining but also always working with that coalition and getting their approval and then sharing data.”*

The need to share data from program implementation is connected to the next stage of the CB process.

(6) *Evaluate programs.* This stage was mentioned least often, by only 48% of CB interviewees, when subjects were asked to name the key stages of the CB process. When it was spoken of, interviewees often expressed concern that they did not have the expertise to do this stage well.

*“Right now, we’re trying to move to look at outcomes and say, ‘Okay, if we don’t have a measurable outcome for this program, then we’re not going to fund that program or we’re not going to put our money into that program.’ That’s what we’re trying to move so we can prove our outcomes.”*

As of now, most evaluations are based on process measures (did the program occur?) and output measures (how many people did the program serve?), but many interviewees expressed a desire to move to outcome measures (what was the health impact of the program?).

*“As far as impact, you can't do that in three years, unless it's something that you put in specifically to accomplish within that time frame. As far as health, you can't measure results in three years. You can report out what you have done towards that goal but, as far as actually measuring it, you can't.”*

*“And we struggled with it there because it's like hard to figure out what exactly...when you're investing in businesses or investing in housing, what is your evidence and what is your outcome that you can directly tie to the intervention or to the process that you put in place?”*

Evaluation was regularly the stage of this process where interview subjects asked for insight I had gained and expressed an interest in learning more about what was possible.

(7) *Report internally.* Spending targets are often shared quarterly with organizational leadership. Other elements, such as the CHNA, are shared less regularly, but done when required.

*“That's been, there have been some, a couple of metrics related to community level programs to do that that were somewhat standardized and required to be reported up to the system office and then rolled up and reported at the system board and committee level.”*

The reporting and communication with external partners often draw upon the same information, so many interviewees spoke of them as related to internal reporting. For example,

*“And then I'm also responsible for maintaining and reporting of the Community Benefit activities of the hospital in general. So I do the finance reporting. Send that information to our system office. And then report to the board and any other community groups. So I work with the [hospital] Foundation a lot.”*

(8) *Report externally.* These are often the required documentation: annual reports on spending; triennial reports on needs assessment and implementation planning.

*“Our department is responsible basically for ensuring that we have everything accounted for, that it's accurate, that we're reporting as part of Schedule H. We do report to our [state hospital associations], as well as our public reports around the work that we're doing.”*

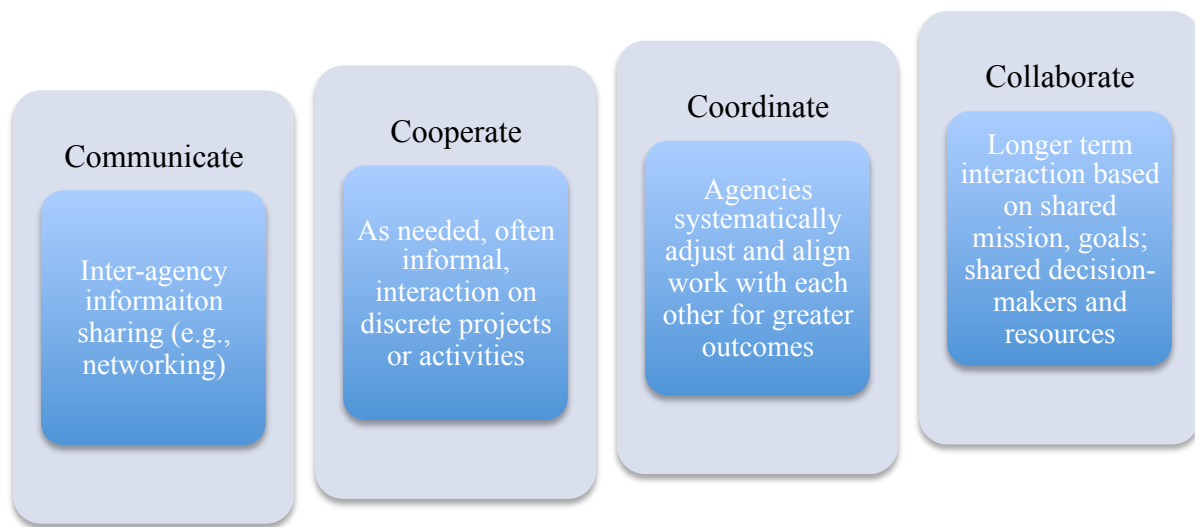
Researchers are most familiar with these documents and the large majority of studies related to CB have been based on information from this stage of the process. Nearly all CB managers considered any additional communication about their work to fall under the responsibility of marketing and communications rather than community health.

### ***Collaboration During Community Benefit Process***

Collaboration is essential to understanding the ethics of population health because no hospital can do this work by itself. The community is to population health as patients are to clinical care or human research subjects are to research; power imbalances necessitate that all actors in community health improvement remain committed to the best interests of the community in the same way that clinicians remained committed to the interests of their patients. Interview subjects shared examples of external partners who were involved in creating a

successful operation for six of the eight stages of the process. This did not apply to the two internal steps of the process – establishing a budget and reporting internally (see Figure 3.2).

**Figure 3.3 The Collaboration Spectrum**



From one stage to another, interview subjects also described varying levels of collaboration with these external organizations. To define the type of collaboration, I used a spectrum of engagement that is common to community health work (see Figure 3.3).<sup>171</sup>

The lowest level of collaboration – communication, which is simply sharing information – occurs as part of every stage but is the central way of proceeding during both allocating resources and annual external reporting. Community organizations are rarely seen as partners at these stages of the process and instead are viewed as those to whom a grant application is made available or to whom an annual report must be delivered. On allocating resources, one interview subject said,

*“What I tell [community partners] is that we want to align with those five priorities. It might be something that's really a great program but if it doesn't align with the five priorities we might still work with you but it's probably not going to get any funding.”*



On reporting externally, another interview subject stated,

*“I think institutionally being able to tell that story while also listening for how that story may be lacking so that we can continue to serve the most pressing needs. ... If we're thinking about Community Benefit reporting, I think there is a goal that relates to communicating that narrative of the work that we do.”*

As with all of these stages, there are examples of hospitals that have stronger or weaker collaboration than others. Possibilities for collaboration while allocating resources are discussed in further detail in Chapter 4, which offers some examples of deeper partnership. Nevertheless, the collaboration as described here is the most typical at each stage.

The next level of engagement – cooperation, which is more informal and occurs around discrete projects – occurs at two separate stages: developing strategy and evaluating programs. Interestingly, while hospitals may collaborate on CHNAs, most of them will subsequently develop their own CHIPs. Some consult with other hospitals or health departments, but the CHIP is viewed more narrowly than the CHNA.

*“We talked with partners to find out if there were initiatives that they would like to do with us and if that was something that we could then work together on an initiative.”*

Many organizations will also contract with local colleges to evaluate their programs, but the college is viewed more as a contractor rather than a collaborator who would have shared investment and voice in the program's goals. One system-level community health manager shared the following advice she gives to facilities.

*“What we've suggested for those who have universities in their community, they may be able to take advantage of the universities and have them come and design these longitudinal studies for them, but it's not where we are right now in healthcare.”*

The next level of engagement – coordination, where agencies may adjust to each other's strategies to work with each other – is often found while implementing community health programs. The depth of relationship during program implementation varies a great deal (and

some reach the level of collaboration), but generally the engagement is formal, longer-term, and requires agencies to adjust for the sake of the other. This stage, however, typically involves handing over rather than sharing resources.

*“We're co-located with community programs and services. Our strengths tend to be very programmatic. We have decades long relationships and programs that are rooted in the community. ... I think there's a lot we can do. [Colleague] and I have talked about even using existing community programs. If you think about Meals on Wheels, if you think about a clinical strategy being fall prevention, it could be the case that or it could potentially be something to be explored to train Meals on Wheels volunteers to do some sort of fall check. There are things, we're already there in the community.”*

Another interview subject shared,

*“They didn't have the funds so we partnered with them, with this activate school challenge and we designated funds so schools could be incentivized to come up with something and that we would help fund that. It's exciting because we just heard, we have 6 schools in the area that are really coming up and they self assess, they help them assess what the needs are. The school comes up with what they want to do. They involved students to get ideas, a lot of energy is happening around that, it's really exciting.”*

The deepest level of engagement – collaboration, where there are shared decision makers and resources – consistently occurred as organizations assessed community health needs. This was evidenced by the fact that many organizations, even competitor organizations, work together on a single CHNA. This is likely because federal regulations are most explicit about collaboration at this stage of the process as well as the fact that it is the stage most related to the community itself rather than the organization’s own identity. The following scenario was fairly typical of interview subjects describing the CHNA process.

*“We partnered with [other facility] which is the competitor in town to do the last CHNA that we have which was a major breakthrough because it's a very competitive market and some animosity between [facility] and [facility] to be frank. They also brought in the [County] Department of Health who was so impressed with the work that was being done. We also used the [University] to help with our surveying tools and also to conduct our focus groups because we wanted not to have a colleague lead those because we wanted it to be as neutral as we possibly could so we engaged the university to do an*

*electronic survey for us and also conduct the focus groups. Everyone from all the partners were present in all of these.”*

**Table 3.1 Example Ethical Concerns with Collaboration**

<i>Stage</i>	<i>Establish Budget</i>	<i>Assess Needs</i>	<i>Develop Strategy</i>	<i>Allocate Resources</i>	<i>Implement Programs</i>	<i>Evaluate Programs</i>	<i>Report Internally</i>	<i>Report Externally</i>
<i>Level of Collaboration and most common partner</i>		<i>Collaboration with local health department</i>	<i>Cooperation with competitor hospital</i>	<i>Communication with community organization</i>	<i>Coordination with community organization</i>	<i>Cooperation with local college</i>		<i>Communication with community as a whole</i>
<i>Example Ethical Concerns</i>		<p>Does the local health department have a voice in planning what process will be used?</p> <p>Do they help shape what community groups are invited to give input?</p> <p>What if they identify a need and the hospital does not share their opinion?</p>	<p>How much information about resources and future initiatives should be shared with competitors when developing a three-year plan?</p> <p>What can be done if one competitor is benefiting from the effective programs of another nonprofit hospital?</p>	<p>What is the hospital's role if a long-term partner has an initiative that has simply proven ineffective or is no longer responding to a pressing health need?</p> <p>Should the hospital place community members on the committee that allocates resources?</p>	<p>What is a reasonable expectation for a hospital to have of its community partners, many of which may lack the desired capacity for financial management or effective evaluation?</p>	<p>Is it possible to evaluate whether a single program improves the health of the community?</p> <p>If so, is the advice of experts actually followed?</p> <p>If not, what advice do experts have as to the best way to measure success of these programs?</p>		<p>Do the external reports give an honest assessment of what has worked and what has not worked to improve the community's health?</p> <p>Do the external reports accurately reflect any concerns raised by the community about these programs?</p>

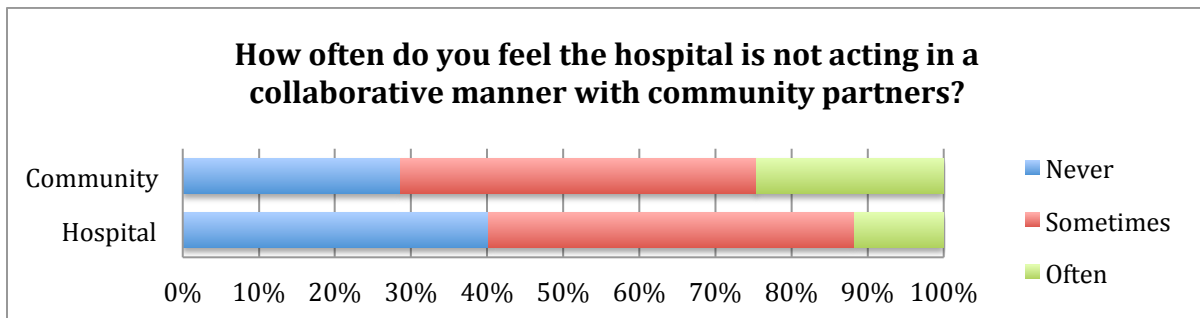
### ***Ethical Concerns about Collaboration***

Several interview subjects raised collaboration as an area of ethical concern.

Understanding the way collaboration varies across stages of this process offers clues into the ethical questions that emerge throughout the process. Power, voice, influence, and authority are major elements of ethical relationships and their proper use varies depending on the level of collaboration one believes is appropriate (see Table 3.1). One of the interview subjects captured the growing recognition that collaboration must be evaluated more seriously when she shared,

*“The hospital was seen as the center of the universe and everything just revolved around it or orbited around it. And then you have the Affordable Care Act come in and people say, “wait, no, no, no”. The community is at the center, the community is the sun and the hospital is one of the many planets, it’s a large planet but it’s one of many that moves around.”*

**Figure 3.4 Frequency of Ethical Concern with Hospital Collaboration**



On the survey questions, respondents from hospitals and community partners were asked, “How often do you feel the hospital is not acting in a collaborative manner with community partners?” (see Figure 3.4). In response, 25% of community partners indicated they often feel this way and 47% indicated they sometimes feel this way. On the positive side, 29% of community partners indicated they never feel this way. Respondents from hospitals had a more positive view of their efforts on collaboration. Half as many respondents from health care

indicated this issue happens often (12%, rather than 25% among community partners). Moreover, a larger percentage from hospitals indicated that they never see hospitals acting in a way that was not collaborative (40%, compared to 29% among community partners). These proportions are statistically significant (chi square,  $p=.005$ ). Because this question was framed broadly, we do not know how or when any of the respondents felt these situations occurred, so this finding indicates the need to further explore this difference.

While some CB regulations have encouraged nonprofit hospitals to take collaboration more seriously, some interview subjects also expressed concern that the regulations around CB can stifle potential creativity in how nonprofit hospitals partner with community organizations. One interviewee suggested the following.

*“Also my hope there is that we expand opportunity beyond just clinicians and nurses to say, ‘IT guys, if you can give one day a month to Catholic charities to go in and help repair their homeless tracking software, then that will really help us.’ It’s again to reinforce the capacity building piece of it.”*

Local hospitals have significant expertise in important areas that could be used to build capacity within local nonprofits. Regulations do not specifically preclude this kind of collaborative effort, but it is not clear whether these efforts would count as CB spending. This may not seem like a major ethical concern, but when regulations unintentionally inhibit creative solutions to problems, they fail to make the right thing the easier thing to do.

One additional area where interview subjects expressed concern that some regulatory measures made true collaboration more difficult is the three-year time cycle for CHNAs and CHIPs. Interview subjects raised two major concerns. First, this short time frame makes it difficult to observe much change in population health measures.

*“In most cases, you’ll see a lot of the priorities and a lot of the strategies are very similar to the last round because with such a short turnaround of CHNAs in 3 years, it’s difficult to really get the work going, let alone to change.”*

Second, the three-year time frame also makes it challenging to collaborate with local health departments, whose needs assessments are typically on a five-year cycle. In speaking of lobbying efforts that preceded the passage of the ACA, one interview subject shared,

*“I wish it was every five years, not every three years. Hospitals tried so hard, were very active in supporting the five-year time frame, aligning it with the PHAB, the Public Health accreditation cycle, which is every five years, to do the CHNA, especially because we have to have Public Health involvement. That would have been perfect.”*

The quality of collaboration was a pervasive theme in this study, and nearly everyone in interviews and focus groups wanted to build strong partnerships. However, very few ever named the lack of quality collaboration as an ethical concern.

### ***The Many Faces of Community Benefit***

Understanding the roles that CB managers must fulfill is important for population health ethics. Much like financial resources, human resources are limited and must respond to needs that often exceed their capacity. If a university accepts tuition from students but does not allow faculty adequate time for teaching and mentoring, we might say the expectations the university places on faculty is unethical toward the student who has paid for the education. In a similar way, those charged with population health improvement will face many demands on their time and it is important to understand how organizational expectations shape their behavior.

Community Benefit managers spoke of their responsibilities in noticeably different ways, depending on which stage of the process we were discussing (see Figure 3.2). The most frequent way of framing their work, used by all but two interviewees, was as *compliance officer*, or someone who assures the organization meets the regulatory components of CB. This role was most often associated with assessing needs and reporting internally, although it appeared at other

stages as well. For example, a CB manager from a medium-sized hospital described her work this way:

*“I am responsible for monitoring, tracking, reporting, building Community Benefit activities for two hospitals in our system. Additionally, I’m responsible for the community health assessment and the community health improvement plan and ensuring that both of those activities are completed as required and that action is taken upon the plan.”*

Another frequent role invoked is that of *strategic planner*, or someone who helps the organization integrate the CB process with larger goals for the facility and the community. For example, a CB manager of a large, urban academic medical center described CB work this way:

*“I do think that’s the heart of the matter. How integral will this work be? What’s the potential for truly integrating this work into healthcare delivery, and the responsibility of healthcare, or healthcare feeling like it’s part of their mission. Not just like they have a responsibility because the government told them but actually feeling like, “Oh, strategically, we need to be doing this.” I think that’s where we need to move to.”*

The role of strategic planner was most often associated with developing implementation plans and allocating resources. Two additional roles are closely associated with the community itself: *community organizer* and *community health worker*. The former most often appeared in relation to assessing needs and was characterized by CB managers attempting to gather input and support from a large coalition. The latter was most frequently associated with implementing programs and spoke to the practical nature of carrying out many CB activities. In speaking of the community organizing role, one CB manager whose work spans multiple counties said:

*“I went into each of these communities, found a representative from the health department, went in and said, look if you’ve got a coalition that would be interested, is it functional, are people meeting? There were several cases that they weren’t meeting and we used our CHNA to get their community coalition going again.”*

A less frequent, but still common, role that many interviewees spoke of filling is that of *public relations* or *communications*. Despite the fact that nearly every organization had a separate department dedicated to marketing, many interviewees felt responsible for ensuring the



community knew that the hospital was doing its part to advance community health. One CB manager described this part of the work this way:

*“At the end of the day, [public relations] may not net an increase to our Community Benefit bottom line, but we need to make our community aware that we're doing.”*

Another interviewee felt some tension with this role of public relations:

*“If there is some ancillary marketing value that comes with what we do, that's great. Hopefully we're making the hospital look good when we go out but at the end of the day, what we're trying to do is focus on our goals related to community health not related to our marketing strategy.”*

A final role, which cuts across many stages of the process, but was most consistently spoken of when trying to secure a hard dollar budget, is that of *mission officer*, or someone whose work is essential for the fundamental character of the organization.

*“I try to communicate that our Community Benefit always goes back to our mission and core values. It's the right thing to do. It's the people that we serve. It's the people that we go to church with. It's the people that we are at the grocery store with. For our Community Benefit, it is to live our mission and our vision and to live it through our core values.”*

Although interviewees rarely articulated the ethical challenges associated with fulfilling many roles, a few of them did mention the conflicts they feel with so many expectations. For example,

*“It's actually the allocation of my time. Yes, for sure, that's been my biggest challenge here, is that the job has grown so much in the 10 years that I've been here. It's really not appropriate for me to be emailing people to say, "How many rides did you offer for this service?" My time could be better used elsewhere but yet, when you think about the Schedule H and how important that is and being able to have correct numbers that if the IRS comes in to audit, you could say these numbers are correct.”*

In member checks, interviewees indicated that these distinctions were unconscious on their part but resonated with feeling divided in their day-to-day lives. Another interviewee indicated that this tension was felt in the way she described her work to colleagues.

*“We don't use the term community benefit. I don't care for it myself because it has such a regulatory ring to it. I don't know, patronizing or something. I don't like it, so we talk much more about partnerships with communities to address their concerns around community health.”*

**Table 3.2 Example Ethical Concerns with Conflicting Roles**

<i>Stage</i>	<b>Establish Budget</b>	<b>Assess Needs</b>	<b>Develop Strategy</b>	<b>Allocate Resources</b>	<b>Implement Programs</b>	<b>Evaluate Programs</b>	<b>Report Internally</b>	<b>Report Externally</b>
<b>Primary Role(s)</b>	<b>Mission Officer</b>	<b>Compliance Officer and Community Organizer</b>	<b>Strategic Planner</b>	<b>Strategic Planner</b>	<b>Community Health Worker</b>	<b>Program Evaluator</b>	<b>Compliance Officer</b>	<b>Public Relations</b>
<i>Example</i>	Is there a dedicated budget for community health activities? If not, what does that say about the mission of improving community health when compared to other elements of the mission?	It is not required to include people with disabilities or language minorities in the needs assessment process, so how much time and energy should be devoted to doing so?	To what degree should the community health improvement also benefit the hospital's own strategic priorities? Do the priorities of population health management inappropriately influence the priority action items for the community?	How much of the available resources can go to long-term initiatives that may not show results for many years and how much should go to initiatives that will yield visible results quickly?	To what degree should you devote resources to building capacity with new community organizations and when should you just partner with organizations that have a proven track record of success?	With limited resources and the challenge of actually measuring improvement in community health, how much time and money should actually be devoted to monitoring and evaluation when other important work must be done?	How much time do authorized bodies (boards of directors) actually give to evaluating reports on community health improvement? Do managers simply report spending levels or are other elements considered as important?	Is the annual report to the community a marketing document or is it an honest evaluation of the hospital's success and failure to improve community health? Is the true audience the community or someone else?

That CB managers feel torn between fulfilling so many different roles for their organization creates inevitable conflicts as to how their limited time should be allocated (see Table 3.2). This is clearly an ethical concern because it creates confusion as to which goals are most important to the organization and therefore does not give employees a clear sense of how to prioritize their time.

### ***Conclusion***

Each of the organizational elements evaluated in this chapter raise ethical concerns for population health strategies. First, while questions related to organizational structure did not yield clear answers on whether structure influences goals or process, the dynamic state of structure offers areas for further research and possible action. For example, the rise of population health management and the possibility of more organizations integrating it with CB mean that community health programs could gain prominence or they may be overshadowed. Ultimately, the way organizational structures are designed will strongly influence which direction this goes. Second, those devoting energy to these efforts must more seriously consider what level of collaboration is necessary at all stages of the CB process. This study shows significant variation throughout the process and some of the most important stages (e.g., developing strategy, resource allocation, communicating to the public) have minimal levels of genuine collaboration. The data suggest that hospitals involve community partners either when they are required to do so or perhaps when they find it convenient to do so. Third, the many roles that CB managers must fill is understandable in today's health care environment, but the lack of a dominant identity may be a problem when conflicts arise. Coming to a common understanding as to the hierarchy of roles these people are expected to fill will help us identify and negotiate ethical conflicts before they become ethical mistakes.

Structure and process are significant elements of population health ethics because knowing them allows us to better understand the degree to which the resources of the hospital or health system are oriented toward improving the health of the surrounding community. Organizational structure tells us who has voice and authority and who does not. Organizational process gives us even greater insight into who is involved and when they are involved, as well as key decision points and the process's ultimate goal. For example, formalization of structure, centralization of structure,<sup>172</sup> record-keeping of decisions, reward systems,<sup>173</sup> and communication channels<sup>174</sup> have all been shown to affect ethical decision-making of individuals within organizations. When comparing structures and processes across several organizations, we can evaluate the degree of standardization and more easily identify gaps that may exist in any of the organizations. This study allows us to consider whether the right people are around the table for CB decision-making, whether they have the right level of authority, whether they are oriented toward the proper goals, and whether their process fosters achievement of those goals. The right organizational structure and process do not guarantee ethical behavior of the organization's members, but the structure and process do make it more likely that such behavior will occur.

The following chapter considers a single stage of the CB process – resource allocation – in greater detail. This deeper investigation into one element of the CB process serves as an example of the kind of work that could be done at each level of the process identified in the chapter above.

## Chapter 4 – Ethics of Resource Allocation

### *Introduction*

Interview subjects had a difficult time identifying work situations they felt were ethically concerning. Of the 38 interviewees, 18 said that they did not believe their work in community health improvement had any ethical concerns. After probing with examples from other interview subjects, many of these 18 later gave ethical examples of their own. Nevertheless, this suggests that, unlike clinicians who can call to mind ethical concerns in their work,<sup>175</sup> many CB managers do not view their work through the lens of ethics. Despite this deficit, resource allocation was the most-often mentioned ethical concern for this group and was ultimately raised by 21 individuals. For example, one interview subject who supervises a region of four hospitals stated,

*“Well, you could always argue that resource allocation is an underlying ethical concern that permeates these things, because at the end of the day, you're thinking, ‘Okay, I've only got so many resources, and the problem is so large in the community, what can we possibly do to have a meaningful impact?’”*

Another interviewee with five years of experience at a facility said,

*“When we're thinking about where we give resources. Making sure that we're not ... That we're really putting them where they're needed. For example, we have a program that's for families that have a child that's diagnosed as unhealthy weight and to a large extent we support organizations that are serving very low income, uninsured/under-insured families, but then we also give funds to other areas of town where we have fairly well off residents who probably could pay for a class but we decided not to. The class would be free and it's just this interesting dilemma of well, you have these different resources of these families, but also regardless all of the families have a child that's at an unhealthy weight that needs the resources. Just thinking through are we being equitable, are we being just around those types of things.”*

While resource allocation has been a long-standing concern for health care ethics,<sup>37,176-178</sup> I am aware of only one work providing data on the process of resource allocation in Community Benefit.<sup>179</sup>

Unlike the process for conducting needs assessments and the reports on spending, the allocation of CB resources is not highly regulated. In order to be counted as CB, funds must fall within one of several specific areas, such as charity care or community health improvement, but how those dollars are distributed among and within these categories is completely up to each institution. Most commonly, funds are first directed toward charity care or shortfall from means-tested government programs. The money available for community health improvement is generally a small proportion of overall CB spending,<sup>5</sup> but this still means many hospitals are directing millions of dollars for community health. The method an organization uses is up to their discretion, as long as the funds are spent on activities that meet the legal criteria for CB, such as meeting an identified need and being available to the broader community. The reason to study this process is because allocation of limited resources for unlimited needs will always involve trade-offs that ultimately impact community health. By better understanding why one program should receive the resources over another, we establish what the criteria for allocation currently are, and determine whether those criteria ought to be modified.

### ***Allocation Process***

Allocating resources for CB is largely an ad hoc exercise for most organizations. This does not mean it is done without care; the CB managers I interviewed clearly saw it as an important part of their jobs. But when asked if the organization had a formal process for allocating resources for community health improvement, very few were able to describe such a practice. One interviewee said,

*“Let's say I have \$150,000 for health fairs and all my programs. I can use that money as needed so there's no formal process for that. As far as that goes, no, there's no formal way from that level.”*

Another said,

*“I use my own judgment. Small amounts up to say \$50,000 I just spend. When it starts getting to be bigger amounts, because our [location] hospitals are bigger and we have bigger budgets ... I literally have several hundred thousand that I can spend. Then I need approval. When it's small amounts, I just go ahead and do it.”*

Despite this informality, interviewees did not take this part of the process lightly. As indicated above, many of them recognized these decisions as having significant impact on community health in general and health equity in particular.

A few organizations did have a more formal process for allocation. Some had a small, internal body that made such decisions. One interviewee shared,

*“It's the administrative team, primarily driven by the president and the finance director, but this 6 people or so on the administrative council ... The request may come initially through me or through the foundation director, and both of us report to the president. We'll bring it up to him and then he may seek the counsel of the rest of the administrative team and then collectively the decision is made generally speaking in that way. That includes the mission leader who's also the HR person, and then the vice president of patient care, vice president of finance, the president, and the 2 clinic administrators.”*

Despite having a small council, this interviewee did not know what criteria factored into the group's decisions. On the other hand, two of the 27 organizations had a formal process for allocation. When asked, the interviewee said,

*“We do. Have an RFP. This is something that's evolved over time. It's become a pretty solidified and more rigorous process now where if an RFP focuses on a specific health issue, it's scored the points system and how we rate each area, there's about nine or so different areas, is transparent in our application. ... It's a pretty rigorous process.”*

This publicly-available RFP is tied to the organization's priority health areas and applications are judged in three areas: project description, including project goals and evaluation; organizational readiness, including experience with partnerships; and budget, including line items and a



sustainability plan. The RFP also gives an example of a successful grant application. The second organization with a public process was quite similar to one described above. Other organizations may have similar criteria in allocating resources, but it is rare for those criteria to be made explicit and publicly available. Without the criteria being explicit and publicly available it is impossible to know how consistently they are applied across project applications.

One of the more surprising findings about allocation for community health improvement was that a sizeable majority of large systems keep this process at the system office. When some facility-level CB managers were asked about allocating resources, they said things such as,

*“No, no. It's decided at the system level. It is a system function, system administered and system led.”*

And,

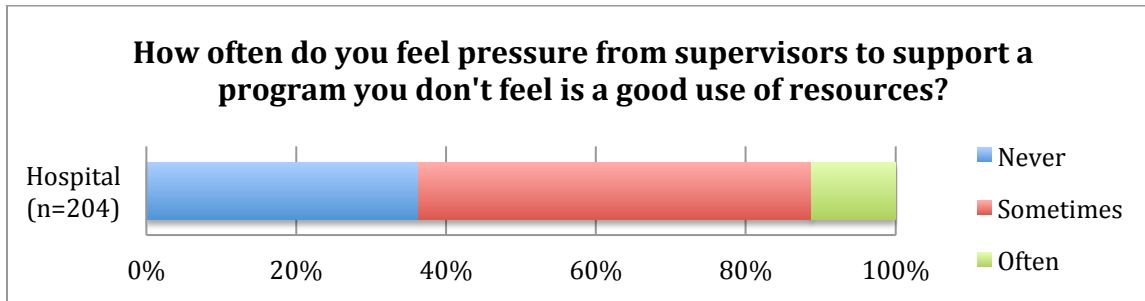
*“We have other programs like [program name], which gives small grants up to ten thousand dollars to local organizations to do activities that are healthy eating, active living and building social connections, so they'll do gardening clubs, cooking clubs, whatever. Those grants are operation dollars funded by the system office, managed by the systems office, and then distributed across.”*

It may make operational sense to place some of these functions at system office, but that raises concerns of its own. If CB is meant to be rooted in the community each facility serves, then having important functions such as allocation of limited resources to community groups may not be appropriate to have done at a system office several states away. This concern is discussed in greater detail in Chapter 5.

### ***Additional Ethical Concerns in Allocation***

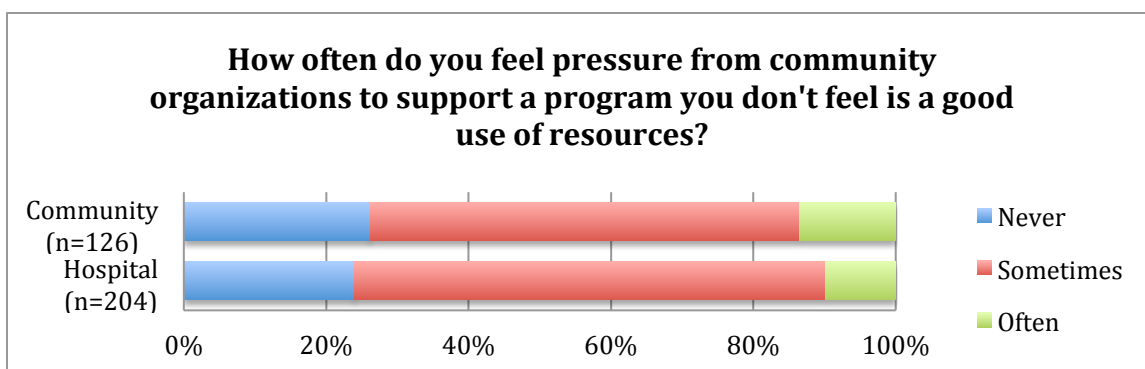
In addition to formal decision-making criteria, two additional elements of resource allocation raise ethical concerns for interviewees.

**Figure 4.1 Frequency of Ethical Concern with Supervisor Pressure**



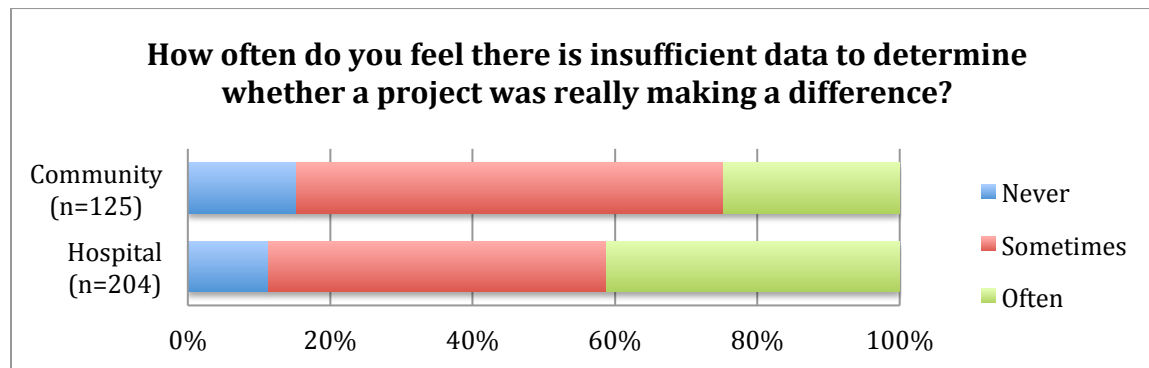
One of the elements that arose in interviews and focus groups was that those charged with spending CB dollars often felt pressure from individuals inside or outside their organizations to fund a program that the CB manager did not feel was a wise use of resources. Survey respondents from health care were asked, “How often do you feel pressure from supervisors to support a program you don’t feel is a good use of resources?” Survey respondents from both health care and the community were asked, “How often do you feel pressure from community organizations to support a program you don’t feel is a good use of resources?” Just over 50% of health care employees said they sometimes feel pressure from supervisors to do this and 11% said they often feel this pressure (See Figure 4.1). At the same time, over one-third (36%) indicated they never feel this kind of pressure.

**Figure 4.2 Frequency of Ethical Concern with Community Pressure**



The perceived pressure from community partners was slightly greater than that from supervisors (See Figure 4.2). A relatively small percentage of all respondents (10% of health care; 13% of community partners) indicated they often felt pressure from community organizations to support a program the CB managers felt wasn't a wise use of resources while a substantial portion (66% of health care; 60% of community partners) indicated they sometimes felt pressure from community partners. About one-quarter of respondents indicated they never feel this pressure (24% of health care; 26% of community partners). For this ethical concern, there was no difference in the experience of health care employees and community partners ( $p=0.470$ ).

**Figure 4.3 Frequency of Ethical Concern with Having Sufficient Data**



Another issue that arose in both interviews and focus groups was not having enough data to make good decisions. These concerns crossed many aspects of the CB process: data for determining community needs; data for choosing effective programs; data for conducting evaluations; and sharing data across organizations. There is also a dearth of literature that evaluates the long-term health impact of CB programs<sup>92,180</sup> and the need for a stronger base of

evidence has been expressed by many others.<sup>181</sup> Some scholars are suggesting the need for a new paradigm of evaluation in public health, one that is based on a complex systems model rather than a simpler causal chain.<sup>182</sup> One interviewee exemplified the frustration many felt with evidence when she said,

*“Do we have good mental health data to say that mental health is an issue in our community? No, we have terrible data. Do you wait until you have good data to show that it's a problem before you start working on it? You don't. You just start working on it because you know it's bad.”*

Regarding data's relationship with allocation or evaluation, all survey respondents were asked, “How often do you feel there is insufficient data to determine whether a project was really making a difference?” Of all the ethical questions, those from health care indicated they experienced this one most frequently. Only 11% said they never experienced this issue, while 48% said they sometimes experienced it, and 41% said they often experienced it (see Figure 4.3). This issue also occurred frequently with community partners (15% never, 60% sometimes, and 25% often), although community partners indicated it was less often a concern than health care employees did ( $p = .010$ ). Additional examples of the relationship between ethics and data are discussed in Chapter 5.

### ***Discrete Choice Results***

One of the challenging elements of organizational ethics, such as feeling pressure to allocate resources unwisely or having insufficient data to make an informed decision, is that many ethical concerns are embedded within the structure and process (or lack of structure and process) of the organization. One can explore such ethical concerns by directly asking about them, as I did during the interviews and as part of the survey. In another attempt to make explicit what would otherwise remain implicit, I fielded a discrete choice experiment (DCE) on the issue of resource allocation as part of the survey. DCE is an ideal research method for revealing

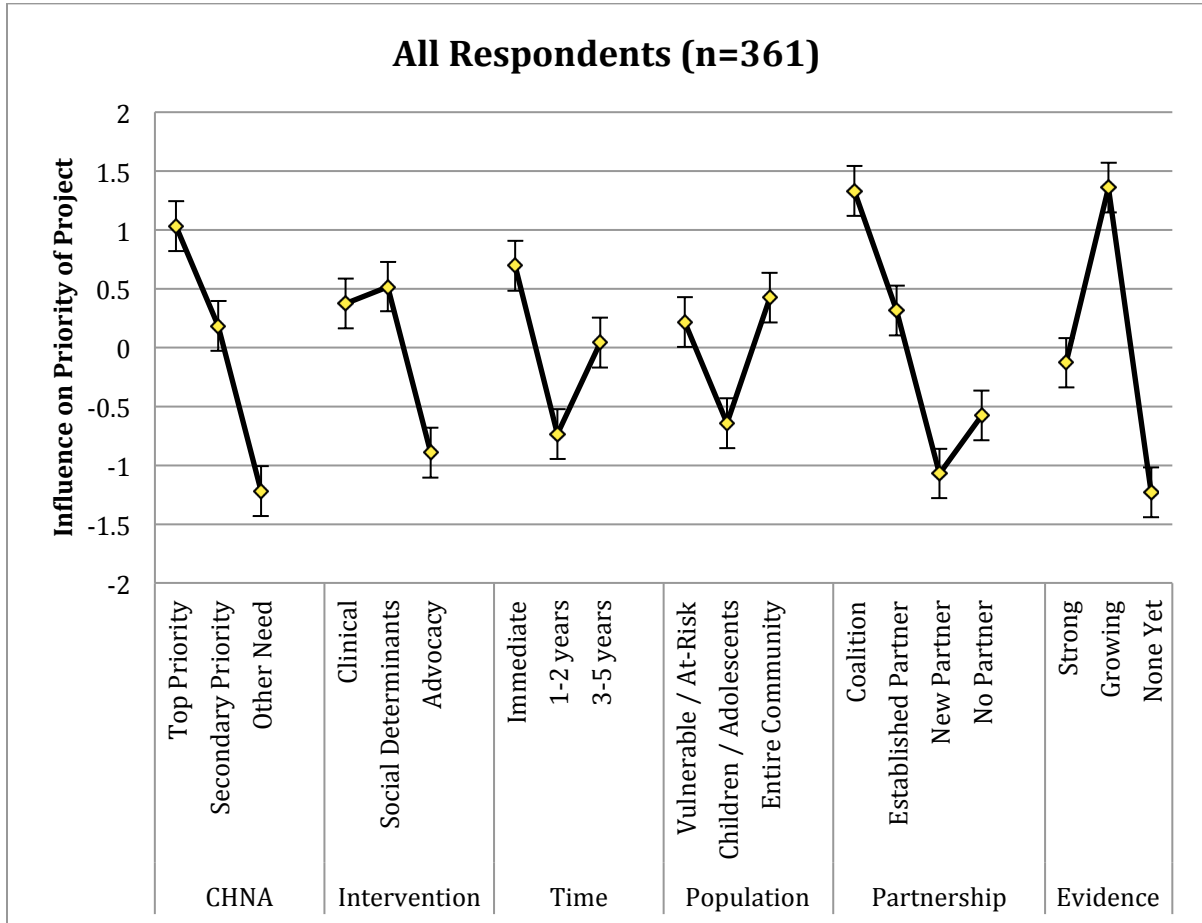
implicit values because respondents do not consciously think of the activity as unearthing their personal priorities. Nevertheless, DCE gives us the ability to reveal latent value systems, such as identifying the characteristics of community health activities that drive decision-making.

Survey respondents were asked the following question, followed by a choice between two community health initiatives (see Appendix 5, question 41 for example choice).

*Consider the following two community health projects. A nonprofit hospital has the resources (either hard dollars or in-kind resources) for one of the projects but not for both. They have asked your opinion as to which one they should support. Assume all other aspects of the project are in keeping with the organization's goals.*

Results of the DCE show a very clear influence of several characteristics on which community health projects receive priority.

**Figure 4.4 Priority Characteristics for Health Projects - Hospital and Community Combined**



Note: A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.

With all respondents combined (n=361), at least two levels in each of the six attributes had a statistically significant impact, either positively or negatively, on the decision of which projects should receive priority (see Figure 4.4). Three categories – evidence of effectiveness, partnership, and priority on CHNA – were shown to have the greatest influence on decision-making. Three additional categories – type of intervention, time until measurable change, and target population – while still showing some influence, had less influence than the other three levels.

**Table 4.1 Priority Characteristics for Health Projects - Hospital and Community Combined**

Attribute	Level	Coefficient (CI)	P value
CHNA Priority Level	Top Priority	<b>1.03 (0.79, 1.28)</b>	<b>&lt;0.001</b>
	Secondary Priority	0.18 (-0.30, .40)	0.094
	Other Need	<b>-1.22 (-1.50, -0.93)</b>	<b>&lt;0.001</b>
Intervention Type	Clinical	0.38 (0.06, 0.76)	0.018
	Social Determinants	<b>0.52 (0.28, 0.76)</b>	<b>&lt;0.001</b>
	Advocacy	<b>-0.90 (-1.24, -0.55)</b>	<b>&lt;0.001</b>
Time to Impact	Immediate	<b>0.69 (0.43, 0.96)</b>	<b>&lt;0.001</b>
	1-2 years	<b>-0.74 (-1.07, -0.40)</b>	<b>&lt;0.001</b>
	3-5 years	0.04 (-0.24, 0.32)	0.774
Target Population	Vulnerable / At-Risk	0.22 (0.01, 0.42)	0.038
	Children / Adolescents	<b>-0.64 (-0.94, -0.35)</b>	<b>&lt;0.001</b>
	Entire Community	<b>0.43 (0.16, 0.69)</b>	<b>0.001</b>
Partnership	Coalition	<b>1.33 (1.00, 1.67)</b>	<b>&lt;0.001</b>
	Established Partner	0.31 (0.01, 0.62)	0.041
	New Partner	<b>-1.07 (-1.45, -0.69)</b>	<b>&lt;0.001</b>
	No Partner	<b>-0.58 (-0.89, -0.26)</b>	<b>&lt;0.001</b>
Evidence of Effectiveness	Strong	-0.13 (-0.42, 0.16)	0.382
	Growing	<b>1.36 (1.04, 1.68)</b>	<b>&lt;0.001</b>
	None Yet	<b>-1.23 (-1.59, -0.87)</b>	<b>&lt;0.001</b>

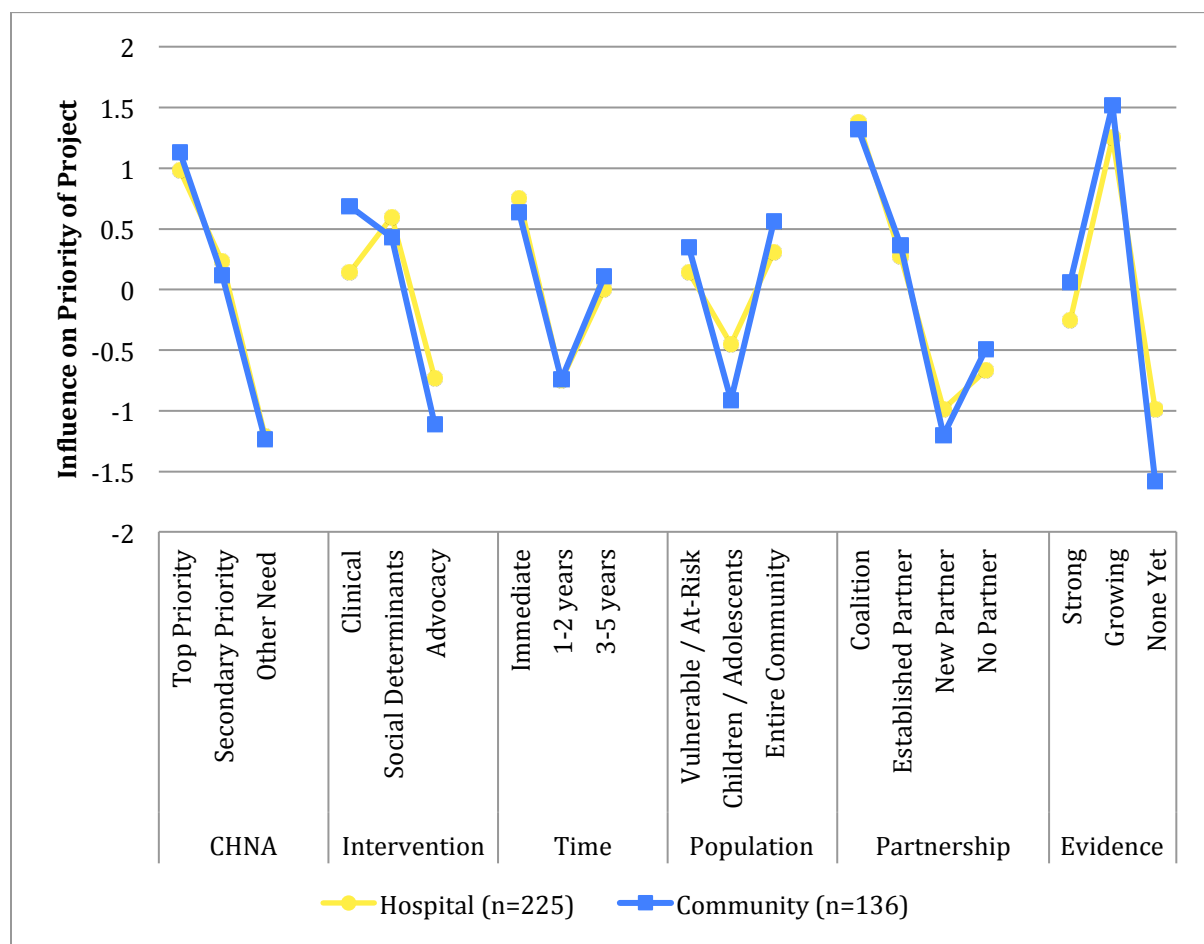
Note: A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.

The coefficients of stated preference experiments do not have any inherent meaning. Nonetheless, a value greater than 0 suggests that particular attribute level makes it more likely for the profile that contains it to be selected and a value less than 0 means that attribute makes it less likely for the profile to be selected. For example, a project profile that indicated the intervention had a growing body of evidence that the intervention was effective was much more likely to be selected (coefficient = 1.36) and a project profile that indicated that there was not yet evidence the intervention was effective was much less likely to be selected (coefficient = -1.23) (see Table 4.1). The difference in coefficients with a single level (e.g., comparing the difference in

coefficients between CHNA priority levels) gives an indication of how significant the influence of that attribute is on selection. However, coefficients cannot be compared between attributes (e.g., even though the coefficient for clinical intervention and an intervention targeting the entire community are quite similar, this should not be interpreted as them having a similar impact on decision-making).

Respondents were very unlikely to opt-out of choosing either project. Respondents chose the opt-out option on only 6.3% of all choice sets and only one out of 361 respondents opted-out on all six choice sets.

**Figure 4.5 Priority Characteristics for Health Projects - Hospital and Community Comparison**



Note: A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.



When comparing the respondents between hospitals (n=225) and community partners (n=136), the results of each group were quite similar to the other (see Figure 4.5). There were no statistically significant differences at any of the DCE levels between hospitals and community partners; evidence of effectiveness, partnership type, and CHNA priority level remained the most influential attributes for priority projects. In designing this experiment, I thought there would be differences between these two groups. I assumed hospitals might be more concerned with the CHNA priority level or the community partners more concerned with having a coalition of partners. But such was not the case. If the results are a true representation of shared priorities between respondents from health care and community, that is a good sign since community health improvement strategies should be shared endeavors. The similarities could have also arisen for other reasons, however. It is possible, for example, that my sampling of community partners was biased toward organizations that are more likely to work with local hospitals than the typical community organizations. It is also possible that the respondents who are more likely to respond to a survey about hospital-community collaboration are more likely to be actively collaborating already than the typical hospital employee or community leader.

I conducted several analyses of subpopulations. All respondents were asked how confident they felt in their answers to the questions (see Appendix 5, question 13). This is done because these experiments can be cognitively burdensome and confusing and it is helpful to conduct an analysis of only those respondents who felt confident in the process. The results of this subpopulation (n=324 of the original 361 respondents) showed no differences from the original results (see Figure A6.1). I also conducted analyses based on basic demographic data collected as part of the survey. Comparing the results based on gender (male and female), geographical location (urban and rural), religious affiliation (faith-based and secular), and

longevity in the field (greater than 15 years and 15 years or fewer) also showed no significant difference between any subgroups (see Figures A6.2, A6.3, and A6.4).

### ***Corroboration of DCE Results***

The DCE results offer important insight into the implicit values driving resource allocation in CB. In addition, the survey included an open-ended question (see Appendix 5, question 14) to aid in the interpretation of these results. The priority level of the CHNA was clearly a significant factor in decision-making. Considering the new regulatory requirements related to the CHNA and the results from Chapter 3 that CB managers often see themselves as compliance officers, this may be expected. Nevertheless, participants also seem to be invested in the results of the CHNA for reasons beyond their regulatory power. One respondent, a community health manager with 20 years of experience in health care wrote,

*“I have a difficult time supporting any investment in an initiative that does not support our CHNA priorities. We put significant resource into CHNA process and I believe we need to stay focused on the priority health issues identified through that process.”*

These results seem to show that both health care employees and their community partners value the CHNA as a vehicle for improving community health.

Partnership was also a significant influence on decision-making. As discussed above, partnership is a complex concept and it is impossible to determine what exactly each respondent understood when evaluating this idea. Nonetheless, a coalition of partners was a positive influence for every subgroup analyzed in this study. This result may be due to the regulations requiring some level of collaboration with local health departments and other organizations, but it also seems to run deeper than the regulations. One community partner who has been involved in this work for 2 years wrote,

*“My answers are tied to my belief in the power of collective wisdom. Projects done alone, I believe, rarely have the impact on the broader community compared to collaborative project.”*

Many respondents shared similar sentiments, recognizing that a hospital can often work on projects alone, but that it is not ideal to do so. What may be slightly concerning is that respondents had such negative responses to new partnerships. New partners may have advantages that established partners do not have, such as creative solutions, new voices, and the possibility of building capacity in areas where it does not yet exist. As partnerships become more of the norm in this work, it would be wise to evaluate the degree to which new community organizations are able to make their way to the table.

The influence of evidence is one of the most interesting results of this study. One might expect a clear monotonic relationship from high to low evidence, similar to the results of CHNA priority levels. However, the highest level of evidence, a best practice, did not make a project more likely to be chosen. At the same time, a moderate amount of evidence, a promising practice, did make a project much more likely. Unsurprisingly, a project with no evidence of effectiveness was much less likely to be chosen. A community partner with 16 years in the field may provide some insight in this attribute lacks a monotonic result when she writes,

*“I was not as concerned about evidence of success, because sometimes you have to be the first to do it, to build the body of evidence. I also wasn't as concerned about time to see outcomes... as long as you are communicating with stakeholders... they should understand not everything happens over night.”*

A community health manager with 23 years of experience in health care echoed these sentiments by writing,

*“My answers would likely reflect my interest in developing new and innovative solutions - not simply relying on what others have done, but building upon current knowledge and being open to new partnerships/collaborations.”*

No group of respondents was more swayed by a strong body of evidence (best practice) than by a growing body of evidence (promising practice). The DCE results may be related to the results from elsewhere in the survey that a large majority of all respondents felt they sometimes or often had insufficient data to tell whether they were making a difference (see Figure 4.3). Taken together, these results may suggest that practitioners of community health see one of their roles as generating evidence for a field they believe has yet to provide a clear body of evidence-based interventions. It is also possible that a large percentage of respondents believe that if there is strong evidence for a program that someone else, like a government agency, should implement it.

Another interesting result concerns the target population for intervention. Interviews and focus groups suggested a strong concern for vulnerable populations in the community. Yet interventions aimed at vulnerable populations did not influence decision-making. Interventions for the entire community were more likely to be chosen and those for children and adolescents were less likely. Some respondents indicated in the open-ended question that they did not select interventions for children because they were not a children's hospital, which is something that I did not anticipate in the study design. The results related to vulnerable and at-risk populations, however, are more difficult to explain. Several respondents wrote things similar to this health care employee,

*“In my responses, I tended to prioritize interventions that focus on at-risk and vulnerable populations rather than the 'community as a whole' due to the importance of actively targeting health equity. Oftentimes when you have non-targeted interventions, the already well-off benefit since they can better access the resources available.”*

This sentiment, although expressed in every part of this study, did not come across in the results of the DCE. This same discrepancy has been found in CHNAs and CHIPs, where equity is a stated concern in a CHNA but few actual programs are designed to address equity.<sup>183,184</sup> The reason may simply be that other elements of a project are more important to resource allocation

than ensuring a project is designed for vulnerable populations. It may also be that DCE does a better job of revealing values than interviews and focus groups because DCE is designed to reveal implicit values that respondents are often unable to explicitly articulate. I believe this area is worth further exploration.

It is also difficult to interpret the results on the time that elapses before measureable change. Those interventions with immediate results were more likely to be chosen, which is quite understandable. One employee in health care strategy explained,

*“Not-for-profits generally have strategies that can be worked within a segment of time that is more short-term monitoring their budgets more tightly. An investment that had early returns would be seen as less risky than over a 5 year period.”*

For some reason, an intervention with a 1-2 year time horizon was less likely to be chosen than one with a 3-5 year time horizon. It is unclear why this might be.

Finally, the type of intervention had clear influence on the allocation of resources. In every subgroup analysis, advocacy-related efforts were less likely to be chosen than others. Public policy is a relatively new space for hospitals and health systems and many may not believe it is the proper role of nonprofits to engage in this type of advocacy. One health care CEO specifically wrote, “I’m highly skeptical of advocacy-related efforts.” Clinical interventions and interventions on social determinants of health made a project more likely to be selected. Considering the relatively recent addition of social determinants of health into the community health lexicon, this may be a surprising result. Still, one community partner seemed to reflect the overall sentiment of respondents when writing, “The social determinants of health are a critical piece of the puzzle that has in the past not been supported nearly enough.” Given the fact that IRS regulations do not explicitly allow health care organizations to include on Schedule H much spending related to the social determinants of health, the preference for these types of

interventions suggest further conversation is needed. These results differ somewhat from a study that asked community members to deliberate and decide whether nonprofit hospitals should prioritize clinical prevention, community-based work, or policy change. That study of 66 community members found policy as the preferred approach of over 50% of study subjects.<sup>179</sup> This may be because of study population (community members versus hospital/community leaders), because of language (policy versus advocacy), or because the other study described specific interventions from which respondents could choose.

It must be noted that allocating resources for community health projects is a complex process that this kind of experiment cannot fully capture. One respondent referenced this reality well by writing,

*“My answers were mixed, in part, because I think it's probably good for any organization to have a mix of approaches. For example, I wouldn't want to do everything alone, but I don't think we need a collaboration for everything. CHNA priorities are very important for focus, but they don't exclude or eliminate every other need. Likewise, strong evidence for effectiveness is always desirable, but someone has to test things and build evidence as well!”*

I suspect many respondents felt the same way, wanting to add to the list of attributes and levels or to express the nuance of their work. Nevertheless, the results of the DCE and the survey respondents' accompanying comments offer us a first insight in the allocation priorities for health care employees and community partners. I received several messages from participants asking to use the DCE in their own facilities as a team exercise. One community partner wrote, “The choices were difficult and caused me to examine what I value.” Essentially, that is the point of the entire experiment. It forced participants to make explicit what so often goes unspoken.

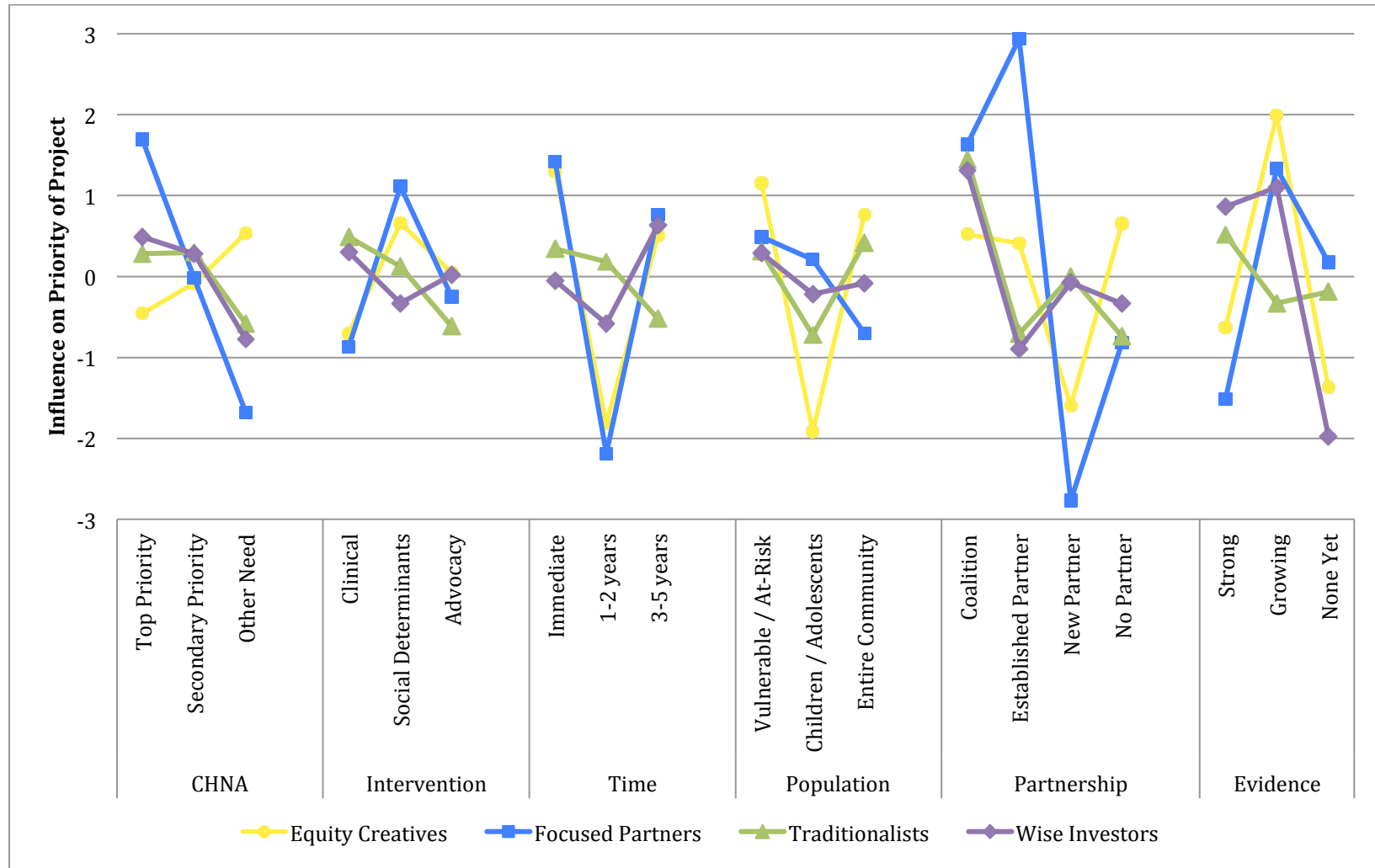
### ***Latent Class Analysis***

Even though there were no significant differences on attribute priorities based on demographic characteristics, there is still a possibility that respondent subgroups emphasize

different attributes when choosing community health projects. To determine whether this is the class, I conducted latent class analysis. To do so, latent variables are introduced in order to detect patterns among respondents. I tested dividing respondents into 1, 2, 3 or 4 classes to see which model most accurately reflected the data. Results show that introducing latent variables for a 4-class model was the most accurate in predicting the discrete choice results (see Table A7.1). When basic demographic data (profession, gender, faith-based institution, urban/rural location) were introduced as covariates, there was no statistical difference in likelihood between classes. This further confirms the stratified analyses and indicates there are latent categories of respondents for which I do not have covariates.

The four classes of respondents were fairly evenly divided among respondents. Class 1 represented 33.9% of respondents; class 2 represented 28.7%; class 3 represented 28.5%; and class 4, the smallest segment of the respondent population, represented only 8.9%. Class 1 is uniquely influenced by time until measurable impact as well as target population, two attributes that had little influence in the overall respondent group (see Figure A7.1). This may partially explain why vulnerable or at-risk populations seemed such a priority during interviews and focus groups but did not appear to influence the overall DCE results; there may be a smaller subset of the population that is very focused on these groups while others place such targeted interventions as a lower priority. Class 2 is uniquely influenced by partnerships and by the health need's place on a CHNA. Class 3 is uniquely not influenced by evidence of intervention effectiveness, while class 4 is the exact opposite and much more likely to be influenced by that attribute.

**Figure 4.6 Latent Class Model for Discrete Choice Respondents at Attribute Level**



Source: Author’s analysis of survey data, February-May 2017. A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.



In addition to determining differences at the general attribute level, this analysis allows analysis at the more specific attribute categories (see Figure 4.6). This more granular analysis shows the four classes have different priorities that do not show up in the DCE results. For example, class 1 is willing to go against the dominant way of thinking about CHNA priorities and often chooses profiles that do not contain a top or secondary need. Class 2 respondents had very strong opinions on partnership and were much more likely than other groups to select established partners and less likely to select profiles with coalitions or no partner. In latent class analysis, each class often gets labeled with a creative descriptor that emphasizes that group's priorities. This is admittedly art over science, but I propose the following. Class 1 I call Equity Creatives, recognizing their preference for projects that target vulnerable populations while also being less tied to CHNA results or best practices. I label class 2 as Focused Partners due to their high emphasis on CHNA priorities and their high preference for established partners. Class 3 I consider Traditionalists, because they emphasize everything one would expect: CHNA priorities; clinical interventions; quick results; a coalition of partners; and strong evidence. Class 4 might be considered the Wise Investors, because they are quite willing to say no to projects and for those they do invest in, they seek a coalition of partners, use evidence-based projects, and are not afraid of a longer timeline.

### ***Conclusion***

There are several results to highlight about the ethics of resource allocation. First, most organizations do not have a formal process for allocating the large amount of funding that goes into community health improvement. Two organizations in this study have formal allocation methods and have chosen to make their process explicit, by committing their priorities, and thus their values, to publicly available documents. But that is not the case for most of the

organizations included in this study. The fact that this process is not formalized raises the likelihood that some decisions will not be aligned with organizational values. It also may make it less possible for the community to hold these organizations accountable for the decisions that they make. Second, most survey respondents experienced ethical challenges in the process of allocating resources. These challenges included pressure from supervisors, pressure from other community organizations, and not having data to determine whether the project was making an impact. Finally, the DCE and open-ended questions revealed strong agreement on allocation priorities, but that some of those priorities may not align with assumed values of community health work. For example, the fact that efforts to assist vulnerable communities was not a higher priority in the DCE may challenge the assumption that addressing health equity is a core principle of population health efforts. The results offer an opportunity to debate more explicitly which values should take highest priority when allocating limited resources for community health improvement.

One of the central tasks of ethics is to help us weigh competing values. In clinical ethics, we must often balance beneficence and autonomy (e.g., when a patient refuses care that the clinician deems necessary). In public health ethics, we often try to find the right balance between achieving a public health goal and maximizing liberty (e.g., the debate on whether to tax sugar-sweetened beverages to reduce obesity). The study of resource allocation in CB is yet another example of needing to weigh competing values. Should the poor and vulnerable receive priority or should we design interventions for the entire community? Should hospitals emphasize clinical care or should we work on the social determinants of health? Should we only invest in programs that have a strong evidence base or should we use this as an opportunity to experiment and build new evidence? These are not just technical and operational questions. The answers to these

questions reveal our ethical values and what we believe is the right way to proceed. Like many questions of clinical and public health ethics, there will be legitimate disagreements about which way is ethically preferable. Multiple paths can be defended. Until now, we have had very little discussion about what those competing values are, or what those should be. These results raise the prospect that the ethics of resource allocation can become a regular conversation with CB leadership, just as the question of patient autonomy is a regular point of conversation among clinicians.

The ethics of resource allocation raise several concerns related to practice and policy, some of which have been referenced above. A more robust discussion of these implications is offered in Chapter 6. Before this, Chapter 5 provides an overview of the ethical concerns that arise during community health efforts and some theoretical contributions to this area.

## **Chapter 5 – Mapping New Ethical Concerns**

### ***Introduction***

Efforts in population health raise ethical issues that the health care community has not fully appreciated. The focus of the results thus far has been on community health, which I consider one of the two parts of population health. In this section, I also include some ethical considerations that arise in population health management, which I have defined as the other major area of population health. These related but distinct areas are gaining prominence for many of the same reasons and should be considered together when mapping the terrain of population health ethics. The health care and research communities made an investment to address other ethical challenges with the birth of modern medical and research ethics. More recently, public health professionals have committed energy to doing the same for their field. The same can be done for population health.

The results of this study suggest that population health creates many situations where right action is not always obvious or easy. I do not attempt to answer those many questions here. This project represents the map and compass rather than the destination, identifying population health ethics as an area of inquiry to which others can contribute. To do so, a basic terrain must be mapped out and such is the goal of this chapter. First, I describe the three levels – individual, organizational, and social – at which questions of population health ethics occur. Second, I offer a different way to organize population health ethics, this time in descriptive categories. Third, I explain the practical infrastructure that is needed to address questions of population health ethics. Fourth, I explore the new intellectual resources needed for this topic. I first do this by suggesting

two ways of bringing existing ethical frameworks – bioethical principles and virtue ethics – to bear on these themes. Finally, I offer a conceptual model that compares and contrasts population health ethics to clinical ethics and public health ethics.

### *Three Levels of Population Health Ethics*

Given the multiple relationships within the area of population health ethics, it is helpful to think of questions occurring at three different levels (see Table 5.1).

**Table 5.1 Three Levels of Population Health Ethics**

Level	Description	Example Questions
Individual	Questions about the <b>right way to treat patients</b> that arise from an organization adopting strategies related to population health management; largely driven by the acceptance of financial risk for certain populations	<ul style="list-style-type: none"> <li>• Should an organization screen for social determinants of health when there is no reasonable expectation for an intervention?</li> <li>• Is it ever appropriate to have different standards of care for patients based on whether the organization holds financial risk for a patient or not?</li> <li>• What should happen when someone is no longer in need of medical care but we know he/she is unsafe to discharge for other reasons?</li> </ul>
Organizational	Questions about the <b>right way to organize itself for action</b> that arise either from population health management or from more general population-level initiatives	<ul style="list-style-type: none"> <li>• To what degree should patient data (either health or non-health information) be shared with other entities for population health planning?</li> <li>• What kind of staffing and training is necessary to achieve population health goals? Who is held accountable for achieving these goals?</li> <li>• What relationship should population health have with population health management within the organization? Who facilitates conflicts when they arise?</li> </ul>
Social	Questions about the <b>right way to engage with the broader community</b> that arise either from population health management or from more general population-level initiatives	<ul style="list-style-type: none"> <li>• When a hospital is collaborating with other community organizations, what is the indication of paternalistic behavior?</li> <li>• Is it more important to use resources cost-effectively or to reduce health disparities when there is a conflict between the two?</li> <li>• To what degree should hospitals be public advocates for issues that indirectly affect health?</li> </ul>

The first level is the individual level, which includes the emerging questions related to population health management. While this study did not explore questions of population health management directly, they were raised in some interviews, focus groups, and member checks. Many of the same regulatory and financial measures are driving the adoption of population health management and community health efforts. For example, new value-based reimbursement systems are changing the clinical management of covered lives and motivating hospitals to build relationships with community-based nonprofits who can help with population-level interventions. Additionally, health care entities are organizing themselves in such a way that the two cannot always be separated. The shift from volume to value in health care reimbursement means that health care organizations are slowly moving from revenue generation to cost containment. Volume-driven revenue generation has its own ethical issues, such as the cost and risk of unnecessary procedures. But what must a health care organization do in an era of cost avoidance? It must determine when care is truly necessary and when it is not. If the organization bears some financial risk for ongoing health outcomes, it must account for factors that affect patient health other than clinical care, such as social determinants of health and health behavior, and determine ways to affect those. All of these efforts bring new questions of what constitutes ethical behavior. New financial pressures and greater appreciation for patients' social complexity mean that health care organizations will need to explore ethical questions about how it interacts with patients for whom the organization bears financial risk.

The second level goes beyond the clinical encounter to consider how the health care organization structures itself as it adopts population health strategies. This level could be considered a specific area of inquiry within organizational ethics, which assesses the degree to

which an organization exhibits its values through its actions. The area of population health ethics at the organizational level, therefore, evaluates the degree to which a health care organization identifies and lives out its value system as it takes on population health strategies. As discussed in Chapter 3, it concerns issues of structure and process. Even more, it includes identifying the competencies and resources (including workforce) needed to be effective in carrying out population health initiatives and investing in the development of needed expertise. It also involves identifying appropriate goals and offering the right incentives for employees to achieve those goals. For example, it would be unethical to staff a cancer center without identifying the skills needed to care for cancer patients or without hiring staff who possess those skills; it would be unethical to allow the organization's Chief Financial Officer or marketing director to supervise decisions about patient care. The organizational issues surrounding population health are not any different, but they have yet to receive needed attention.

The third level of ethical issues in population health considers how the health care organization interacts with its surrounding community as it invests in population health. This level, along with the previous level, came across most clearly in this study. The area of right action in hospital-community engagement is not new, but it takes on a greater relevance in an era of population health because hospitals have new financial and regulatory incentives to be involved in population-level initiatives. Hospitals also have increased need to coordinate care across multiple organizations. Therefore, the frequency of collaborative work is likely to increase. This level includes questions about meaningful collaboration: who should be involved and have voice; how is authority distributed; and how best to involve traditionally marginalized groups? It is also concerned with resource allocation issues, which necessarily require a hospital and its community to identify the primary goals of population health efforts. This level requires

the health care organization to recognize itself as part of a much larger ecosystem and to determine how to be an appropriate part of that ecosystem. By virtue of its size, resource level, and its possession of certain expertise, a hospital risks falsely believing it is the point around which all population health work revolves. Before paternalism became a watchword in medical care, physicians once fell into a very similar trap. Population health ethics requires that the organization consider the proper balance of power as it more regularly steps outside of its own walls and into its community.

Most ethical concerns have implications at multiple levels. For example, whether an organization chooses to screen for social determinants of health affects the individual level (e.g., how a provider interacts with the patient), the organizational level (e.g., what kind of infrastructure is needed to carry out this process), and the social level (e.g., the degree to which the organization can build capacity within the community for improving social determinants). The levels serve as a way to organize one's thinking about the various ways population health influences the health care organization's relationships. This way of organizing ethical concerns also allows people throughout the health care organization to consider how population health might affect their own work. A physician may not care about the hospital's strategic planning, but she should care about how ethical questions may change or arise as she interacts with her patients. Similarly, a community health manager may not be concerned about how different payers affect standards of patient care, but he should care about whether the hospital is hiring a lawyer or a social worker to staff the Community Benefit office. Given the fact that so few subjects of this study were able to call to mind ethical issues associated with their work, the first task is helping people identify important ethical questions to ask no matter where they are within the organization. The second step is giving them the resources to start answering those questions.



## ***Core Issues for Population Health Ethics***

Throughout the previous three chapters, I have described ethical challenges associated with population health. While this study does not exhaust all the ethical questions that will emerge, the study does provide a basic terrain for what we might encounter. Above, I described the issues as occurring at three distinct levels: clinical; organizational; and social. Another way to think of these issues is according to general theme.

**Table 5.2 Summary of Ethical Issues for Population Health**

<b>General Category</b>	<b>Example Issue(s)</b>	<b>Corollary with more familiar ethical questions in health care</b>
Clinical care	Is it acceptable to have different standards of care for two patients, one for whom the organization carries some financial risk and the other for whom the organization does not?	Clinical ethics: When is it acceptable for recommended treatment to be influenced by the patient's insurance?
Organizational structure	To whom do those charged with improving community health report? What metrics are used to hold executives accountable for progress in improving community health?	Organizational ethics: Is it ethical to tie physician compensation to financial metrics?
Consequences of consolidation	Should a large health system spend Community Benefit resources evenly across communities, on those with the greatest need, or those that align with system priorities? Which decisions for community health improvement should always be made at the local level and which can be centralized?	Public health ethics: In the case of emergency, how does a provider triage limited time and resources? Organizational ethics: When does managed care inappropriately usurp the authority of physicians to provide the care they believe a patient needs?

Collaboration, Power, and Voice	When do community partners have a say in setting priorities, in identifying strategies, in allocating resources, or other stages of community health improvement? Does this change if community partners are requesting something the hospital disagrees with?	Clinical ethics: When do patients have a say in their own treatment? Does this change if providers disagree with their decision?
Resource allocation	To do what degree should resources be prioritized for vulnerable populations? When should hospitals use resources for advocacy or improvement of the social determinants of health?	Public health ethics: How should limited public resources balance the goals of efficiency and equity? When does addressing a health inequity outweigh using resources as efficiently as possible?
Evidence	Is it appropriate to use limited resources for programs where there is little to no evidence that they actually improve community health?	Clinical ethics: When is it acceptable for a provider to use a pharmaceutical for off-label usage?
Conflict of interests	To what degree can resources that should benefit the community also benefit the hospital? When is acceptable to align strategies for community health improvement with strategies for hospital growth?	Clinical ethics: When is it acceptable for a physician to receive compensation from a company whose products he/she recommends to patients? Public health ethics: When is it acceptable for researchers or policymakers to take funds from commercial interests for research on a given topic?

The ethical issues for population health can be grouped into several general categories: organizational structure; consequences of consolidation; collaboration, power, and voice; resource allocation; evidence; clinical care; and conflicts of interest (see Table 5.2). When speaking with practitioners over the course of this study, I have found it helpful to explain the ethical issues for population health by offering corollaries to ethical issues with which people may be more familiar. I therefore include such corollaries for each category. It is worth noting that many of the issues arising from population health are not unique to population health. Standards of care, conflicts of interest, resource allocation, and use of power are familiar categories to anyone who has worked in the field of health care ethics. As noted below, however,

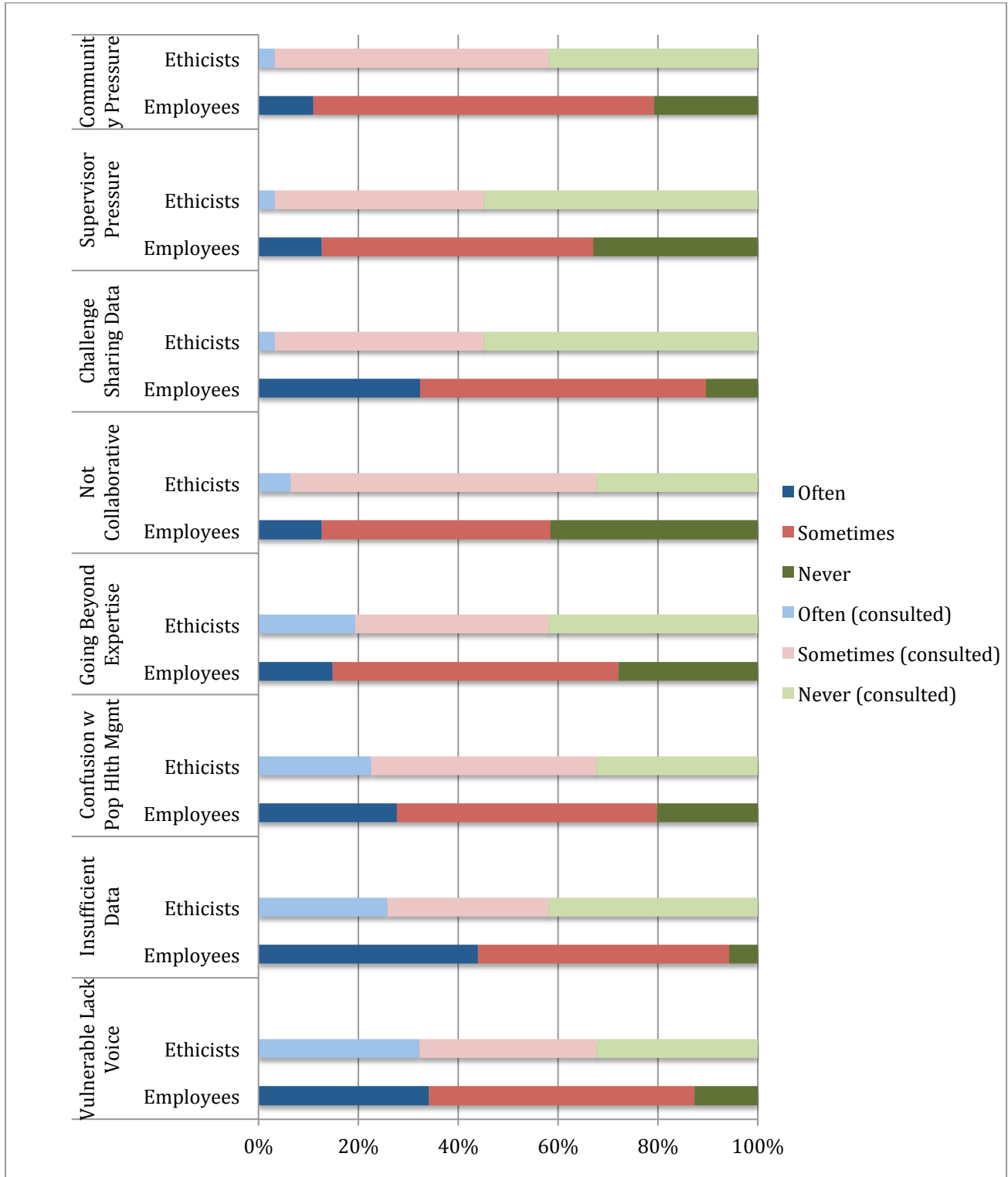
the actor, primary relationship of concern, and core ethical concepts make population health ethics distinct from what has been studied before.

### ***Involving Ethicists in Population Health Ethics***

One of the key challenges with identifying and addressing the issue of population health ethics is that it requires new intellectual resources and practical infrastructure. In addition to the theoretical work that must be done, actual people who can help health care organizations think through these issues must be in place. The infrastructure for clinical ethics, for example, is well integrated into today's health care system. Hospitals often have staff ethicists and/or ethics committees; there are educational programs and professional associations that cultivate interest in issues of clinical ethics; there are journals and conferences that attract interest in questions of clinical ethics; and so on. For understandable reasons, such is not the case for population health ethics.

As part of the survey, I asked a different version of the ethics questions of hospital ethicists than I did of hospital employees. For hospital employees, I asked how often they had *encountered* various scenarios. For hospital ethicists, I asked how often they had *been consulted* about the same scenarios. The difference was designed to determine whether there was any meaningful difference between the frequency with which staff encountered a question of population health ethics and the frequency with which it was brought to staff ethicists.

**Figure 5.1 Comparisons Between Hospital Employees and Hospital Ethicists on Frequency of Experiencing and Being Consulted on Ethical Concerns**



The results show that in seven of the eight situations, employees encounter a question more often than ethicists are consulted about it (see Figure 5.1). In five of these situations, the difference was statistically significant (see Table A9.1). There are potentially very good reasons for this difference to exist. Most importantly, there is nothing to say that there should be an equivalent frequency between encountering an ethical situation and consulting on it. In fact, if employees are trained well to deal with ethical questions, we would expect to see them encountering situation more often than they consult ethicists on similar situations. It is also quite likely that hospital ethicists are not experienced in dealing with questions of population health ethics. In such cases, it may not be all that helpful for hospital employees to consult with ethicists on these issues. Or even if the ethicists are trained for these questions, it may not fall within their scope of responsibility. Any time they spend on these questions, therefore, is time they are not dealing with important questions of clinical ethics for which they are actually responsible. Moreover, even though hospital employees experience these issues on a regular basis, they may not see them as ethical concerns and therefore would not think to bring them to hospital ethicists. Regardless of the reason why it occurs, issues of population health ethics are arising within health care organizations and there is not an obvious person within the organization to whom the staff member can turn.

I recently wrote about the need to broaden the competencies we expect from health care ethicists to include issues related to population health.<sup>185</sup> In it, I suggested that building capacity for population health ethics would require several concurrent strategies. First, we must identify the knowledge domains necessary for this field. As a baseline, I suggested we need ethicists who are familiar with public health, community engagement, and health care business operations. This first goal allows us to begin building competency at the individual level. Second, we need to

build a team of individuals within health care organizations who are interested in these questions in the same way that we have built ethics committees who handle issues of clinical ethics.

Hospital ethics committees have traditionally held three roles within health care organizations: education; consultation; and policy development.<sup>186</sup> As organizations move into population health, they would benefit greatly from an ethics committee fulfilling a similar three-fold charge.

As we consider ways to build the practical infrastructure needed to address issues of population health ethics, we must also be investing in the intellectual infrastructure. To that end, I first apply two schools of thought – bioethical principles and virtue ethics – to the questions of population health ethics. I then offer a conceptual model of population health ethics as compared to clinical ethics and public health ethics.

### ***Population Health and Bioethical Principles***

One of the possibilities for framing the ethical challenges of population health is to use the familiar principles of medical ethics. Autonomy, beneficence, and justice are the classic bioethical principles enshrined by the Belmont Report,<sup>56</sup> which have traditionally been applied in clinical questions. One of the weaknesses with bioethical principles, or perhaps just one of the weaknesses in the way that they are applied, is that it can give the impression that action can be divided into right or wrong. A research project is approved once it overcomes the threshold set by an Institutional Review Board; a controversial medical procedure is permitted if it is deemed ethical by a committee. Principlism can lead us to evaluate discrete action as ethical or not rather than seeking to build ethical systems that encourage people and organizations to reach for ever-more ethical ways of proceeding. Although principlism has significant weaknesses, it does provide a shared language in the field of ethics. Therefore, I briefly explore the application of

these ethical principles for issues of population health. In addition, I share data from two other survey questions on population health ethics.

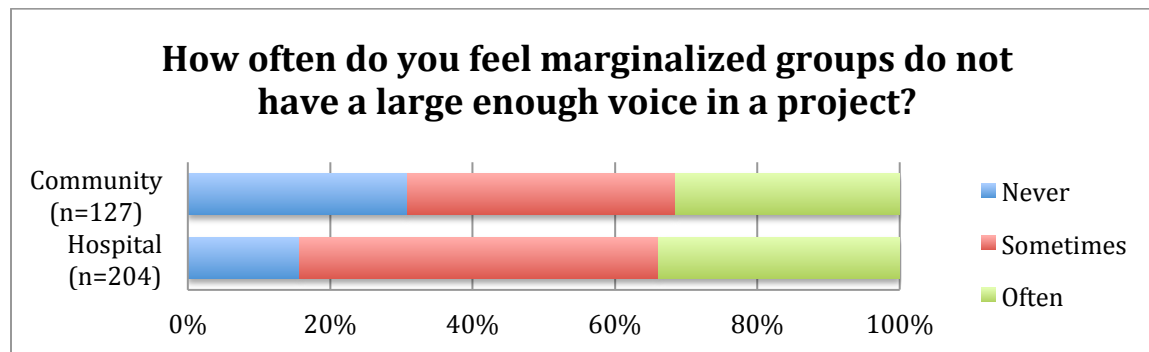
### *Autonomy*

Autonomy, an idea grounded in the respect for persons and the animating force behind informed consent, is regularly the dominant principle in modern bioethics. Because autonomy is conceptualized at the individual level, however, its application to issues of population health ethics is not entirely apparent (except in issues of population health management, where patient autonomy would be a strong consideration). Public health ethics has often grappled with the role of autonomy in health policy, asking the degree to which individual autonomy can be restricted in order to achieve a public health goal. For example, public health ethics considers when motorcyclists can be compelled to wear hear helmets, when sugary beverage consumption can be taxed or restricted, or when those exposed to or carrying infectious diseases can be isolated or quarantined. All of these public health measures require that a restriction to autonomy be justified on the basis of reducing morbidity or mortality. Yet population health ethics is rarely in a similar position because the restriction of autonomy is almost always the prerogative of the state. The role of autonomy in population health ethics, therefore, would be different than autonomy in public health ethics.

Because autonomy is rooted in respect for persons, the best application of autonomy to population health ethics may be in asking how respect is shown to various stakeholders in population health decision-making. In other words, autonomy in population health ethics would be interested in who has authority or voice in relevant decisions. For example, in Chapter 4, I described situations in which CB managers felt pressure from either supervisors or from community partners to fund programs that the managers believed was not a good use of

resources. In order to determine whether this pressure is an ethical concern, one must ask where the decision for funding currently resides and where it should reside. If one believes the decision resides with the community itself, then CB managers probably should feel pressure from the community to go against their own wills. But if one believes the decision resides with the CB manager, then pressure to go against their wills may be an ethical concern. At the same time, being autonomous requires being adequately informed. Therefore, even if one believes the CB manager has the ultimately authority, the supervisor and community may have important information that should be considered before any decision is made. Not being able to voice their ideas compromises both the CB manager's autonomy (because they are not fully informed) but also the supervisor's autonomy and the community's autonomy (because they both should at least have a voice in the process).

**Figure 5.2 Frequency of Ethical Concern with Including Marginalized Voices**



Another way to think of autonomy is by knowing it through its opposite. In clinical care, we easily call to mind a paternalistic physician making decisions for his or her patient. In population health initiatives, we rarely think of a hospital as being paternalistic, but that is only because we have not used that language. In Chapter 3, I described the frequency in which the



hospital is perceived to not be acting in a collaborative manner. It is not possible to determine with that research question when action is paternalistic, but one can easily imagine the latter as a subset of the former. In addition, survey respondents were asked, “How often do you feel marginalized groups do not have a large enough voice in a project?” About one-third of community leaders (31%) and hospital employees (34%) felt this occurred often. Another substantial percentage of community leaders (38%) and hospital employees (50%) said this sometimes occurred (see Figure 5.2). This lack of voice could be a sign that these communities lack the respect they should be accorded or that the hospital is acting paternalistically.

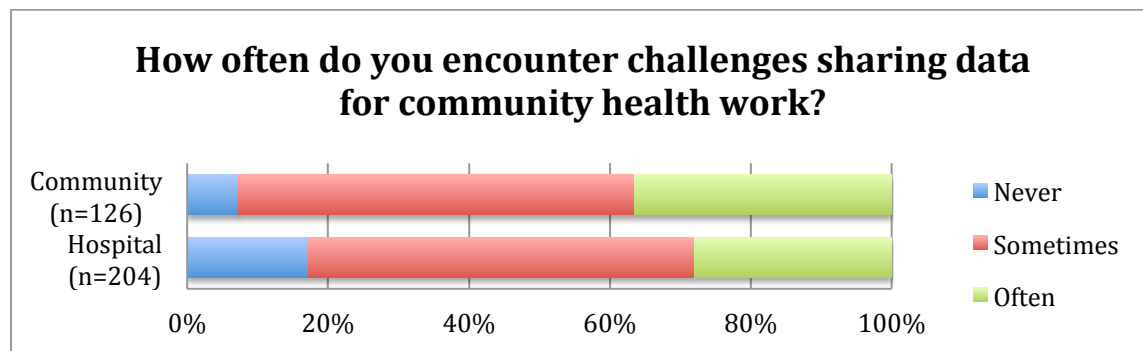
In the end, autonomy or respect can be helpful in population health ethics when we are concerned who how we can best show respect for persons or communities when carrying out population health activities.

### *Beneficence*

Another principle in classic bioethics is beneficence, or the need to secure someone’s well being. This includes not doing harm (sometimes described as the stand-alone principle of non-maleficence) as well as maximizing potential benefits. Rather than thinking of this principle as evaluating the benefit to a patient, we can think of it as helping us evaluate how to avoid harm and maximize benefit to a community. For example, in Chapter 3, I described the wide range of organizational structures that exist for Community Benefit. One element I described was the degree to which CB activities can be centralized in a system office or can be placed at the local facility. There was little consensus among interviewees as to the degree to which such centralization should occur. But more fundamentally, there seems to be little consensus as to what question should even be asked to determine how much CB should be centralized. If one’s lens is purely operational, one might ask, “how can this work be done most efficiently?” But if

one’s lens is beneficence, one should ask, “what will lead to the greatest benefit to the local community?” These two questions may very well arrive at the exact same answer in terms of how centralized to make the CB operations, but they would get there for very different reasons. I would suggest that when we take the ethics of population health seriously, we would arrive at our organizational arrangements because we’ve asked what structures and processes deliver the greatest benefits to the communities we serve.

**Figure 5.3 Frequency of Ethical Concern with Sharing Data**



Another concern that arose in the course of this study and has been previously expressed in the literature was the challenge in sharing needed data.<sup>32</sup> With multiple organizations in a single community working in similar areas, it stands to reason that sharing data would only make everyone’s efforts more effective. And yet many interviewees and focus groups indicated that the act of sharing data with other organizations was often a challenge. Respondents of the survey were asked, “How often do you encounter challenges sharing data for community health work?” (see Figure 5.3) Community leaders indicated they experience this challenge more often than hospital employees (chi square,  $p=.021$ ), with 37% of community members indicating they often have this challenge and an additional 56% indicating they sometimes have this challenge. Only

7% of community leaders said this was never an issue. Of hospital employees, 28% indicated this often occurred, 55% said it sometimes was, and 17% said it was never a problem. This ethical concern is not necessarily an issue of beneficence, but it may become one depending on the reason why sharing data is a challenge. If sharing data is challenging for technical or legal reasons, then it may not be a major ethical concern. But if sharing data is challenging because hospitals view data as proprietary or simply because hospitals choose not to invest in the capability to share data, we must ask whether the hospital is choosing to act in a way that fails to maximize potential benefit to the community. Again, we can approach this issue from two very different perspectives. One might ask, “what kind of data are we required to share and how can we do that most easily?” Or one might ask, “how might the community benefit from sharing data and how is that best accomplished?” The second form of the question takes the idea of beneficence as its central concern. There will likely be disagreement even when asking the second question, but at least it is animated by what is right and not what is required.

As in clinical care, beneficence is helpful when there are several possible actions, each carrying benefits and harms. Its unique application in population health ethics is that we take the entire community as our concern for maximizing well being.

### *Justice*

Justice is the principle that most easily finds resonance in population health, as it is concerned with the distribution of benefits and burdens between individuals or across populations. Issues of resource allocation must always take into account concerns of justice, but as can happen with most ethical concepts, the application of this single concept can breed disagreement. For example, the discrete choice experiment sought to determine whether respondents believed community health projects should be primarily aimed at the entire

community or vulnerable populations. Someone advocating for the entire community may invoke justice because their understanding of justice requires *to each person an equal share*. Yet someone advocating for vulnerable populations may also invoke justice because their understanding of justice is *to each according to need*. Others might advocate for *each according to merit* or the *equality of opportunity*, to name just a few possibilities. Justice brings the issue of distribution to light, but justice by itself is not enough to resolve complex issues of resource allocation. This is because there is fundamental disagreement as to what justice requires.

One ethical concern discussed in Chapter 3 is the possibility that CB resources are in reality being directed toward population health management initiatives. In other words, the benefits that should be accruing to the community are actually accruing to the hospital's patients and the hospital itself. As an example, population health management may run a diabetes management program but could do it in a way wherein only their attributed patients participated. Although this may be an important program, it is not a Community Benefit program because it is designed to benefit the hospital's bottom line along with the community's health. Counting such a program as CB is plainly prohibited and should not occur. But there are many grey areas as to what counts in CB and some organizations may be legitimately confused as to whether it is permissible to count a population health management program as CB.<sup>187</sup> In this latter case, the lens of ethics would be helpful. In so doing, the question becomes less about what *can* be done and more about what *should* be done. If one believes that justice requires the benefits of CB not fall to the hospital itself, one would be much more reticent about including population health management programs as CB. In essence, the community has borne the entirety of the burden by forgoing tax revenue and, therefore, justice becomes a guiding principle for distributing the benefits back to the community.

Concerns of justice also go beyond matters of distribution. More generally, justice encourages one to ask whether an action is fair or reasonable. To that end, some scholars have suggested that justice should be considered as a matter of procedure rather than distribution. Procedural justice is less concerned with whether goods are distributed in the proper way and more concerned with whether a fair process was used to distribute the available goods. One model of procedural justice requires four components: that the rationale for distribution be publicly accessible; that all criteria used are relevant; that there be a mechanism for revision and appeal; and there be public regulation that the first three criteria are met.<sup>188</sup> Several questions in Chapters 4 and 5 are in essence matters of procedural justice. Many of the ethical issues related to structures and processes – to what degree the community should participate in resource allocation or how Community Benefit managers should be evaluated and rewarded – might best be answered by considering whether the organizational process is fair or reasonable. Instead of determining where CB money actually goes, assessing whether the hospital's Community Benefit program has the right participation and process for resource allocation may be a better way to determine whether the process is just.

Although one can see that the classic principles in bioethics can be helpful in population health ethics, they need not be the exclusive way of understanding these issues. They can often help one evaluate right action and have proven quite useful in many clinical and research settings. At the same time, principles often conflict with each other and the conflict must be negotiated. In clinical ethics, autonomy often comes into conflict with beneficence. Under what conditions, for example, should a physician follow a patient's wishes and pursue aggressive treatment that the physician believes will only cause pain and suffering? Patient autonomy must

be balanced against the physician's requirement to do good and avoid harm. In public health ethics, justice can often conflict with autonomy. When is appropriate for a government to compel parents to vaccinate their children? In such situations, individual choice must be balanced against the desire to distribute communal benefits of vaccination and to discourage free riding. These situations can also lead one to believe that ethical analysis is similar to writing an equation and determining which factors should be given the most weight. This risks viewing ethics only as the evaluation of discrete actions rather than as building ethical systems. Such are some of the classic challenges of relying on autonomy, beneficence, and justice.

Health care ethics is a much richer tapestry than principlism and I contend many other frameworks within health care ethics do a better job of linking right action and identity. What we do cannot be separated from who we are. An underappreciated area in health care ethics that has the potential to be quite helpful in this regard as hospitals grapple with the question of identity in an era of population health is virtue ethics.

### ***Population Health and Virtue Ethics***

As described in Chapter 1, virtue ethics has received little attention in modern health care ethics. Nonetheless, I suggested in a previous article that virtues are ever-present in health care itself.<sup>77</sup> “Virtues are not foreign concepts in the fields of medicine or public health. When a physician encourages a hypertensive patient to reduce his sodium intake or a public health campaign educates a community about the same, it is encouraging temperance. When patients are asked to complete a regimen of antibiotics even after they feel better in order to prevent future drug resistance, the physician and public health community are asking for fortitude. And when a first responder treats a patient based on medical need rather than wealth, they are responding to society's desire for justice. In other words, the daily rhythm of our medical and

public health systems are already characterized by the promotion of virtue.”<sup>77</sup> Virtue is primarily about cultivating right action or habituating ethical behavior. It has historically been conceptualized at the individual level, which may make it seem like an odd framework for questions of population health. Yet virtue, reconceived for organizational and social issues, may be exactly what we need to properly address the ethical issues described above.

### *Structures of Virtue*

The goal of virtue is to internalize moral habits. In the field of public health, we know that social structures can habituate either healthy or unhealthy behaviors. For example, one’s built environment influences whether one exercises or eats a balanced diet. One’s social environment influences whether one smokes. These social structures – or, social determinants of health – are not entirely determinative, but they are significant influences on behavior and therefore, on health outcomes. This well-accepted reality provides the conceptual foundation for my proposal of structures of virtue in public health.<sup>77</sup> I contend that it is not just healthy behavior that we need to cultivate, but also the moral disposition that leads to such behavior. I suggest that a good built environment does not just increase healthy eating, but increases temperance, which is one of the accompanying virtues of healthy eating. An effective smoking cessation program does not just decrease smoking, but increases fortitude, which is a key virtue needed to quit smoking. Various social structures – built environment, social environment, policy, and law – are the theoretical basis for structures of virtue in population health ethics.

I explain elsewhere why internalization of virtue is a core aspect of right behavior. “A child may initially tell the truth to her mother because she is afraid that she will be punished if her falsehood is later discovered. While such reasoning is an expected phase of moral development, telling the truth for fear of being punished is not considered virtuous. Later on, the

child may realize that telling the truth to her mother fosters a healthy relationship between them and makes her a more integrated person—these reasons move the child toward virtue. With time and repetition, this virtuous child will internalize this action and will naturally tell the truth. She not only *acts* honestly but *is* honest. What she does is now rooted in who she is. This process of habituating honesty is made nearly impossible if the child lives with siblings who regularly practice dishonesty and the family has no social structure to rectify it. Yet it is not enough just to have rules. The rules – one example of a social structure – must be born of social norms that carry a narrative as to why they are important. Simply using heavy-handed methods of coercion may achieve the proximate end of changing behavior but may never realize the ultimate end of building character. This distinction is similar to one made by Nussbaum when she writes, ‘There is a huge moral difference between a policy that promotes health and one that promotes health capabilities.’<sup>189</sup> The focus on maintaining choice insofar as possible and habituating voluntary behavior is a key aspect of structures of virtue.”<sup>77</sup>

In considering the organizational questions that emerge in population health ethics, we should consider the degree to which the structures of our hospitals help employees internalize or habituate the expected ethical behavior. This is not to claim that the goal of CB or population health strategies is to cultivate virtue, but I do propose that virtue is key to right behavior, both on the individual and organizational levels. To operationalize this, we can reframe the three guiding questions for virtue ethics mentioned in Chapter 1. To do so, we ask: “What kind of an organization are our structures influencing us to be?” “What kind of an organization do we want our structures to influence us to be?” “How do we design structures to do so?” The organizational structures influence what we do. What we do shapes who we are. Who we are shapes what we do. And the cycle continues. Therefore, if we are concerned with habituating ethical behavior,



we must evaluate what kind of person our social structures are leading us to become and consider whether they should be modified.

Structures of virtue is an appropriate framework for many ethical questions identified in this study. For example, concerns of collaboration are not best expressed as discrete actions (e.g., did the hospital collaborate at this moment?), but rather as general dispositions (e.g., does the hospital generally act in a collaborative manner?). Therefore, we should be concerned with creating a broader organizational environment in which meaningful collaboration is valued. This reality aligns with the earlier observation that very few of the ethical questions in population health generate high-profile dilemmas. Instead, population health generates questions of guiding principles or values. The concern of values is another reason why structures of virtue is an appropriate framework for the organizational questions that emerge in population health. Hospitals often identify “core values” that they hope guide organizational and employee behavior. These are essentially a list of virtues the organization has identified as core to their mission. These core values can be linked to the organizational structures that either promote them or discourage them, thus creating an opportunity to evaluate the degree to which a structure is able to promote ethical behavior.

### *Virtues in Population Health*

I believe the work of ethics has three central tasks. First, identifying core values. Second, recognizing when there may be a potential conflict in values (or sometimes not a conflict, but a deficit). Finally, determining how to resolve that conflict (or fill in the deficit). When considering virtue ethics in the area of population health, we must first identify what our core values or virtues should be.

The Community Benefit process at the center of this study serves as a focused example of where virtues can be identified, potential conflicts or deficits can be recognized, and resolutions can be determined (see Table 5.3). One can see that there are many possible virtues through the CB process and many ways in which those virtues are challenged. For example, one might suggest that the virtue of accountability is central to CB. In so doing, we are saying that the kind of organization we want to be is one that is accountable to the community. Perhaps the organization is not as accountable as it would like to be and its employees do not feel as accountable as we would like for them to feel. We must then consider structures to build within the organization that foster accountability, such as evaluation. Right now, very few organizations conduct robust evaluations of their CB programs and even fewer measure long-term impact of community health. That would change if the organization committed 10% of its CB budget to monitoring and evaluation and committed to report all outcomes associated with its programs. With these commitments, the employees would be more accountable for the outcomes of their programs and the community would be able to hold the organization more accountable for those outcomes. In so doing, it is quite possible that other ways of being held accountable will emerge and become part of the organizational culture. For example, having a 10% budget for monitoring and evaluation may make governance structures more interested in accountability since they would have metrics that can be used for assessment of goals. Establishing these structures creates a virtuous cycle where what we do shapes who we are and who we are shapes what we do.

**Table 5.3 Virtues, Concerns, and Structural Solutions At Each Stage of the Community Benefit Process**

<i>Stage</i>	<b>Establish Budget</b>	<b>Assess Needs</b>	<b>Develop Strategy</b>	<b>Allocate Resources</b>	<b>Implement Programs</b>	<b>Evaluate Programs</b>	<b>Report Internally</b>	<b>Report Externally</b>
<b><i>Virtue (many others possible)</i></b>	<b>Commitment</b>	<b>Concern for Vulnerable</b>	<b>Integrity</b>	<b>Honesty</b>	<b>Solidarity</b>	<b>Accountability</b>	<b>Commitment</b>	<b>Transparency</b>
<i>Example of Ethical Concerns</i>	If there is not a dedicated budget for proactive CB activities, CB managers have little ability to make strategic decisions, leading to a CB division that is weaker than other departments in the organization	Some of the most vulnerable populations – disabled, language minorities, undocumented – are often the most difficult to involve in this process, resulting in priorities that may not reflect the voice of the most vulnerable in the community	CB managers can feel pressure to prioritize strategies that benefit the organization (such as those that benefit enrolled populations) instead of those that primarily benefit the community	Involving community partners is a double-edged sword – community voices often add important perspectives but CB managers often find it difficult to tell community partners, especially long-term partners, “no” even when warranted	A major challenge can be finding community partners with the capacity to carry out programs (planning, financial / data management), which means CB managers may need to help in capacity building if they want to avoid paternalistic relationships	Many programs are never evaluated or only assessed with process or output measures; outcome measures are difficult to attain, can be more expensive, and take longer, but give the best sense of CB’s impact on community health	Governance structures can often take a minimalist approach to CB, only requiring the bare minimum of compliance, or they can be engaged and expect CB to be reported on with the same level of care as other divisions within the organization	Public documents can risk being marketing material rather than giving an honest assessment of what has gone well and what has not; progress in community health depends on it being the latter
<i>Structure to Help Cultivate Virtue</i>	Organizations establish an annual proactive CB budget for programming that is known by governance structures	CHNA must describe specifically how most vulnerable groups were included in process	Senior leadership develops document distinguishing CB and population health management	An objective form for allocating resources is publicly available	Data and financial management employees are made available to community partners just as health workers are	Commit 10% of CB budget to monitoring and evaluation	Board creates accountability metrics for leadership in area of CB that get reported alongside other metrics	Forum is held to discuss documents before they are finalized; documents include list of questions public asked

A similar process of identifying core values, recognizing places of conflict or deficit, and determining structures to resolve that conflict or deficit can be done in many other areas of population health. Perhaps an organization wants to be committed to the most vulnerable in their community. I would suggest it is not enough for hospitals to say they are committed to this value and to perform discrete acts of charity that benefit the vulnerable. We should not dismiss such acts of charity, but they will not make commitment to the vulnerable a central ethical principle for the organization and its employees. That changes if we ask the question, “How do we design our organizational structures to orient us toward commitment to the vulnerable?” We might now consider questions such as: What percentage of our CB budget should be targeted to efforts specifically for vulnerable communities? As the largest employer in town, how do we create a workforce pipeline for underrepresented populations? What kind of accountability metrics would make it known to senior leadership that we are serious about their efforts to improve health for vulnerable communities? And so on. Over time, the commitment is built into organizational structures and processes. In turn, these structures and processes make it known to those working in the organization that this is a key ethical commitment. As the ethical commitment is internalized, we discover even more possibilities of incorporating it into how the organization functions. And the virtuous cycle continues.

### *Perfection is not a Virtue*

To be clear, structures of virtue will encounter conflicts in the same way that principlism has in clinical ethics. An organization might want to be innovative and creative but may also want to be grounded in evidence and best practices. This will create conflict that will have to be resolved through prudential judgment, or phronesis, as to how to balance the two virtues. Or an organization may want to be collaborative but may also want to be efficient with their limited

time. Or an organization may want to be cost-effective with their limited resources but may also want to be committed to equity and reducing health disparities. When any two values conflict, organizations will have to make a determination as to how it can balance them in its organizational structures.

Perhaps the most important aspect of viewing the ethics of population health through the lens of virtue is its ability to link the individual to the organization or community. Structures of virtue recognize the way our surroundings influence our behaviors, which is essential for answering many of the ethical challenges in population health. Second, virtue helps make explicit what is usually left implicit. One of the reasons organizational ethics has probably received so little attention in health care is because it becomes hidden and an assumed part of daily life. Virtue ethics provides a shared language to properly evaluate the ethical nature of organizations. Finally, I believe that ethics is at its best when it focuses on promoting the right behavior rather than simply restricting the wrong behavior. Much of health care ethics is about determining what actions are not permitted and there is a place for such an approach. At the same time, we miss the full potential of ethical analysis unless we seek ways to also promote the right behavior and this goal is at the heart of structures of virtue.

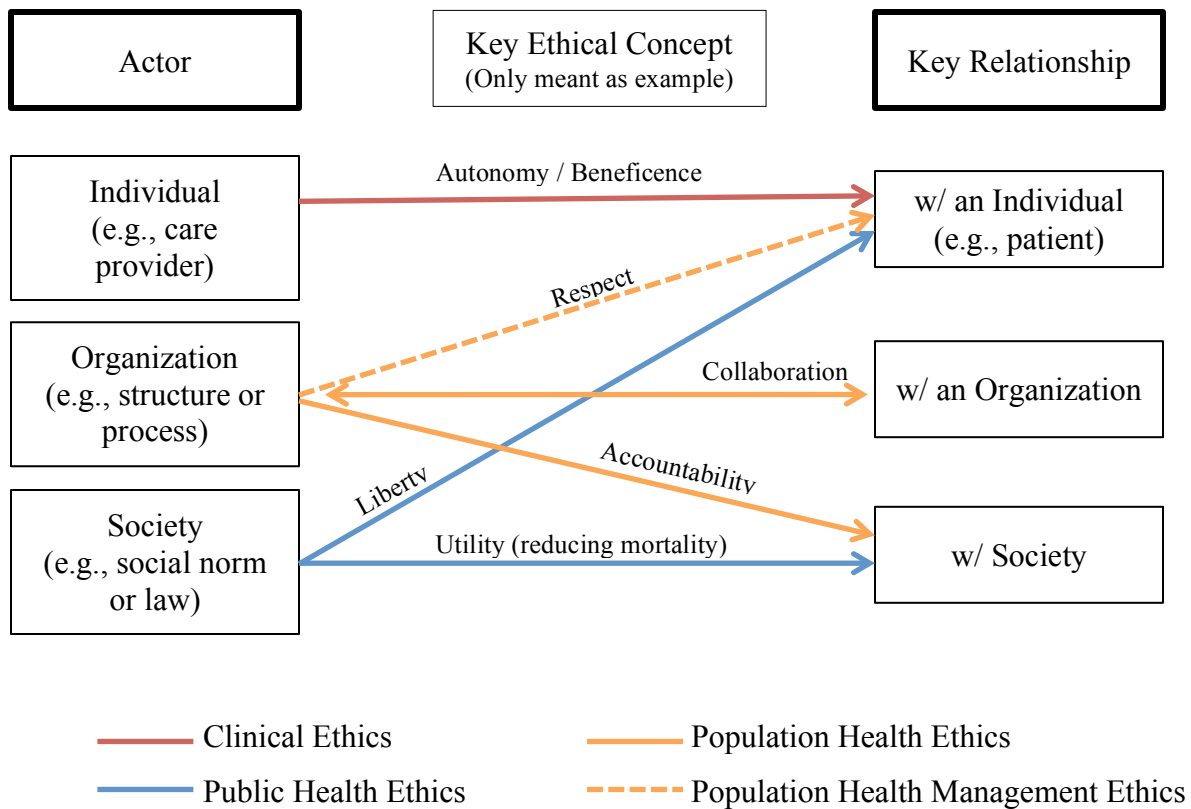
There are rarely single answers to complex ethical concerns. Nevertheless, virtue ethics and structures of virtue provide a new way of thinking through such challenges as they arise in population health. They offer a way past thinking of ethics as a set of dilemmas and a way to think of ethics as a way of living.

### ***Conceptual Model for Ethics in Health Care***

Another way to think about ethics is through the lens of relationship. To do so, we can ask three questions. First, whose action are we concerned with? This might be an individual, an

organization, or a larger social group. Second, who are they in relationship with? This question helps us identify whom their actions might affect. In other words, it helps us identify why the action matters. Finally, which concepts help us identify whether the action is right or not? I use these questions as a way to map the central ideas of ethical concerns (see Figure 5.4). In many ways, this conceptual model takes inspiration from John Glaser’s work on identifying three realms of ethics.<sup>165</sup> I take his key insight in order to explain the important ways in which population health ethics may be distinct from clinical ethics and public health ethics.

**Figure 5.4 Conceptual Model Comparing Ethical Questions in Health Care**



### *Actor*

The first element of this model is identifying the entity whose actions we are concerned with. In clinical ethics, we most often ask questions about the actions of caregiver. For example, can a provider treat a patient without his or her consent? In these situations, the question of right or wrong action takes the individual caregiver as the actor of concern. In public health ethics, we most often ask questions about what kind of community or society we want to live in. For example, should society require all children to get vaccinated? Obviously any action must be carried out by individuals and will involve organizations, but the central actor is the society that either passes a law or does not.

In population health ethics, we most often ask what actions a hospital ought to take. For example, to what degree should a hospital take into account the priorities of its community when creating community health initiatives? Or, when can a hospital implement a health improvement program for which there is little evidence of effectiveness? Here again, individuals must carry out this action, but population health ethics is primarily concerned with whether the organization has a structure or process that makes the expectation clear to the individuals involved.

### *Relationship*

The second element is identifying the key relationship, or the people who are most significantly affected by the action. Given the many effects a single action can have, identifying the central relationship is key to understanding what should be one's highest concern. For example, clinical ethics is primarily concerned with one individual's relationship with another individual. Most commonly, this is the relationship between a patient and a provider. This does not mean that other relationships do not matter. Clinical actions often involve a constellation of individuals and actions have consequences for both organizations and society, but the primary

relationship is most often between a provider and the patient. In public health ethics, society as an actor often has a two-fold relationship to consider: with individuals and with the community. For example, the question of whether to require vaccination asks us to consider the ways laws affect both individuals (in this case, by possibly coercing individuals to be vaccinated) and the broader society (by achieving an important public health goal). Matters of resource allocation, such as distributing limited vaccines during a pandemic, are also common in public health ethics. Once again, society is the key actor and we are concerned about the ways a rule or law impacts both individuals and populations within society.

In population health ethics, the organization has relationships of interest with other organizations and with society. This is seen in the many questions raised by this study, such as how to involve the community in decision-making or how to allocate limited resources for community health improvement. With such questions, the hospital is the key actor and its actions primarily affect other organizations and the community itself. Additionally, the ethics of population health management, which I consider a subset of population health ethics, concerns the relationship between organizations and individuals, such as whether an organization should treat patients differently depending on their payer. Here, the organization remains the primary actor, but the organizational process most significantly affects individual patients.

### *Ethical Concept*

The final consideration for this model is the ethical concept(s) for understanding the ethically preferable action. In the previous sections, I briefly described classical bioethical principles as well as virtues. These are just some of the candidate concepts or principles one might use to negotiate ethical questions. In clinical ethics, autonomy and beneficence are the most common concepts one might use to evaluate a situation. In public health ethics, we often



must balance maximizing liberty (for the individual) and achieving an important public health goal (for society).

Population health ethics has the exciting benefit of not yet having a dominant ethical principle. To that end, throughout this work I have suggested several ways in which we might think about the ethical challenges in this field. Most importantly, I have proposed that organizations identify the key virtues they wish to cultivate. In the model, I offer additional examples. For example, it is possible organizations may wish to cultivate the virtue of accountability when evaluating actions that affect the community. If so, the rightness of an action would be assessed based on the degree to which it fostered that virtue. Or it is possible that when evaluating actions that affect other organizations, hospitals may hope to promote collaboration. If that is the case, the rightness of an action would be assessed based on the degree to which genuine collaboration is achieved. All of these situations are merely examples to demonstrate how this kind of analysis might work. In the end, determining the key ethical concepts for population health ethics will require the same work that went into identifying the key concepts for clinical ethics and public health ethics.

It should be noted that the model itself and the subsequent descriptions are generalizations of each field. I name the most common elements of each category, while recognizing nuances must always be incorporated.

### ***Conclusion***

We are at the very beginning of mapping the terrain of population health ethics. This study focused mostly on issues that occur at the organizational and social levels and the study revealed several initial areas of concern. First, we must better understand the organizational investment needed in the space of population health. Like any other area of health care,

population health's goals must be clarified; it must be adequately staffed and otherwise resourced; the incentives must align with the goals; we must understand how it fits in the strategic goals of the larger operation. The lack of clarity is somewhat understandable given the nascence of population health, but organizational structures and processes are beginning to take shape. We want questions of ethics at the table as that occurs. Second, we must better understand the consequences – both negative and positive – of hospitals and other organizations stepping outside their walls and into the communities they serve. Community Benefit obviously carries a particular ethical obligation for nonprofit hospitals, but population health strategies will create ethical tensions much more broadly speaking, including for for-profit hospitals. Hospitals and health systems, both nonprofit and for-profit, have already begun stratifying patients, screening and intervening in social determinants, and building coalitions with other organizations. These efforts are all quite beneficial for our broader health care system, but they must be done in a way that appreciates the ethical concerns that arise along the way.

We must start investing in the intellectual resources needed to identify and answer questions of population health ethics. There is good work from across many sectors that give these efforts a running start – community engagement, organizational ethics, public health ethics – but it will take a concerted effort to bring these resources to bear on questions of population health. Those interviewed as part of this study were largely unable to describe how they think through the issues that they have identified. While we need to give professionals in this area a way of thinking through complex issues, it would be a disservice to position a single principle or framework as the best way forward.

The final chapter of this study offers additional information that will be helpful as we map the terrain of population health ethics and help hospitals clarify their identity in the era of population health.

## Chapter 6 – Discussion

In this final section, I synthesize three important elements of this study. First, I take two of the key ethical challenges and describe how virtue ethics is uniquely situated to respond to these challenges. Second, I explain the implications that the study results have on public policy and health care practice. Finally, I describe additional research that would be beneficial for moving the field of population health ethics forward.

### *Two Examples of Addressing Population Health Ethics*

Although my plan is not to suggest answers to the ethical questions raised throughout this study, I would like to provide two examples of how one might think through such questions in a way that is different than traditional ethical analysis in health care. I offered three central tasks of ethics and three guiding questions in the previous chapter. The tasks include: identifying core values; determining where they may be a conflict between values or a deficit in values; and resolving that conflict. The guiding questions for individual action based on a virtue framework are: what kind of person are organizational structures influencing us to be? what kind of people do we want our structures to influence us to be? how do we build structures to do so? The guiding questions can also be asked at the organizational level: what of kind of organization are our structures influencing us to be?; what kind of organization do we want our structures to influence us to be?; how do we build structures to do so? Let us use these central tasks and guiding questions to consider two specific ethical concerns for population health.

Either of the examples below could be framed as an ethical dilemma, in the same way that I framed ethical questions in Chapter 5 (see Table 5.1 and Table 5.2). However, I do not believe our obsession with dilemmas is the best way to think of ethics, either within or outside of health care. Therefore, I offer situations that evaluate commitment to a virtue. First, I consider the virtue of accountability. I then assess the virtue of commitment to the poor. The importance of these virtues does not arise solely because of population health, but their role in health care delivery is changed with population health strategies.

#### *Accountability of Executives*

One pressing ethical concern for any organization is the behavior of its leadership. Do the behaviors and priorities of the executives align with the stated values of the organization? This includes certain aspects of personal behavior; Greenpeace would not want their leadership driving around in Hummers, for example. But ethical behavior also includes more subtle choices about how to lead the organization. The ethical behavior of an executive is demonstrated in what hiring practices the organization uses, what strategic priorities the organization adopts, how employees are compensated, and much more. A more classical approach to ethical analysis at the individual level starts with, “Does the executive behave ethically?” I propose above that a more useful first question starts at the organizational level and asks, “Do the structures of the organization encourage ethical behavior?” We can follow this question by subsequently asking whether the executive’s behavior is ethical. But I believe we first should determine the degree to which the executive is oriented toward unethical or ethical behavior by his or her environment.

One way to shape employee behavior is through evaluation and compensation. Ideally, evaluation is connected to meeting organizational goals and compensation is based on such an evaluation. This linkage promotes the virtue of accountability. In other words, employees should

feel accountable for achieving the goals that are most central to the organization. For example, in publicly traded companies, if shareholder value is the most important metric, the board may choose to link executive evaluation and compensation with stock price. In nonprofit health care, those who determine executive compensation must decide how best to hold their executives accountable. One way to do this is by putting some compensation at risk, or tying some of the executive's salary to the most important organizational metrics.

There are several situations in which the virtue of accountability may not be realized within the organization. First, it is possible that executives are simply not held accountable for meeting organizational goals. Evaluation may be cursory or compensation may be guaranteed. Executives may feel little risk to their employment status regardless of organizational success. Such a situation may be rare for hospital executives, but is entirely plausible. Second, an executive may be held accountable, but accountable for the wrong things. For example, it is possible that a nonprofit hospital executive's performance evaluation and at-risk compensation are only based on financial outcomes. In that situation, the structure of the organization is influencing the executive to be concerned with one thing: financial success. Of course this does not mean every executive in such a situation is indifferent to patient quality measures or employee satisfaction, but the structure itself makes it more likely that all other measures are treated as secondary to financial ones. At the least, the structure creates an expectation or norm that is known across the organization. The structure itself conditions the executives in these environments to devote energy and resources to financial success.

Consider a different nonprofit hospital wherein the at-risk compensation is spread across finances, patient outcomes, employee satisfaction, and population health measures. Perhaps after a community assessment, the board has decided to tie compensation, among other things, to the

percentage of the population that has access to fresh fruits and vegetables and percentage of population that received an annual flu vaccine. The structure of this organization holds executives accountable, but they are accountable for very different things than in the previous organization. The board has clearly decided that it wants its executives to be accountable for the health of the broader community and not just the financial success of the organization. This does not guarantee that an executive will change her behavior, but it does make it more likely that she will do so. And when there is conflict between having a better bottom line or having a healthier community, the executive will have to consider a broader range of factors than an executive at the organization that only ties compensation to financial success. The structure itself habituates the behavior of being concerned with the health of the community.

The question of how to properly incentivize leaders is obviously not unique to population health and I do not mean to suggest that executive compensation only arises as an ethical issue because of population health. But I do believe that the emergence of population health challenges health care organizations to think more critically about how they evaluate and compensate their leaders. At least for nonprofit health care, it should not be acceptable to merely have a financially successful organization; it is also not enough to have good outcomes for one's own patients. Therefore, if a nonprofit hospital creates structures that hold executives accountable only for outcomes related to finances and patient quality, I believe such structures are insufficient to cultivate ethical behavior.

### *Commitment to Vulnerable Populations*

Many nonprofit hospitals make commitment to the poor and vulnerable a core value for the organization. There are many ways to evaluate whether the organization is truly committed to the poor and vulnerable. For example, the percentage of hospital revenue devoted to charity care

is one way to assess this commitment. A nonprofit hospital that devotes an insignificant amount of its resources to charity care may be violating its ethical commitment to the poor. Yet we know hospitals only have so much control over which patients show up at their door, so perhaps we can instead assess the generosity of the hospital's financial assistance policy. This policy shows a bit more clearly the ongoing organizational commitment to the poor because it is a standing policy that becomes a bit more embedded in the organization. Still other ways, described below, may give us an even better sense of whether the ethical behavior stands a chance of being habituated by the people within the organization. We should not dismiss the importance of charity care, but we must be open the possibility that an ethical commitment is not just about a single metric. Ethics is also about a disposition that gets carried throughout the organization and the commitment's ability to withstand challenges to it because it becomes embedded within the organization itself.

Another way to think about an organizational commitment to the poor and vulnerable is to ask how organizational structures and processes make this commitment either easier or more difficult for those within the organization. For example, are those employees who conduct community health needs assessments given the resources to hold information sessions in multiple languages? If not, it is very challenging to hear the voices of some of the most vulnerable populations in the community. It makes it less likely that the employees will build relationships with members of those populations, which in turn makes it less likely that the final decisions of where to direct resources will reflect the opinions of those populations. On the other hand, if employees are given the resources to hold such information sessions, it makes it more likely that the employees will build relationships with more members of the most vulnerable communities. Those relationships make it more likely that all subsequent decisions will be informed by the



voices of those populations. Those relationships also make it more likely that hospital employees will think of additional ways to incorporate poor and vulnerable groups into the hospital's operations. In that way, the virtuous cycle only deepens the organization's commitment to the poor and vulnerable. For example, because employees know actual people from these communities, the hospital may become more committed to inviting people from marginalized groups to serve on advisory boards. Or the public relations department may become more aware of the need for advertisements to reflect the diversity of the hospital's community. Or after working with certain populations, CB managers may want to analyze patient data along new demographic categories, which may require a change in the way patient information is collected or coded. An organizational commitment to the vulnerable does not automatically happen if CHNA information sessions are held in languages other than the community's dominant language. But having sessions in English only demonstrates a lack of commitment to potentially vulnerable groups. One can see how an organizational, and thus an employee, disposition is created as new organizational processes and structures are built that make the default action one that accounts for the community's most vulnerable.

One might challenge my proposal about structure of virtue and suggest that the poor really do not care whether the hospital or its employees are cultivating a virtuous disposition; the poor care whether their lives are better or not and we should be measuring outcomes that help us assess that. If the poor's lives are better, the hospital is behaving in an ethical manner and if their lives are not better, the hospital is failing to do so. I appreciate this concern, but I think it takes a rather narrow view of ethical behavior and fails to appreciate the true potential of ethics to change culture and do real, long-term good. At its best, we create a virtuous cycle, wherein we can assess both who we are (creating virtuous organizations and individuals) and what we do

(improving the lives of the poor). Most of our ethical analysis in health care draws a line between what is ethical and what is not, essentially setting a minimum bar over which we must jump. The approach to ethics that I am proposing does not eliminate this lower bar. What we do absolutely matters. At the same time, structures of virtue also ask us to consider what more is possible. And it encourages us to create a system in which we are all conditioned to think about what more is possible. Our ethics then become more aspirational rather than simply achieving a threshold.

### ***Implications for Policy and Practice***

This study leads to several practical suggestions, some of which are for health care organizations and others for policy makers.

#### *Discuss Ethical Concerns and Build Competencies in Population Health Ethics*

Those with the authority to shape discussions in health care ethics must start paying attention to the ethical concerns associated with population health. This includes academic programs in health care ethics, which can help educate the next generation of health care ethicists to appreciate concerns in this area. This also includes the many practitioner-oriented ethics programs such as grand rounds in hospitals and professional conferences. These activities often include seminars on matters of clinical ethics and it may be wise to expand these activities to more regularly include questions about population health ethics. It may also be time to develop parallel programs for health care administrators instead of focusing just on clinicians. Health care administrators face many ethical challenges in their work yet are rarely given the resources to identify and navigate those issues when compared to their colleagues who are care providers. When the topics such as supervisor pressure and supporting bad programs due to community pressure arose during the interviews and focus groups, it felt like a cathartic moment for many of the participants. They were able to give voice to a concern that they had otherwise silently held

onto. It would be beneficial to consider how successful efforts to inculcate clinical and research ethics can be adapted to build competencies in the area of population health ethics. This will be a decades-long process, as evidenced by the fact that public health ethics is still finding its way into the general discourse of academia and practice.

### *Structure*

Health care organizations must decide if there is an optimal organizational structure for Community Benefit, population health management, and other population health strategies. As of now, there is little similarity from one organization to another. While there may not be a single best way of organizing this work, there are certainly better and worse ways to do so. For example, it seems reasonable to say that CB should report neither to marketing nor compliance. These functions should support the work of CB, but the central goal should be to improve community health; that goal will likely be subordinated if CB is located in marketing or compliance. As another example, large organizations must decide which functions of CB can rightly be located at the system office and which functions should remain at local facilities. It seems rather unlikely that functions such as identifying needs with community input or allocating resources can meaningfully be directed from the system office. The system office may provide support, such as a template for the CHNA or determining the process by which decisions should be made, but the most important functions should remain at the local level so the community has a reasonable chance to shape that work.

### *Process*

The study reveals many aspects of the CB process that should be more carefully examined by health care organizations. I have previously suggested actions at each stage that could cultivate a particular virtue within that organization (see Table 5.2). I would like to

highlight three as essential as we move forward. First, organizations should have a proactive budget for community health initiatives rather than a retroactive accounting system to collect information. A hard-dollar budget would allow CB managers to make more strategic decisions about where to direct resources and give them more authority within the organization, thus communicating the importance of CB to others within the organization. Second, when considering funds for community health initiatives, organizations should develop a publicly available request for proposal and describe the criteria by which they allocate available resources. It would also be commendable to have community members as participants in making such decisions. Third, 10% of community health budgets should be set aside for monitoring and evaluation, which is the percentage recommended by the CDC for effective evaluation.<sup>190</sup> Nearly every interview subject and a large majority of survey respondents indicated that evaluation of success was a major challenge with this work. A dedicated percentage of one's budget for monitoring and evaluation does not solve the problem, but it is a necessary step for remedying this situation.

### *Staffing*

A health care organization has total control over how it staffs its CB operations; this study revealed little similarity from one organization to another. Like any other department, the organization must determine the department's primary goals and develop a staffing strategy to meet those goals. A majority of the interviewees indicated they had essentially fallen into their role with Community Benefit. It is time to determine how to achieve the goals of CB and population health, which are an admittedly dizzying combination of public health, finance, compliance, social work, and more. This will require answering both how many and what kind of staff are needed to achieve core objectives. Organizations must also determine how they want the

staff to view themselves – as community health workers, as compliance officers, or something else.

The results of this study on CB managers filling so many roles may seem innocuous and something most professionals must do; in some ways that is true. But history also tells us that roles often conflict and create significant ethical tension. Henry Beecher's seminal article on physician-investigator conflicts reminds us that it was not that long ago that a conflict of roles was at the heart of many violations of medical ethics.<sup>191</sup> One could view oneself primarily as a physician who conducted research or as a researcher who was also a physician, but the latter led to many situations that unacceptably put scientific advancement before patient well being. So too, those working for health care organizations charged with promoting community health may experience a conflict of interest. For example, what if community members want CB investment in mental health services but the hospital management knows that CB investment in diabetes and hypertension would be better for the organization's bottom line? Both would benefit the community, so no harm is done. But how a CB manager understands his or her primary role would shape the path taken. Or consider the fact that most CB managers have more demands on their time than they can possibly meet. Should they prepare a more comprehensive report for the quarterly board meeting? Should they properly evaluate the impact of the latest program? Or should they hold a focus group that ensures minority voices are included in the needs assessment? It is easy to say all of the above, but staffing decisions will shape where time and energy are invested and, therefore, what is accomplished.

### *Time Cycle and Collaboration*

Nonprofit hospitals must conduct a needs assessment and develop an implementation strategy every three years. Most public health departments are on a five-year time cycle for their

own needs assessments and strategic plans. The three-year cycle for hospitals creates two major challenges. First, my interviews suggest that some public health departments are changing their own process in order to collaborate with hospitals, by requesting permission from accreditation agencies to increase the frequency of their own needs assessments to every three years. Second, most public health experts understand that three years is not enough time to see meaningful change in most of the population-level metrics we are concerned with. I believe it would be wise to change the CHNA cycle to every five years. This would increase the possibility of meaningful collaboration between health care and public health as well as increase the possibility of seeing actual improvement (or lack thereof) in population health metrics in between cycles.

The IRS now requires nonprofit hospitals during the CHNA process to “take into account input from persons who represent the broad interests of its community, including those with special knowledge of or expertise in public health,” including government public health departments as well as medically-underserved, low-income, and minority populations.<sup>30</sup> Yet within this regulation, there is tremendous variation in the number and kind of community partners and in the depth of collaboration. Ultimately, the level of engagement becomes accepted practice and not only reflects organizational priorities but shapes what its employees believe is ethically acceptable. Therefore, these and other elements related to structure and process become embedded within the organization itself, ultimately shaping the ethical character of the organization and those within it.

#### *Allow Community Benefit Investment in Social Determinants*

Regulations governing CB spending currently separate *community building* activities (known as Part II of the Schedule H Form 990) from Community Benefit activities. These include “physical improvement and housing”, “economic development”, “community support”

such as violence prevention and emergency preparedness, and “environmental improvements”, and many other activities that have a strong connection to health.<sup>192,193</sup> The IRS opened the possibility of including investments in housing,<sup>103</sup> but refused to give a definitive answer. If there is a community need and there is strong evidence of the community building activity’s connection to health, there is no compelling reason why work in the social determinants of health should not count as CB. This study’s data suggest there is consensus as to the positive role hospitals should play in this space. One interview subject captures this succinctly by posing the following question.

*“When you look at unemployment and jobs, when you look at education and when you look at housing and those kinds of things that truly impact one’s health and well-being or zip code, where you live and those kinds of things, ... isn’t that a Community Benefit?”*

Yet without greater certainty from the IRS, there is little reason to believe that nonprofit hospitals will make significant investment in these areas. I am not the first one to suggest such a policy change,<sup>102,121</sup> so I add my voice and this research to others who suggest the importance of this policy clarification.

### *Build Accountability for Health Equity*

The importance of health equity emerged in many interviews and in many survey comments. Nevertheless, vulnerable populations did not receive priority in the discrete choice experiment and a large majority of survey respondents indicated that marginalized populations often do not have a large enough voice in community health projects. This disparity in rhetoric and reality, found elsewhere in the CB literature,<sup>183</sup> indicates we must think of more concrete ways of integrating the goal of health equity in the work of CB and population health. One way to raise the profile of health equity is by being more explicit about its importance in regulatory frameworks. For example, it would be possible to ask organizations to indicate on the Schedule

H Form 990 which activities were explicitly designed to address health equity and what measures were used to assess progress. Previous studies have shown that IRS tax policy increases reporting of CB activities.<sup>194</sup> Therefore, it would be possible to require health care organizations to identify the most vulnerable populations within their communities and to explain how they included their voices in each stage of the CB process. Ultimately, we must get more creative as to how to incorporate this core value into the actual workings of population health activities rather than allowing it to be positive side-benefit when it occurs.

### ***Further Research***

This study provides an initial assessment of the field of population health ethics, but there is still a great deal that can and should be done in this area.

### *Scholarship and Education on Population Health Ethics*

This study revealed that a fundamental challenge associated with developing the field of population health ethics is that many individuals doing the work of community health improvement do not see the ethical challenges in their efforts. This gap can be remedied by developing educational material for both practitioners and ethicists on the ways in which population health raises important ethical questions. Part of this work must include scholars developing the theoretical foundations for population health ethics, as this study begins in Chapter 5. Another strategy is gathering a series of case studies that provide concrete examples of practitioners encountering questions of population health ethics and how they might negotiate such issues. This is quite common in both clinical ethics and public health ethics and would serve as a valuable resource for practitioners. I suspect there would be a symbiotic relationship between theory and practice, wherein one is able to shape and expand the ways in which the other is considered and vice versa.



### *Organizational Structure*

The results of this study suggest there is a great deal to still learn about the organizational structures being built to support efforts in population health. Many important questions remain, such as: Where are the various efforts in population health currently placed within the organizational structure? What kinds of employees are being hired to staff these efforts? In larger systems, what functions occur at the system, region, and local levels? What is the organizational relationship between population health and population health management? All of these questions and many others have significant implications for what role population health will play in our health care efforts moving forward. They would be best answered by a larger study or a study that follows organizations over a period time. In particular, the larger study is important because the interview subjects in this study were considered industry leaders. A study that samples more widely would provide insight as to how representative the findings here actually are. While these results show many areas for improvement, it is still quite possible that these are positive deviants and that a large number of organizations are well behind even where these organizations are.

### *Organizational Process*

There is a great deal to learn about the organizational processes that are part of population health. These processes include, but are not limited to, Community Benefit. For example, exploring how organizations make decisions about screening for social determinants of health would provide insight into the ethical questions contained therein.<sup>74</sup> Or we might want to understand how organizations make decisions about patients whose social complexity make discharge dangerous after their medical complexity is dealt with. Or it could be helpful to understand how data is shared with community organizations or how senior leadership at a

hospital chooses which community organization's board to sit on. These questions occur at all three levels identified in Chapter 5 – individual, organizational and social – and these questions have significant ethical dimensions.

Regarding Community Benefit, this study identified eight key stages of the CB process. Significant work has been done on *identifying needs* and *reporting externally*. This study shows in Chapter 4 why another stage – *allocating resources* – is important to explore as well. Each of the stages would benefit from greater exploration such as that done with the discrete choice experiment. For example, it may be important to know whether proactive budgeting for CB has implications for the quality of the CB programs. One hypothesis may be that organizations that proactively budget are more willing to invest in initiatives that require longer-term investment and have longer-term impact. Studying the evaluation stage would provide greater insight into what kinds of measures organizations are currently using and whether there are ways to partner with population health management data and analytics to develop best practices for individual and population-level measurement. This study shows that the CB process contains decisions from beginning to end that could have a significant impact on the health of the community served and each stage requires more research. We need more information to determine who currently makes consequential decisions along the process and, just as important, to publicly consider who *should* make such decisions.

#### *Stated and Revealed Preferences*

The discrete choice experiment is a good start to understanding how an underlying and unspoken value system drives many of the decisions related to CB and population health. The DCE, however, necessarily simplifies the complex reality of decision-making. It would be useful

to conduct similar exercises to see if the preferences found in the DCE are durable and if there are other factors that significantly influence priorities.

In addition, we should recognize that theoretical exercises can and should be compared to the revealed preferences of health care organizations. For example, detailed analysis of secondary data on community health funding or observations of allocation meetings would likely shed important insight on the degree to which stated preferences align with revealed preferences. These additional studies may also illuminate any additional factors that are important for resource allocation.

### *Ethics of Population Health Management*

This study focused on the organizational and social dimensions of population health. However, informal aspects of this study, such as member checks and professional gatherings have made it clear that there are many elements of population health management that have unexplored ethical concerns. These issues occur at the individual level in conceptual model presented in Chapter 5 (see Figure 5.4). Some of these questions are mentioned related to structure and process (e.g., screening for social determinants; discharging patients who are socially complex), but as far as I know, there is only one study, which is not yet published in print and uses the classic Belmont principles, that surveys the landscape of ethical concerns in population health management.<sup>195</sup> Expanding this area would be a great service to this growing area of health care delivery.

## **Conclusion**

One core objective of this study is for the health care community to see the ethical implications of population health strategies with the same importance that it sees the ethical implications of clinical care and public health. The results of this study show that there are, in fact, significant areas of concern for health care as it moves into the area of population health. Clinically, there are questions of how and whether patient populations are offered different standards of care and the degree to which social determinants of health are integrated in clinical encounters. Organizationally, we must ask how to build organizational structures and processes that are not only operationally effective but also ethically responsive. Socially, we must consider the best ways for health care organizations to engage communities, especially vulnerable populations. Some of these questions have been asked before, but they have never been brought together conceptually. Naming them as issues of population health ethics creates a more defined field of study that will hopefully bring interest from scholars and practitioners as well as community advocates.

A secondary objective of this study is to raise the issue of changing identity for our health care organizations in an era of population health. In truth, the question of identity was not a central concern as the study began. It was not an explicit part of the interviews, focus groups, or survey, but its importance was realized as the data were analyzed and synthesized. The question of identity appears in the proper role of hospitals in community collaboration; it appears in the multiple and often conflicting roles that Community Benefit managers must fulfill; it appears in the elements that influence resource allocation; it appears in the often-confused relationship

between population health management and community health and the proper staffing and structure for those activities. If we are to answer the question of who we want hospitals to be, we will have to answer what we want them to do. And if we are to answer what we want them to do, we will have to know what we want them to be. I believe the ethical challenges of this work are central to answering these pressing questions and I believe virtue ethics is uniquely situated to help us simultaneously think through both sides of this coin.

I offer three final observations as the most important conclusions from this study. First, the uncertainty around the exact shape of population health in the U.S. health care system may suggest it is an inopportune time to make population health ethics a focus of study. On the contrary, because organizations are in the middle of making important decisions of how to respond to the changing environment, it makes it an ideal time to use scholarship to shape those decisions. Second, there is much work to be done to inculcate some important values in the health care system. There are signs that many within health care have commitments to genuine community collaboration, the social determinants of health, reducing health disparities, and investing in the long-term health of their communities. However, those values are not universal and they have not yet been embedded within our health care system. We see how successfully autonomy has been embedded in clinical care and research. There is no reason to think the same cannot be done for the values we hold most dear in population health. Finally, we do not yet see the work of population health as ethically complex. Population health strategies are largely being adopted for reasons of regulation and cost and those are the categories through which most of this work is viewed. Seeing population health through the lens of right action, however, is essential for the future character of our health system. We want to improve health and to reduce cost, but we want to do so while also naming and advancing the values that we hold most dear.

## Appendices

### Appendix 1: Interview Script for Community Benefit

Today, I'd like to speak with you about your role in administering Community Benefit resources for your institution. The interview should take about 60 minutes of your time. Before we begin, I'd like to ask that you not refer to other individuals or organizations by name. I simply want to ensure we protect everyone's identity as well as we can. If you do accidentally mention someone by name, it will be anonymized when the transcript is made.

#### 1. Could you briefly tell me about your Community Benefit-related responsibilities?

Follow-up questions:

- What percentage of your time is given to Community Benefit activities?
- To whom do you report for your Community Benefit-related work?

#### 2. Could you briefly tell me how the Community Benefit program fits into your organization as a whole?

Follow-up questions:

- What divisions are involved and in what ways?
- What personnel are involved and in what ways?
- To your knowledge, has this changed over time?

I'd to now talk about the specific activities of your Community Benefit program. Here I'm talking about everything that takes place from conducting a CHNA through reporting your activities. First, I'd like to map out the major Community Benefit activities that take place with your hospital [health system].

#### 3. Let's start with the CHNA. I've looked at the last CHNA for [HOSPITAL NAME] in [YEAR]. Could you tell me how the CHNA gets completed?

Follow-up questions:

- What departments are involved? How are they involved?
  - What kind of organizations outside of the hospital are involved?
- How did you arrive at the priority needs that you did?
- How does the Implementation Strategy follow from the CHNA?

#### **4. What happens once an Implementation Strategy is completed?**

##### Follow-up questions:

- Are there decisions as to how best to allocate Community Benefit dollars?
  - If so, what department is involved? How are they involved?
- Is there a dedicated Community Benefit budget? Or is it all retrospective?

#### **5. When there are Community Benefit dollars for the hospital to allocate for community health activities or community donations, is there a process for those decisions?**

##### Follow-up questions:

- What department is involved and how are they involved? Hospital staff? Community partners?
- What criteria do you use to determine where the monies should go?
- Who do you think are the most important actors in this process? Why so?
- Can you tell me about a time when monies were allocated for community health activities?
- Can you tell me about a time when monies were requested but were not allocated for community health activities?

*If there is a sense that the process is more formal:*

- Could you describe the process?
- What percentage of the CB budget is set aside for community health activities?

#### **6. Many hospitals [or health systems] are discussing population health as a new strategic area. Is your hospital [or health system] doing this? How do you anticipate Community Benefit will fit into this strategy?**

##### Follow-up questions:

- Do you see any conflicts between population health and Community Benefit?
- Do you see any opportunities?

I'd like to now ask more explicitly about the ethical dimensions of your work.

#### **7. How would you describe the most important goals of Community Benefit for your hospital [or health system]?**

##### Follow-up questions:

- Do you think these goals are widely shared within your organization?
- How do you know if these goals are met?

**8. Are there situations in Community Benefit work where you've struggled with what the right course of action would be?**

Follow-up questions:

- Would you consider this ethical questions?
- Could you give a specific example of a specific ethical question you or your organization has worked through in this work?
- What resources do you use when faced with ethical questions in Community Benefit?
- Probes:
  - Resource allocation?
  - Collection, use or sharing of data?
  - Conflict with population health / used to benefit hospital?
  - Struggle with partnerships?

**10. I am also curious about how you think of your hospital [or health system] as relating to the community. I know this is a big question, but what qualities do you think are most important for your hospital to live by when working on community health?**

Follow-up questions:

- Are these the same qualities that you think guide the work of population health?
- What do you think is the community's role in shaping the activities your hospital takes on?
- Can you give me a concrete example of when you think your hospital has lived these qualities well?
- Can you give me a concrete example of when you think you've faltered?

**11. What do you think the future of Community Benefit is? What will be its role in the changing landscape of US healthcare?**

**12. Could I ask you a bit more about your background?**

Follow-up questions:

- How long have you worked in health care?
  - In what capacities?

**13. Is there anything else you would like to share?**

**14. After hearing these questions, is there anyone in Community Benefit work whom you would recommend I contact?**



## **Appendix 2: Interview Script for Population Health Management**

Today, I'd like to speak with you about your role in administering population health for your institution. The interview should take about 60 minutes of your time. Before we begin, I'd like to ask that you not refer to other individuals or organizations by name. I simply want to ensure we protect everyone's identity as well as we can. If you do accidentally mention someone by name, it will be anonymized when the transcript is made.

### **1. Could you briefly tell me about your responsibilities related to population health?**

Follow-up questions:

- What percentage of your time is given to population health?
- To whom do you report for your population health work?

### **2. Could you briefly tell me how the population health program fits into your organization as a whole?**

Follow-up questions:

- What divisions are involved and in what ways?
- What personnel are involved and in what ways?
- Has this changed over time?

I'd to now talk about your relationship with the Community Benefit program.

### **3. How would you describe population health's relationship with Community Benefit?**

Follow-up questions:

- Do you see any potential areas of cooperation?
- Do you see any potential areas of conflict?

### **4. Are you aware of how Community Benefit resources are directed? Do you know how priorities, especially related to community health, are determined?**

Follow-up questions:

- Do you think this is a good strategy for improving community health?
- Is there anything you would like to see done differently regarding allocation of resources for community health?

I'd like to now ask more explicitly about the ethical dimensions of your work.

**7. How would you describe the most important goals of population health for your hospital [or health system]?**

Follow-up questions:

- Do you think these goals are widely shared within your organization?
- How do you know if these goals are met?

**8. What do you see as the ethical questions related to population health or your work in the community?**

Follow-up questions:

- Could you give a specific example of a specific ethical question you or your organization has worked through in this work?
- What resources do you use when faced with ethical questions in population health?

**10. I am also curious about how you think of your hospital [or health system] as relating to the community. I know this is a big question, but what qualities do you think are most important for your hospital to live by when working on community health?**

Follow-up questions:

- Are these the same qualities that you think guide the work of Community Benefit?
- What do you think is the community's role in shaping the activities your hospital takes on?

**11. Could I ask you a bit more about your background?**

Follow-up questions:

- How long have you worked in health care?
  - In what capacities?

**12. Is there anything else you would like to share?**

**13. After hearing these questions, is there anyone in population health work whom you would recommend I contact?**

### **Appendix 3: Focus Group Script for Hospital Employees**

**5 min**

Thank you for your time today. I'd like to speak with you about the way nonprofit hospitals and community members work together to improve community health. The focus group will not last longer than one hour. Please know that information shared here is not confidential. Others may repeat anything said in this group.

Do you have any questions before we begin?

**10 min**

You all come from nonprofit hospitals. And you know that nonprofit hospitals have Community Benefit programs, where the hospital works on improving the health of its surrounding community. Any work has both opportunities and challenges.

**What challenges do you experience as a hospital taking on this role of improving community health?**

**What opportunities do you experience?**

**15 min**

Community-oriented work could bring new ethical challenges for hospitals and its employees.

**Have you experienced any ethical questions associated with community-oriented work?**

**Do you foresee any new ethical questions emerging in the years to come?**

Probes / Follow-ups:

- Do you see this in the allocation of time and resources?
- Do you see this in the sharing and use of data?
- Do you see this in the partnerships with other organizations?

25 min

I'd like to spend some time discussing how hospitals choose which community health programs to support and why. When facing any health need – obesity, smoking, mental health, anything really – there are any number of ways to address that health need. But we must choose interventions and programs.

**So my question is what characteristics are most important for a nonprofit hospital when choosing a program to improve community health?**

*Participants will be given some time to freely discuss this question. Then they will be given a handout that has candidate attributes and levels to aid the discussion.*

Probes / Follow-ups:

- Do any the criteria you see not matter at all when deciding on a community health program?
  - Any disagreement?
- What about \_\_\_\_\_? Is this the language you would use with your colleagues? Or would you describe it differently?
- What about \_\_\_\_\_? Are there any dimensions of that category that are missing?
- Is this list missing any important criteria? Are there any factors that you weigh when deciding community health projects that aren't listed here?
  
- If having trouble – Think of a recent program you were involved with. What were the most important criteria for you when deciding to pursue that program?

5 min

Thank you for your time today. Does anyone have any final thoughts that they would like to share?

## Appendix 4: Focus Group Script for Community Members

5 min

Today, I'd like to speak with you about the way nonprofit hospitals and their communities relate to one another. The focus group will not last longer than one hour. Before we begin, I'd like to ask that you not refer to other individuals or organizations by name. And please know that information shared here is not confidential. Others may repeat anything said in this group.

Do you have any questions before we begin?

15 min

You all work in areas that help improve the health of the community. And you know that the local nonprofit hospitals have Community Benefit programs, where the hospital works on improving the health of its surrounding community as well.

**How do you and your colleagues talk about the work the hospital does to improve community health?**

**How do you think the hospital talks about the work it does to improve community health?**

Any work has both opportunities and challenges.

**Do you see any challenges in a hospital taking on this role of improving community health?**

**Do you see any opportunities?**

25 min

Hospitals often spend money or run programs to improve the health of the surrounding community.

I'd like to spend some time discussing how hospitals choose which community health programs to support and why. When facing any health need – obesity, smoking, mental health, anything really – there are any number of ways to address that health need. But we must choose interventions and programs.

**So my question is what characteristics are most important for a nonprofit hospital when choosing a program to improve community health?**

*Participants will be given some time to freely discuss this question. Then they will be given a handout that has candidate attributes and levels to aid the discussion.*

Probes / Follow-ups:

- Do any the criteria you see not matter at all when deciding on a community health program?
  - Any disagreement?
- What about \_\_\_\_\_? Is this the language you would use with your colleagues? Or would you describe it differently?
- What about \_\_\_\_\_? Are there any dimensions of that category that are missing?
- Is this list missing any important criteria? Are there any factors that you weigh when deciding community health projects that aren't listed here?
  
- If having trouble – Think of a recent program you were involved with. What were the most important criteria for you when deciding to pursue that program?

**15 min**

Community-oriented work could bring new ethical challenges for hospitals and its employees.

**Have you experienced any ethical questions when working with the local hospitals?**

**Do you foresee any new ethical questions emerging in the years to come?**

**What resources do you use / will you use to negotiate these questions?**

## Appendix 5: Survey

Q1:

You are being invited to complete this survey because you are involved in improving the health and well-being of your community - either within a hospital, a public health agency, or a community-based nonprofit.

At its best, improving health is a community-wide effort. But it is also a complicated task that often involves important trade-offs. Your responses will help determine how we can best achieve important community health goals when working across sectors.

This survey will take about 15 minutes to complete. All survey responses will be anonymized.

All individuals who complete the survey will be eligible for a drawing of one of twenty \$100 Visa cards. Those wishing to be eligible for the prizes will be asked to submit their name and work e-mail address at the end of the survey. Contact information will be kept separate from all other survey data.

If you have questions about this research, you can contact Michael Rozier at [mrozier@umich.edu](mailto:mrozier@umich.edu).

If you have any questions about your rights as a research participant, please contact the University of Michigan's Health Sciences and Behavioral Sciences Institutional Review Board, toll free at (866) 936-0933, 540 E. Liberty St., Suite 202 Ann Arbor, MI 48104-2210, [irbhsbs@umich.edu](mailto:irbhsbs@umich.edu).

Do you wish to continue?

- Yes, continue with survey
- No, exit survey

---

Q2:

Which of the following best describes your current position?

- Employee of a nonprofit health care organization (clinic, hospital, system, etc) *[go to Q3]*
  - Employee of a public health agency *[go to Q7]*
  - Employee or volunteer of a community organization *[go to Q5]*
  - None of the above
-

---

Q100:

This survey is intended for those who work or volunteer for one of the following: a nonprofit health care organization, a public health agency, or a community organization. In the previous question you indicated that none of these apply to you.

You may return to the previous question by clicking the back arrow and select one of those options.

Or you may exit the survey.

Exit the survey

---

Q3:

Which of the following areas best describes your current position? (In the case you have multiple areas, please select the one with which you most identify.)

- Community outreach / Community health
  - Ethics
  - Clinical care
  - Finance
  - Compliance
  - Marketing or Communications
  - Strategic planning
  - Government affairs
  - Information technology
  - Other (please specify) \_\_\_\_\_
- 

Q4:

How many years have you worked in the field of health care? *[go to Q9]*

---

Q5:

Which of the following areas best describe your organization's work? (Select all that apply)

- Health
- Education
- Housing
- Aging
- Transportation
- Economic Issues / Jobs
- Children / Adolescents
- Women
- Immigrants
- Other (please specify) \_\_\_\_\_



---

Q6:

How many years have you worked or volunteered in the area of community improvement? [go to Q9]

Q7:

Which of the following areas best describes your current position? (In the case you have multiple areas, please select the one with which you most identify.)

- Director / Health officer
- Administrative or clerical personnel
- Public health manager
- Public health nurse
- Environmental health worker
- Emergency preparedness staff
- Health educator
- Nutritionist
- Community health worker
- Epidemiologist
- Other (please specify) \_\_\_\_\_

---

Q8:

How many years have you worked in the field public health?

---

Q9:

In the following section, you will be asked several questions about community health projects.

As you know, there are often many different ways to address community health needs. For example, a community may choose between: a mobile van with fresh fruits and vegetables to reduce obesity; a health fair to screen for diabetes and high blood pressure; and phone line for smokers to get assistance quitting. Choosing which kinds of activities to fund can be challenging, but all organizations must do it.

Nonprofit hospitals are often involved in community health projects, but they must choose between many worthy projects. At its best, improving health is a community-wide effort and knowing everyone's opinions is important. This survey is intended to gather the opinion of hospitals, public health departments, and community organizations as to what kinds of projects are most important for hospitals to support.

The next three pages will ask you to review the various qualities that community health projects might have. There are no questions to answer on the next three pages.

Q10-12:

Consider the following characteristics for community health projects. These characteristics are often used by hospitals and other organizations when choosing which programs to support.

**Priority on a Community Health Assessment** – describes how important the health issue was last time the hospital conducted a Community Health Needs Assessment

***Priority Need:*** Need was identified as a top priority based on severity of problem

***Secondary Need:*** Need identified as a secondary priority based on severity of problem

***Other Need:*** Need not identified as a priority or secondary need based on severity of problem

**Type of Intervention** – describes the kind of approach the program takes to address the health issue

***Clinical:*** Clinical approach or medical intervention

***Social Determinants:*** Upstream determinants of health – housing, education, food access, etc.

***Advocacy / Public Policy:*** Advocacy effort aimed at changing public policy

**Time to See Impact** – describes how long it typically takes to see a difference in health status after the program is implemented

***Immediately:*** Impact possible to measure almost immediately

***1-2 years:*** Impact possible to measure in 1-2 years

***3-5 years:*** Impact possible to measure in 3-5 years

**Population of Interest** – describes the people in the community the program is designed to help

***Children / Adolescents:*** Directed specifically to children or adolescents

***Vulnerable / At-Risk Group:*** Directed to vulnerable or at-risk population in a culturally-competent manner

***Entire Community:*** Directed toward the community as a whole

**Partnership for Implementation** – describes if there are any other organizations the hospital is working with to carry out the program

**Coalition of Partners:** Coalition of partner organizations, including health care and/or public health organizations

**Established Partner:** Partner organization the hospital has worked with in the past

**New Partner:** Partner organization the hospital has not worked with in the past

**No Partner:** Hospital itself without a community partner

**Evidence of Effectiveness** – describes how much evidence there is that the program will actually work to improve the health issue

**Strong Evidence:** Strong evidence the program is effective; considered a best practice

**Growing Evidence:** Growing evidence the program is effective; considered a promising practice

**No Evidence Yet:** No evidence yet the program is effective

[The following pages will ask you to compare two community health projects that have a combination of these characteristics and choose which one should be prioritized.]

Q41-96: Discrete Choice Experiment (example below is one of 36 sets; respondent received six sets as part of survey)

Consider the following two community health projects. A nonprofit hospital has the resources (either hard dollars or in-kind resources) for one of the projects but not for both. They have asked your opinion as to which one they should support. Assume all other aspects of the project are in keeping with the organization’s goals.

Attribute	Project A	Project B	Neither
<i>Priority on Community Health Assessment</i>	Need <b>identified as a top priority</b> based on severity of problem	Need <b>identified as a secondary priority</b> based on severity of problem	
<i>Focus of Intervention</i>	<b>Upstream determinants of health</b> – housing, education, food access, etc.	<b>Clinical approach</b> or medical intervention	
<i>Time to See Impact</i>	<b>3-5 years</b>	<b>Almost immediately</b>	

<i>Population of Interest</i>	<b>Community as a whole</b>	<b>At-risk or vulnerable population</b>	
<i>Partnership for Implementation</i>	<b>Coalition of partner organizations</b> , including other health care organizations and/or public health	Partner organization the hospital <b>has worked with before</b>	
<i>Evidence of Effectiveness</i>	<b>Strong evidence</b> that the program is effective; considered a best practice	<b>Growing evidence</b> that the program is effective; considered a promising practice	

	Project A	Project B	Neither
Which project should the hospital support?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Q13:

How confident are you in the choices you made in the previous questions?

- Very confident
- Somewhat confident
- A little confident
- Not confident at all

---

Q14:

We recognize these questions simplify very complex realities of programming and partnership. If you would like to share any thoughts on the task of prioritizing, please do so below. This is entirely optional.

Q15:

Working on community projects can raise important questions or concerns. Please consider the following situations and indicate whether you have encountered them in your time as an employee of a health care organization. [similar question for ethicists, community organizations, and public health employees]

	Never	Sometimes	Often
Challenge in sharing data with other organizations for community health work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pressure from community partners to support a program I felt was not a good use of resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pressure from supervisors or other staff to support a program I felt was not a good use of resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Confusion between population health management and community health – whether something is meant just for our patients or is broadly available to all in need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that the hospital was not acting in a collaborative manner with community partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that vulnerable or at-risk groups did not have a large enough voice in the project	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that there was insufficient data to determine whether a project was really making a difference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern that the hospital was taking on too much and / or asked to go beyond its areas of expertise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other concern (please describe)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17a: *[for those in public health]*

Is there at least one nonprofit hospital serving your public health agency's jurisdiction?

- Yes *[include Q23 and Q24]*
  - No *[exclude Q23 and Q24]*
  - Don't know *[exclude Q23 and Q24]*
- 

Q18:

What is your gender?

- Male
  - Female
  - Prefer not to answer
- 

Q19:

What is the highest level of education you have completed?

- Elementary school or some high school
  - High school graduate
  - Some college or trade / technical training
  - College graduate
  - Postgraduate studies
  - Prefer not to answer
- 

Q20: *[for those in health care and community organizations]*

Is your organization a faith-based organization?

- Yes
  - No
- 

Q21:

Please select the state in which you primarily work. (In the case it is multiple states, please select the one that requires most of your time.)

- Alabama
- ...
- Washington, D.C.
- West Virginia
- Wisconsin
- Wyoming
- Outside the U.S.

---

Q22:

How would you describe the community/communities in which you primarily work? (In the case it is many different areas, please select the one that requires most of your time.)

- Rural
- Semi-urban or Suburban
- Urban

Q23: *[for those in public health]*

Does your agency currently collaborate with nonprofit hospitals in your community around community health needs assessments?

- Yes
- No
- Don't know

---

Q24: *[for those in public health]*

Does your agency currently collaborate with nonprofit hospitals in your community around community health planning efforts?

- Yes
- No
- Don't know

---

Q25:

Would you like to share anything else before completing the survey? This is entirely optional.

---

Q26:

If you would like to be included in the drawing for prizes (20 Visa cards worth \$100 each), please include your name and work e-mail address. This information will be kept separate from all responses to this survey.

Name  
Work E-mail

---

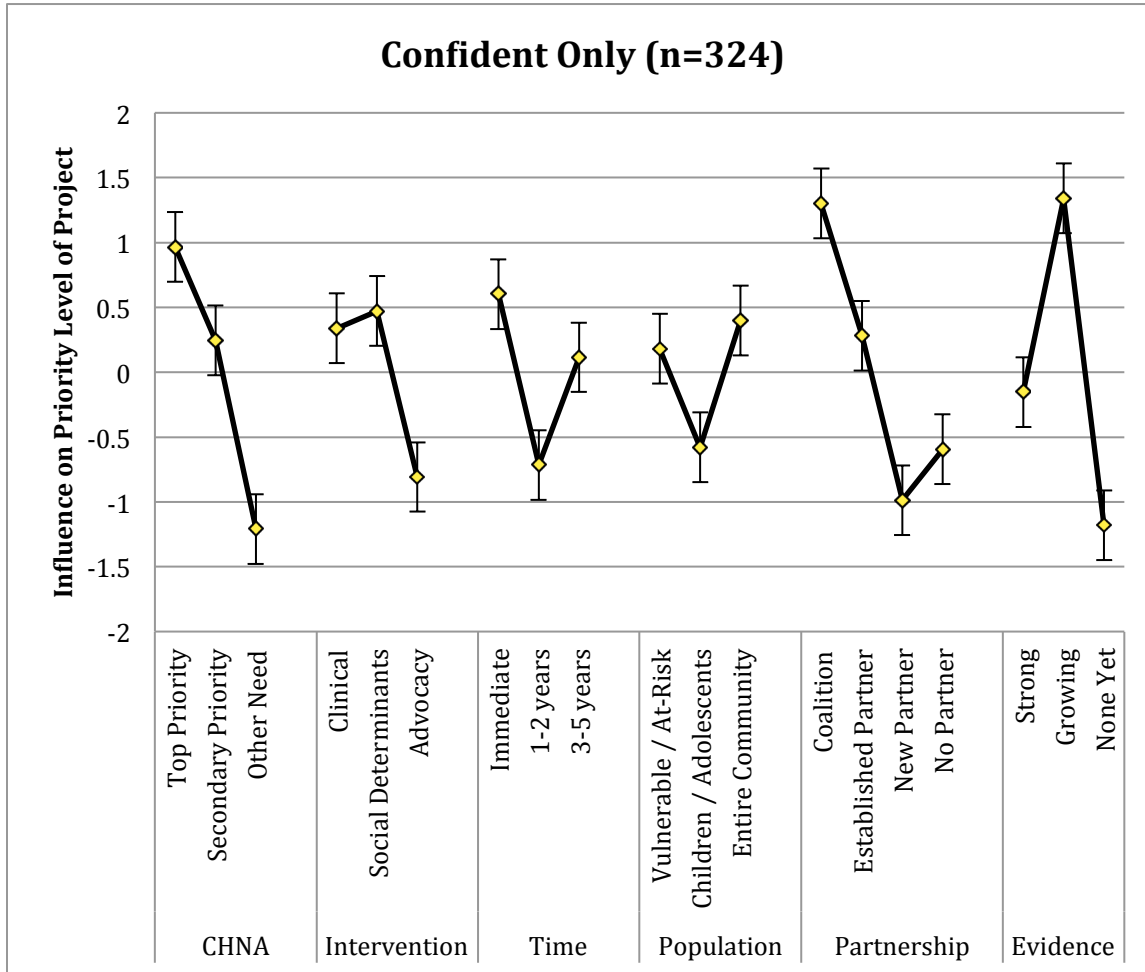
Q27:

If you would like to receive updates when information from this survey is presented or published, please indicate that below.

- Yes, please send me updates via the e-mail listed above

## Appendix 6: Additional Analyses of Discrete Choice Experiment

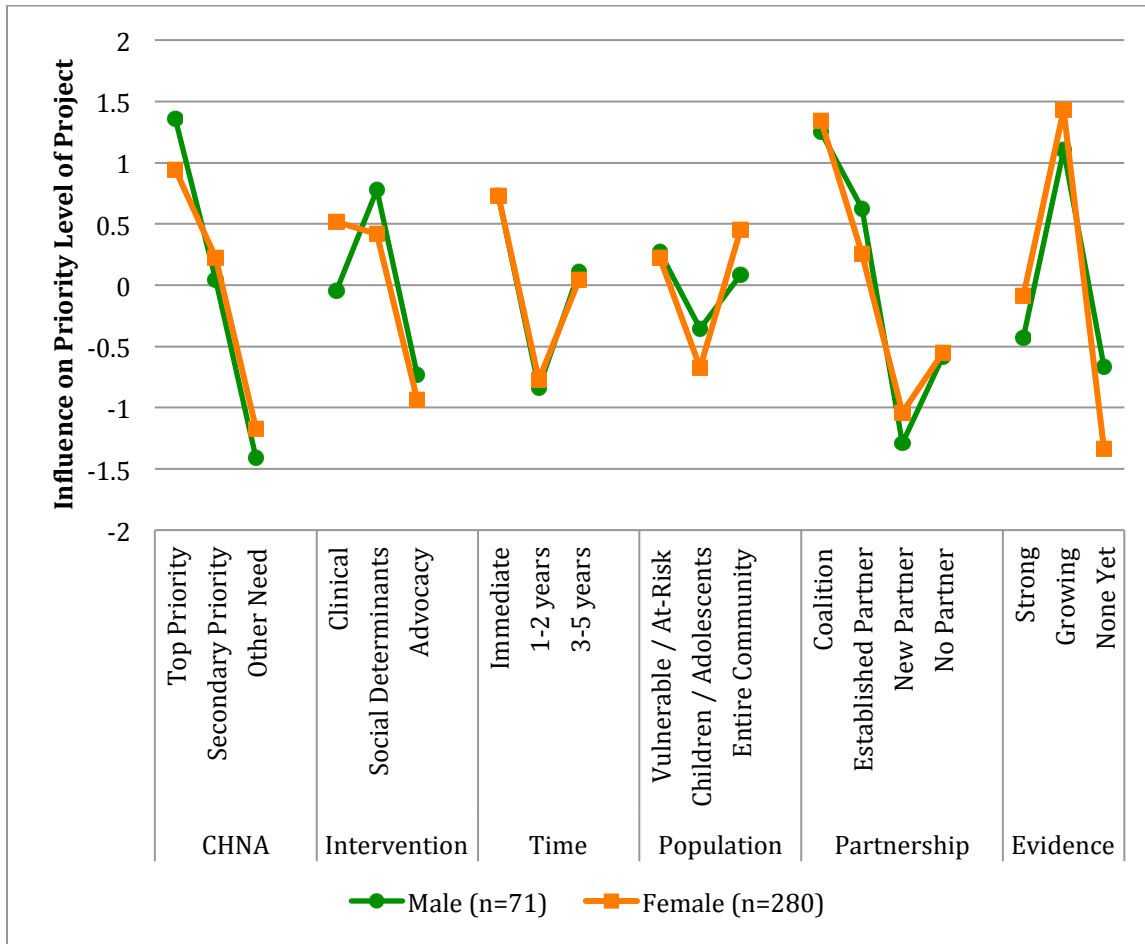
**Figure A6.1 Priority Characteristics for Health Projects - Those Confident in Responses**



Source: Author's analysis of survey data, February-May 2017. A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.

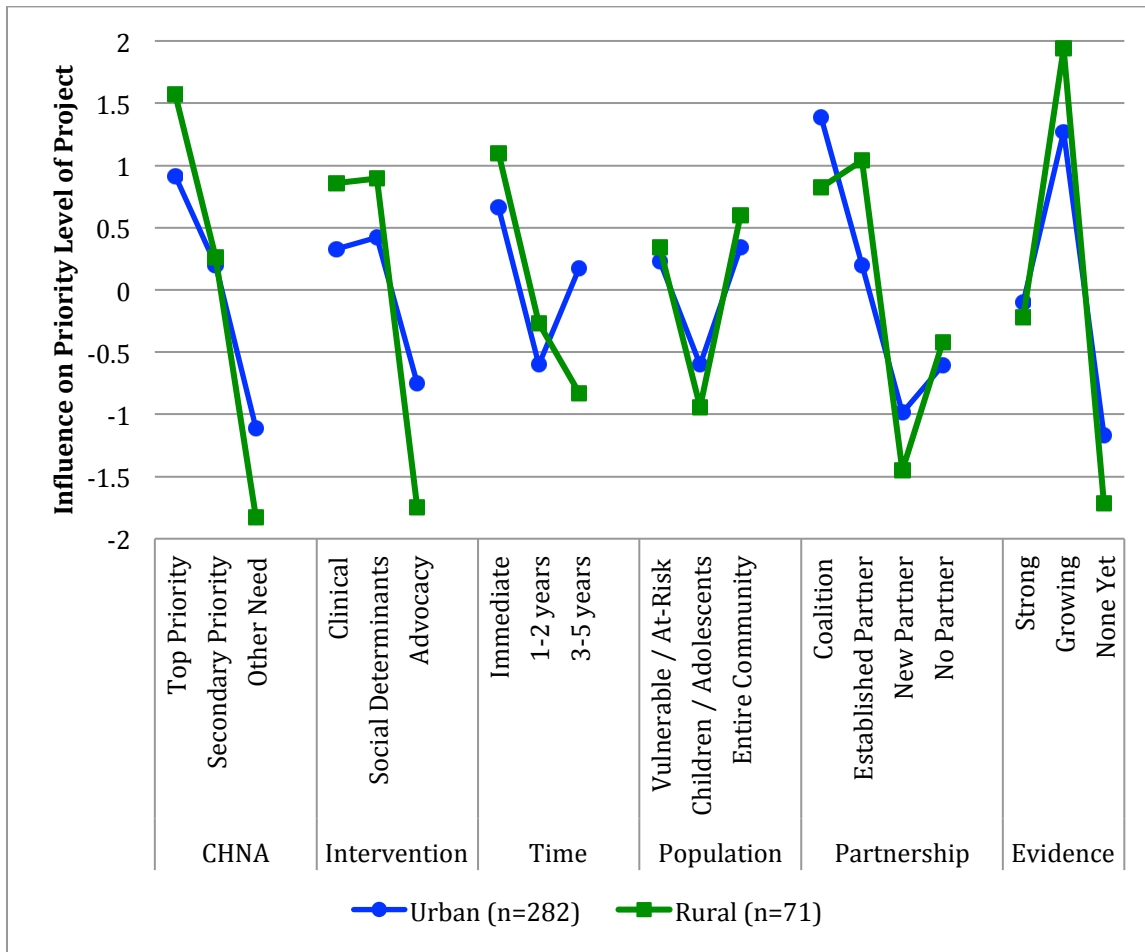


**Figure A6.2 Priority Characteristics for Health Projects - By Gender**



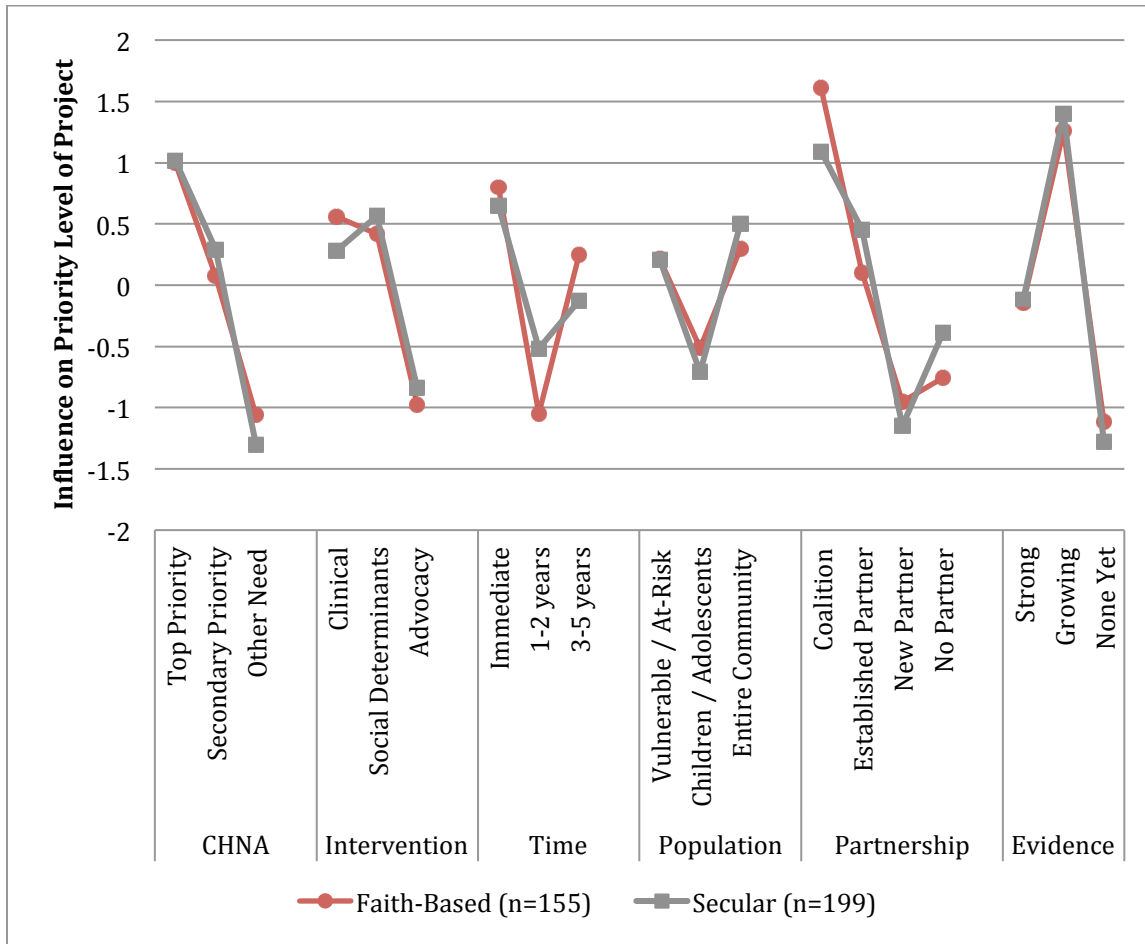
Source: Author's analysis of survey data, February-May 2017. A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.

**Figure A6.3 Priority Characteristics for Health Projects - By Urban / Rural Location**



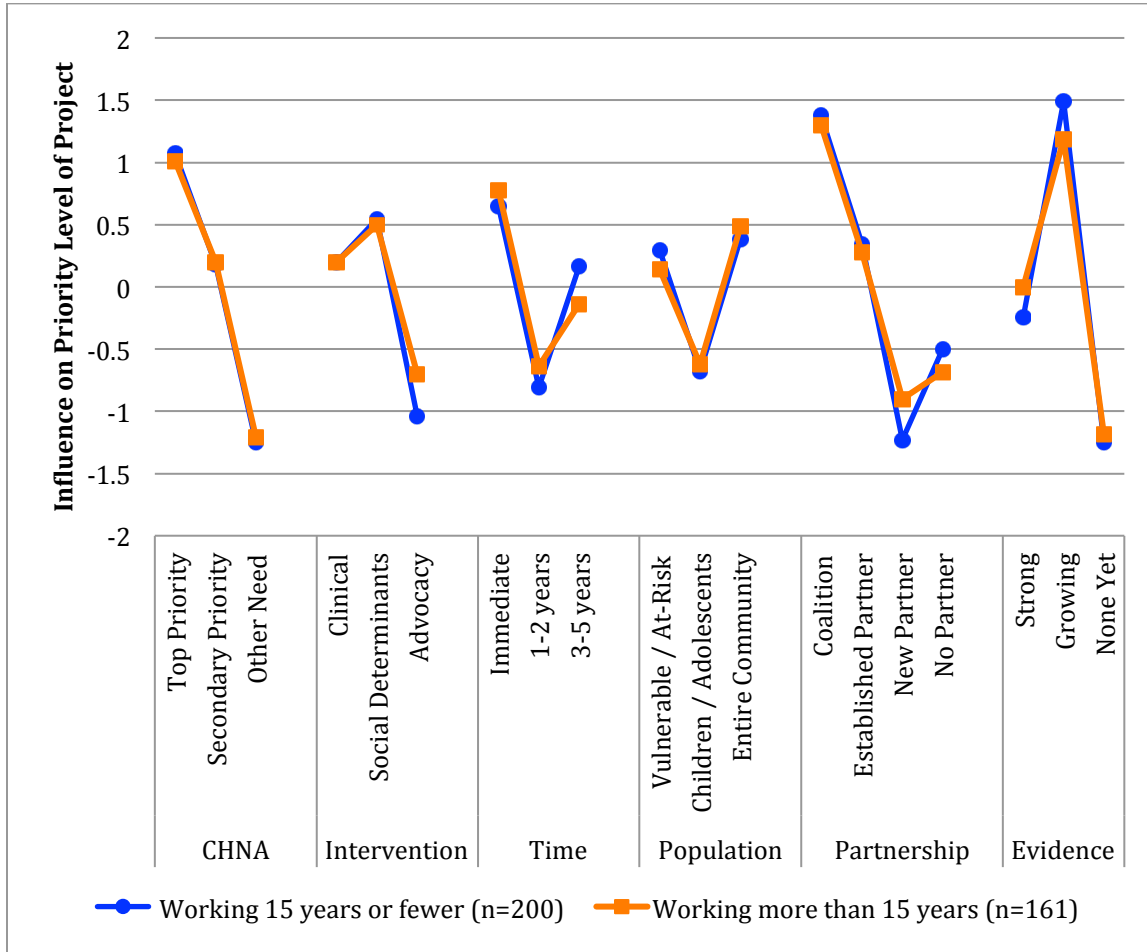
Source: Author’s analysis of survey data, February-May 2017. A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.

**Figure A6.4 Priority Characteristics for Health Projects - By Faith Affiliation**



Source: Author’s analysis of survey data, February-May 2017. A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.

**Figure A6.5 Priority Characteristics for Health Projects - By Years Working in Field**



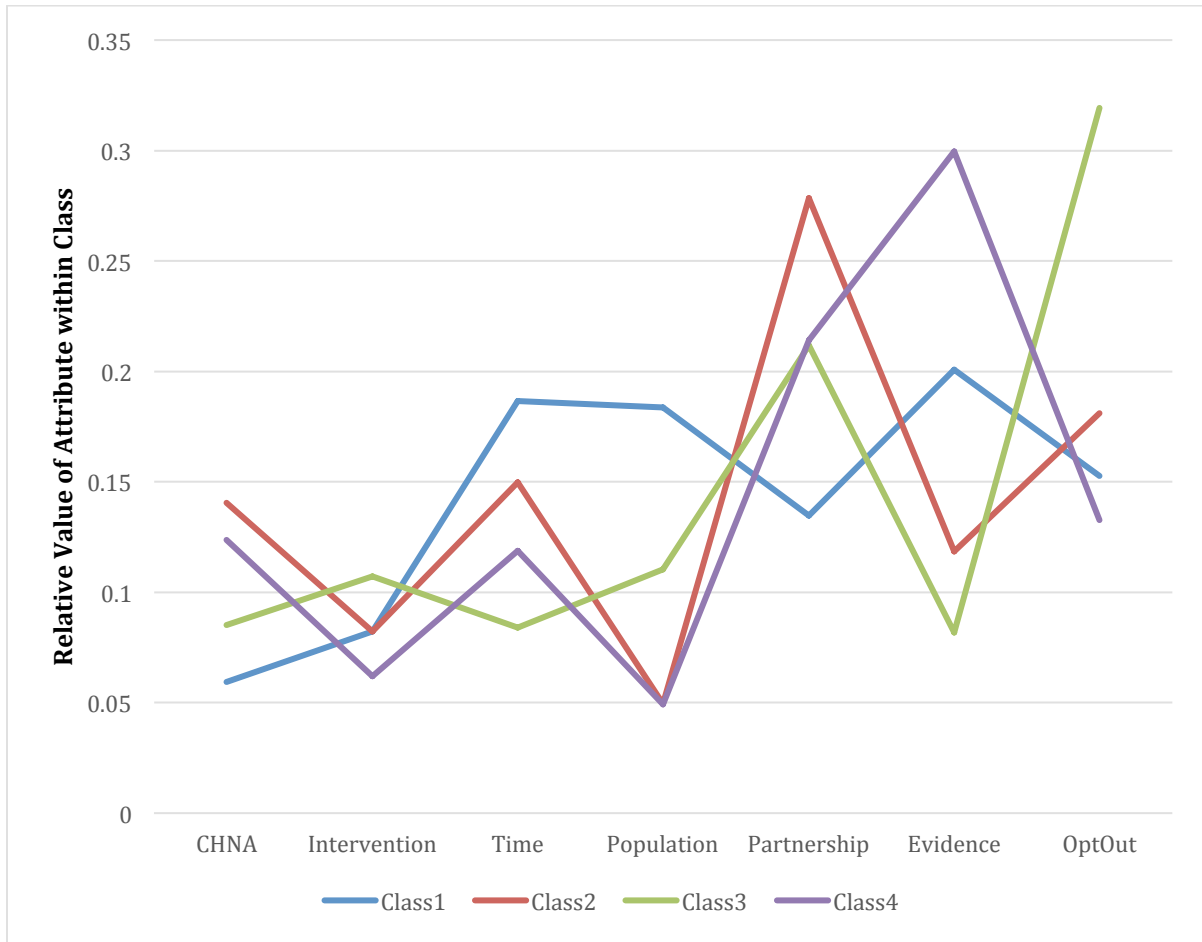
Source: Author’s analysis of survey data, February-May 2017. A value greater than 0 indicates an attribute made it more likely that a project would be selected. A value less than 0 indicates an attribute made it less likely a project would be selected.

## Appendix 7: Results from Latent Class Analysis

**Table A7.1 – Comparison of Latent Class Analyses with 1, 2, 3, and 4 Classes**

	<u>LL</u>	<u>BIC(LL)</u>	<u>L<sup>2</sup></u>	<u>df</u>	<u>p-value</u>	<u>R<sup>2</sup></u>
<i>1-Class Choice</i>	-1667.1312	3416.7068	1558.0516	347	1.30E-152	0.1643
<i>2-Class Choice</i>	-1550.265	3277.1963	1324.3191	331	9.40E-119	0.2452
<i>3-Class Choice</i>	-1452.8657	3176.6198	1129.5205	315	3.70E-92	0.4189
<i>4-Class Choice</i>	-1378.6339	3122.3782	981.0569	299	1.60E-73	0.5527

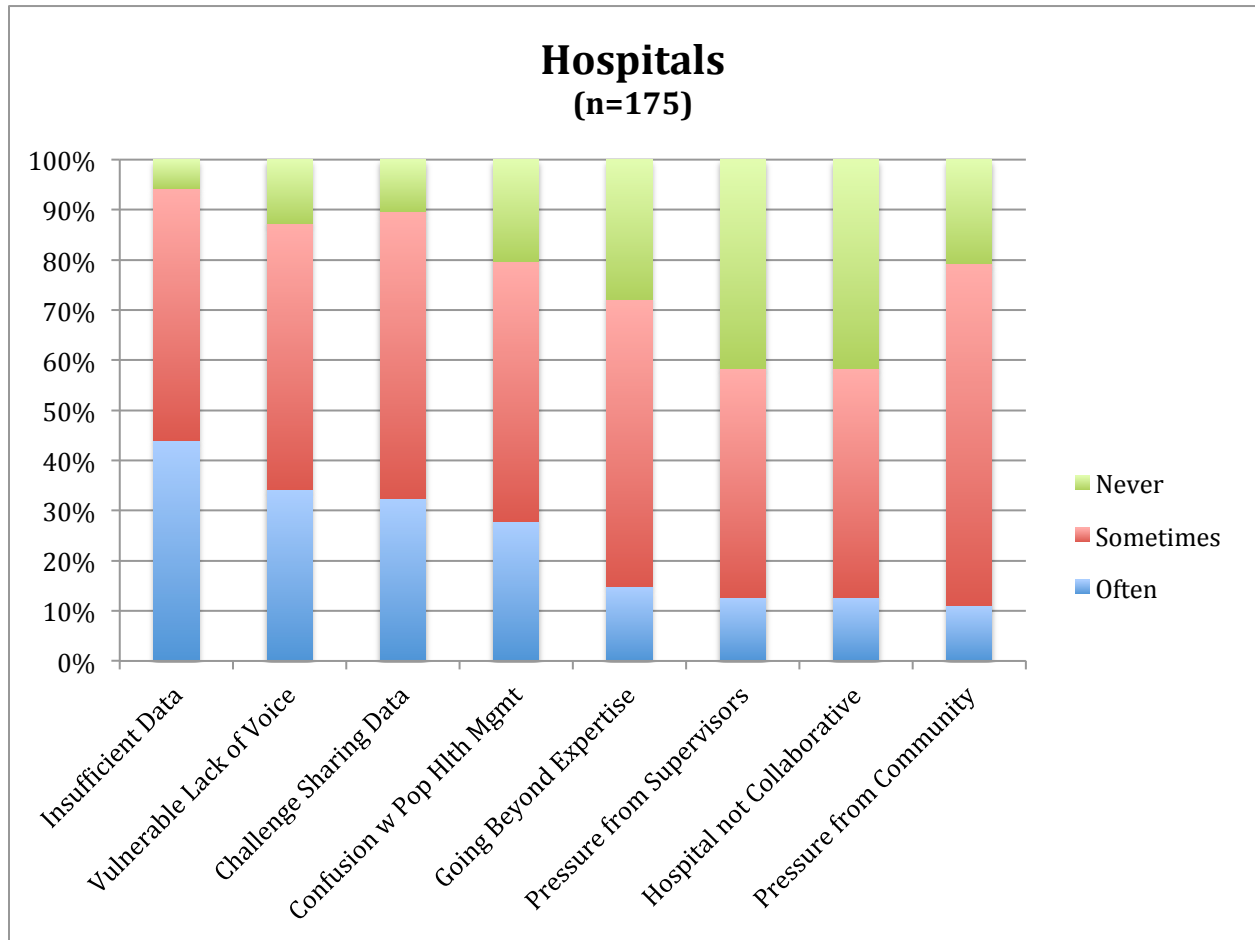
**Figure A7.1 Latent Class Model for Discrete Choice Respondents**



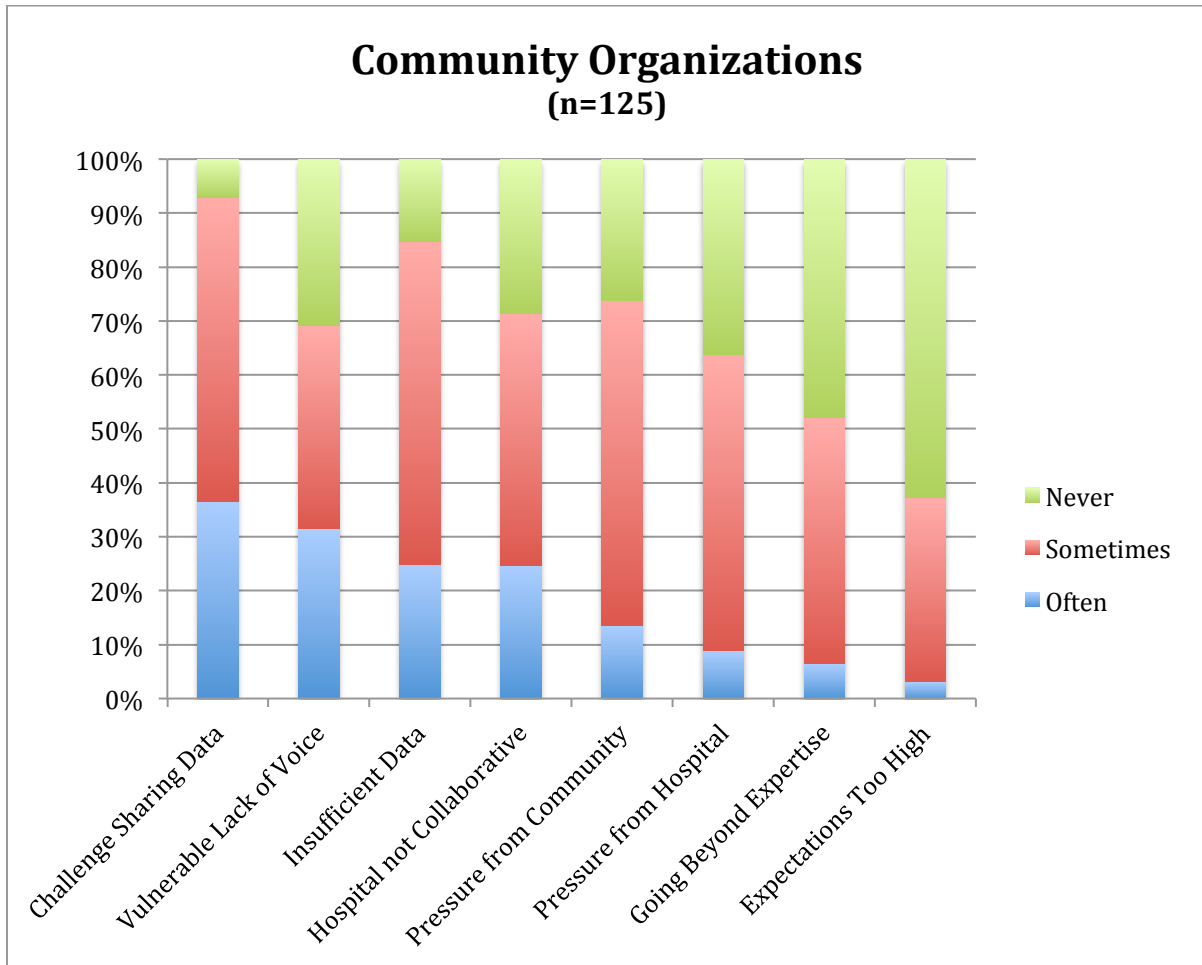
Note: Values indicate the relative importance of each attribute for a given class. The coefficients across all seven categories (six attributes and opt-out) are re-scaled to sum to 1 for each of the four classes.

## Appendix 8: Frequency of Ethical Concerns from Hospitals and Community Organizations

**Figure A8.1 – Frequency of Ethical Concerns from Hospitals**



**Figure A8.2 – Frequency of Ethical Concerns from Community Organizations**





**Table A8.1 – Comparison Between Hospitals and Community Organizations in Frequency of Ethical Concerns**

Survey Question	Hospital (n=173)			Community Organization (n=125)			Chi-Square Comparison <i>P</i> value
	Often	Sometimes	Never	Often	Sometimes	Never	
Belief that hospital going beyond its expertise	16%	54%	30%	7%	46%	48%	.002
Hospital not acting in a collaborative manner	12%	48%	40%	25%	47%	29%	.005
Insufficient data to determine whether project was making a difference	41%	48%	11%	25%	60%	15%	.010
Challenges sharing data for community health work	28%	55%	17%	37%	56%	7%	.021
Pressure from community organization to use resources unwisely	10%	66%	24%	13%	60%	26%	.470
Marginalized groups do not have a large enough voice	34%	50%	16%	31%	38%	31%	.572
Pressure from supervisor to use resources unwisely	13%	46%	42%				
Confusion between activities that benefit community and that benefit patients only	28%	52%	20%				
Pressure from hospital to use resources unwisely				36%	55%	9%	
Expectations for my organization were too high				3%	34%	63%	

## Appendix 9: Involvement of Hospital Ethicists in Ethical Concerns

**Table A9.1 – Comparison Between Hospital Employees and Hospital Ethicists in Frequency of Ethical Concerns**

Survey Question	Hospital Employees [How often experience] (n=173)			Hospital Ethicists [How often consulted] (n=31)			Chi-Square Comparison <i>P</i> value
	Often	Sometimes	Never	Often	Sometimes	Never	
Insufficient data to determine whether project was making a difference	41%	48%	11%	26%	42%	32%	<.001
Challenges sharing data for community health work	28%	55%	17%	3%	42%	55%	<.001
Marginalized groups do not have a large enough voice	34%	50%	16%	32%	35%	32%	.018
Pressure from community organization to use resources unwisely	10%	66%	24%	3%	55%	42%	.027
Pressure from supervisor to use resources unwisely	13%	46%	42%	3%	42%	55%	.042
Belief that hospital going beyond its expertise	16%	54%	30%	19%	39%	42%	.160
Hospital not acting in a collaborative manner	12%	48%	40%	6%	61%	32%	.248
Confusion between activities that benefit community and that benefit patients only	28%	52%	20%	23%	45%	32%	.328

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