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Moving Further Upstream to Promote Racial Equity:  
A Mixed Method Analysis of Private Nonprofit Hospital Community Benefit

By

Erica Lashá Browne

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Public Health

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Hector Rodriguez, Chair

Associate Professor Amani Allen

Professor Jason Corburn

Loel Solomon, PhD

Summer 2020



# **Abstract**

Moving Further Upstream to Promote Racial Equity:  
A Mixed Method Analysis of Private Nonprofit Hospital Community Benefit

By

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Doctor of Public Health  
University of California, Berkeley  
Professor Hector Rodriguez, Chair

This dissertation examines how private nonprofit hospital community benefit aligns with health, and the extent to which racial health inequities are addressed. While previous empirical work has examined hospital community benefit in relation to state laws, tax savings, and hospital ownership, less is understood about the relationship between private nonprofit hospital community benefit spending and community health-related needs. The first paper of this dissertation systematically reviews empirical studies to assess the relationship between private nonprofit hospital community benefit and health, and to determine how social health inequities are considered. The findings suggest that hospitals generally report higher amounts of community-directed spending in communities with lower levels of socioeconomic and community health need. The second paper is a cross-sectional study that examines the association between hospital characteristics, community-level indicators of social vulnerability, and private nonprofit hospital community benefit spending for vulnerable populations. Support is found for the hypothesis that hospital capacity, rather than indicators of community social vulnerability, affects the amount of community benefit that private nonprofit hospitals spend. The third paper uses a comparative case study to analyze how two private nonprofit hospital investments in housing and workforce development are rationalized and deployed. The findings indicate that community-based resources are essential to align hospital investments with community need, and to prevent the use of race-neutral decisions that emphasize socioeconomic need yet underappreciate racialized barriers to health. Together, the three papers provide support for a racial equity approach to private nonprofit hospital community benefit that builds upon existing theoretical and empirical work, and helps to move research and practice further upstream to advance racial equity and improve population health.

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and beautiful light still shines so bright.  
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to the joy you brought into our community as a  
friend and fellow classmate.

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## Introduction

Racial inequities in health are costly. In the United States (U.S.), an estimated \$1.24 trillion in health care spending could be saved by eliminating racial disparities in health.<sup>1</sup> Yet, less than 5% of U.S. health care spending is allocated to public health investments that improve health outcomes.<sup>2</sup> Although health inequities are only partly attributed to health care,<sup>3</sup> medical expenditures exceed spending for housing supports, employment training, and other social programs that have demonstrated benefits for population health outcomes.<sup>4</sup> Nearly two-thirds of the hospitals in the U.S. are private nonprofit hospitals that maintain federal and state tax-exemption by providing over \$60 billion in annual community benefit.<sup>5</sup> Despite multiple categories of community benefit—which include charity care, uncompensated medical care for government means-tested programs, subsidized health services, health professions education and training, research, cash and in-kind donations, community health improvements, and community building activities—over 75% of these resources are allocated to medical care.<sup>6-8</sup> Less than 5% of spending is apportioned to community health improvements.<sup>6,8,9</sup>

Previous research has examined private nonprofit hospital community benefit in relation to tax-savings,<sup>5,7,10,11</sup> defined community benefit categories,<sup>12-16</sup> state law,<sup>12,14,17-19</sup> hospital capacity,<sup>20,21</sup> and ownership.<sup>18,22,23</sup> However, the relationship between private nonprofit hospital community benefit and community health needs is unclear. Historically, federal community benefit statutes did not require hospitals to explicitly define the types of activities intended to serve the community.<sup>24</sup> Instead, the 1969 IRS Revenue Ruling 69-545 established a broad community benefit statute that allowed nonprofit hospitals to report a range of health promoting activities as community benefit as long as they were deemed “beneficial to the community as a whole.”<sup>25</sup> Despite the insurance coverage gains achieved through national health reform, which shifted hospital investments to focus on non-clinical community benefits, recent studies suggest that private nonprofit hospital community benefit and community needs are misaligned.<sup>8,26</sup>

Although private nonprofit hospitals receive federal tax-savings via access to tax-exempt debt, research grants, loans, and other tangible benefits,<sup>11</sup> state income and local property taxes provide most of the estimated \$24.6 billion in tax benefits.<sup>7</sup> It is assumed that hospitals will redistribute excess tax benefit at the local level, respond to local priorities, and provide benefits that improve health at the local community level.<sup>11</sup> Yet, amid a range of health-related needs and community benefit strategies, over 92% of nonprofit hospital community benefit expenditures are allocated to clinical care.<sup>7</sup> Further research is needed to better understand the relationship between private nonprofit hospital investments and community health-related needs.

Importantly, the relation between community benefit and the health inequities that limit opportunities for well-being in socially disadvantaged communities must also be examined.<sup>27</sup> Health-related outcomes are, in part, socially determined within complex socioeconomic, environmental, and political conditions.<sup>28</sup> For example, disproportionately high rates of poverty, unemployment, and housing instability in communities can exacerbate health inequities, impede population health, and affect hospital spending decisions and their effectiveness.<sup>29,30</sup> Within these conditions, racism is a fundamental cause of health that contributes to the disproportionate risk accumulation that socially disadvantaged racial/ethnic communities experience.<sup>31</sup>

Specifically, racism produces racial inequities in socioeconomic position and curtails access to power, beneficial social relations, and other resources that impact health outcomes.<sup>31,32</sup> Resources that are not targeted to address disproportionate needs may exacerbate health inequities by concentrating resources among groups with fewer needs and greater access to resources.<sup>28,33,34</sup> Private nonprofit hospital investments attuned to social health inequities may better align with community health-related needs, and address inequities that impede population health.

A Public Health Critical Race (PHCR) lens provides a theoretical framework to examine the relationship between private nonprofit hospital community benefit and social inequities in health.<sup>35</sup> Importantly, the framework focuses on the “the fundamental contribution of racial stratification to societal problems,” and it foregrounds racism as part of the context where health-related needs are produced.<sup>35</sup> When applied to private nonprofit hospital community benefit, a PHCR lens can be used to interrogate how approaches that fail to address racial inequities in social health risk exposure, opportunity access, and health outcomes may exacerbate inequity and impede population health. This framework includes principles of race consciousness, intersectionality, structural determinism, voice, and disciplinary self-critique that can be used to conceptualize a racial equity approach to private nonprofit hospital community benefit.<sup>35</sup>

First, the principle of race consciousness, which emphasizes racial stratification, can be used to shift the focus of race-neutral community benefit decisions to address racial and social inequities in health.<sup>35</sup> When applied, this principle can bring attention to the ongoing role that racism plays in producing health inequities across the life course.<sup>36</sup> Second, intersectionality, which describes the “interlocking nature of co-occurring social categories and forms of social stratification that maintain them,” can be used to re-conceptualize community health-related needs.<sup>35</sup> When applied, this principle enables a more complex understanding of community to be used in order to rectify health inequities that exist at intersecting dimensions of marginalization.<sup>37</sup> Third, the principle of structural determinism can be applied to identify the fundamental causes of disproportionate disease burden and premature death that are sustained “across time and contexts.”<sup>35</sup> Structural determinism can be used to address racism and historic race-based exclusion as forces that shape health-related needs and private nonprofit hospital resource allocation decisions.

Fourth, the application of the principle of voice can promote community-engaged, participatory practices that build capacity and mutually beneficial relationships within the communities that private nonprofit hospitals serve. When this principle is applied, the lived experience of marginalized communities can be valued and prioritized.<sup>35</sup> Fifth, the principle of disciplinary self-critique—which emphasizes the social construction of knowledge, and systematically interrogates the societal impact of institutional customs—can be used to interrogate private nonprofit hospital community benefit practices, and their impact.<sup>35</sup> When applied, a disciplinary self-critique may enable private nonprofit hospitals to critically examine the impact of their investments, and the extent to which community benefit practices either reinforce or address social inequities. Community benefit practices that are attuned to social inequities in health may help private nonprofit hospitals move “upstream”<sup>38</sup> to address social determinants of health through targeted investments.

This dissertation will contribute to our understanding of the private nonprofit hospital community benefit approaches that address health-related needs by examining three specific aims. First, it aims to assess the relationship between private nonprofit hospital community benefit and health, and how social inequities in health are considered. Second, it aims to examine the association between hospital characteristics, community-level indicators of social vulnerability, and private nonprofit hospital spending for vulnerable populations. Third, it aims to analyze how private nonprofit hospitals rationalize and deploy investments in housing and workforce development to address social determinants of health. Together, the three papers provide support for a racial equity approach to private nonprofit hospital community benefit that builds upon existing theoretical and empirical work, and helps to move research and practice further upstream to advance racial equity and improve population health.

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# **Paper 1: Moving Upstream to Advance Equity in Private Nonprofit Hospital Community Benefit Investments: A Critical Systematic Review**

## **Abstract**

Private nonprofit hospitals spend more than \$60 billion in annual community benefit. Over 75% is allocated to patient-directed services with fewer resources allocated to community-directed strategies that address social health determinants. We conduct a systematic literature review to 1) assess the relationship between private nonprofit hospital community benefit and health and 2) determine how social inequities in health are considered. Most studies (11/21) we reviewed used a national sample of private nonprofit hospitals to quantitatively analyze (17/21) the effect of hospital and market factors on community benefit spending. However, none of the studies we reviewed examined community benefit in relation to social health inequities. Despite mixed results, private nonprofit hospitals generally reported higher amounts of community-directed spending in communities with lower levels of socioeconomic and community health needs. Although non-clinical community-directed spending was positively associated with lower hospital readmission rates, hospitals spent more on patient-directed services in low-income communities regardless of need. Race/ethnicity (3/21) was the least frequently used measure compared to income (11/21), the proportion of uninsured adults (10/21), the percentage of people living in poverty (6/21), rates of unemployment (5/21), and education attainment (3/21). Hospitals generally spent similar amounts of community benefit in communities with higher concentrations of non-White residents. Policy interventions will be needed to promote an equity-focused approach to private nonprofit hospital community benefit investments.

**Key words:** Private nonprofit hospitals, Community benefit, Social inequalities in health



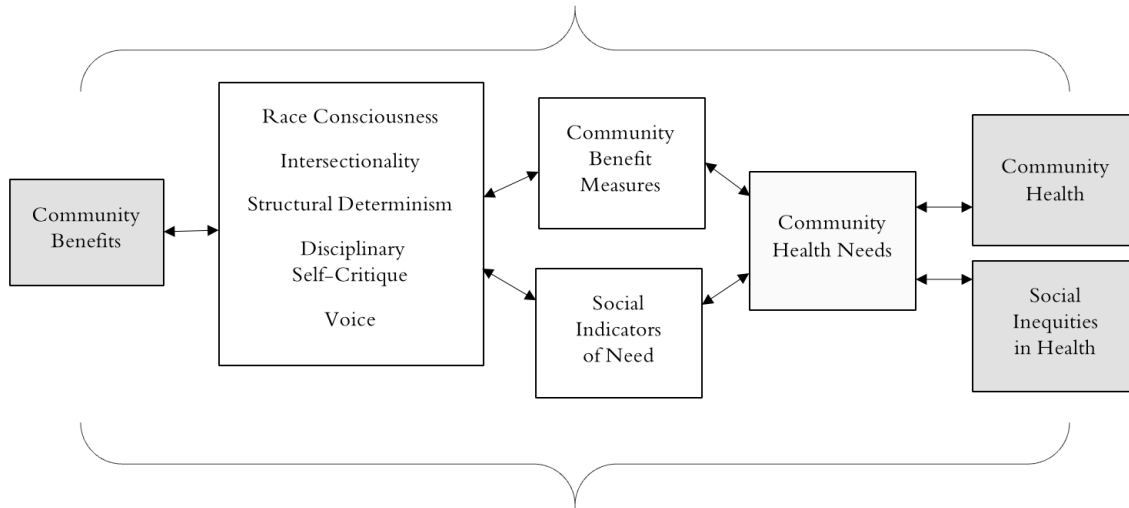
## 1.1. Introduction

In the United States (U.S.), two-thirds of hospitals are private nonprofit hospitals that receive tax-exemption in exchange for providing community benefit. Since the 1969 IRS Revenue Ruling 69-545, a broad community benefit statute was established that allowed nonprofit hospitals to report a range of charitable health promoting activities deemed “beneficial to the community as a whole”.<sup>1</sup> However, more recent mandates have standardized reporting categories and required hospitals to conduct triennial community health needs assessments to make spending for health improvement more transparent.<sup>2,3</sup> Conventional community benefit categories include charity care, uncompensated means-tested government programs, subsidized health services, community health improvements, medical professions education and training, research, and other community benefits. Annually, private nonprofit hospitals report more than \$60 billion in community benefit.<sup>4-6</sup> Over 75% of this spending is allocated to charity care, uncompensated care for government means-tested programs, subsidized health care, and other patient-directed services; less than 15% is allocated to health professions education and training, research, community health improvements, and other community-directed strategies.<sup>7,8</sup>

Although research has examined community benefit in relation to tax savings,<sup>4,9</sup> charity care,<sup>10-13</sup> state law,<sup>14-18</sup> hospital capacity,<sup>19,20</sup> and ownership,<sup>9,13,17</sup> the relationship between community benefit and health is unclear. Hospital community benefit is positively associated with increased public health funding to improve health outcomes.<sup>21</sup> Yet, recent studies suggest that private nonprofit hospital community benefit and community health needs are misaligned.<sup>7,22</sup> Although community building activities<sup>23</sup> and community health information<sup>24</sup> may help align hospital spending with community health needs, these strategies are infrequently used.

Understanding whether community benefit strategies align with community needs, and address social inequities in health,<sup>25</sup> requires further examination (Figure 1). Poor health outcomes amid inordinate health care spending are partly attributed to racial health inequities that are socially and economically costly.<sup>26</sup> Yet, less than 5% of health care spending is allocated to address social determinants and other fundamental causes of health.<sup>27,28</sup> For example, disproportionately high rates of poverty, unemployment, and housing instability in racial/ethnic communities may exacerbate health inequities, impede population health, and affect hospital spending decisions and their effectiveness.<sup>29,30</sup> Resources that are not targeted to address disproportionate needs among socially marginalized groups may instead exacerbate health inequities by concentrating resources among groups with fewer needs and greater access to resources.<sup>31-33</sup> Community benefit strategies attuned to social inequities in health may help nonprofit hospitals move “upstream”<sup>28</sup> and target spending to improve health outcomes.

1. What is the relationship between community benefit and health?



2. How are social inequities in health considered?

Figure 1.1: Conceptual Framework for Critical Systematic Review

In order to examine the relationship between community benefit and health, and the extent to which health inequities are considered, we systematically reviewed the empirical literature. We apply a Public Health Critical Race (PHCR) framework<sup>34</sup> to examine how private nonprofit hospital community benefits impact health and either address or overlook health inequities. PHCR principles elucidate how racism and multiple overlapping forms of social marginalization may impact community health needs, and community benefit research and spending decisions. Our systematic review integrates existing community benefit evidence to identify new opportunities for alignment between community benefit and disproportionate health-related needs. We argue that social inequities in health should be addressed in community benefit research aims, methods, and recommendations to help inform targeted community benefits. An equity approach to community benefit—one that addresses unjust, avoidable, and systematic differences in health--<sup>25,35</sup>can promote targeted spending. Research is needed to clarify whether equity is addressed through upstream investments and the community benefit practices of private nonprofit hospitals.

## 1.2. Methods

### *Search Strategy*

We use Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to systematically review empirical studies published in English-language scientific journals without any publication year restrictions.<sup>36</sup> Keywords related to “hospital,” “community benefits,” “hospital investments,” and “hospital community investments” were used and combined as search terms in PubMed. Keyword combinations of “hospital community benefits and health,” “community benefits and health,” and “hospital investments and health,” were searched in Web of Science to account for the broader social science literature included in this electronic database. The final search was conducted on June 17, 2019. Figure 2 describes our search strategy.

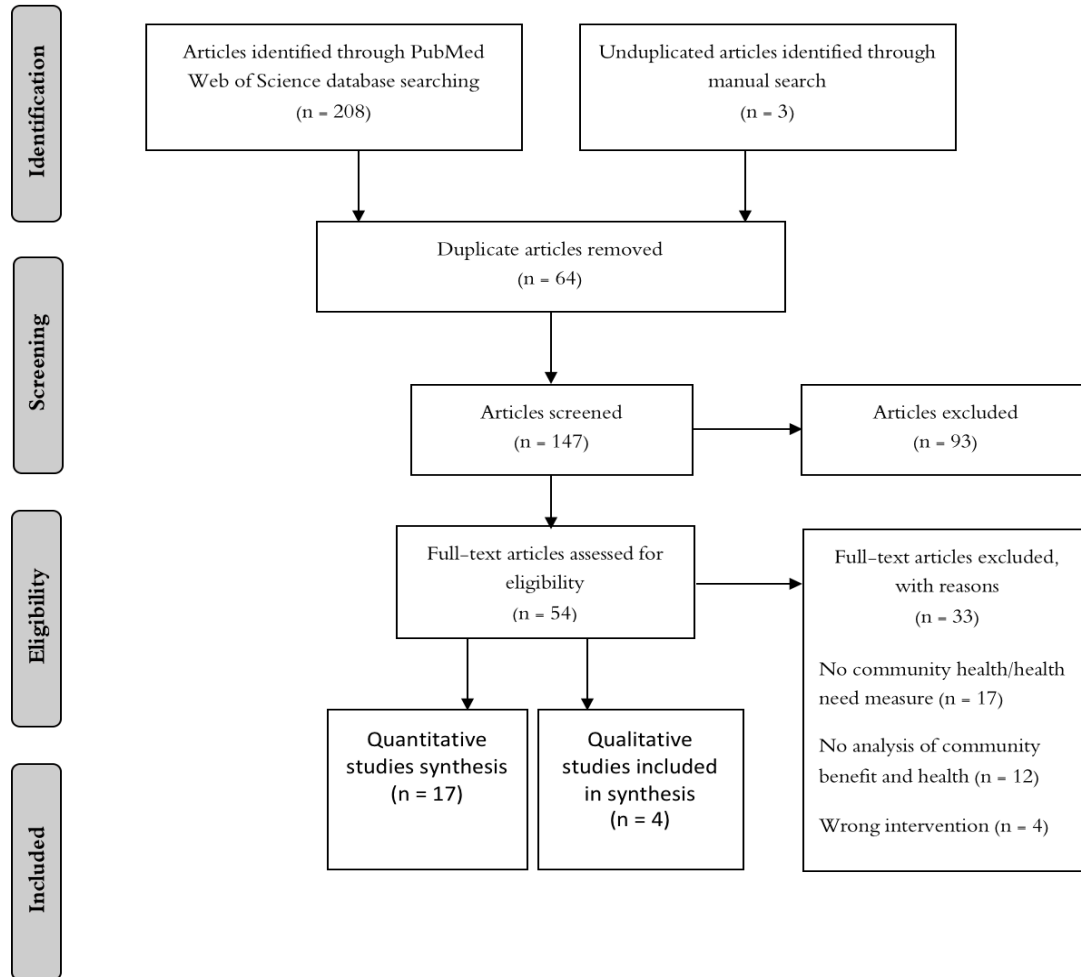


Figure 2.1: Flow Diagram of Search and Selection Strategy

### *Inclusion/Exclusion Criteria*

We include peer-reviewed empirical studies that examine community benefit and similar private nonprofit hospital activities. Quantitative and qualitative studies that analyzed community benefit in relation to health outcomes, community health needs, and/or sociodemographic characteristics are included. Given the community benefit requirements for private nonprofit hospitals located in the U.S., and the unique health needs these hospital activities address, we exclude studies that focus exclusively on for-profit hospitals, public hospitals, hospitals located outside of the U.S., and other types of health care organizations. Our review also includes studies that broadly consider health in terms of community health needs and social health indicators. We focus on the “powerful role [of] social factors—apart from medical care— [that shape] health across a wide range of health indicators, settings, and populations”.<sup>28</sup> Our inclusion criterion is agnostic to directionality and allows us to include studies that analyze community health as either a response or explanatory variable.

### *Study Selection*

We identified 211 research articles based on titles and abstracts, and we removed 64 duplicate articles that appeared in multiple keyword searches. We then screened 147 articles using a second more thorough abstract review and we excluded 93 articles that did not meet our inclusion criteria. We conducted a full text review of 54 articles and excluded an additional 33 articles for these reasons: four did not focus on a defined community benefit activity; 17 did not have a health outcome, health need, or health-related measure; and 12 did not analyze the relationship between community benefit and health as defined by our inclusion criteria. Our final analytic sample consists of 21 peer-reviewed empirical research studies.

### *Data Extraction and Analytic Framework*

We developed a rubric to guide our data extraction and analysis (Appendix 1). To examine the current state of the literature, we extracted data on the author(s), publication year, study aims, study design and setting, variables (for quantitative studies), sample size, hospital selection pool (for qualitative studies), and study conclusions. These data were extracted, analyzed and synthesized to 1) identify which community benefit measures and health indicators were used, and 2) assess the relationship between community benefit and health. To assess the community benefits received by socially marginalized groups in relation to groups with different social statuses, we applied Ford and Airhihenbuwa's (2010) Public Health Critical Race principles of race consciousness, intersectionality, structural determinism, disciplinary self-critique, and voice (Appendix 2).<sup>34</sup> These principles were used to develop 15 questions that guided data extraction on whether, and how, study aims, variables, methods, and conclusions considered social inequities in health. By applying these principles, we aimed to explore patterns of social health risk exposures by race/ethnicity and the broader socio-political context of community benefit decisions that may affect health.<sup>34</sup> We combined data extraction categories from both rubrics to create ten primary codes that were used for deductive coding of each of the 21 studies (Appendix 3). Next, we conducted thematic analysis of these coded segments and examined the range of statistically significant findings from the quantitative studies reviewed. We iteratively combined findings from our thematic analysis, which yielded four main findings (Appendix 4). We used MaxQDA 2018 software to code, collate codes, review themes, and describe primary themes.

### **1.3. Results**

We systematically reviewed 21 empirical studies to examine the relationships between community benefit and health, and to assess the extent to which social inequities in health are considered. Table 1 summarizes the characteristics of the studies we reviewed.

Table 1.1: Summary of Community Benefit Studies

Study Characteristics	# of studies	% of studies
<i>Primary Study Aims</i>		
Examine variation in community benefit by hospital factors	11	52%
Examine variation in community benefit by community factors	7	33%
Examine variation in community benefit by state law	2	9.5%
Examine variation in community benefit by community benefit types	2	9.5%
Evaluate the impact of hospital administered community benefit programs	2	9.5%
Evaluate the impact of community benefits on public health funding	1	4.7%
Evaluate alignment between community health needs and strategies	1	4.7%
<i>Study Design</i>		
Cross-sectional	16	76%
Retrospective cohort	1	4.7%
Mixed method	3	14%
Content Analysis	1	4.7%
<i>Study Setting</i>		
National sample of hospitals	11	52%
Multiple-state sample of hospitals	3	14%
Single-state sample of hospitals	3	14%
Regional sample of hospitals	4	19%
<i>Community Benefit Measures</i>		
Patient-centered (composite measure)	5	23.8%
Community-centered (composite measure)	5	23.8%
Charity care	6	28.5%
Uncompensated care	6	28.5%
Uncompensated care for means-tested government programs	7	33%
Community health improvements	6	29%
Health professions education	4	19%
Research	2	9.50%
Cash and in-kind donations	2	9.50%
Community building activities	1	4.7%
Other community benefit activities	6	29%

Most studies (11/21) used a national sample of private nonprofit hospitals to quantitatively analyze (17/21) the effect of hospital and market factors on community benefit spending. Three studies used qualitative survey data to evaluate the impact of hospital-administered community benefit programs,<sup>37-39</sup> and one study conducted a content analysis of the alignment between community health needs and community benefit strategies.<sup>40</sup> Only five studies used explicit health outcome measures in their analysis, which included composite measures of health behaviors and quality of care<sup>10,40-42</sup> and birth rates.<sup>43</sup> One study used hospital readmission rates as a proxy for community health need and,<sup>44</sup> in another study, public health funding levels provided a proxy for community health needs.<sup>45</sup> Three studies used a range of community sociodemographic characteristics as proxies for community needs.<sup>7,8,46</sup> The remaining studies used broad health-related social factors, which we analyzed as proxies for community social health needs. Notably, none of the studies we reviewed aimed to examine community benefit in relation to social inequities in health.

### *Inconsistent Measures May Obscure Community Benefit Impact*

Community benefit was most frequently measured by hospital spending for Medicaid and county health programs (7/21). Hospital spending for health professions education and training (4/21), research (2/21), cash and in-kind donations (2/21) and community building activities (1/21) were the least used measures of community benefit. Nearly one-quarter (5/21) of the studies used a composite measure of community benefit to distinguish between spending for patient-directed medical care (i.e., a combination of charity care, uncompensated medical care costs, uncompensated care for government means-tested programs, and subsidized health services) and community-directed health improvements (i.e., a combination of community health improvements, health professions education, cash and in-kind donations). Importantly, the majority (17/21) of studies measured community benefit as financial expenditures rather than activities (e.g., community engagement) and other non-monetized investments.

Almost two-thirds (13/21) of the studies controlled for individual characteristics (e.g., income, health insurance status) that may affect health needs, and five studies treated community characteristics (e.g., the percentage of uninsured adults) as market controls. This approach impeded the analysis of social inequities in health (e.g., targeting of community benefit via stratified analyses, impact of community benefit) because variation in social health risks were controlled rather than explored as factors that affect the type and level of community need. Urban areas were described as a market or hospital factor (e.g., "urban hospital") rather than as a community characteristic.

Evidence on the association of private nonprofit hospital community benefit expenditures and health outcomes is mixed. For example, Chaiyachati et al. (2019) found lower hospital readmission rates in communities where hospitals reported higher levels of community-directed spending.<sup>44</sup> The -7.3 relative difference in readmission rates ( $p < .0001$ ) between the highest and lowest levels of community benefit spending suggests an association between community benefit and hospital readmissions.<sup>44</sup> Yet, an analysis of alignment between community benefit and community health needs by Singh et al. (2015) found a spurious association between community health behavior needs and total community benefit (-0.780,  $p = .039$ ).<sup>41</sup> In another study, Singh (2013) found that higher levels of charity care in the healthiest communities was positively associated with community health services (0.4364,  $p < .01$ ), health profession education (0.2894,  $p < .01$ ), and other community benefits (0.2994,  $p < .01$ ).<sup>10</sup>

In communities with the poorest health, higher levels of charity care were only associated with spending for other patient-directed benefits (0.3304,  $p < .01$ ), which may indicate less spending across multiple community benefit strategies in these communities.<sup>10</sup>

### *Community Benefit and Social Health Needs are Misaligned*

In general, private nonprofit hospitals spent higher amounts of community benefit in urban zip codes and higher amounts of community-directed spending in suburban zip codes with lower levels of need. For example, Baehr et al. (2018) found that while hospitals spent more in urban zip codes as a proportion of total spending (\$43.9 million/\$11.8 million,  $p = .05$ ), they spent more on community-directed health improvements (i.e., non-charity care, non-patient directed medical spending) in suburban zip codes with lower levels of need (6.48%/0.63%,  $p = .002$ ).<sup>47</sup> However, Begun and Trinh's (2019) analysis showed that hospitals reported slightly higher amounts of total community benefit (0.154,  $p = .003$ ), non-clinical community building (0.948,  $p = .02$ ), and community health improvement (0.876,  $p = .009$ ) spending in urban communities.<sup>48</sup> Bazzoli et al. (2010) found that Florida hospitals in rural communities provided lower amounts of community benefit and uncompensated care (-0.773,  $p < .01$ ) even when controlling for levels of charity care provided by hospitals in other areas (-0.723,  $p < .01$ ) without state community benefit laws.<sup>43</sup> Johnson et al. (2019) examined higher levels of community benefit spending among hospitals located in urban zip codes and states with community benefit state laws, and found no difference in community benefit spending among hospitals located in rural zip codes regardless of community characteristics and state laws.<sup>49</sup> In general, community benefit spending appeared to vary by urban, suburban, and rural categories.

Although private nonprofit hospitals provided more uncompensated care in economically poor communities, the amount of other types of community benefit were lower in these communities compared to communities with lower levels of need. In an analysis by Schneider (2007), hospitals provided more uncompensated care (0.868,  $p < .05$ ) in communities with higher levels of poverty.<sup>42</sup> In another study by Alexander et al. (2009), the percentage of people below the poverty level was positively associated with uncompensated Medicaid (0.005,  $p < .001$ ) and negatively associated with the amount of community engagement (-0.035,  $p < .05$ ), which was measured as a non-monetary community benefit activity.<sup>50</sup> Begun et al. (2019) found that per capita income was positively associated with spending for community health improvements (0.46,  $p < .001$ ) and negatively associated with total community benefit spending (-0.007,  $p < .001$ ).<sup>48</sup> Similarly, in an analysis of value-based community benefit services among Catholic hospitals, White et al. (2010) found that fewer vulnerable- (-2.42,  $p < .001$ ), access- (-2.30,  $p < .001$ ), and compassion-related (-2.05,  $p < .001$ ) services were provided to communities with a higher percentage of people living in poverty.<sup>39</sup> In multiple studies, social conditions were controlled for rather than explored as contributors to community social health needs. For example, in Schneider (2007), community (e.g., crime rate, per capita income) and market (e.g., Medi-Cal and Healthy Families enrollment) characteristics that might serve as proxies for social health determinants were controlled for rather than examined as possible explanatory factors for community needs.<sup>42</sup>

In more than half of the studies (13/21), socioeconomic characteristics—including the percentage of people living in poverty, per capita income, the proportion of people without health insurance, the percentage of people with a high school diploma or less, and the unemployment rate—were analyzed as covariates in multivariate analyses to examine the effect of hospital factors on

community benefit. The use of socioeconomic indicators as confounders to the effect of hospital factors on community benefit spending is an appropriate analytic approach to the stated research aims we reviewed. Yet, in studies that used composite measures of community need,<sup>10,41,47</sup> income, unemployment, and poverty rates were analyzed as indicators of need rather than as market controls. Few studies examined the effect of community socioeconomic characteristics on health needs and hospital spending.

### *Racial Inequalities in Health are Overlooked*

Race/ethnicity (3/21) was the least frequently used measure of community characteristics compared to income (11/21), the proportion of uninsured adults (10/21), the percentage of people living in poverty (6/21), rates of unemployment (5/21), and education attainment (3/21). Among the three studies that included measures of race/ethnicity, hospitals generally spent similar amounts of community benefit in communities with higher concentrations of non-White residents.<sup>44,46,47</sup> Chaiyachati et al. (2018) reported slightly higher proportional total community benefit (9.0%/8.1%,  $p < .001$ ) and health care (7.5%/7.4%,  $p < .001$ ) spending in communities with the highest quintile of Hispanic residents compared to communities with the lowest quintile of Hispanic residents.<sup>46</sup> Baehr et al. (2018) found higher levels of community benefit spending in urban communities with a higher proportion of non-White residents (58.5% vs. 17.3%) and a higher percentage of poverty (26.5% vs. 7.0%). Community-directed spending did not vary according to the concentration of racial/ethnic groups within zip codes.<sup>47</sup>

Race-neutral terms were generally used to describe communities served by hospitals. For example, in a comparative analysis of California and Florida hospital spending, contextual differences were described in race-neutral terms that emphasized per capita income and the proportion of uninsured persons as “community characteristics that influence the amount and types of community benefits needed”.<sup>43</sup> In another study, Maeda et al. (2015) used “vulnerable” and “complex social needs” to describe the communities served by safety-net clinics in the mid-Atlantic region without providing further detail about sociodemographic characteristics that may shape the community health needs that safety-net providers address.<sup>37</sup> Similarly, the Singh et al. (2013) analysis may have overlooked structural explanations for lower levels of community benefit spending in communities with high levels of need and non-White racial/ethnic groups.<sup>10</sup> Likewise, Chaiyachati et al. (2018) controlled for race and Medicaid dual eligibility in their analysis of Medicare readmission rates, which did not allow community benefit spending to be analyzed according to communities stratified by race or disability.<sup>46</sup>

When data on race-based patterns were presented, race-neutral interpretations were used. For example, although Baehr and colleagues (2018) denoted the higher percentage of non-White residents living in poverty in urban Philadelphia communities, this data was not used to interpret the disproportionately higher amounts of community-directed spending in non-urban, predominantly White communities.<sup>47</sup> The authors recognized that “urban hospitals invest less both relatively, and absolutely, on community health improvement services—the domain with the greatest potential to affect upstream determinants of health”.<sup>47</sup> However, the authors depict “urban” as a hospital characteristics that is non-racialized. Community health improvement services are a main category of community-directed spending, and this conceptualization limited the analysis of community health outcomes stratified by race/ethnicity.



### *Community Participation May Help Align Benefits and Needs*

We found few examples of community knowledge and participatory methods in our review. For example, Rains et al. (2018) used pre- and post-test knowledge and skills data to evaluate hospital-administered community programs.<sup>38</sup> While Baehr et al. (2018) recommended inter-hospital coordination to better align community benefits to community needs, the recommendations did not include collaboration with community-based organizations, leaders, and residents.<sup>47</sup> We found multiple studies that considered health professionals' perspectives. Chaiyachati et al. (2019) acknowledged the expertise of local public health departments in addressing social determinants of health,<sup>44</sup> and Rains et al. (2018) used a multi-disciplinary team comprised of hospital leaders, evaluators, and bookkeepers to evaluate the impact of hospital community benefit programs.<sup>38</sup> Similarly, Maeda et al. (2015) used interviews from safety net clinic staff and other program data to evaluate the impact of a private nonprofit hospital collaboration with safety net clinicians.<sup>37</sup>

Notably, there were few recommendations that considered how community benefits might produce different impacts in communities with different levels of need and access to resources. For example, Chaiyachati and colleagues (2019) found the impact of community-directed spending on lower readmission rates was smaller for patients living outside of the hospital's zip code, which underscores how hospital proximity may affect differential levels of community engagement and spending.<sup>44</sup> Likewise, Schneider's (2007) recommendation that tax-exemption policy be based on community dividend levels to eliminate unfair competitive advantage did not include a focus on community-centered needs and value.<sup>42</sup> In some studies, however, the perspectives of health care and community leaders and members were used to inform data collection and recommendations.<sup>38,44</sup>

## **1.4. Discussion**

Building upon previous research, we examined the relationship between private nonprofit hospital community benefits and health, and the extent to which social inequities in health are considered when these investments are assessed. Our review produced three main findings that warrant further explanation. First, we found inconclusive evidence on the relationship between community benefits and health. The use of inconsistent measures may contribute to these mixed results.<sup>15</sup> Different types of community benefit activities were measured, and this variation may limit the reporting accuracy and generalizability of the findings we reviewed. Furthermore, the predominant use of hospital expenditures to measure community benefit may limit our understanding of how non-quantifiable investments (e.g., community building activities) align with community needs that impact health. For example, economic development, physical improvements and housing, leadership development, and training for community members are examples of non-quantifiable benefits that may support community health despite their exclusion from reported expenditures.<sup>51</sup> Because these investments are difficult to quantify and are often excluded from hospital reports, they may be less frequently analyzed in empirical research. Yet, their inclusion in analyses may produce different findings on the relationship between community benefits and health. Furthermore, the use of non-expenditure outcome measures, including improvements in social (e.g., enhanced advocacy, leadership and operational capacity for organizations) and economic (e.g., infrastructure, housing, and workforce training) conditions may improve the health impact evaluation of these investments because a range of health-related

measures are utilized.<sup>52</sup> Non-expenditure outcome measures may facilitate the evaluation of intermediate and more distal health-related outcomes.

Importantly, the use of community voice, which “[p]rioritiz[es] the perspectives of marginalized persons, and [p]rivileg[es] the experiential knowledge” of affected community members, may address these limitations and enable a broader range of community benefit activities to be examined.<sup>34</sup> When applied, community voice may emphasize the knowledge of community members and hospital leaders to inform community benefit practice and research decisions. It may also bring into focus the extent to which non-financial hospital investments produce benefits within communities. Community knowledge and participatory methods may enhance data collection and analysis, focus attention towards equity, and help transform hierarchies that influence community benefit practice and research.<sup>34,53</sup> For example, the inclusion of community members and hospital leaders as research partners may enhance qualitative data collection and analysis and help explain complex hospital decisions and community interactions. This approach may help clarify whether community benefit practice and research aim to improve health outcomes and address social inequities, or maintain the status quo.<sup>54</sup> Participatory decision-making processes may challenge existing power dynamics by engaging community leaders and members as active partners. The use of non-quantifiable hospital investments, intermediate social-health outcome measures, and community knowledge in community benefit research may strengthen the empiric evidence on the relationship between community benefit and health.

Second, we found the amount of non-clinical community-directed spending was higher in healthier communities and lower in communities with potentially higher levels of socioeconomic and health needs. Although community-directed spending was associated with lower rates of hospital readmission, this category of spending was targeted towards healthier communities and therefore misaligned. One explanation for this finding may be hospital capacity. Hospital capacity has been associated with community benefit spending,<sup>20</sup> and capacity limitations may help explain why more targeted spending occurs in communities with lower levels of socioeconomic need and where fewer hospital resources may be required to implement non-clinical investments. Another explanation relates to the use of composite (i.e., community-directed, patient-directed) measures that may unintentionally result in some community benefit activities, and within-community needs, being overlooked. For example, non-clinical community-directed spending on capacity building and infrastructure may not be captured by the community benefit reports analyzed in the research studies. Inclusion of these community benefit activities could alter the findings reported here. Yet, without assessing these activities systematically, it is unclear how they would impact the results. The use of composite spending categories in analyses that do not stratify communities based on sociodemographic characteristics may underestimate the need for community building strategies in resource poor communities, and understate the need for charity care in communities with more economic resources. Importantly, the use of composite measures of community benefit activities may also minimize the range of needs within resource-poor communities that charity care and other medical benefits are unable to address. Community heterogeneity, and its relationship to community benefits, may be overlooked when composite measures are used.

Because access to economic and social opportunities impacts health,<sup>28</sup> it may also affect community benefit spending. We found that the benefit of community-directed spending decreased the further residents lived from the hospital. Geographic proximity may affect community access

to hospital resources and limit access for residents in medically underserved areas. The analysis of social health inequities across and within communities may enhance community benefit evidence. Structural determinism, which examines “the fundamental role of macro-level forces in driving and sustaining inequities across time and contexts,” might be applied to promote analysis of the factors that contribute to social inequities in health and the need for targeted community benefit.<sup>34</sup> Research methods that exclude analysis of social inequities in health may, however, unintentionally reinforce biased assumptions. For example, measuring socioeconomic or urban environment characteristics as market and hospital factors may produce interpretations that minimize historical policies that disadvantage rural, low-income, and non-White racial/ethnic communities. A disciplinary self-critique can be used to examine the biases that underlie community benefit practice, and make research assumptions transparent so that they can be explained.<sup>34</sup> A structural approach to community benefit may move further upstream to center equity and the extent to which investments are targeted to align with disproportionate needs.<sup>55</sup>

Third, we found a limited use of race/ethnicity to conceptualize the social context where health is produced and hospital resource decisions are made. While the size, density, diversity, and complexity of urban areas produce unique social health determinants,<sup>56</sup> racism is a key determinant of health that may be overlooked.<sup>57</sup> Urban communities, specifically, are racialized and subject to ahistorical analyses that exclude “...a deeper understanding of how and why [these] social determinants of racial health disparities...” exist.<sup>58</sup> Most of the analyses we reviewed did not consider a historical context related to racism. For example, the studies we reviewed either excluded race from the analysis or included it as a covariate without explaining its potential impact on health needs or community benefit spending. Racism is a fundamental cause of health that operates through racial inequities in socioeconomic position and the health risk accumulation of racially marginalized groups.<sup>59</sup> Yet, the potential effects of racism on health needs and hospital spending were not examined. The race-neutral terms and interpretations we found may overlook how racism and other structural forces impact health needs and resource allocation decisions.

Race consciousness may provide an opportunity for community benefit research and practice to consider “the fundamental contribution of racial stratification to societal problems” so that the impact of racism on health and community investments can be conceptualized and explained.<sup>34</sup> This approach may enhance our understanding of racial inequities and whether community benefits are targeted to communities with disproportionate need based on racial discrimination and institutionalized racism. Likewise, this approach might include stratifying analyses by race to see if the effect of community benefits on other outcomes differs for areas with higher versus lower concentrations of non-White racial/ethnic groups. The effective use of race/ethnicity data in community benefit research can help determine which community benefit strategies are most impactful in terms of reducing inequities. Importantly, the application of race consciousness may support an intersectional approach that recognizes how multiple interlocking dimensions of social marginalization impact health and community health needs.<sup>34</sup>

### *Recommendations to Move Upstream Towards An Equity Approach*

Our findings build upon existing literature to recommend an equity approach to private nonprofit hospital community benefit research and practice. An equity approach considers the fundamental causes of health inequities<sup>35</sup> and uses a race consciousness lens to examine how racism affects community health needs and community benefit decisions.<sup>34</sup> This approach can examine the role of racism in the reproduction of health inequities across the life course<sup>60</sup> and re-conceptualize vulnerability so that it goes beyond medically indigent status to include the experiences of socially marginalized racial/ethnic groups and multiple forms of social exclusion. It may also examine how individual and community factors interact to affect health through social conditions.<sup>57,61,62</sup>

An equity approach may analyze health inequities produced by intersecting dimensions of social marginalization that deny opportunity based on race/ethnicity, disability, gender and other socially assigned identities.<sup>63</sup> Likewise, this approach might examine how common hospital practices and research methods may overlook inequities in health and resource allocations.<sup>64</sup> Because marginalization “curtails opportunities for capacity building, and constraints [the] ways in which relationships are established,” an equity approach can examine potential race-based biases in the type and amount of hospital community engagement afforded to different communities.<sup>63</sup> Through this approach, non-financial hospital assets are examined as forms of capacity building that may vary according to community composition.<sup>65</sup> An equity approach might more effectively address the excess burden of poor health among racial/ethnic groups that impacts population health and community benefit spending.

### *Limitations*

There are limitations to our findings that must be considered. First, because a single coder was used, potential threats to internal reliability were addressed through the development and utilization of detailed rubrics to extract and code data. One rubric was used to guide consistent data extraction, and a second rubric was used to produce a standard set of codes that were subsequently applied to each of the 21 empirical studies in our sample. The use of a multiple coder may have improved coding reliability. Second, the studies we reviewed included hospital-reported community benefit investments that may either under-report the amount of non-quantifiable investments that are excluded from federally reported data<sup>15,51</sup>, or mis-report certain investment categories that lack consistent definitions.<sup>15</sup> Although federal- and state-level private nonprofit hospital reports have been previously validated, our inclusion of studies that utilized hospital-reported community benefits may reduce the validity of our findings. Future research should examine important investments not assessed consistently in other studies, including capacity building, infrastructure investments, and other types of non-clinical community building activities. Third, we included observational studies, which generally limit internal validity and prevent an analysis of the causal relationship between private nonprofit community benefit and health. Accordingly, our interpretation of associations, rather than causal, is made explicit.

## **1.5. Conclusion**

Social inequities impede population health and require that effective health improvement strategies address upstream health determinants. Private nonprofit hospital community benefit includes strategies to improve social conditions and health. Our findings identify opportunities for community benefit research to examine the relationship between community benefit more attentively with an equity approach. An equity approach considers complex social health needs and the social context where such needs are addressed or overlooked. Policies that promote community-engaged participatory methods, financial and non-financial investments, and targeted resource allocations that address social health inequities may be necessary for private nonprofit hospitals to adopt an equity approach to community benefit. An equity approach moves private nonprofit hospitals further upstream to promote health by addressing disproportionate health-related needs and allocating resources accordingly.

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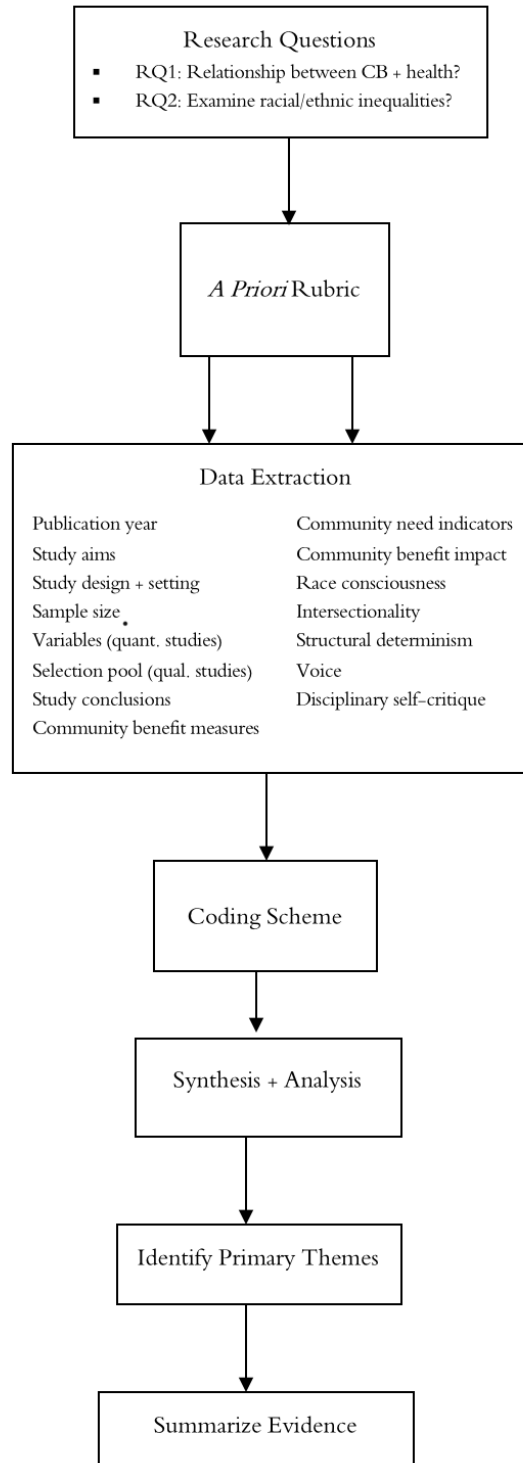


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## 1.7. Appendices

### Appendix 1: Data Extraction Model



Appendix 2: A Priori Rubric to Apply Public Health Critical Race Principles

Source: Ford & Airhihenbuwa, 2010

Principles	Guiding Questions
<i>Race Consciousness</i>	<p>Are racial biases and race-based social patterns considered?</p> <p>Are racial/ethnic health inequities examined?</p> <p>Are racial/ethnic inequities attributed to non-racial factors?</p> <p>Do recommendations promote health and racial equity?</p>
<i>Intersectionality</i>	<p>Is an intersectional, multi-dimensional definition of community used?</p> <p>Is intersectionality considered in the analysis?</p> <p>Is intersectionality used to interpret research findings?</p> <p>Are potential differential impacts of interventions on socially marginalized groups considered?</p>
<i>Structural Determinism</i>	<p>Are inequities in health for socially marginalized communities considered?</p> <p>Are social and structural factors considered in the analysis?</p> <p>Are social and structural factors used to interpret research findings?</p> <p>Are justice and equity reflected in research recommendations?</p>
<i>Voice</i>	<p>Are community experiences and knowledge used?</p> <p>Are community knowledge and lived experiences perspectives reflected in the data?</p> <p>Is community knowledge and lived experiences used to interpret research findings?</p> <p>Are equity-focused policy and program recommendations based on community lived experiences?</p>
<i>Disciplinary Self-Critique</i>	<p>Are disciplinary approaches and/or researcher biases that perpetuate inequities acknowledged?</p> <p>Are measurement and analytic approaches that perpetuate and/or ignore inequities used?</p> <p>Are methods promote equity used to interpret study findings?</p> <p>Are opportunities to reform community benefits research and practice included in the recommendations?</p>

### Appendix 3: Primary Codes with Definitions

Source: Ford & Airhihenbuwa, 2010

<b>Code Categories</b>	<b>Definitions</b>
Code 1: "CB and health"	Analysis of relationship between CB measure and need indicator
Code 2: "CB definition"	Description of hospital CB category or activity
Code 3: "Community Need"	Description of community social or health need indicator
Code 4: "Impact outcome"	Description of outcome, process, indicator affected by CB activity
Code 5: "Racial equity analysis"	Use of Public Health Critical Race principles in empirical study
Code 6: "Race consciousness"	Awareness of racial stratification processes operating in colorblind context
Code 7: "Intersectionality"	Interlocking nature of co-occurring social categories and forms of social marginalization that maintain them
Code 8: "Structural determinism"	Fundamental role of macro-level forces in driving and sustaining inequities across time and contexts
Code 9: "Voice"	Perspectives and experiential knowledge of marginalized persons are prioritized
Code 10: "Disciplinary self-critique"	Systematic examination by members of a discipline of its conventions and impacts on the broader society

## Appendix 4: Summary of Primary Themes with Examples

Citation	Excerpt
<i>Inconsistent Measures May Obscure Community Benefit Impact</i>	
Chaiyachati et al., 2019; pg. 2	"The 9 categories of community benefit spending specified on the Schedule H form were grouped into 3 categories: total community benefit spending, and the subcategories of health care-related and community-directed spending."
Singh, S.R., 2013; pg. 44	"For the purpose of this study, we focused on charity care, mission-driven health services, community health services, and health professions education, which together accounted for almost 95% of Maryland hospitals' community benefit spending."
<i>Community Benefit and Social Health Needs Are Misaligned</i>	
Begun & Trinh, 2019; pg. 320	"...access to resources in hospitals that are 'better off' allows for greater investment in community-related activities, with hospitals that are urban, larger, system-affiliated, and more profitable reporting both higher community health improvement and community-building expenses. Community wealth (per capita income), another indicator of access to resources, is associated with higher community health improvement expenses but not community building expenses."
Baehr et al., 2018; pg. 3-4	"...Philadelphia County had a higher percentage of residents living in poverty (26.5% vs. 7.0%), higher proportion of non-white residents (58.5% vs. 17.3%), and higher CNI average (3.79 vs. 2.08) compared to suburban counties." "Although urban hospitals reported higher overall expenditures, they invested less in community health improvement services than suburban hospital (median \$185,269 vs. \$927,119, p=.09) and the proportion of community benefit expenditures attributed to community health improvement services among urban hospitals was significantly lower than suburban hospitals (median 0.63% vs. 6.48%, p=.002)."
<i>Racial Inequalities in Health Are Overlooked</i>	
Bazzoli et al., 2010; pg. 1023-1024	"...perhaps the best strategy for policy makers and the hospital industry is to reform the current on identifying the circumstances under which some or all of hospital bad debts and Medicare shortfalls should be counted towards community benefit. In terms of bad debt, nonprofit hospitals are already moving in this direction by redefining their charity care policies so that financially needy individuals are captured as charity care a priori...Hospitals have also revised their charity care policies so that they can rely on information such as a person's enrollment in state-subsidized food or housing programs rather than rely on more sensitive and difficult to collect income and set information." "Guidelines and standards for nonprofit hospitals could focus on the types of patients or services for which resulting bad debts or Medicare shortfalls may qualify as community benefits."
Maeda, et al., 2015; pg. 23, 26	"KPMAS also hoped to learn from the safety-net clinics how to better care and to manage vulnerable populations with complex chronic conditions and challenging social needs." "Another important challenge was that of overcoming language barriers with the lack of resources in the clinic setting. For example, one clinic reported that its patient population spoke more than five different languages."
<i>Community Participation May Help Align Benefits and Health</i>	
Powell, et al., 2018; pg. 332	"Community benefit investments can be maximized not only by ensuring coordination with community organizations but also by supporting partnerships with local public health organizations."
Rains, et al., 2018; pg. 336	"The multidisciplinary impact evaluation team included leaders, evaluators, and bookkeepers from [Child Health Advocacy and Outreach] CHAO and a public health sciences research team from the School of Medicine that included biostatisticians, a health economist, and a social worker."

## **Paper 2: Community Benefits for Whom? Private Nonprofit Hospital Community Benefit Investments for Vulnerable Populations in California**

### **Abstract**

Private nonprofit hospitals have historically allocated over 75% of their community benefit resources to direct patient care, but insurance coverage gains achieved through national health reform have shifted hospital investments to non-clinical community benefits for the broader community and targeted spending for vulnerable populations. It remains unclear, however, whether community benefit spending is targeted to address the needs of socially vulnerable populations. We used multivariate logistic regression to examine the association of hospital system affiliation, hospital size, disproportionate share designation, urban location, and community-level indicators of social vulnerability on California private nonprofit hospital (n=212) community benefit spending for vulnerable populations from 2014-2016. Guided by a Public Health Critical Race framework, we examine vulnerability via multiple forms of social exclusion. In adjusted analyses, larger hospitals had greater odds of spending a high amount of community benefits for vulnerable populations (Odds ratio, OR=2.47,  $p<0.0001$ ). System-affiliated hospitals located in census tracts with higher per capita income (OR=1.86,  $p=0.04$ ) and more persons with a disability (OR=2.15,  $p=0.01$ ) were more likely to have high spending on non-clinical community benefit for the broader community, but not spending for vulnerable populations. There was no association between hospital mission and community benefit spending for vulnerable populations. Our findings suggest that private nonprofit hospitals do not primarily make community benefit investments based on indicators of social vulnerability in their communities or target funding to socially excluded groups. Greater private nonprofit hospital investment in non-clinical community benefits for vulnerable groups may require standardization reporting guidelines and targeting of resources and equity-focused practices.

**Key words:** Nonprofit hospitals, Community benefit, Vulnerable populations, California

## 2.1. Introduction

Racial/ethnic health inequities in the United States are costly and impede overall population health.<sup>1</sup> Although social inequities in health are only partly attributed to health care,<sup>2</sup> medical expenditures exceed spending for housing supports, employment training, and other social programs that have demonstrated benefits for population health outcomes.<sup>3</sup> Research suggests that states with higher proportions of social services spending are more likely to invest in public health programs and have better health outcomes.<sup>4</sup> Similarly, local government and private hospital investments in social and community health services have been positively associated with health outcomes.<sup>5</sup> Decisions about how public and private resources are allocated to improve health are influenced by different principles and definitions of equity.<sup>6</sup> Whether resource allocations are made to support social health improvement strategies, or to target the disproportionate needs of socially vulnerable groups, may depend on which principles motivate these decisions.

Private nonprofit hospitals provide over \$60 billion in annual community benefit,<sup>7</sup> and the value of these investments is based on hospital expenditures rather than community outcomes.<sup>8</sup> Because private nonprofit hospitals receive more local and state tax benefits than federal tax savings, the redistribution of tax benefits is assumed to improve health in local communities.<sup>9</sup> Accordingly, private nonprofit hospital community benefit may be used to address disproportionate rates of disease and preventable death that result from limited public health spending and community economic development in some local communities. Yet, disparities in spending relative to tax-savings<sup>7,9-11</sup> defined community benefit categories,<sup>12-16</sup> and state law<sup>12,14,17-19</sup> suggest that variation in the amount of community benefit may be based on institutional pressures other than community need.

For example, although private nonprofit hospital community benefit spending exceeds tax savings,<sup>10</sup> lower levels of community benefit are reported when uncompensated care is excluded as a defined category, and in states that lack reporting mandates. Per capita community benefit spending can range from \$30-335<sup>20</sup> and contribute as much as 9% in additional population health resources for government health departments.<sup>21</sup> Hospital ownership,<sup>15,18,22,23</sup> organizational mission,<sup>15,24</sup> and resource capacity<sup>22-25</sup> have been positively associated with community benefit spending. And, despite limited empirical analysis of the alignment between community benefit and community need, it is estimated that over 75% of community benefit expenditures are allocated to medical care, with less than 5% of spending apportioned to community health improvements that do not correspond to community need.<sup>26-28</sup> Private nonprofit hospitals located in communities with greater need do not spend more on community health improvements, while hospitals located in the healthiest communities tend to spend the most on community health improvement strategies.<sup>28</sup>

In California, private nonprofit hospitals provide over \$12 billion in annual community benefit.<sup>29</sup> Insurance coverage gains achieved through national health reform have shifted hospital investments to non-clinical community benefits for the broader community and targeted spending for vulnerable populations. Yet, despite high amounts of hospital spending and increased health care coverage, racial/ethnic inequities in health persist.<sup>30</sup> For example, African Americans have the lowest life expectancy, the worst maternal/child measures, and the highest death rates for breast, prostate, lung, and colorectal cancer.<sup>31-33</sup> Racism is a fundamental cause of social inequities in health<sup>34</sup> that contributes to disproportionate and adverse health impacts among African Americans and other socially vulnerable groups.<sup>35-37</sup> Because California health policy is shaped



by its complex sociodemographic diversity,<sup>38,39</sup> political landscape, and persistent health inequalities based on race/ethnicity and immigration status it provides a pertinent context to examine targeted community benefit.<sup>40</sup>

This cross-sectional study examines whether targeted private nonprofit hospital community benefits are directed towards socially excluded groups.<sup>41</sup> We use a Public Health Critical Race framework<sup>42</sup> to analyze whether targeted community benefit aligns with multiple dimensions of social exclusion based on race/ethnicity, socioeconomic status, disability, and housing and transportation access as measured by the Social Vulnerability Index.<sup>43</sup> We posit that private nonprofit hospitals spend a high amount of community benefit for vulnerable populations as a strategic response to institutional pressures.

*Hypothesis 1:* Religious hospitals maintain a mission that emphasizes care for the poor and other vulnerable populations<sup>44</sup> and generally provide more community benefit than other private nonprofit hospitals.<sup>45</sup> Adherence to religious mission is a mimetic pressure<sup>46</sup> for hospitals to model the moral and social justice principles of other religious organizations.<sup>46</sup> Religious hospitals are motivated to spend more community benefit for vulnerable populations as a strategic response to conform to internal organizational culture and the external influences of other religious charitable organizations.

*Hypothesis 2:* While private nonprofit religious hospitals generally provide more community benefit, system-affiliated hospitals are more likely to provide targeted community benefit based on their larger size and geographically dispersed locations.<sup>47</sup> Hospital systems have greater resource capacity to engage in the community orientation activities that targeted spending requires, and to respond to stakeholder demands.<sup>48</sup> Private nonprofit hospital systems provide a high amount of community benefit to vulnerable populations and the broader community in order to maintain legitimacy.<sup>49</sup>

*Hypothesis 3:* Charity care affects community benefit spending,<sup>22,23</sup> and eligibility is principally based on economic need. Because hospitals use economic and health insurance status to define vulnerability, less targeted community benefit spending is allocated to groups that experience other forms of social exclusion that also determine vulnerability.<sup>42,50</sup> Although local communities influence private nonprofit hospital resource allocations by establishing shared values that determine what and how much is appropriate to invest,<sup>51</sup> social exclusion<sup>41</sup> constrains the capacity of marginalized communities to advocate for high amounts of non-clinical community benefit.

## 2.2. Methods

### *Data*

We analyzed associations between hospital and community characteristics, and the targeted community benefit spending of California private nonprofit hospitals (n=212) that submitted community benefit reports to the California Office of Statewide Health Planning and Development (OSHPD). The use of hospital-reported state-specific data has been established<sup>13,52</sup> and these reports include narrative descriptions of non-quantifiable community benefits that provide more granular data. We used an OSHPD identification number to combine linked data on community benefit expenditures with other hospital- and community-level data obtained from the 2013 Medical Service Study Area Census Detail and the Hospital Annual Financial Data set available through the OSHPD. We also used the hospital census tract to combine census tract-level data from the Centers for Disease Control Social Vulnerability Index. This index uses data from the 2010-2014 American Community Survey to measure four domains of community vulnerability: socioeconomic status; household composition and disability; minority status and language; and, housing and transportation access. These data exclude institutionalized persons that reside in adult correctional facilities, juvenile facilities, skilled-nursing facilities, psychiatric hospitals, and other institutionalized group settings.<sup>43</sup>

### *Measures*

**Outcome Variables:** Our main outcome variable was targeted community benefit spending for vulnerable populations, which we measured by averaging 3-year (2014-2016) hospital community benefit expenditures. We combined spending for charity care, medical services for vulnerable populations, other services for vulnerable populations, and other benefits for vulnerable populations. As secondary outcome measures, we averaged 3-year non-clinical community benefit expenditures for vulnerable populations (i.e., other services and benefits for vulnerable populations) and the broader community (i.e., health professions education and training, research, cash and in-kind donations, community building, and other benefits). Due to the skewed distributions of all of the continuous measures, we dichotomized the outcome measures at the 75th percentile cutpoint to distinguish between high (above or equal to the 75th percentile) and not-high (below the 75th percentile) spending amounts.

**Main Independent Variables:** We used a dichotomized hospital mission measure to describe whether or not a hospital maintained a religious mission (yes=1, no=0). We also used a dichotomized measure for system affiliation to distinguish a hospital that was a member of a corporate entity that owned three or more hospitals (yes=1, no=0).

**Other Independent Variables and Covariates:** Disproportionate share hospital (DSH) status (yes=1, no=0) measured whether a hospital received MediCal disproportionate share payments, and urban (yes=1, no=0) distinguished between rural (population density <250 population/sq.mi) and urban (population density >250 population/sq.mi) environments defined by the California Medical Service Study Areas. We standardized all continuous variables. The number of licensed hospital beds (small <100, medium 101 > 299, large >300) was used to measure hospital size, and we measured racial/ethnic minority (% of non-White minority), disability (% of non-institutionalized persons with a disability), education attainment (% of persons over the age of 25 without a high school diploma), per capita income (average annual per capita income), health care coverage (% uninsured in the non-institutionalized population), unemployment (% of unemployed persons over

the age of 16), transportation access (% of households without access to a vehicle), overcrowding (% occupied housing units with more people than rooms), and poverty (% of persons below 200% FPL) as hospital census tract-level community characteristics.

### *Analyses*

To analyze the data, we first used descriptive statistics to examine bivariate relationships between community benefit spending, hospital characteristics, and community indicators of social vulnerability. We then used adjusted multivariate logistic regression to examine whether hospital mission, system-affiliation, and social vulnerability correlated with high community benefit spending for vulnerable populations. We used the same model and parameters to test complementary hypotheses related to high amounts of non-clinical community benefit for vulnerable populations and the broader community. We conducted post-analysis sensitivity tests to check model assumptions. In order to assess the robustness of our results, we excluded community benefit operational costs from our outcome measures and used this category of spending in our sensitivity analysis.

### *Regression Model*

$$\log(p/1-p) = b_0 + b_1 * \text{mission} + b_2 * \text{system} + b_3 * \text{dsh} + b_4 * \text{size} + b_5 * \text{urban} + b_6 * \text{education} + b_7 * \text{unemployed} + b_8 * \text{minority} + b_9 * \text{disability} + b_{10} * \text{uninsured} + b_{11} * \text{income} + b_{12} * \text{poverty} + b_{13} * \text{transportation}$$

Whereby,

H1:  $p$  = the odds of spending high levels of community benefits for vulnerable populations

H1:  $1-p$  = the odds of spending not-high levels of community benefits for vulnerable populations

H2:  $p$  = the odds of spending high levels of non-clinical community benefits for vulnerable populations

H2:  $1-p$  = the odds of spending not-high levels of non-clinical community benefits spending for vulnerable populations

H3:  $p$  = the odds of spending high levels of non-clinical community benefits for the broader community

H3:  $1-p$  = the odds of spending not-high levels of non-clinical community benefits for the broader community

We also analyzed narrative descriptions of non-quantifiable community benefits from the OSHPD reports to contextualize financial expenditures data, and analyzed these investments for 2016 by extracting data on the type of investment and target population, and by coding these data according to category type and frequency. Stata 14.2 was used for all analyses.<sup>53</sup>

### 2.3. Results

Table 1 summarizes the hospital and community characteristics from our study population. Nearly 75% of hospitals were part of a hospital system (n=156) and their average annual operating margin was 1.9% (SD=13.3). There were few differences between hospitals that did and did not spend high amounts of community benefit for vulnerable populations. High community benefit spending hospitals were less likely to have a religious mission (19 vs. 49, p=0.004), receive MediCal disproportionate share payments (18 vs. 28, p=0.012), and have fewer than 300 licensed beds (21 vs. 125, p<0.0001) compared to hospitals that spend not-high amounts. Hospitals that spend high amounts of community benefit for vulnerable populations, on average, receive more emergency department visits (62,219 vs. 45,734, p=0.003), have more total equity (\$447,991,000 vs. \$268,196,000, p=0.012), provide more charity care (\$10,154,000 vs. \$2,441,000, p<0.0001), and spend more on total community benefit (\$82,348,000 vs. \$18,164,000, p<0.0001).

We did not find significant differences between the communities served by hospitals that spend high vs. not-high amounts of community benefit for vulnerable populations. Overall, 90% of these communities were urban environments with a high concentration of non-White minorities (54%). Less than one-quarter of residents were living below the federal poverty level (17%), did not receive a high school diploma (16%), were uninsured (15%), were living with a disability (12%), did not have access to a vehicle (12%), and lived in a crowded household (8%).

Table 2.1. Descriptive Statistics by High Community Benefit for Vulnerable Populations: CA Hospitals, 2014–2016

Hospital Characteristics	All Hospitals (N=212)		High CB Spending Hospitals (N=53)		Not-High CB Spending Hospitals (N=159)	
	Frequencies or Means (SD)	p-value	Frequencies or Means (SD)	p-value	Frequencies or Means (SD)	p-value
Mission**						
—religious	68	0.004	19	0.004	49	0.004
—private/other	134	0.004	27	0.004	107	0.004
—children	8	0.004	6	0.004	2	0.004
—teaching	2	0.004	1	0.004	1	0.004
System Affiliation						
—yes	156	0.15	35	0.15	121	0.15
—no	56	0.15	18	0.15	38	0.15
DSH Designation**						
—yes	46	0.012	18	0.012	28	0.012
—no	166	0.012	35	0.012	131	0.012
Hospital Size***						
—small <100	52	0.000	7	0.000	45	0.000
—medium <299	94	0.000	14	0.000	80	0.000
—large >299	66	0.000	32	0.000	34	0.000
Number of Beds***	231 (156)	0.000	334 (184)	0.000	197 (129)	0.000
# ER Visits**	49855 (34971)	0.003	62219 (34066)	0.003	45734 (34393)	0.003
% Return on Equity	—141.6 (2285.9)	0.57	11.7 (27.1)	0.57	—192.7 (2639.5)	0.57
% Operating Margin	1.9 (13.3)	0.68	2.6 (9.5)	0.68	1.7 (14.4)	0.68
Net Income (\$) per 100,000	235.14 (447)	0.097	323.45 (691)	0.097	205.71 (326)	0.097
Total Equity (\$) per 100,000**	3123.45 (4351)	0.012	4447.91 (6364)	0.012	2681.96 (3342)	0.012
Total Charity Care (\$) per 100,000***	43.69 (115)	0.000	101.54 (220)	0.000	24.41 (21)	0.000
Total CB for Broader Community (\$) per 100,000***	61.08 (150)	0.000	152.88 (276)	0.000	30.48 (37)	0.000
Total CB Spending (\$) per 1000,000***	342.11 (474)	0.000	823.48 (736)	0.000	181.64 (136)	0.000
CB Operations Cost, broader community (\$)	35100 (100526)	0.10	54667 (153943)	0.10	28578 (74328)	0.10
CB Operations Cost, vulnerable populations (\$)	111824 (198150)	0.17	79994 (170430)	0.17	122434 (205964)	0.17

\* p&lt;0.05    \*\* p&lt;0.001    \*\*\* p&lt;0.0001

SD = standard deviation

Table 2.1. Descriptive Statistics by High Community Benefit for Vulnerable Populations: CA Hospitals, 2014–2016

Community Characteristics	All Hospitals (N=212)		High CB Spending Hospitals (N=53)		Not-High CB Spending Hospitals (N=159)	
	Frequencies or Means (SD)	p-value	Frequencies or Means (SD)	p-value	Frequencies or Means (SD)	p-value
Environment						
—urban	191	0.084	51	0.084	140	0.084
—rural	51	0.084	2	0.084	19	0.084
Per capita income (\$)	32720 (18131)	0.90	32439 (17338)	0.90	32813 (18440)	0.90
% Non-White Minority	54.12 (24)	0.45	56.30 (22)	0.45	53.39 (25)	0.45
% Unemployed	10.33 (6)	0.52	10.77 (6)	0.52	10.19 (6)	0.52
% Uninsured	15.15 (9)	0.93	15.06 (8)	0.93	15.17 (9)	0.93
% Below FPL	17.36 (13)	0.94	17.46 (15)	0.94	17.33 (12)	0.94
% No high school diploma	15.83 (13)	0.92	15.67 (13)	0.92	15.88 (13)	0.92
% population with disability	12.16 (6)	0.55	12.64 (8)	0.55	12.03 (8)	0.55
% household crowding	7.80 (9)	0.87	7.63 (9)	0.87	7.86 (9)	0.87
% households without vehicle	12.39 (14)	0.85	12.71 (14)	0.85	12.28 (14)	0.85

\* p<0.05    \*\* p<0.001    \*\*\* p<0.0001

SD- standard deviation

The results from our adjusted multivariable regression analysis revealed that large hospitals are more likely to spend high amounts of community benefit for vulnerable populations. Each standard deviation increase in the number of beds (SD=156 beds) was associated with a hospital having more than 2.4 times the odds (95% CI: 1.66, 3.65) of spending a high amount of community benefit for vulnerable populations. Although religious mission was associated with having 1.9 times the odds (95% CI: 0.79, 4.58) of high community benefit spending for vulnerable populations, the association was not statistically significant and our hypothesis that religious hospitals provide a high amount of community benefit for vulnerable populations was not supported.

We also hypothesized that system-affiliated hospitals spend a high amount of community benefit for vulnerable populations, which when we regressed non-clinical community benefit spending was partially supported by our results, albeit in paradoxical ways. System-affiliated hospitals were less likely to spend a high amount of non-clinical community benefit for vulnerable populations compared to independent hospitals. We found that system affiliation was associated with a 75% decrease in the odds (95% CI: 0.08, 0.69) of a hospital spending a high amount of non-clinical community benefit for vulnerable populations. However, we also found that system affiliation was associated with a hospital having 2.4 times the odds (95% CI: 1.01, 5.70) of spending a high amount of non-clinical community benefit for the broader community. Consistent with our other findings, hospital size was positively associated with a hospital having 1.46 (95% CI: 1.02, 2.09) and 1.58 (95% CI: 1.07, 2.34) times the odds spending a high amount of community benefit for vulnerable populations and the broader community, respectively, for each standard deviation (SD=156 beds) increase in the number of hospital beds.

Our final hypothesis that a high amount of community benefit spending for vulnerable populations would not be associated with indicators of social vulnerability was partially supported by our results. High amounts of total community benefit and non-clinical community benefit for vulnerable populations were not associated with any measures of community social vulnerability, including the percentage of persons living below the federal poverty level (OR=2.07, p=0.056), which we theorized would have a statistically significant association. Notably, we found associations between a high amount of non-clinical community benefit for the broader community and social vulnerability indicators. Specifically, per capita income (OR=1.86, p=0.04) and disability status (OR=2.15, p=1.014) were positively associated with a high amount of non-clinical community benefit spending for the broader community. Each standard deviation increase in per capita income (SD= \$1,8131.15) is associated with a hospital having more than 1.8 times the odds of high spending for the broader community, and a standard deviation increase in the percentage of persons living with a disability (SD=6.49 percentage points) is associated with hospitals having more than 2.0 times the odds of being a hospital that expends a high amount of non-clinical benefits for the broader community.

Table 2.2. Multivariable Logistic Regression Results: Association of Community Characteristics and Community Benefit Spending, CA Hospitals 2014–2016

Characteristics	High CB Vulnerable Populations		High Non-Clinical CB Vulnerable Populations		High Non-Clinical CB Broader Community	
	Odds Ratio (95% CI)	p-value	Odds Ratio (95% CI)	p-value	Odds Ratio (95% CI)	p-value
Religious mission	1.91 (0.79, 4.58)	0.15	1.04 (0.47, 2.30)	0.91	0.40 (0.14, 1.11)	0.08
System-affiliated**	1.78 (0.71, 4.47)	0.21	0.24 (0.08, 0.69)	0.008	2.40 (1.01, 5.70)	0.04
DSH designation	1.99 (0.85, 4.67)	0.11	1.31 (0.53, 3.22)	0.54	2.30 (0.93, 5.70)	0.07
# of beds***	2.46 (1.66, 3.65)	0.00	1.46 (1.02, 2.09)	0.03	1.58 (1.07, 2.34)	0.02
Urban designation	2.59 (0.44, 14.95)	0.28	2.72 (0.49, 15.01)	0.25	1.15 (0.21, 6.15)	0.86
Per capita income*	0.79 (0.42, 1.47)	0.47	1.42 (0.81, 2.48)	0.21	1.86 (1.02, 3.37)	0.04
% Below FPL*	0.98 (0.45, 2.12)	0.97	2.07 (0.98, 4.39)	0.05	1.49 (0.71, 3.14)	0.28
% Unemployed	1.32 (0.79, 2.19)	0.28	1.21 (0.74, 2.00)	0.43	0.73 (0.42, 1.28)	0.28
% Uninsured	0.58 (0.43, 1.69)	0.65	0.75 (0.39, 1.43)	0.38	1.12 (0.54, 2.32)	0.74
% No high school diploma	0.64 (0.26, 1.58)	0.34	1.00 (0.44, 2.28)	0.98	0.40 (0.15, 1.03)	0.05
% Persons with a disability**	1.05 (0.60, 1.83)	0.86	0.64 (0.38, 1.09)	0.11	2.15 (1.16, 3.97)	0.01
% Households without vehicle	0.98 (0.58, 1.64)	0.94	1.02 (0.63, 1.64)	0.92	1.04 (0.64, 1.69)	0.86
% Household crowding	1.03 (0.49, 2.19)	0.92	1.11 (0.57, 2.17)	0.74	1.08 (0.46, 2.54)	0.84
% Non-White minority	1.12 (0.58, 2.14)	0.73	0.74 (0.39, 1.42)	0.37	1.55 (0.80, 2.97)	0.18

\* p<0.05 \*\* p<0.001 \*\*\* p<0.0001

CI = confidence interval

## 2.4. Discussion

Our analysis is one of the first to examine targeted private nonprofit hospital community benefit for vulnerable populations, and our findings suggest that hospital attributes may affect targeted spending more than community social vulnerability. We found that hospital size and system affiliation were significantly associated with a high amount of targeted community benefit. Yet, contrary to our hypothesis, having a religious mission did not affect the likelihood of a hospital spending a high amount of community benefit for vulnerable populations. One possible explanation may be that religious hospitals fulfill their mission through unconventional strategies that may be underestimated. For example, community-engaged investments and spiritual services may enable religious hospitals to fulfill their mission despite the potential underreporting of these activities. Historically, religious hospitals have provided services to meet the needs of the poor, disenfranchised, and otherwise socially vulnerable as an extension of their faith-based mission rather than as a requisite compliance activity. Nevertheless, because the Internal Revenue Service Form 990 Schedule H excludes community building activities as quantifiable benefits it may inaccurately estimate the value of faith-based investment strategies.

The exclusion of community building and similar activities as quantifiable benefits may necessitate a revised definition of community health improvements that includes evidence-based community building strategies that reflect a wider range of hospital investments.<sup>10,54</sup> Accordingly, housing and physical improvements, economic development, coalition building, leadership development and training, and other less conventional strategies, when assessed, may better estimate the value of mission-driven strategies to improve health outcomes in vulnerable communities. Notably, a recent analysis of hospital spending to address social determinants of health suggests that these investments may be driven by the mission and values of both religious and secular hospitals.<sup>55</sup>

For religious hospital systems, the purchase of small hospitals in low profitability rural areas may be another mission-driven strategy that provides community benefit, yet is underestimated. Between 2014-2016, there were hospital acquisitions within our study population that may accord with a pattern of religious hospital systems assuming ownership of critical access hospitals in underserved areas. Furthermore, we found that religious hospitals were more likely to serve rural communities, and the lack of an association between religious mission and targeted community benefit for vulnerable populations may be the result of structural inequities in rural areas that affect community need and hospital resource allocations,<sup>56</sup> yet were not measured or included in our analysis.

Another possible explanation for our findings may be that larger hospitals, irrespective of mission, have greater resource capacity to leverage for targeted community benefit spending. Hospital size was significantly associated with each category of spending we analyzed, which is consistent with previous studies.<sup>23,57</sup> Hospitals that spend a high amount of community benefit for vulnerable populations, on average, had significantly more total equity and spent more on total community benefit than hospitals that spend a not-high amount for vulnerable populations. Larger hospitals may have higher dedicated community benefit budgets and organizational capacity to leverage. To the extent that non-operating income may affect a hospital's ability to offset patient care losses,<sup>23</sup> a higher amount of non-operating revenue among larger hospitals may increase their capacity to



provide targeted community benefit because these hospitals may be better able to stabilize their profit margins.

Although we hypothesized that system affiliation would also confer greater capacity for targeted spending, we found mixed results. System-affiliated private nonprofit hospitals were less likely to fund non-clinical community benefit for vulnerable populations, and more likely to spend on community health improvements for the broader community. Previous studies have found that the effect of system affiliation on community benefit varies in magnitude and direction according to the “type of community benefit examined and the structural characteristics of the system,” whereby larger multi-market systems provide more community benefit and community engagement activities.<sup>57</sup> To the extent that community socioeconomic characteristics may affect community health need and hospital resource allocations, the reduced likelihood of system-affiliated hospitals providing a high amount of non-clinical community benefit for vulnerable populations may be explained by a greater need for medical care in these communities, and limited capacity among local hospitals to engage in non-clinical community health improvement strategies.<sup>58</sup> Another explanation may be that hospitals operating in medically underserved communities trade-off between charity care and non-clinical community benefit spending for vulnerable populations. In the absence of a rate-setting system to standardize reimbursement rates for uncompensated care,<sup>13</sup> private nonprofit hospitals that spend a high amount of community benefit for vulnerable populations may lack additional resources to allocate non-clinical community benefits, or choose to allocate these resources to the broader community.

Conversely, the greater likelihood of system-affiliated hospitals spending a high amount of non-clinical benefits for the broader community may be a function of the principles and definitions that hospitals use to determine vulnerability. How a hospital defines vulnerability, and whether non-economic forms of social exclusion (e.g., racism) are also considered as determinants of disproportionate need, may impact which communities benefit from hospital investments. Although our findings were consistent with our hypothesis that non-economic indicators of social vulnerability would not be associated with a high amount of community benefit for vulnerable populations, we did find an association between social vulnerability and a high amount of non-clinical benefits for the broader community that warrants discussion.

One explanation may be that hospitals use inconsistent and unstable definitions of vulnerability that do not consider the political and economic structures that simultaneously shape individual- and group-level social health risks.<sup>59</sup> Accordingly, the health needs of an individual may be shaped by community socioeconomic status at the same time that racism and other forms of social exclusion affect community needs. Inconsistent and uncritical definitions of vulnerability may underestimate need and result in misaligned community investments. That a high amount of non-clinical community benefit for the broader community was positively associated with disability and per capita income could be the result of measurement bias as well as a failure to critically consider how social location and multiple interlocking forms of social exclusion shape disproportionate needs within populations.<sup>42</sup> Although California Health and Safety Code Sections 127340-127365 require hospitals to report medical and other benefits for vulnerable populations, hospitals are permitted to use their discretion to define vulnerability without an explicit description of the communities to which resources are being allocated. Our findings suggest that disability status may not be considered a dimension of vulnerability to which community benefit is targeted.

Hospital resource allocations are influenced by broader community ideology and values, including the norms of other institutions and the geographic area where hospitals are headquartered.<sup>51</sup> That hospitals were more likely to spend a high amount on non-clinical benefits for the broader community rather than for vulnerable populations may reflect certain principles other than equity “within the institutional and social structure of the [broader] community.”<sup>51</sup> To the extent hospitals serve geographically defined communities, and allocate resources to improve health beyond their patient membership, then a high amount of non-clinical benefits for the broader community may be consistent with hospital aims and principles. However, in the absence of a disciplinary self-critique to interrogate whether community benefit targets disproportionate need, hospital investments may unintentionally perpetuate inequity by concentrating resources among groups with greater resource access.<sup>42,50</sup>

We found that private nonprofit hospitals were more likely to spend a high amount of non-clinical community benefit for the broader community at increasing levels of per capita income. Higher-income communities were more likely to receive funding for community health improvements than communities with higher poverty, unemployment, more non-White minority residents, and other forms of social exclusion that contribute to disproportionate health-related needs. An emphasis on equity might consider how disproportionate need produced by racial discrimination, and across socioeconomic position,<sup>35</sup> requires targeted hospital investments. Importantly, the targeting of these investments ought to consider how both clinical and non-clinical investments are necessary to improve health outcomes, community conditions, and positive hospital-community relations in vulnerable communities.

For example, the Maryland Health Improvement and Disparities Reduction Act of 2012 requires hospitals to describe efforts to track and reduce health disparities in the communities they serve, and authorizes the Hospital Services Cost Review Commission to consider feedback from the Maryland Health Disparities Collaborative and the Hospital Race and Ethnicity Disparities work groups in its community benefit recommendations.<sup>60</sup> Similar efforts may support targeted private nonprofit hospital community benefits that address social inequities in health at the intersection of multiple forms of vulnerability. To our knowledge, this analysis is one of the first to examine whether private nonprofit hospital community benefit is targeted to address disproportionate health-related needs among socially excluded groups. The linkage of census tract-level indicators of social vulnerability with state-specific data on community benefit spending for vulnerable populations provided a unique opportunity to examine how institutional and community factors influence hospital resource allocations. Consistent with other studies, we found that non-clinical community benefit spending was misaligned with the health-related needs<sup>27,28</sup> of socially vulnerable groups. Private nonprofit hospital spending on community health improvements that fail to address social inequities and the disproportionate need of socially vulnerable groups may impede population health.<sup>41,42</sup>

### *Limitations*

Our study has some important limitations to consider when interpreting our results. First, we analyzed cross-sectional associations that cannot establish causal relationships. Our focus on the relationship between targeted community benefit spending and simultaneous forms of social vulnerability provides foundational information to inform targeted community benefit spending. Future research might use natural experiment study designs to assess the impact of state policies

on private nonprofit hospital investments and handle attribution complexities related to hospitals' investments in the same community.<sup>8,61</sup> Second, we focus on a three-year cycle of private nonprofit hospital community benefit spending, which limits the applicability of our findings to extended periods of time and correlates of late adopter behavior. An assessment of whether these influences change over time as non-clinical community benefit investments are institutionalized for the nonprofit hospital organizational field will be an important next step. Third, we use the census tract location of the hospital to define the community served, which may bias our estimates of community social vulnerability. Although we conducted sensitivity analyses to assess potential associations at different geographic scales (e.g., county, multiple zip codes within a hospital service area), these definitions are geographic boundaries that may not reflect communities as experienced by residents. Finally, we used validated social vulnerability measures to identify theoretically relevant predictors that, nevertheless, may misclassify local social vulnerability due to the exclusion of institutionalized community members.

## **2.5. Conclusion**

Our analyses of California private nonprofit hospital spending reveal that larger hospital size increases the likelihood of hospitals spending a high amount of community benefit for vulnerable populations. Yet, funding for community health improvements is more likely to be targeted to the broader community. These results provide a critical interpretation of private nonprofit hospital investments and offer a novice interpretation to previous findings on the alignment between community benefit and community needs. As scrutiny of private nonprofit hospital community benefit intensifies, attention may be directed towards policy and practice changes that support targeted hospital investments that address social health inequities. Policies to standardize reporting guidelines, specify which vulnerable populations benefit from community benefit, and promote the use of intersectional dimensions of vulnerability that include race/ethnicity, immigration and legal status, disability, and other forms of social exclusion may enable community benefit practice changes. Importantly, these policies should align incentives and accountability according to hospital resources and community benefit capabilities. Private nonprofit hospitals that prioritize targeted community investments for vulnerable populations, should receive technical support—that may be financed through Medicare reimbursements and pooled hospital financial resources from health systems—to sustain and evaluate the potential impacts of these critical resources allocations on improving health equity.

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# **Paper 3: California Dreamin': The Paradox of Colorblind Private Nonprofit Hospital Community Benefit Investments to Address Social Determinants of Health**

## **Abstract**

Over 75% of private nonprofit hospital community benefits are allocated to medical services, and fewer investments are made to address structural and social determinants of health (SDOH). In particular, this spending is rarely used to redress racial inequities in opportunity access that shape health. Despite spending disproportionately on charity care and medical services, some private nonprofit hospitals invest in non-medical strategies to improve health outcomes. In California, private nonprofit hospitals report \$12 billion in annual community benefits that include spending on community building strategies for vulnerable populations. This comparative case study analyzes data from organizational documents, interviews, and media communications to examine how hospital community building investments in housing and workforce development are rationalized and deployed to address SDOH in Los Angeles County. Findings indicate that community-based resources are essential to align hospital investments with community need, and avoid “colorblind” decisions that emphasize socioeconomic need yet under-appreciate racialized barriers to health. Policy and practices that promote targeted capital investments, and prioritize the disproportionate needs of racial /ethnic groups, will be needed to prevent colorblind hospital community investments that perpetuate racial inequities in health.

**Key words:** Nonprofit hospitals, Community benefit, Social determinants of health, California

### 3.1. Introduction

California is considered a bellwether for strategies to improve population health.<sup>1</sup> Yet, racial inequities in health persist. Although life expectancy has increased for all Californians, African Americans have the lowest life expectancy, the highest death rates for breast, prostate, lung, and colorectal cancer, and disproportionately higher death and maternal mortality rates statewide.<sup>2-4</sup> African Americans also experience high levels of social vulnerability, which may help explain these persistence health inequities. For example, in Los Angeles County, African Americans account for 40% of people experiencing homelessness, and they are disproportionately impacted by residential racial segregation, housing discrimination, labor market discrimination, predatory lending, mass incarceration, and child welfare system involvement, all risk factors for adverse health outcomes.<sup>5,6</sup> Because racial inequities in health are costly,<sup>7</sup> and less than 5% of health care spending is allocated to social programs,<sup>8</sup> hospital spending to address social determinants of health (SDOH) may be an effective strategy to improve health outcomes.<sup>9-11</sup>

In California, private nonprofit hospitals report \$12 billion in annual community benefit spending<sup>12</sup> on charity care, health professions education and training, and other community benefits. Since 1994, the California State Legislature has required nonprofit hospitals to report annual community benefit spending according to categories that distinguish between community benefits for vulnerable populations and community benefits for the broader community. Although these hospital investments may benefit some communities, the use of race-neutral terms to define “community” can result in the needs of communities of color being overlooked. Because county-level disparities in poverty and other SDOH disproportionately impact communities of color,<sup>13</sup> private nonprofit hospital community benefits in housing, workforce development, and other community building activities can be used to ameliorate racial inequities in health.

This comparative case study<sup>14</sup> examines how “colorblind” approaches to address SDOH are rationalized and deployed within two hospital investments in Los Angeles County. Colorblind approaches are defined as resource allocation decisions that emphasize socioeconomic need yet under-appreciate racial inequities. A Public Health Critical Race lens<sup>15</sup> is used to interrogate whether racism and its impact on health inequities are considered when hospital investment decisions are made (Table 1).

Table 3.1: Examples of Colorblind Versus Racial Equity Hospital Investment Approaches<sup>15</sup>

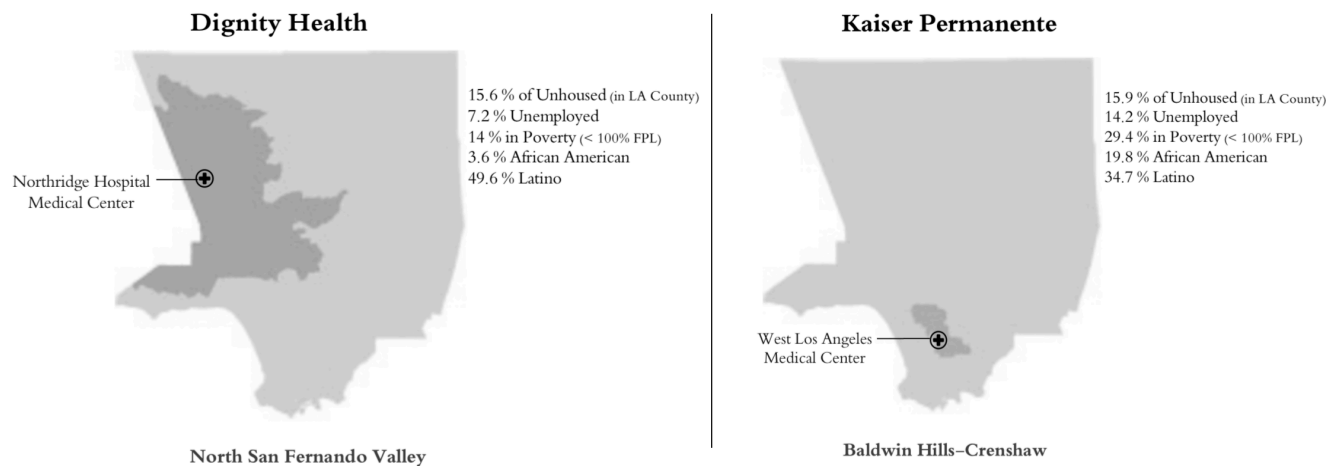
<b>Principle</b>	<b>Colorblind Approach</b>	<b>Racial Equity Approach</b>
<i>Race Consciousness</i>	Site capital projects in geographic areas without consideration for historical racial discrimination and disinvestment	Prioritize capital investments and community building strategies in communities disadvantaged by racism and disinvestment
<i>Structural Determinism</i>	Implement strategies that address individual health risk factors and SDOH	Allocate resources to address the effects of racism and other root causes of health
<i>Intersectionality</i>	Use of one-dimensional geographic definitions of community that minimizes racial inequities	Align resource allocations with multiple intersecting forms of social exclusion
<i>Community Voice</i>	Limit engagement/decision-making opportunities for local residents from communities affected by racism with lived experience	Provide leadership and employment opportunities to local residents from communities affected by racism with lived experience
<i>Disciplinary Self-Critique</i>	Allocate resources to racial/ethnic groups with greater opportunity access and fewer needs	Remove organizational and individual barriers that impede resource allocations to address racial inequities in health

Race has been integral to the development of Los Angeles, and how African American residents have responded to racism has shaped housing and employment practices.<sup>16</sup> Housing and jobs are two essential determinants of racial inequities in health that are the focus of both cases. Both hospitals prioritized housing instability and economic insecurity as key drivers of health, which were used to identify housing and workforce development as a priori investments for this study. Housing stability can affect multiple health outcomes over the life course, and across generations.<sup>17,18</sup> For example, housing interventions have been used to mitigate the effects of asthma, injury, obesity, sleep abatement, poor indoor air quality, and social isolation; and both individual household and community housing interventions produce health impacts.<sup>17,19,20</sup> Similarly, investments in workforce development, education, and employment opportunities can mitigate the myriad health impacts of precarious employment in communities with disproportionate need.<sup>21-23</sup>

At least two hospital systems in Los Angeles have made investments in housing and workforce development as key drivers of health. In North Hollywood, Dignity Health issued a direct loan to finance construction of an 80,000 square foot permanent housing facility. In the Baldwin Hills-Crenshaw neighborhood, a Kaiser Permanente capital project helped nearly 500 local residents obtain trade union and health care jobs. In both cases, the convergence of residential racial segregation and economic disinvestment resulted in the concentration of African American residents in targeted geographic areas, which enabled them to experience the impact of these hospital investments. However, in the absence of deliberate resource allocations to address racially discriminatory housing and employment barriers, the magnitude of impact was limited. Taken

together, both cases demonstrate how community-informed resource allocations enable hospitals to better align investments for communities with disproportionate need in order to achieve population health and racial equity.

Figure 3.1: Geographic Map of Los Angeles County Study Site, 2016<sup>24-26</sup>



### 3.2. Methods

A comparative case study was used to examine two non-medical community benefit investments. Los Angeles (Figure 1) was selected as the study site due to the multiple private nonprofit hospital systems that report spending a high amount on non-medical community benefit for vulnerable populations. The county provided a shared context for policies (e.g., state law, county health programs) that may affect community benefit spending in the two hospital cases examined—Dignity Health Northridge Hospital and Kaiser Permanente West Los Angeles Medical Center. Dignity Health and Kaiser Permanente are two of California’s largest hospital systems, and each was selected based on its mission, hospital location, and unconventional community investments. Because “[a]ll places have histories,” the community history of each hospital system, and the racialized history of Los Angeles housing and employment policy and practices (Table 2), are briefly described.<sup>27</sup>

Table 3.2: Select Racialized Housing and Employment Policy and Practices<sup>16,28</sup>

<b>Discriminatory Housing Policy/Practice</b>	
<i>Description, Year(s)</i>	<i>Impact(s)</i>
Los Angeles Investment Corp v. Gary, 1919	CA Supreme Court upheld covenants right to keep out non-Whites
Corrugated v. Buckley, 1926	U.S. Supreme Court upheld racially restricted covenants for 20 years
Los Angeles Ku Klux Klan, 1920s	Emerges to terrorize, intimidate, attack Blacks in White neighborhoods
Wagner-Steagall Housing Act, 1937	Funds slum clearance and public housing construction that disproportionately concentrates Black LA residents into racially segregated, disinvested areas
Commission on Human Relations, 1956	Los Angeles County records six bombings and four arson incidents to Black-owned homes and 17% of racial incidents occurred in the Valley
National Association of Real Estate Boards, 1950s	Code of Ethics maintained explicit provisions prohibiting realtors from showing white neighborhoods to Blacks and other minorities
Federal Housing Administration, post-1948	Between 1950-1954 only 2.4% of LA County FHA housing units were available to non-Whites despite the same delinquency rate for Blacks and Whites
California Proposition 13, 1978	Passed with support from 65% of voters, it reduced taxes that disproportionately affected Black beneficiaries of public housing, welfare, and public employment
Los Angeles Police Department, 1984-1985	Under Police Chief Darryl Gates' leadership the Police Department used the steel battering ram to disproportionately target homes in Black neighborhoods
<b>Discriminatory Employment &amp; Economic Policy/Practice</b>	
The Los Angeles Shenk Rule, 1912	Charging African Americans more than others was not considered extortion or civil rights violation
Employment Discrimination, 1920s-present	Los Angeles apparel, oil, construction, aircraft, manufacturing employers refused to hire Black workers largely relegating them to domestic work
Congress of Industrial Organizations, 1936	Los Angeles Black workers excluded from most industries were unable to garner benefits received by over 15,000 Mexican CIO members
The New Deal, 1933-1939	Over 444 Los Angeles programs created opportunities that maintained racial segregation and disproportionately disadvantaged Blacks
Los Angeles Unified School District, post-WWII	The CA Teachers Association and LA County Teachers Placement Advisory Service accept racial discriminatory job requests from LAUSD schools
The Economic Opportunity Act, 1964	\$20 million in LA anti-poverty funds are delayed until after the 1965 Watts Rebellion and failed to improve economic conditions in Black communities
U.S. Labor Department Moynihan Report, 1965	Influenced federal anti-poverty programs that attributed racial inequality to an undesirable Black family structure and behavior rather than racism
Hart-Cellar Immigration Act, 1965	Relaxed immigrant quotas and undocumented immigrant worker access to employment opportunities that excluded Black industrial Southern CA workers
California Proposition 209, 1996	Eliminated the requirement for employers and education institutions to maintain representation of non-White racial/ethnic groups proportional to the population

The positive deviance—or distinctive and consistent demonstration of exceptional organizational performance—associated with unconventional hospital investments requires in-depth qualitative analysis to identify practices that quantitative analysis may not reveal.<sup>29</sup> Therefore, data from multiple sources were collected and triangulated. First, publicly available information from organizational websites, news articles, press releases, and other media communications were collected and reviewed. Next, 16 community health needs assessments and community benefit implementation plans produced between 2013 and 2016 were reviewed to examine the community investments of both hospital cases (Table 3). Next, semi-structured interviews with 20 hospital leaders and community-based organization (CBO) staff were conducted, audio-recorded, and transcribed. Because the implementation phase for both hospital case investments concluded prior to data collection, the completed projects were analyzed. Direct observations and field notes were based on limited access to 12 community meetings, events, and site visits. All primary data was collected between December 2018 to January 2020.

A constructivist grounded theory approach<sup>30</sup> was used to code and analyze the data. Open coding was used to identify codes based on word phrase frequency and a priori assumptions about the rationales, resources, and relationships that informed these investments. Selective coding was used to organize and analyze data according to primary codes and emergent patterns. This iterative process was instructive because successive interviews provided new insights and revisions. Pattern matching enabled thematic patterns to be identified within each case, across interview participant groups (i.e., theoretical replication), and across both cases (i.e., literal replication).<sup>14</sup> Explanation-building techniques were also used to develop hospital case profiles and resource logic models.

### 3.3. Results

#### *Dignity Health's Housing Investments*

In 1854, the Sisters of Mercy arrived in San Francisco to serve the sick and impoverished and establish charitable hospitals throughout California. Eventually, two congregations merged to form Catholic Healthcare West, and by 2012 the organization was renamed Dignity Health to emphasize its commitment to compassionate health care. Historically, the organization acquired hospitals that maintained its mission to serve the disenfranchised and invest financial assets into local communities. Since its founding sponsorship, Dignity Health has been a 30-year strategic partner of Mercy Housing, and has provided land, low-cost leases, community grants, and on-site wellness programs to support affordable community housing.<sup>31</sup>

Several housing investments have been made through its Community Investment Program (CIP), which redirects retirement holdings and other assets into the communities where its hospitals are located. A \$2 million development loan to the Corporation for Supportive Housing was used to create permanent affordable housing for frequent users of emergency rooms, shelters, jails, and other highly-vulnerable populations, and \$75,000 was deployed to the Los Angeles House of Ruth to provide comprehensive support and transitional services to homeless women and children survivors of domestic violence.<sup>32</sup> Other investments have included a \$700,000 line of credit to Stocktonians Taking Action to Neutralize Drugs for an affordable homes sales program in Stockton, CA,<sup>33</sup> and a \$1.2 million bridge loan to complete the Arrowhead Grove Project in San Bernardino, which helped secure \$20 million in funding from the California Strategic Growth Council.<sup>34</sup>

Between 2015-2016, homelessness in the San Fernando Valley increased by 30%, and the local Northridge Hospital, accordingly, prioritized affordable housing as a community need (Table 3). In 2016, Dignity Health provided LA Family Housing Corporation (LAFH) a \$3,051,000 direct bridge loan to finance construction of the Irmas Campus ). Although Dignity Health did not determine the project location, it did choose to align its investment with the Northridge Hospital rather than its California Hospital Medical Center located in downtown LA where over 45% of the county's unsheltered and disproportionately African American population resides.<sup>5</sup> Notably, this decision enabled much needed capacity to be built in the San Fernando Valley.

The complexity of Los Angeles' housing instability crisis, where upwards of 50,000 Los Angeles residents were unhoused, motivated Dignity Health to invest in multiple strategies. Over \$200 million in CIP funds were leveraged to support prevention and diversion, housing stabilization, new and rehab construction, and respite care. In 2019, Dignity Health rebranded as part of a \$29 billion merger with Catholic Health Initiatives to form CommonSpirit Health, the nation's largest Catholic nonprofit health care system. Conditional approval from the California State Attorney General required the organization to provide free medical care to individuals earning up to 250% of the poverty level, maintain an established minimum of charity care and community benefits spending across its California hospitals, and invest at least \$20 million in integrated housing and health care services to address homelessness.<sup>35</sup>

Table 3.3: Summary of Los Angeles County Hospital Cases, 2014–2016<sup>24,36–38</sup>

<i>Hospital Characteristics</i>		
Facility Name	<b>Northridge Hospital Medical Center</b>	<b>West Los Angeles Medical Center</b>
System Affiliation	Dignity Health	Kaiser Permanente
Year Founded	1854	1942
Year Hospital Opened	1955	1974
# of Hospital Beds	424	305
Operating Margin	-0.77%	8.07%
Total Equity	\$338,241,795	\$587,236,010
# of Medical Facilities	29 hospitals, 400 care facilities	38 hospitals, 635 medical offices
# of Employees	9,000 physicians, 62,000 employees	20,487 physicians, 52,868 nurses, 192,607 other employees
# of Service Area Residents	1.3 million	1.3 million
Prioritized Health Needs	1. Primary Care Access 2. Oral Health 3. Mental Health/Substance Abuse	1. Mental Health 2. Obesity/Overweight 3. Diabetes
Prioritized Health Drivers	Access to care barriers, poverty rates, insurance, transportation, culture, education	Health insurance, health care access, healthy eating, physical activity, cardiovascular disease management, employment, nutritional access, homelessness, substance use, income
<i>Community Demographics</i>		
% African American	4.1%	19.8%
% Latino	48.6%	34.7%
% Caucasian	33.7%	33.9%
% Asian/Pacific Islander	10.8%	8.2%
% Uninsured	6.0%	19.3%
% Unemployed	7.2%	14.2%
% No H.S. Diploma	21.7%	18.2%
<i>Community Benefit Spending</i>		
2014 CB Total*	\$50,539,880	\$27,902,162
Targeted Spending**	\$47,664,978***	\$25,502,887
2015 CB Total*	\$36,028,858	\$39,972,386
Targeted Spending**	\$32,895,652***	\$38,018,990
2016 CB Total*	\$53,456,796	\$28,002,536
Targeted Spending**	\$50,844,379***	\$25,863,638

\*Excludes Medicare \*\*Spending for Vulnerable Populations \*\*\*Spending for those Living in Poverty



### *Kaiser Permanente's Investment in Workforce Development*

Kaiser Permanente began in California providing health care to industrial workers in the 1930s, and by 1945 the general public was able to enroll in its prepaid health plans. In 1953, a \$3 million Los Angeles Medical Center opened to the public and the admonition of the Los Angeles County Medical Association, which deemed the prepaid group practice unethical, and an economic threat, despite its accessibility to charity care patients. Two years after the 1965 Watts Riots, Kaiser Permanente opened the Watts Counseling and Learning Center to serve local children and families through diverse culturally relevant education, counseling, and outreach programs.<sup>39</sup>

Decades later, the decision to open a medical office building in the Baldwin Hills-Crenshaw neighborhood aligned with community and business needs. A report commissioned by the Los Angeles Housing and Community Investment Department described the 152-acre site as “blighted”.<sup>40</sup> Further, the \$90 million capital project was designed to be integrated into the community and support local employment. Even the security company hired during construction was a minority-owned firm that employed 70 local residents. Importantly, the investment furthered a regional goal to build livable communities: a two-mile walking path and almost three miles of green space were produced; 48% of trade union workers were locally hired; and 40% of construction contracts and \$22 million in procurement went to women, minority and/or veteran owned businesses.<sup>41</sup>

The local Kaiser Permanente hospital prioritized economic security—which it defined as “having stable access to employment, educational, and housing opportunities”—as a driver of community health based on the “severity of the issue in the service area, and depth and breadth of partner organizations working” on the issue.<sup>42</sup> Workshop collaborations with local high school parent centers, workforce development partnerships to update procurement policies, and local educational partnerships to create workforce development programs and pipelines were identified as investment strategies to improve economic security in the community.<sup>43</sup>

To align its investments (Table 3), Kaiser Permanente negotiated business needs and hospital resources across several departments: Public Affairs, Community Benefit, Human Resources, National Facilities Services staff and executive leadership. As the general contractor, Turner Construction Industries was, in part, hired for its community engagement commitment and demonstrated capacity to fulfill local hire agreements. It managed the multi-million dollar construction project and recruited 2nd Call—a local CBO that gives former felons, offenders, and parolees “a second chance to love life”—to lead the community outreach.<sup>44</sup> The Asian American Drug Abuse Program (AADAP) helped coordinate training programs through the West Adams WorkSource Center it manages..

During the first investment phase, 2nd Call led door-to-door canvassing and recruited residents to weekly support sessions in a South Los Angeles church. This ensured that hard-to-reach, unemployed and predominantly African American residents could learn about the available trade union jobs and free training. During the second phase, AADAP used its network to inform local residents about the health care jobs available. Over 800 mostly African American and Latino residents attended the first outreach event. Kaiser Permanente’s sole ownership of both phases of the project determined how its investments were targeted. Its project labor agreement (PLA) reflected a deliberate choice to improve community economic security by requiring that 50% of

all new trade workers resided within a five-mile radius. As one hospital leader stated, “[t]his community holds a special place in our hearts. We’ve cultivated many wonderful, productive relationships with community partners throughout the area, and we all are eager to see our work towards a re-energized Baldwin Hills–Crenshaw community flourish”.<sup>45</sup>

Table 3.4: Summary of Community Investments Strategies Stratified by Hospital Cases

<i>Community Investments</i>		
	<b>Dignity Health</b>	<b>Kaiser Permanente</b>
Investment Type	Indirect investment to LAFH*	Direct Investment to community
Hospital System Resource(s)	\$3,051,000 bridge loan	\$90 million capital project, wages paid
Local Hospital Resources	Multiple \$10,000–\$25,000 community benefit grants, sponsorships	Multiple \$10,000–\$50,000 community benefit grants, sponsorships, local procurement
Non-Financial Resources	Hospital volunteers, sponsored events, community advisory group participation, employee knowledge, professional relationships	Volunteers, onsite employer events, community advisory group participation, training coordination, program planning, employment placements, leadership development, employee knowledge, personal/professional relationships
<i>Organizational Partners</i>		
Hospital Department(s)	Community Investment Program, Community Health	Community Benefit, Public Affairs, Regional Community Benefit, National Facility Services, Human Resources
Primary Partner(s)	Los Angeles Family Housing Corporation	Turner Construction, 2nd Call, AADAP**
Additional Partner(s)	Northeast Valley Healthcare Corp, Valley Presbyterian Hospital, Kaiser Permanente, LA Homelessness Services Authority, Hope of the Valley, Neighborhood Legal Services, local government	West Adams WorkSource Center, Urban League, YMCA, Community Build Inc., LA Chamber of Commerce, Goodwill of Southern CA, CA Employment Development Department, Los Angeles Unified School District, Pace BusinessSource, local schools, neighborhood councils, local government
<i>Community Impact</i>		
Impact Outcomes	263 bridge + 49 supportive housing units, FQHC***, 4,300sq ft community space, 500 residents housed	Over 500 residents employed, 48% local hire, 40% diverse business contracts, 100,000sq ft medical facility, community space, community pride, new collaborations
Indicators Tracked	Access to nutrition, employment, education, social connectivity, transportation vouchers, permanent housing, service referrals, clinic visits, recuperative care spending, money saved,	Resident interviews, job placements, full-time employment, hours worked, wages paid, attrition, recruitment events, employment counseling, local procurement

\*Los Angeles Family Housing \*\*Asian American Drug Abuse Program \*\*\*Federally Qualified Health Center

In both cases, the hospital investments leveraged distinctive organizational histories and resources. Dignity Health’s housing investments began with its founding charter and included a 30-year affordable housing partnership and Community Investment Program aligned with its mission. During Kaiser Permanente’s 65-year history in Los Angeles, it constructed several hospitals, ambulatory care and community facilities that improved conditions and produced economic benefits in underserved areas.

### *The Paradox of Colorblind Hospital Community Investments*

Despite racial inequities in employment and housing, neither hospital investment explicitly focused on racial equity. Table 4 summarizes both hospital investments. Although hospital community health needs assessments included data on racial health disparities (e.g., racial/ethnic differences in diabetes prevalence) and social inequalities (e.g., neighborhood differences in poverty rates), disproportionate need was not attributed to racial/ethnic inequities. However, while both investments focused on socioeconomic need, community leaders often described racialized needs with more nuance and understanding of the impact of racial discrimination than hospital and organizational partner staff from outside the community. Resource allocation decisions informed by community leaders (e.g., door-to-door outreach in specific neighborhood blocks) often focused on specific barriers that were identified using lived experience rather than community health needs assessment reports. As one community partner described,

“But I just know that in my community-- I'm specifically talking about the black and brown community now— some of those things that might happen in other communities don't manifest itself like it do in our community. So therefore, there's a level of training that has to happen before we get out there into the battlefield. And I call the work area ‘the battlefield.’”—KP Interview, 2019

The decision to align hospital resources with specific community needs was influenced by the lived experience of community partners, and their knowledge of the needs of Black communities. For example, because African Americans accounted for 71% of the Baldwin Hills-Crenshaw community, 9% of the LA population, and less than 2% of the LA County construction industry<sup>45</sup>, Kaiser Permanente resources were leveraged to address specific employment barriers. Targeted outreach activities, equipment and training fees, weekly support groups, mentorship, and event sponsorships were provided to address racialized workforce barriers. Although these resources were available to all community members, they often focused on the specific and disproportionate needs of African Americans.

Dignity Health’s investments were targeted according to need irrespective of racial inequities. For example, housing need and severity were assessed using validated tools. The Dignity Health Community Needs Index— which produces an average score of housing, income, insurance, education, and language barriers—was used by hospital staff to target investments. And, LAFH used the 27-item Vulnerability Index Service Prioritization Decision Assistance Tool to screen and triage unsheltered adults. Although high severity housing needs may have been affected by structural racism, investments were targeted to geographic areas and residents within the immediate hospital vicinity. Notably, socioeconomic-focused strategies were described in a manner that minimized the need to address racial inequity. According to one hospital leader:

“When you look at the people on our streets, you see actually more Latino and Caucasian than you do African-American... However, I think when you're looking at the current issue of they're housing more people, but more and more people each year are going into homelessness, I think you have to address the bigger problem of affordable education for all ethnicities and socioeconomic levels. You have to look at fair wages for everyone.”—DH Interview, 2019

Because racial discrimination has led to race-based patterns of homelessness, targeted housing investments in the Black community are needed. In 2017, Black people represented 9% of the general population in LA County, comprised 40% of the houseless population, and experienced a higher rate of returning to homelessness than all other racial/ethnic groups.<sup>5</sup> Because the Northridge Hospital serves a large population and geographic area—where many unsheltered residents face severe substance use, violence, precarious employment, and housing instability, simultaneously—leaders found it difficult to address racial inequities. Yet, in a media interview, Dignity Health CEO Lloyd Dean acknowledged racialized patterns of housing instability by stating, “When you think about the fact that there are so many people in this country who are homeless on a given night, and then you zero in further and begin to sort that data and you see that a large proportion of those individuals that are homeless are African-American, it just caused me to say we've got to be more than just a comprehensive health care provider. We've got to be in and of the community”.<sup>46</sup>

#### *The Need For Community Resources to Address Race-Based Inequity*

Knowledge of racialized patterns of disadvantage, need, and opportunity access were most often used to make investment decisions when hospital and CBO leaders leveraged their lived experience. Local hospital resources—in the form of community grants and sponsorships, community-based relationships, knowledge, and lived experience—provided critical benefits to CBOs, some of which were led by African American community members, in the Kaiser Permanente case.

Across both cases, local hospital resources were used to connect community members to opportunities that maximized the impact of the hospital investments. For Kaiser Permanente, local financial resources and information about the organization—including which jobs were available, how to navigate the selection process, and access to onsite interviews with Human Resources Talent Acquisition Managers—simultaneously addressed employment barriers and increased CBO capacity. For Dignity Health, the LAFH loan and a \$1 million loan to the Valley Economic Development Center to provide small business loans to African Americans were system-level, rather than hospital-level, investments used to address SDOH in the area.<sup>25</sup>

Compared to Kaiser Permanente, Dignity Health formed few partnerships based on community lived experience. Instead, the professional experience of multiple departments within LAFH was engaged, which may have affected the comparatively fewer examples of strategies to address racial inequity. Outreach strategies, for example, appeared to be based on professional knowledge rather than lived experience. In both cases, hospital financial resources were able to activate non-financial resources that extended benefits to local residents, CBOs, and the broader community. Kaiser Permanente's direct investment enabled it to make critical decisions that were unavailable to

Dignity Health because of its indirect investment in LAFH. Accordingly, the combination of capital investments and direct project ownership conferred greater authority to make equity informed decisions. As one Kaiser Permanente partner described,

“...if they're just trying to increase the African American experience in working or whatever, they have to negotiate their PLA in a way—the project labor agreement with the unions in a way that pushes that, and they can because they are the owner. They can do that.”

—KP Interview, 2019

Because data on race/ethnicity were not collected and reported for these workforce development and housing investments, the extent to which these investments addressed racial inequities is unknown. Kaiser Permanente nearly met its local hire goal, which likely benefited African Americans—through training and employment opportunities—given the community demographics. For Dignity Health, because the Irmas Campus provided housing to San Fernando Valley residents with the highest severity of housing instability, the disproportionate need of Latino residents may have been addressed since they account for 42% of the homeless and are underrepresented in the permanent housing population.<sup>5</sup> Ultimately, while housing and workforce investments addressed critical SDOH, Kaiser Permanente’s direct investment and use of community lived experience mitigated its use of race-neutral approaches.

### 3.4. Discussion

The use of colorblind approaches that emphasized socioeconomic needs, yet overlooked racialized patterns in employment and housing barriers may have limited the potential for these investments to address SDOH for Black communities. Although both hospital systems used a race-neutral approach, Kaiser Permanente’s dependence on community lived experiences enabled a race-specific lens to be used. Further discussion of the distinction between colorblind and racial equity community investment approaches is warranted. First, colorblind approaches overlook racism as a fundamental cause of health.<sup>15</sup> In urban environments, socioeconomic status, place of residence, and race/ethnicity shape health.<sup>23</sup> Racism, specifically, restricts resource access, affects the use and quality of health and social services, and limits educational, economic, and occupational opportunities for racialized groups across generations.<sup>23,47,48</sup> For non-White racial/ethnic groups, racialized criminalization and immigration policies also affect opportunity access, increase social health risk exposures, and impede health.<sup>49</sup> Because hospital investments for vulnerable populations allocate resources according to poverty and medical indigent status, the vulnerability produced by racism may be overlooked. Race consciousness in resource allocations is necessary to address root causes of social inequities, and to make racial equity an explicit goal.

Whether Proposition 209, which prohibits discrimination and preferential treatment in public contracting based on race and ethnicity, limited how hospital investments were targeted and publicly described remains unclear. Fear of violating legal restrictions may have led hospital leaders to take a colorblind approach, and avoid making racism an explicit focus of targeted investments. Yet, hospital community investments should be examined in the context of racism, and the race-based policies and institutional practices that simultaneously confer health-related advantages and disadvantages.<sup>50</sup> A racial equity approach to hospital community investments goes

beyond SDOH to address “the fundamental role of macro-level forces in driving and sustaining inequities across time and context”.<sup>15</sup> This approach considers “the fundamental contribution of racial stratification to societal problems,” community health needs, and one’s own awareness of racialized patterns.<sup>15</sup> A racial equity approach to hospital community investments might utilize an intersectional perspective to consider needs that are simultaneously determined by interlocking categories of race, socioeconomic status, legal status, disability, and gender.<sup>15</sup> For example, workforce development investments can address child care, mobility accommodation, gender protection, and legal assistance needs that are barriers to employment.

Second, colorblind investment approaches minimize the history of structural forces that shape opportunity access and exclusion. Capital investments in housing and workforce development are necessary, yet insufficient to address racial inequities in health in the absence of a targeted approach. Although hospital investments have funded housing quality improvements, residential-based health services, and affordable housing to stabilize households,<sup>51,52</sup> these investments may not address disproportionate and limited access to safe, affordable housing due to racial discrimination. Likewise, workforce training and education investments that create stable mid- to high-income employment opportunities for low-resource communities<sup>53</sup> may have a greater impact if resources target African Americans and Latinos, and are allocated to address the disproportionate precarious employment produced by racism.<sup>5</sup> Capital investments may improve economic and social conditions, yet their potential impact on racial inequities in health requires targeted resource allocations and the direct participation of affected communities in decision-making.

Third, colorblind hospital investments that fail to address racial inequities may unintentionally perpetuate inequalities by allowing investment benefits to concentrate among those with more resources rather than those with disproportionate needs.<sup>54,55</sup> Hospital investments that focus on broad geographic service areas, rather than communities with specific and disproportionate needs, may actually deepen health inequities by failing to address heterogenous needs within a population.<sup>54</sup> A racial equity approach (Figure 2) may require hospital leaders to systematically examine hospital practices and resource allocation decisions that perpetuate inequality and racial bias.<sup>15</sup> Substantive community engagement through employment, hospital board placement, contracts, leadership development and capacity building, health profession training and education, and investments in CBOs provide opportunities for hospitals to promote racial equity.

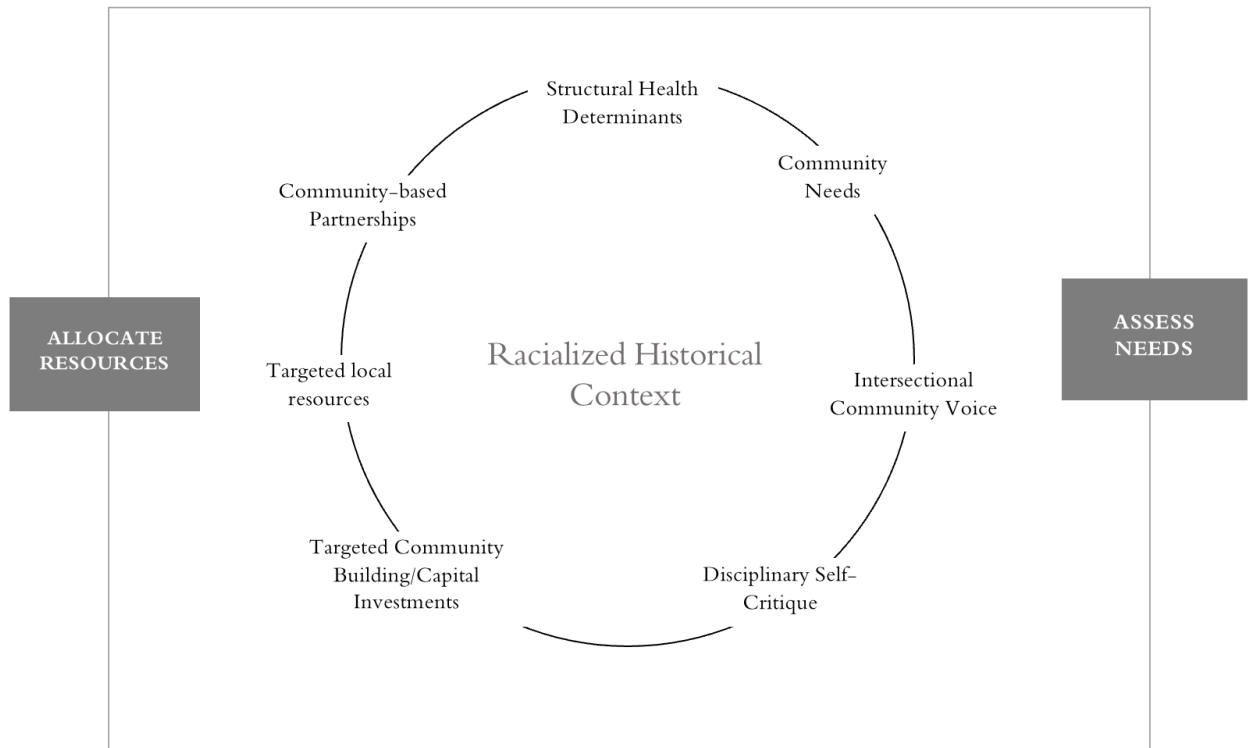


Figure 3.2: A Racial Equity Approach to Hospital Community Investments

The following limitations should be considered when interpreting these findings. First, bias in the data collection, while minimized through the comparative case study design and protocol, nonetheless limited reliability. Specifically, the use of snowball sampling to identify interview participants potentially limited the number of respondents and range of perspectives analyzed. Second, restricted access to internal documents necessitated a greater reliance on publicly available reports and media communications, which may reflect the selective reporting bias of hospitals and limit the internal validity of these findings. Multiple sources of evidence, pattern matching techniques, and the use of key informants to review draft hospital case profiles maximized validity. Lastly, the generalizability of these findings is limited by a focus on California private non-profit hospital systems, and the context specific racial inequities in health within the state.

### 3.5. Conclusion

There are multiple policy and practice implications related to this study. First, given the exclusion of capital investments as quantifiable community benefit, revised reporting guidelines that include community building activities may be established to promote opportunity access and health.<sup>56,57</sup> Assembly Bill 962,<sup>58</sup> which requires hospitals to report the proportion of contracts awarded to women, minority, and veteran-owned businesses, may provide a model for legislation that incentivizes hospital capital investments in historically disinvested and systematically disenfranchised racial/ethnic communities. Such legislation might include incentives for hospital systems operating in economically underdeveloped and medically underserved areas.

Second, California community benefit reporting guidelines should be modified to ensure that hospital definitions of vulnerable populations include racial/ethnic groups and legal status. Such a provision might motivate hospitals to use data on racial inequities in health and allocate resources to address disproportionate need. State resources could be mobilized to increase hospital capacity to monitor and report progress on racial/ethnic health inequities using a standard set of indicators that hospital community investments may impact. Community member representation on decision-making and advisory boards, with influence over resource allocations, is key.

Third, training and capacity building resources could be mobilized to support hospitals and their community partners maximize impact. Hospitals could provide health professions education and community building activities to support core operations and capacity building needs among CBOs with priority for organizations led by members of historically disadvantaged racial/ethnic groups. This might increase the provision of training benefits to community members and leaders, including within racial/ethnic communities that may not otherwise have access to health professions education and training opportunities.

Racial inequities produce complex needs that may be addressed through community-engaged hospital investment decisions. Yet, when hospital investments fail to build and leverage community partnerships, they fail to provide benefits to those who need it most. To the extent that California is considered a bellwether for national population health improvement strategies, its use of a racial equity approach may provide a harbinger for how to achieve equity and dispel the illusion that color-blind strategies can improve population health.



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## Conclusions

But you heard it before  
The sun will come out tomorrow, or so they say  
But see we're living in L.A. and what you thought was the sun, was just a flash from the [a]k  
—From *City of Angels*, Ozomatli <sup>1</sup>

In LA, maybe someone said Chicanos were the new niggers  
In Frisco, maybe someone said Orientals were the new niggers  
I had said I wasn't gonna write no more poems like this  
But the dogs are in the street  
It's a turnaround world where things are all too quickly turned around  
—From *A Poem for Jose Campos Torres*, Gil Scott Heron <sup>2</sup>

I'd be safe and warm (I'd be safe and warm) If I was in L.A. (if I was in L.A.)  
California dreamin' (California dreamin') On such a winter's day  
—From *California Dreamin'*, John Phillips and Michelle Phillips <sup>3</sup>

Racial inequities impede efforts to improve population health. A racial equity approach to private nonprofit hospital community benefit emphasizes the role that racism plays in producing health inequities in order to better align hospital resources with disproportionate health-related needs. The findings from this dissertation provide new insight into the relationship between private nonprofit hospital community benefit and health, and the need for hospitals to address racial and social health inequities through targeted resource allocations.

First, this dissertation assessed the relationship between private nonprofit hospital community benefit and health and presented results of a critical systematic analysis of empirical studies. The findings suggest that hospitals generally report higher amounts of community-directed spending in communities with lower levels of socioeconomic and community health need. Second, this dissertation examined the association between hospital characteristics, community-level indicators of social vulnerability, and private nonprofit hospital community benefit spending for vulnerable populations. Support was found for the hypothesis that hospital capacity, rather than indicators of community social vulnerability, affects the amount of community benefit that private nonprofit hospitals spend in their communities. Third, this dissertation analyzed how two private nonprofit hospital investments in housing and workforce development were rationalized and deployed. The findings indicate that community-based resources are essential to align hospital investments with community need, and to prevent the use of race-neutral decisions that emphasize socioeconomic need yet under-appreciate racialized barriers to health. Together, these findings contribute to addressing gaps in the literature on private nonprofit hospital community benefit approaches to improve population health.

Importantly, these findings build upon existing theoretical and empirical work to recommend an equity approach to private nonprofit hospital community benefit research and practice. A racial equity approach considers the fundamental causes of health inequities,<sup>1</sup> and uses a race consciousness lens to examine how racism affects community health needs and community benefit decisions.<sup>2</sup> This approach can examine the role of racism in the reproduction of health inequities over time, and re-conceptualize community health-related needs to include multiple interlocking forms of social exclusion. A racial equity approach might more effectively address the excess burden of poor health among racial/ethnic groups that impacts population health and community benefit spending.

As scrutiny of private nonprofit hospital community benefit intensifies, attention may be directed towards policy and practice changes that support targeted hospital investments. In California, this may include policies to standardize reporting guidelines, specify which vulnerable populations benefit from community benefit, and promote the use of intersectional dimensions of vulnerability that include race/ethnicity, immigration and legal status, disability, and other forms of social exclusion. Private nonprofit hospitals could adopt practices that prioritize community building activities to address the capacity building needs of local community-based organizations led by members of historically disadvantaged racial/ethnic groups. Further, these practices might be used to increase the provision of health professions education and training benefits to community members and leaders within racial/ethnic communities that may not otherwise have access to these opportunities. To the extent that California is considered a bellwether for national population health improvement strategies, its use of a racial equity approach may provide a harbinger for how to achieve equity and dispel the illusion that color-blind strategies can improve population health.

Social inequities in health require that effective health improvement strategies address upstream health determinants. Racial inequities, specifically, produce complex health-related needs that may be addressed through hospital investment decisions that provide benefits to those who need it most. Policies that promote community-engaged participatory decision-making, financial and non-financial investments, and targeted resource allocations may be necessary for private nonprofit hospitals to move further upstream to address racial health inequities.

## Endnotes

<sup>1</sup> Ozomatli is a multi-racial Los Angeles-based hip-hop/rock fusion band comprised of musicians, rappers, and performers whose music captures the vibrancy, irony, and potential of life in the City of Angels. This song pays homage to the band members' neighborhoods and centers the unique experiences and perspectives of men of color growing up in Los Angeles, which served as the site for this comparative case study of private nonprofit hospital community investments in housing and workforce development.

<sup>2</sup> Gil Scott Heron's wit, lyricism, sharp political commentary, and humor documented key moments and movements in the collective experience of Black Americans for over four decades. While he is perhaps best known for his 1970 song, "The Revolution Will Not Be Televised," much of his music and writings reflect a critical race consciousness and intersectional perspective, including this poem, which describes the interconnected plight of people of color in America. This spoken word poem encapsulates and, therefore, served as an audiovisual testament to the effects of structural racism described within this dissertation.

<sup>3</sup> The Mamas and Papas are largely credited with popularizing this song, and the Sunshine pop style of music that it characterized during the 1960s, which arguably included alternative and competing narratives about life in California during that time. This song title and music sub-genre provided a reference to explore the paradox of color-blind, or race-neutral, private nonprofit hospital community investments as a strategy to improve health outcomes in the highly racialized context of California.

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