Allocating Private Nonprofit Hospital Community Benefit Spending to Address the Needs of Socially Vulnerable Communities in California

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Executive Summary

Private nonprofit hospitals have historically allocated over 75% of their community benefit resources to 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. However, it remains unclear whether non-clinical community benefit spending is addressing the needs of socially vulnerable populations. Recent and unprecedented levels of hospital spending to address health inequities exacerbated by the COVID-19 pandemic has highlighted the critical importance of aligning hospital community benefit spending with the disproportionate needs of socially vulnerable populations.

Our analysis of California private nonprofit hospital (n=212) community benefit spending for vulnerable populations from 2014-2016 suggests private nonprofit hospitals do not primarily make community benefit investments based on indicators of social vulnerability in their communities or target funding for socially vulnerable populations. Instead, spending was more likely associated with hospital characteristics and concentrated in communities with lower levels of need. Key findings include:

- Hospital size increased the likelihood of hospitals spending a high amount of community benefit for vulnerable populations, yet non-clinical community benefit spending was more likely to be targeted to the broader communities.

- Hospitals that spend high amounts of community benefit for vulnerable populations, on average, have more total equity, provide more charity care, and spend more on total community benefit.

Consistent with other analyses, we found non-clinical community benefit spending was misaligned with health-related needs 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 improvements.\(^1,2\) Priority should be given to policies and private nonprofit hospital practices that target non-clinical community investments towards socially vulnerable populations.

Figure 1. CA Private Nonprofit Spending, 2014-2016

Figure 2. High Vulnerable and Not-High Vulnerable CB Spending Hospitals, 2014-2016
Background

Racial/ethnic health inequities are costly and impede overall population health improvements. Although social inequities in health are only partly attributed to health care, medical expenditures exceed spending for housing supports, employment training, and other social programs that have demonstrated benefits for population health outcomes. States with higher proportions of social services spending are more likely to invest in public health programs and have better health outcomes. Local government and private hospital investments in social and community health services have been positively associated with health outcomes.

In exchange for tax-exemptions, private nonprofit hospitals provide community benefits. Although private nonprofit hospitals provide over $60 billion in annual community benefit, the value of these investments is based on hospital expenditures instead of community outcomes. Decisions about how public and private resources are allocated to improve health are influenced by different principles and definitions of equity. 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.

The Value of Community Benefit

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. Accordingly, private nonprofit hospital community benefit may be used to address disproportionate rates of disease and preventable deaths that result from limited public health spending and community economic development in some regions. Per capita community benefit spending can range from $30-$335 and contribute as much as 9% in additional population health resources for government health departments.

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 often do not correspond to community need.

Figure 1. CB Spending by Category, CA Private Nonprofit Hospitals, 2014-2016

Local government and private hospital investments in social and community health services have been positively associated with health outcomes.
The California Landscape

In California, private nonprofit hospitals provide over $12 billion in annual community benefit.\textsuperscript{17} 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 health inequities in California persist.\textsuperscript{18} 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.\textsuperscript{19-21}

Because California health policy is shaped by its complex sociodemographic diversity,\textsuperscript{22,23} political landscape, and persistent health inequalities based on race/ethnicity and immigration status, it is a valuable context to examine targeted community benefit.\textsuperscript{24} In addition to conventional reporting categories, California nonprofit hospitals report whether community benefit spending is targeted to vulnerable populations or the broader community. Our analysis focused on California private nonprofit hospital (n=212) community benefit spending for vulnerable populations from 2014-2016.

Hospital Characteristics Matter

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 Medi-Cal 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 lower 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).

Nearly 75% of hospitals analyzed were part of a hospital system and their average annual operating margin was 1.9%.
The Community Context

We did not find significant differences between communities served by hospitals that spend high versus 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%).

Figure 5. Community Social Vulnerability Indicators, 2010-2013

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%).

High amounts of total community benefit and non-clinical community benefit for vulnerable populations were not associated with any measures of community social vulnerability. Instead, spending was more likely concentrated in communities with lower levels of need.

Misaligned Community Benefits

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 populations. Instead, non-clinical community benefits were concentrated in communities with lower levels of need.

1. 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.

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.

Figure 6. Odds Ratios, Community Characteristics, and CB Spending for the Broad Community

Each standard deviation increase in per capita income (SD=1,813.15) 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.

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.
These findings also suggest that disability status may not be considered a dimension of vulnerability to which community benefit is targeted. An emphasis on equity might consider how disproportionate need produced by racial discrimination, and across socioeconomic position, 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 communities made vulnerable at the intersection of multiple forms of social exclusion.

Hospital resource allocations are influenced by broader principles and values, including the norms of other institutions and the geographic area where hospitals are headquartered. 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 assessments to interrogate whether community benefit targets disproportionate need, hospital investments may unintentionally perpetuate inequity by concentrating resources among groups with greater resource access.

2. Large hospitals are more likely to spend high amounts of community benefit for vulnerable populations.

Figure 7. Odds Ratios, Hospital Size, and CB Spending

An emphasis on equity might consider how disproportionate need produced by racial discrimination, and across socioeconomic position, requires targeted hospital investments.

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 of spending a high amount on community benefit for vulnerable populations and the broader community, respectively, for each standard deviation (SD=156 beds) increase in the number of hospital beds.

One possible explanation may be that larger hospitals 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. 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, 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.

Having a religious mission did not affect the likelihood of a hospital spending a high amount of community benefit for vulnerable populations. For religious hospital systems, the purchase of small hospitals in low profitability rural areas may be a mission-driven strategy that provides community benefit, yet is underestimated. 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, yet were not measured or included in our analysis.
3. System-affiliated 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.

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.

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.\textsuperscript{31}

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.\textsuperscript{29} 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.

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,\textsuperscript{32} 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 allocate these resources to the broader community.

The greater likelihood of system-affiliated hospitals spending a high amount of non-clinical benefits for the broader community may also be a function of the definitions that hospitals use to determine vulnerability.

Hospitals may use inconsistent and unstable definitions of vulnerability that do not consider the political and economic structures that shape social health risks.\textsuperscript{33} 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 could, for example, 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.\textsuperscript{4}
Policy Implications

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.\(^{3,4}\) 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 discretion to define vulnerability without an explicit description of the communities to which resources are being allocated.

1. **Priority should be given to private nonprofit hospitals that target community benefit spending to address inequities in health.**

   California private nonprofit hospitals that prioritize targeted community investments for vulnerable populations should receive technical support—financed through Medicare reimbursement and pooled hospital financial resources from health systems—to sustain and evaluate the potential impacts of these critical resource allocations to promote health equity.

   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 workgroups in its community benefit recommendations.\(^{3,4}\) Similar efforts may support targeted private nonprofit hospital community benefits that address social inequities in health at the intersection of multiple forms of vulnerability. Administrative and policy actions that motivate private nonprofit hospitals to allocate resources to address racial and social health inequities, and to benefit communities that may not otherwise have access to such resources, should be pursued.

2. **Policy to incentivize hospital capital investments in historically disinvested and medically underserved areas should be considered.**

   The exclusion of community building 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.\(^{35,36}\) Housing and physical improvements, economic development, coalition building, and other less conventional strategies, when assessed, may better estimate the value of mission-driven strategies to improve health outcomes in vulnerable communities. 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 diverse hospitals.\(^{37}\)

3. **Recent legislation focused on hospital contracts can be extended to better align community benefit spending with disproportionate need.**

   Assembly Bill 962, which was passed in 2020 and requires hospitals to report the proportion of contracts awarded to women, minority, and veteran-owned businesses, may provide a model to promote targeted community benefit spending and reporting accountability. Policy 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. 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.
Limitations

Our analysis has some important limitations. 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 a basis to inform targeted community benefit spending. Future analyses 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.11,38 Second, we focused 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. These definitions are geographic boundaries that may not reflect neighborhoods 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.

Methods

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.38,39

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.40

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 cut-point 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. 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.

Other independent variables and covariates: Disproportionate share hospital (DSH) status measured whether a hospital received Medi-Cal...
disproportionate share payments, and urban 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:** We 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. 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.

**About the Author:**
Erica Browne, DrPH is a faculty affiliate with the California Initiative for Health Equity and Action. Her research focuses on social inequities in health and the community investments of private nonprofit hospitals.

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