

The Role of Hospitals in Improving Non-Medical Determinants of Community Population Health

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Executive Summary

Context

Hospitals can define the "population" for which they are accountable as patients attributed to them by payers (e.g., in an Accountable Care Organization) and/or as the people living in surrounding communities. Hospitals can focus on medical care for attributed patients and/or create initiatives impacting non-medical health determinants for their entire community. We investigate the extent to which hospitals in New York State and innovative hospitals nationally are addressing non-medical determinants of community population health, as well as facilitators of and barriers to this work.

Methods

We reviewed New York State hospitals' community service plans and interviewed 46 New York hospital and community leaders, 18 national population health experts, and leaders of six hospitals in other states with innovative programs.

Findings

New York State hospitals' involvement in programs impacting community non-medical health determinants is not widespread, owing to a perceived lack of incentives and resources for such programs. Nevertheless, some hospitals have developed programs addressing non-medical health determinants— such as access to healthy foods and parks, housing, and employment—by partnering with community organizations and local government. These programs require relatively little investment; they leverage the hospital's key role and relationships in the community to catalyze change.

Conclusions

Given their relatively low cost, more hospitals might invest in programs to improve non-medical determinants of community population health if the concept became better known to hospital executives and if examples were readily available. Funding from sources such as New York State's Delivery System Reform Incentive Payment (DSRIP) program and Medicare's recently announced Accountable Health Community program is also a facilitator. Private foundations and public policymakers interested in increasing hospitals' role in community population health could raise awareness of examples, develop funding models to support hospitals' community population health efforts, and develop tools for measuring their impact.

Introduction

ealth care delivery in the United States is beginning a transformation from volume to value-based financing. One of the key concepts underlying this transition is the Triple Aim, the "simultaneous pursuit of three aims: improving the experience of care, improving the health of populations, and reducing per capita costs of health care."

With this shift, population health has taken center stage. However, the term means different things to different people. Accountable Care Organizations (ACOs) are said to be trying to improve population health by providing better medical care, patient education, and social services to their attributed patient populations.² Jacobson and Teutsch challenged this definition by coining the phrase "total population health," defined by geographic area rather than attributed patients.³ Kindig and Stoddart stress that there are multiple health determinants other than medical care, including social factors such as education, poverty, inequality, and the built environment.⁴ While it has been estimated that only 10% of health can be attributed to clinical care, 40% has been attributed to social and economic factors, 30% to health behaviors, and 10% to environmental factors.^{5,6}

As hospitals assume greater risk for their patients (for example, through ACO participation), some analysts argue that they should focus not only on the medical care of their attributed patients but also on improving non-medical health determinants in their communities at large.⁷⁻⁹ Since hospitals alone do not have the capabilities or the authority to fully address non-medical determinants of health, some observers advocate for a community-wide infrastructure integrating health care delivery systems, public health agencies, and community organizations.¹⁰⁻¹⁴

Though there is increasing interest in hospitals' efforts to improve community population health, little is known about the extent of what hospitals are doing. Do hospitals and ACOs have the incentives and capabilities to undertake this work? We explore these questions by focusing on New York State, a large and diverse state, and by highlighting examples of hospitals in other states that are engaged in particularly innovative efforts. We first briefly describe current New York State and national policies that might encourage hospitals to engage in improving non-medical determinants of community population health. Then we present results of New York State hospitals' community service plan and community benefits report reviews. We focus on interviews conducted with hospital leaders and board members, leaders of community organizations working with these hospitals, and population health experts.

Policy Drivers

ACO-type contracts that reward hospitals for improving the health of their attributed patients may encourage hospitals to address non-medical determinants of community population health, particularly if they have a large community market share.⁷ In addition, for hospitals to maintain tax-exempt status, which is estimated to provide them with a financial benefit of \$24.6 billion annually, nonprofit hospitals are required to report community benefit spending as part of Internal Revenue Service (IRS) Schedule H tax reporting and to submit community needs assessments and implementation strategies.¹⁵

The IRS definition of what programs qualify as a "community benefit" is vague, although it can be broadly thought of as "all services demonstrating a positive benefit to communities at large."¹⁶ Charity care and unreimbursed patient care expenses from Medicaid and other means-tested government programs accounted for more than 85% of hospitals' 2009 community benefit reporting; only 5% of community benefit expenses went toward community health improvement activities (activities for the express purpose of improving community health).¹⁷ To continue to justify their tax-exempt status as more individuals attain health insurance with the Affordable Care Act (ACA)—and thus are not in need of charity care—some believe that hospitals have a new opportunity to redirect their investments into community health improve the community's health or safety) on Schedule H, but there is uncertainty about the extent to which these can count as community benefits.¹⁹

In New York State, the Prevention Agenda 2013–2018 requires hospitals and local health departments to collaboratively create community service plans that align with statewide Prevention Agenda priority areas to improve health and reduce disparities.²⁰ Additionally, New York's Delivery System Reform Incentive Payment (DSRIP) program will reinvest up to \$6.42 billion in savings from reforms recommended by the State's Medicaid Redesign Team back into Medicaid programs to reduce preventable hospital use by 25% over five years.²¹ Through DSRIP, safety-net providers and community organizations form regional networks called Performing Provider Systems to invest in system transformation, clinical improvement, and population health initiatives addressing multiple health determinants.²²

On a national level, the Centers for Medicare & Medicaid Services (CMS) recently introduced the Accountable Health Communities (AHC) program to invest \$157 million to evaluate whether addressing social determinants of health can reduce health care utilization and costs for Medicare and Medicaid beneficiaries.²³

Methods

e identified population health experts and hospitals with innovative programs addressing non-medical community health determinants nationally and in New York State. We interviewed 18 population health experts—12 nationally and 6 in New York—to learn their perspectives on the extent to which hospitals are addressing community population health, identities of hospitals with

particularly interesting programs, and potential barriers and facilitators to this work.

Using the American Hospital Directory,²⁴ we identified 44 hospitals in New York State with greater than 400 beds and a random sample of 25 with fewer than 400 beds. We were able to obtain community service plans for 59 of these 69 hospitals. We reviewed each plan to identify programs addressing non-medical health determinants in the hospitals' geographic communities. We did not include disease-specific education and screening programs even if directed toward the general public, because they do not directly address non-medical health determinants. For example, programs providing community asthma screening and education were not included, but programs that addressed non-medical determinants of asthma (such as housing programs that improved indoor air quality or smoke-free legislation) were included.

We selected 19 New York State hospitals or hospital systems for interview outreach, including 10 participating in a Medicare ACO and 9 that represented different geographic areas and appeared to have innovative community population health programs based on literature, community service plan reviews, and advice from expert interviews. We also selected 8 hospitals/systems outside of New York State for interview outreach that appeared, based on our literature review and expert interviews, to have particularly innovative programs.

Out of the 27 selected hospitals/systems, 24 participated, including 18 in New York State and 6 nationally. These 24 hospitals/systems included 61 individual hospitals. For each, we interviewed the hospital leader most involved in efforts to improve non-medical determinants of community population health. For hospitals/systems that were participating in an ACO and/or were found to have substantial community population health programs after initial interview, we requested additional interviews with: (1) a senior executive, such as the hospital's CEO, (2) a leader of the board of trustees, (3) a leader of a partnering community organization (such as a local health department), and (4) a leader of the ACO (when applicable). Twenty-one hospitals/systems—15 in New York State and 6 nationally—were invited to participate in these additional interviews. Seventeen hospitals/systems, 13 in New York State and 4 nationally, participated in at least one additional interview. A total of 65 participants were interviewed from hospitals and their partnering organizations.

Based on our review of the literature and expert interviews, we created semi-structured interview protocols for all five hospital interviewee categories to learn about their programs addressing non-medical community health determinants, reasons for investing (or not investing) in these programs, and key barriers and facilitators to these programs.

Methods (continued)

We reviewed 41 of the 61 individual hospitals' 2013 reported community benefit and community building expenses from publicly available 2013 990 Schedule H tax forms from GuideStar.²⁵ We did not review Schedule H forms for 20 hospitals because they either: (1) were not tax exempt so did not report 990 forms, (2) were acquired by the participating hospital system after 2013 tax reporting, or (3) filed jointly with an affiliated hospital. We computed the mean portion of hospitals' net community benefit expenses (net referring to total expenses less the direct offsetting revenue) spent on financial assistance/ means-testing government programs and community health improvement services/community benefits operations. We also computed the mean portion of the hospitals' total expenses spent on community benefits and community building.

Results

Community Service Plan Review

Out of the 59 community service plans from New York State hospitals reviewed, 27 (46%) included community programs addressing upstream behavioral lifestyle factors—such as access to healthy foods and exercise trails—to prevent downstream development of chronic conditions such as obesity, diabetes, and hypertension (Table 1). Seventeen hospitals (29%) included programs impacting other non-medical community health determinants, such as the built environment, housing, education, and crime.

Health Determinant Category	Number of Community Service Plans (n=59)	Percentage of Total Community Service Plans	Examples
Behavioral (nutrition, physical activity, lifestyle)	27	46%	 School and worksite policy initiatives for healthy eating, physical activity, and decreased screen time Local restaurant sodium reduction campaigns Farmers' markets and fresh produce delivery programs Tobacco-free policy development restricting sales and use in public areas
Built Environment	7	12%	 Creation of community gardens Development of parks and walking trails for physical activity Public transportation system expansion and safety improvements
Housing	3	5%	 Home air quality and asthma trigger improvement programs in high asthma and low-income communities Home lead reduction programs
Education	3	5%	 Early childhood education intervention providing small group learning sessions to kindergarteners and mentoring to teachers and parents School-based academic stress reduction program
Crime	2	3%	 Development of gang suppression unit with local police department Partnership with local social service agencies to prevent domestic violence
Other	2	3%	 Outreach to local employers to establish breast-feeding friendly worksites

TABLE 1 New York State Community Service Plan

Characteristics of Participating New York State Hospitals

Service Areas Covered

The service areas of the New York State hospitals/hospital systems that we interviewed were located in all nine regions of New York State and 32 counties. Six hospitals/systems (representing a total of 31 hospitals) served the regions of New York City and Long Island. Twelve hospitals/systems (representing a total of 30 individual hospitals) served regions north. We describe characteristics of these hospitals in Table 2.

Review of Community Benefit Expense Reports

The mean community benefit expenses reported were 9.0% (range 0.3–20.7%) of total expenses (Table 2). Community Health Improvement Services and Community Benefit Operations expenses made up an average of 3.2% (range 0–23.0%) of community benefit expenses and 0.3% (range 0–1.29%) of total expenses. Twenty-six out of the 41 hospitals' Schedule H forms reported community building expenses, averaging less than 0.1% (range 0–0.2%) of total expenses.

Mean Number of Beds (Range)	348 (4-1171)
<100	9
101-400	30
401-600	12
>600	10
Number of Hospitals Participating in an ACO (%)	39 (63.9%)
Number of Hospitals Designated as a DSRIP Performing Provider System Lead Organization (%) ^a	35 (57.4%)
Community Benefits Reporting ^{b, c, d}	
Mean percentage of hospitals' total expenses spent on community benefits (Range)	9.0% (0.3-20.7%)
Mean percentage of community benefits that go to cover losses from uninsured patients and from means-tested government programs (Range)	69.3% (21.6-102.5%)
Mean percentage of community benefits spent on community health improvement and community benefits operations (Range)	3.2% (0-23.0%)
Mean percentage of hospitals' total expenses spent on community building (Range) $^{ m b,e}$	< 0.1% (0-0.2%)
ndividual hospitals within a health system designated as a New York State DSRIP PPS lead organization are included ²⁶	

TABLE 2 Characteristics and Community Benefit Reporting of New York State Hospitals Interviewed

 a Individual hospitals within a health system designated as a New York State DSRIP PPS lead organization are included. 26

^b Based on publicly available data from GuideStar.²⁵

^d Community benefits are services demonstrating a positive benefit to communities at large.¹⁶ Community health improvement and community benefit operations refer to activities carried out or supported for the express purpose of improving community health and to assess and administer community benefit program.¹⁷

^c Based on 41 hospitals with publicly available IRS Schedule H forms reviewed.

^e This calculation is based on 26 hospitals reporting community building expenses on IRS Schedule H. Community building expenses are reported separately from community benefits and refer to activities to protect or improve community health or safety.

Interview Findings

Definition of Population Health

Both expert and hospital respondents frequently define population health as the concept of addressing broad health determinants, including social, behavioral, and environmental factors, for a given population. Many referred to the Triple Aim as a backbone for population health. There was wide agreement that the definition of population health changes based on the context and target audience and is often used to refer to either hospitals' patients, patients attributed to hospitals by payers, or individuals residing in hospitals' geographic communities.

Examples of Innovative Programs

We briefly describe some of these programs below, organized by categories of non-medical determinants addressed.

Behavioral Lifestyle Factors

Some hospitals work in their communities to impact health behaviors, such as healthy eating, physical activity, and smoking. For example, Montefiore Health System in the Bronx, in partnership with its city health department, works with more than 30 area bodegas to increase stock and promotion of healthier foods in high-obesity communities where nutritious options are not readily available. To allay bodega owners' concerns over losing customers by changing their products, the hospital collects signatures from local residents stating that they will purchase these healthier foods. St. Joseph's Hospital Health Center in Syracuse partners with the Lerner Center for Public Health Promotion and a local grocery store in developing a healthy food choice incentive program. Foods are labeled with nutritional index scores so shoppers can identify healthy items and earn reward points toward prizes like exercise equipment.

In a community survey, Ellis Medicine, located in the Capital Region of New York, found that 40% of local residents suffered from food insecurity. It performed community asset mapping of food resources with a nearby college and is currently developing a food resource mobile phone app for residents. Bassett Healthcare Network in Central New York partners with schools in a national childhood obesity prevention campaign entitled "5-2-1-0." School children receive education on the importance of "5 fruits and vegetables, 2 hours of maximum screen time, 1 or more hours of physical activity, and 0 sugary beverages" per day.

Glens Falls Hospital partners with local leaders to promote smoke-free policies and reduce tobacco marketing and sales as part of the New York State Department of Health's "Advancing Tobacco-Free Communities" program. Additionally, a youth-led "Reality Check" component aims to discourage tobacco marketing to 13–18 year olds.

Bon Secours Baltimore Health System

Bon Secours Baltimore Health System is a nonprofit Catholic health system serving a high-poverty area of West Baltimore, Maryland. Since the 1990s, the hospital has partnered with local organizations to create the nonprofit organization Bon Secours Community Works to understand and address community needs. Bon Secours Baltimore Health System has spent a total of approximately \$2.5 million on these efforts over the past 15 years. As access to safe and affordable housing is a main community concern, the health system collaborates with Enterprise Homes, Inc., to renovate housing units and build new construction for low-income residents lacking a stable place to live. A hospital leader stated, "We have 648 housing units but only 88 hospital beds; that demonstrates how much we are doing outside the hospital walls."

Moreover, through its Clean & Green program, Bon Secours employed and trained local residents to clean more than 600 empty and waste-filled lots in the neighborhood to create green areas for community use. In addition to revitalizing the environment, trainees learned marketable landscaping and career development skills. Bon Secours also provides neighborhood and economic revitalization grants to residents and businesses. It also offers parenting, educational, job training, and financial literacy programs—in addition to financial services—to the community.

Results (continued)

Housing and the Built Environment

Dignity Health, located in California, Arizona, and Nevada, partners with Mercy Housing to establish low-income housing, providing philanthropic support, housing loans, land access, and resident health programs. They state, "People cannot be healthy without a home."

Some hospitals have programs aimed at improving environmental conditions in existing housing. St. Peter's Health Partners, in the Capital Region of New York, is planning an asthma intervention program to identify buildings with disproportionate numbers of residents with poorly controlled asthma and use community health workers to help residents minimize triggers. The hospital is also partnering with the local health department to develop smoke-free housing policies.

Montefiore Health System partners with local government and community organizations to repair roads and highways, remove graffiti, and improve parks and gardens to make their community safer and more appealing.

Arnot Health

Arnot Health is a nonprofit three-hospital system with 589 beds based in Elmira, New York. Through the Creating Healthy Places to Live, Work, and Play Program sponsored by the New York State Department of Health, Arnot Health has partnered with more than 30 community organizations. Collectively, they created community gardens in parks and schools, donating produce to a local food bank and to school children whose families lacked fresh foods. They also renovated playgrounds and built exercise trails, subsequently noting that their county health measure for access to exercise opportunities for physical activity increased 18 percentage points from 59% to 77%.²⁷ Arnot Health also started a 6-week community walking program, which reduced blood pressure by 65% and lowered body mass index by 71% in the 170 participants completing the program.

In response to findings that only 47% of area children entering kindergarten were ready to learn, Arnot Health worked with county and community organizations to create the "School Readiness Program," providing home visits, early care, and parental education for young children. Over the five-year program, the percentage of children ready to learn increased from 47% to 68%. During this period, the county's pediatric emergency room visits for asthma for children ages four and under decreased by 33%. Arnot Health's community outreach programs cost an estimated \$423,000 yearly, with approximately 40% of this amount coming from grant funding. As one hospital leader explained, "It's part of the culture of the organization. It is part of our mission. Our community has many challenges, and we all have to work together to move needles... The biggest question is how do we make the biggest impact."

Education and Employment

Niagara Falls Memorial Medical Center created the "Project Runway" program for young women at risk for drugs and pregnancy, reaching out to local jails and schools. In addition to providing drug and pregnancy resources, it offers women assistance in completing their GEDs, clothes to wear to interviews, skills related to seeking and keeping employment, and volunteer opportunities. Of 80 women currently enrolled in the program, 17 have found jobs. Wake Forest Baptist Medical Center's "Supporters of Health" program collaborated with multiple organizations to retrain janitorial staff—who otherwise would have been laid off—to work as community health workers. The hospital, located in Winston-Salem, North Carolina, recognized that many of the janitors lived in neighborhoods with high rates of hospital use and that they could be effective resources for their neighbors. Bassett Healthcare Network serves a rural area of New York with a strong agricultural economy; it created the New York Center for Agricultural Medicine and Health, which researches and implements farmworker safety programs, including tractor rollover and chainsaw safety programs.

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Broad Collaborative Models

Some organizations partner with hospitals to address non-medical health determinants by providing or enabling on-site programs embedded within clinical practices. Since 1999, NYC Health + Hospitals (formerly the New York City Health and Hospitals Corporation) has partnered with Health Leads, an organization to address patients' basic needs like food, housing, or child care. Once a provider writes a referral for a patient, specially trained college volunteers or full-time advocates work one-on-one with patients. Health Leads works with hospitals to help them understand existing community needs and assets and develop staffing and technology infrastructure needed to implement and track their programs. Mount Sinai Health System's primary care clinic was the pilot site for City Health Work's community health coaching program, drawing upon a peer health coaching model used in Africa and other developing countries. City Health Works recruits health coaches from the communities it serves, training and embedding them to work in medical practices on patients' social, clinical, and emotional needs. Through the DSRIP program with Mount Sinai Health System, it is expanding its programs and engaging payers to demonstrate proof of concept.

The CommunityRx program at the University of Chicago employs youth in the community to perform extensive asset mapping of community businesses and organizations via a program called MAPSCorps. These data are put into an automated system that integrates with the University of Chicago Medicine's electronic medical record (EMR) that queries patient data to generate individualized lists of community resources for patients. CommunityRx is currently expanding its model to one which could be implemented at other hospitals and outpatient clinics nationally in a financially self-sustainable way.

Some hospitals use medical-legal partnerships. LegalHealth, a division of the New York Legal Assistance Group, provides on-site legal assistance to 25 New York City hospitals. For example, it worked with patients with asthma who live in substandard housing conditions to force landlords to remediate problems, resulting in clinical improvement and decreased hospital utilization.²⁸ For 2013–2014, LegalHealth helped clients obtain an estimated \$7 million in direct benefits, of which \$4.8 million was in retroactive Medicaid payments to hospitals for helping immigrants and other clients to obtain health coverage. LegalHealth is currently working within DSRIP to expand its services to additional communities. In the primary care clinics at Cincinnati Children's Hospital Medical Center, the EMR cues providers to ask screening questions on social factors; responses can trigger referral for on-site legal services to Legal Aid Society of Greater Cincinnati. This partnership has yielded multiple positive results, including \$200,000 of public benefits paid out over a three-year period²⁹ and remediation of a large substandard housing cluster.³⁰

Key Barriers to and Facilitators of Community Population Health Programs

Table 3 summarizes interviewees' commonly described barriers and facilitators to hospitals addressing non-medical determinants of health in their communities. The most frequently discussed barrier was that the prevailing fee-for-service payment system does not support investing in community population health. One hospital's population health director stated:

"The big issue is financing. For example, I constantly need to shift between talking about two different financing systems. When I am at a hospital-centered meeting, we are still having discussions in the fee-for-service world. But when we talk about DSRIP or population health, this is an idea that is ahead of the payment system and ahead of the current infrastructure and clinical pathways. We would need to have major IT, social work, and care management investments to make this happen."

Results (continued)

In addition, some hospital leaders reported difficulties caused by the lack of a demonstrable return-oninvestment to hospitals, given the difficulty of quantifying the impact of improving non-medical health determinants.

The most commonly mentioned financial facilitators were (1) the change to value-based and risk contract payment models and (2) new, large-scale funding for Medicaid populations through DSRIP. One hospital's community planning director stated:

"DSRIP has a huge impact on allowing hospitals to address socioeconomic determinants of health and is the most exciting program that I have seen in my career."

While most hospital leaders were positive about DSRIP's potential impact, some voiced concern that DSRIP's extensive programmatic, reporting, and collaborative requirements were burdensome and might potentially lead to dilution of hospitals' programs.

Category	Barriers	Facilitators
Financial	 The current fee-for-service payment system does not support investments in improving population health. Population health programs require upfront investments in technology, staffing, and infrastructure that are challenging for some hospitals with small profit margins to finance. 	 The shift from fee-for-service to value-based payments through increased risk contracting is the main financial facilitator. Many believe that DSRIP funding will be a significant catalyst of infrastructure development to support population health. Some feel that social impact bonds, increased grant funding, and regional wellness trust models will be helpful.
Technology	 Hospitals and community organizations lack information technology (IT) infrastructure to track data across disparate systems, measure non-medical health determinants, and measure/report results of interventions. 	 Leveraging technology to demonstrate positive population health program impact may help gain leadership and payer support.
Leadership	 Some hospital and community leaders do not fully support population health programs due partially to the lack of demonstrable return on investment. 	 When present, leadership and Board of Trustees understanding and support of population health programs are strong facilitators.

TABLE 3 Reported Barriers and Facilitators to Population Health^a

Results (continued)

Category	Barriers	Facilitators
Policy	 The requirements for various programs (community needs assessment and service plans, DSRIP, etc.) are scattered, not well-aligned, and duplicative, leading to inefficiencies. Some feel DSRIP programs are difficult to implement due to overly prescriptive policies. 	 DSRIP program policies promote new collaborations among organizations.
Understanding of the phrase "population health"	 Many hospital leaders and Boards think of "population health" as providing better medical care for their population of patients (e.g., the patients attributed to the hospital in an ACO contract). 	 Understanding "population health" as the health of all the people in the community in which the hospital is located can lead to broader efforts to address non-medical determinants of health.
Other	 Funding for many population health programs targets only specific populations, leaving hospitals with the conundrum of how to provide seamless care to their entire population. People are working in silos with little sharing of innovative ideas across regions. Hospitals have many competing priorities during this time of rapid change in the health care system. When working collaboratively with other regional organizations, several hospitals feel that their communities' specific needs are overshadowed by the different needs of their collaborators' communities. Several hospitals cite difficulties working with community organizations due to competition and resistance to change. Some communities are hesitant to partner with hospitals due to lack of trust. 	 Hospitals participate in population health programs because of their missions to "do the right thing" for their communities. They also cite the importance of non-medical health determinants in keeping people healthy and hence lowering utilization and costs. Hospitals' collaboration with community organizations to integrate and expand existing community resources is important. Population health coaching programs (such as the Robert Wood Johnson Foundation's Roadmaps to Health) and supportive population health collaboratives (e.g., Healthcare Association of New York State, New York State Prevention Agenda Task Force, Population Health Improvement Program, Stakeholder Health, regional collaboratives) help with guidance and exchange of ideas.

^a "Population health programs" for the purposes of this table refer to programs addressing non-medical health determinants in the geographic communities served by hospitals.

Hospitals' population health leaders and executive leaders both frequently stated that having hospital leadership with a strong understanding of and commitment to upstream community health determinants was a key facilitator. A hospital vice president stated:

"It takes Board and hospital executive leadership to get out there and enter the no-man's land of payment for value; we aren't there yet, so you go out to no-man's land by yourself. You are making a bet that the next land will be there for you and convincing payers that's where you need to go."

Establishing strong partnerships between hospitals and community organizations was also a significant facilitator. One leader of a community organization partnering with a hospital stated:

"The biggest advice to hospitals is to value partnerships. There is a tendency among health care facilities to want to be the biggest gorilla in the room. It distances potential partners from getting involved because their contribution isn't valued as much. This creates a feeling in the community that the people that want to help aren't like us, that they are 'the other guys.' I'm referring to true partnerships, not just eight names on a letterhead."

Most hospitals involved in ACOs stated that it was too early to tell whether being part of an ACO was a major facilitator of programs addressing non-medical community health determinants. However, some stated that being part of an ACO highlighted the importance of population health, with "population" defined by some as attributed patients and by others as the larger community.

The requirement to conduct community needs assessment and develop community service plans received mixed feedback. Some felt that needs assessments helped hospitals stay updated on community needs and encouraged hospitals, health departments, and community organizations to collaboratively share resources rather than work in silos. Others argued that these processes were overly formalized, arrived at already known conclusions, and had timelines that were too short to identify measurable impact. Few believed that projected decreases in charity care expenses with the ACA or potential changes in IRS community benefit reporting would result in hospitals investing more in programs targeting non-medical health determinants.

The multiple programmatic and reporting requirements for population health initiatives, such as community assessments and DSRIP, put forth by different New York State agencies were often cited as causing inefficiencies. One hospital president stated:

"There is a danger as we make this shift from volume to value and population health because there are so many programs and requirements all measuring different things in different ways at different times. It creates a paralysis. We need to streamline and organize the measures across different programs because having all these measures doesn't offer any meaningful information to us or to patients and leads to being scattered in too many different directions."

Limitations

Our study had several limitations. First, hospitals that agreed to participate may have been more active in community population health than those that did not participate. However, 89% of invited hospitals/ systems participated. Second, our community service plan reviews may not have captured all that hospitals are doing to address non-medical determinants of community health, since the plans varied considerably in their completeness. Third, we are unable to provide definitive data evaluating the effectiveness of hospitals' programs.

Discussion

ew York State hospitals' adoption of programs addressing upstream non-medical determinants of community population health is not widespread. However, some hospitals—in New York State and elsewhere in the U.S.—do have such programs and are expanding them. Leaders of these hospitals stated that their motivations for developing these programs were to fulfill their service missions to their patients and

community and to decrease health care costs by interventions addressing root causes of poor health. Given the lack of strong financial incentives for these programs, the choice to invest in them appears somewhat idiosyncratic; it is very dependent on hospital leadership. However, hospitals with a large community market share may be more likely to initiate such programs.

Hospitals' primary purpose will remain providing good medical care to their patients. They have neither the authority nor the responsibility of government for matters relating to schools, the economy, the environment, or other areas outside of health care. However, hospitals are anchor institutions in their communities, are large employers, may have capital to deploy, and have skilled managers. They are well positioned to serve as catalysts for, or at least to collaborate in, initiatives to improve community health.¹⁰⁻¹⁴ The shift from fee-for-service toward value-based reimbursements, innovative funding sources like DSRIP and AHC, and State and federal regulatory requirements for community needs assessments and community benefits may increase incentives for hospitals to invest in improving community health. Recently, proposals have been made to fund coalitions of community organizations and hold them accountable for improving population health measures.^{7, 10, 31-33} DSRIP is in part an attempt to fulfill this vision. Nevertheless, though some hospitals report encouraging results of their programs addressing non-medical community health determinants, peer-reviewed data on programs' results and return on investment remain scarce.

We found it striking that hospitals could create and maintain programs to improve community population health with relatively small financial investments. However, while the costs reported for community benefits might seem small relative to hospital budgets, hospital and community leaders perceived a lack of financial resources to be a significant barrier in light of the tight profit margins some hospitals face. Some hospitals were able to leverage their resources by collaborating with community organizations and public health departments. This suggests that other hospitals could afford to invest in such programs— and perhaps would do so—if the concept gained support from their executives and if examples were readily available. Foundations and public policymakers could increase executives' awareness of the possibilities for improving community health and could help to develop tools and resources for measuring the impact of community health programs.

References

- 1. Berwick, DM, Nolan TW, Whittington J. The Triple Aim: Care, health, and cost. Health Aff (Millwood). 2008;27(3):759-769.
- 2. Noble DJ, Casalino LP. Can accountable care organizations improve population health? Should they try? JAMA. 2013;309(11):1119-1120.
- 3. Jacobson DM, Teutsch S. Environmental scan of integrated approaches for defining and measuring total population health by the clinical care system, the government public health system, and stakeholder organizations. Washington: National Quality Forum; 2012. Available from: <u>http://www.qualityforum.org/Publications/2012/06/An_Environmental_Scan_of_Integrated_Approaches_for_Defining_and_Measuring_Total_Population_Health.aspx</u>. Accessed June 2015.
- 4. Kindig D, Stoddart G. What is population health? Am J Public Health. 2003;93(3):380-383.
- Booske BC, Athens JK, Kindig DA, Park H, Remington PL. Different perspectives for assigning weights to determinants of health. Madison: University of Wisconsin Population Health Institute; 2010. Available from: <u>https://uwphi.pophealth.wisc.edu/publications/other/different-perspectives-for-assigning-weights-to-determinants-of-health.pdf</u>. Accessed June 2015.
- 6. Kindig, Asada, Booske. Population health framework for setting national and state health goals. JAMA. 2008;299(17):2081-2083.
- 7. Hacker K, Walker DK. Achieving population health in accountable care organizations. Am J Public Health. 2013;103(7):1163-1167.
- 8. Ingram R, Scutchfield D, Costich JF. Public health and accountable care organizations: finding common ground in population health. Am J Public Health. 2015;105(5):840-846.
- 9. Fisher ES, Corrigan J. Accountable care communities: getting there from here. JAMA. 2014;312(20):2093-2094.
- 10. Shortell SM. Bold proposal for advancing population health. Institute of Medicine Roundtable on Population Health Improvement. 2013 Jul 24; National Academy of Sciences.
- 11. Hester JA, Stange PV. Sustainable financial model for community health systems. Institute of Medicine Roundtable on Population Health Improvement. 2014 Mar 6; National Academy of Sciences.
- 12. Halfon N, Long P, Chang DI, Hester J, Inkelas M, Rodgers A. Applying a 3.0 transformation framework to guide large-scale health system reform. Health Aff (Millwood). 2014;33(11):2003-2011.
- 13. Austen BioInnovation Institute. Healthier by design: creating accountable care communities. Akron: Austen BioInnovation Institute; 2012; Available from: <u>http://www.faegrebdc.com/webfiles/accwhitepaper12012v5final.pdf</u>. Accessed June 2015.

- Isham GJ, Zimmerman DJ, Kindig DA, Hornscth GW. HealthPartners adopts community business model to deepen focus on non-clinical factors of health outcomes. Health Aff (Millwood). 2013; 32(8):1446-52.
- 15. Rosenbaum S, Kindig DA, Bao J, Byrnes MK, O'Laughlin C. Value of the nonprofit hospital tax exemption was \$24.6 billion in 2011. Health Aff (Millwood). 2015;34(7):1225-1233.
- Burke JG, Truong S, Albert S, Steenrod J, Gibert C, Folb B, et al. What can be learned from the types of community benefit programs that hospitals already have in place? J Health Care Poor Underserved. 2014;25(1):165-193.
- 17. Young GJ, Chou CH, Alexander J, Lee SD, Raver E. Provision of community benefits by tax-exempt U.S. hospitals. N Engl J Med. 2013;368(16):1519–27.
- Rosenbaum S, Rieke A, Byrnes M. Encouraging nonprofit hospitals to invest in community building: the role of IRS 'safe harbors' [Internet]. Health Affairs Blog. 2014 Feb. Available from: <u>http:// healthaffairs.org/blog/2014/02/11/encouraging-nonprofit-hospitals-to-invest-in-communitybuilding-the-role-of-irs-safe-harbors/</u>. Accessed July 2015.
- 19. Corrigan J, Fisher E, Heiser S. Hospital community benefit programs: increasing benefits to communities. JAMA. 2015;313(12):1211-1212.
- 20. Boufford JI, Garcia A. Achieving the Triple Aim in New York State: the potential role of hospital community benefit. New York: New York Academy of Medicine; 2014.
- 21. Delivery System Reform Incentive Payment Program: DSRIP overview [Internet]. New York: New York State Department of Health. [updated 2014 Sept]. Available from: <u>https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/overview.htm</u>. Accessed June 2015.
- 22. Bachrach D, Pfister H, Wallis K, Lipson M. Addressing patients' social needs: an emerging business case for provider investments. New York: Commonwealth Fund. 2014. Available from: <u>http://www.commonwealthfund.org/publications/fund-reports/2014/may/addressing-patients-social-needs</u>. Accessed July 2015.
- 23. Alley DE, Asomugha CN, Conway PH, Sanghavi DM. Accountable health communities addressing social needs through Medicare and Medicaid. N Engl J Med. 2016;374(1):8-11.
- 24. American Hospital Directory [Internet]. [updated 2015]. Available from: <u>www.ahd.com</u>. Accessed February 2015.
- 25. GuideStar [Internet]. [updated 2015]. Available from: <u>www.guidestar.org</u>. Accessed July 2015.
- 26. Shearer C, Kennedy-Shaffer L, Myers N. DSRIP data brief performing provider system projects: tackling the health needs of communities. 2015 Jan; Medicaid Institute at United Hospital Fund.

References (continued)

- 27. County health rankings and roadmaps [Internet]. Madison: University of Wisconsin Population Health Institute. [updated 2015]. Available from: <u>http://www.countyhealthrankings.org/app/new-york/2015/</u> <u>measure/factors/132/map</u>. Accessed September 2015.
- O'Sullivan MM, Brandfield J, Hoskote SS, Segal SN, Chug L, Modrykamien A, et al. Environmental improvements brought by the legal interventions in the homes of poorly controlled inner-city adult asthmatic patients: A proof-of-concept study. J Asthma. 2012;49(9):911–917.
- 29. Klein MD, Beck AF, Henize AW, Parrish DS, Fink EE, Kahn RS. Doctors and lawyers collaborating to HeLP children: outcomes from a successful partnership between professions. J Health Care Poor Underserved. 2013;24(3):1063-73.
- 30. Beck AF, Klein MD, Schaffzin JK, Tallent V, Gillam M, Kahn RS. Identifying and treating a substandard housing cluster using a medical-legal partnership. Pediatrics. 2012;130(5):831-8.
- Auerbach J, Change DI, Hester JA, Magnan S. Opportunity knocks: population health in state innovation models. Institute of Medicine Roundtable on Population Health Improvement. 2013 Aug 21; National Academy of Sciences.
- 32. Alpers J. Baciu A. Financing population health improvement. Institute of Medicine Roundtable on Population Health Improvement. 2014; National Academy of Sciences.
- 33. Shortell SM. Bridging the divide between health and health care. JAMA. 2013;309(11):1121-22.





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