



Value Added: Adopting a ‘Social Determinants of Health’ Lens

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By

Anchor Institutions Task Force Health Professionals’ Subgroup

Executive Summary

The Anchor Institutions Task Force (AITF)¹ defines anchor institutions as enduring organizations that remain in their geographic places, and play an integral role in their local communities and economies. They are often significant local employers, purchasers, and real estate developers with various investments in their neighborhoods and regions. Universities and healthcare institutions are examples of anchor institutions and can also play a role in ensuring the health, wellbeing and care of individuals in the community.

In 2016 a group of representatives of healthcare institutions and universities coalesced to learn from and support each other in AITF's Health Professionals' Subgroup. The purpose of the Subgroup is to provide a forum for professionals in various health fields to share ideas, best practices, and challenges about how anchors can effectively address health disparities in their communities, as well as discuss other contributions that anchors can make to improve the overall well-being of communities.

Subgroup members are committed to adopting a health equity lens and emphasizing the importance of Social Determinants of Health (SDOH) for understanding health outcomes. As a result of this commitment, these institutions have cultivated a robust framework to guide their involvement and investments within their communities. They find that identifying as an anchor institution and focusing on SDOH makes them more fiscally nimble and effective in addressing long-standing negative health indicators.

SDOH can be defined as the “conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a range of health, functioning and quality-of-life outcomes and risks” (Office of Disease Promotion and Prevention, n.d.). According to the Centers for Disease Control and Prevention (2014) there are generally 5 recognized determinants of health: genes and biology; health behaviors; social environment; physical environment; and health services or medical care. While research is still lacking on the precise contribution of each determinant it is estimated that genes, biology, and health behaviors account for only 25% of population health. The remaining three categories represent SDOH and influence 75% of health outcomes.

Health outcomes are influenced by an individual's access to resources that enhance the quality of life, such as employment, safe and affordable housing, high quality education, access to healthy foods, social support systems, and health services. When individuals are born into poverty caused by barriers of access, health inequities arise creating systematic differences in the health outcomes of population groups. These barriers and the resulting disparities in health outcomes disproportionately affect racial and ethnic minorities (U.S. Department of Health and Human Services, 2011).

¹ www.margainc.com/initiatives/aitf/

The institutions in this paper have demonstrated their willingness to systematically address SDOH and health inequities in their communities. Each institution's starting point has varied based upon the needs identified by the communities in which they reside. All of the anchors have sought to address multiple determinants from housing, employment and education, to economic development, food, and safe spaces. Some have been in the driver's seat while others have played a supporting role enhancing the capacity of those already working within the community to deepen their impact. Many of the university anchors are playing a catalytic role as they transform the way they train and prepare future practitioners in interdisciplinary approaches to health, multiplying the impact that they can have beyond their immediate communities. The healthcare institutions in the Subgroup are serving as innovators as they partner with community based groups, local businesses, schools, and government to create cross-sector investments in the health and well-being of communities, and create holistic models of care. For all the anchors, the community is as much the patient as the individuals that reside there.

This is particularly true for Nationwide Children's hospital in Columbus, as they have sought to invest in affordable housing, workforce development, education, and health and wellness for the residents in the neighborhoods surrounding the hospital. Through hospital seed funding they successfully leveraged additional public and private funding and developed partnerships to implement their Healthy Families Healthy Neighborhoods initiative. The result was a \$25.6 million investment, which has resulted in the improvement of 300 homes and a 20% reduction in home vacancy rates since 2009.

For University of Maryland, Baltimore, the focus is on community and workforce development and improving K-12 education. They successfully opened a free standing neighborhood based Community Engagement Center (CEC), run by the University. The CEC is designed to identify complex and persistent problems, in partnership with the community, and provides multiple resources and programs to address SDOH. In its three years of operation the CEC has received 25,000 visits. As a result of this demonstrated commitment to community development, the University has been able raise additional funds to grow and expand the Center into a larger space.

SBH Health System in the Bronx has long understood the connection between health, wellness and the impact of SDOH. As a result of a changing focus in New York State on value and health equity for Medicaid recipients, SBH was able to put this knowledge into action. They received \$22.6 million in funding from the State to innovate and partner with a mission driven developer to create a mixed use development. The development will include affordable housing, preventative clinical programs, teaching kitchens, rooftop vegetable gardens, and community meeting space.

The University of Chicago Medicine has focused on enhancing the work of community-based partners to address SDOH and health disparities, among other strategies. Recognizing the important role that nonprofit organizations play in the health and vitality of local communities, they launched the Community Benefit Grants program that supports the success of nonprofit

organizations whose work benefits residents on the South Side of Chicago. The success of this program has enabled several nonprofits to earn larger grants and expand programming to target SDOH and deepen impact. It has also resulted in improved health outcomes for residents.

The University of Pennsylvania-School of Nursing (SON) in Philadelphia, has integrated SDOH throughout the curriculum emphasizing the importance of addressing these issues in order to decrease health disparities and promote the development of empathetic future health care professionals. Through its efforts the SON has developed and implemented educational frameworks to build collaborative education in partnership with communities across the University. In addition the faculty's commitment to community engagement is evidenced by efforts in 380 community initiatives in 95 locations in Philadelphia.

Florida International University's Herbert Wertheim College of Medicine in Miami believes it is their mission to prepare socially accountable, community-based physicians, scientists and healthcare professionals. This mission has driven them to change the future of medical education by training the next generation of physicians and healthcare professionals to comprehensively address SDOH in a team-based interdisciplinary way. This approach has allowed the College to partner with patients in the neighborhood and has resulted in mutual benefit to the community and the students.

At the University of Connecticut (UConn) in Hartford, engagement with addressing SDOH has been at the program level with faculty scholarship and pedagogy, and with student learning and service. Several UConn faculty members have spearheaded initiatives that address specific SDOH in their courses and programs. This has included a campus-community partnership focused on youth development through physical activity, nutrition education, and mentorship in school and afterschool settings; a health-based interprofessional education program to improve patient outcomes and provide care for underserved populations; and an effort to increase diversity in health professions by working with a nursing and health sciences public high school to ensure that students graduate and are prepared for higher education. These initiatives have been operational for over 10 years demonstrating both the commitment of faculty and the success of these programs.

The Subgroup members unanimously agree that adoption of a SDOH lens has benefitted both their institutions and their communities and has facilitated stronger relationships with patients, partners and community members.

However, the journey towards adopting an SDOH lens and implementing initiatives is not without challenges. For many of the healthcare anchors the biggest challenge has been in creating a culture change among doctors and medical staff away from a focus on volume of services and towards a focus on value and quality of care. Given that it takes time to see the results of investing in SDOH strategies, it can be difficult to provide data to convince practitioners to begin the process. Therefore, it is important to find champions who are influencers and risk takers. Additionally, having the support of the CEO and board can ensure that buy-in is established at the highest level and passed on to departments.

Some health anchors have also found that in trying to focus on quality of care and reduce the number of unnecessary hospitalizations they have had to transform a culture of use among the community. For some patients in low-income communities, the hospital may be a safer place when they are confronting violence, housing instability, and food shortages. That is why addressing SDOH and helping patients overcome these challenges ultimately can decrease the cost of care and improve community well-being.

For universities focused on community development one of the challenges is overcoming a lack of trust among residents. Given the history of universities conducting research in minority communities, many residents may be reluctant to participate in university sponsored programs. For this reason, it is critical to approach communities as partners and ensure that they are in the driver's seat in terms of identifying issues and needs. Establishing a community advisory board and using community-based organizations as partners in implementing strategies is one way to overcome this challenge.

In changing the way that practitioners are educated one of the challenges that some universities face is finding faculty with expertise in the area of SDOH and experience in community engagement in their research, teaching and practice. Part of the problem is that the current system undervalues community-based research and engagement and doesn't provide incentives for faculty in terms of tenure, promotion and funding. Transforming this culture will take time, but universities can begin to make that change by fostering an educational environment that views addressing social justice and health equity as integral to the mission of the university. Additionally, recognizing the importance of diversity and inclusion and identifying strategies to develop practitioners from within underserved communities is critical.

For some anchors that have been addressing affordable housing in their communities, one of the biggest challenges has been the uncertainty of the housing market. While initially pricing or availability of housing units may not be an issue, over time as the housing market experiences an upswing anchors may have to compete with the private market and out of town investors resulting in inflated sales pricing. One way to address this issue is to 'land bank' properties, which involves buying properties for future development or sale. Therefore, as anchors develop their strategies they also have to consider and plan for future market changes that may result from their community investment.

While all of these health and university anchors have faced challenges along the way, the critical elements that have helped are: strong leadership to ensure buy-in; community partnerships that create trust and help identify and implement strategies; leveraging assets to cultivate strategic partnerships; and approaching SDOH in interdisciplinary ways. They are focusing on systemic change by transforming the way that providers treat patients, shifting the focus to the communities where they reside. In the process, they have built new partnerships across sectors and increased investments in their communities.

By sharing their experiences, the Subgroup members, hope to encourage greater dialogue among other healthcare institutions and universities about how to adopt and apply a SDOH lens as they move towards a value-based approach to health care.

Introduction

The Anchor Institutions Task Force (AITF)² defines anchor institutions as enduring organizations that remain in their geographic places, and play an integral role in their local communities and economies.

Anchor institutions are longstanding institutions that are deeply rooted within their communities by mission and investments, and are committed to improving their communities. It is difficult for anchor institutions to divest from the communities in which they reside. They are often significant local employers, purchasers, and real estate developers with various investments in their neighborhoods and regions. Because of their local commitments, anchor institutions are interdependent with their surroundings. Universities and healthcare institutions are examples of anchor institutions and can also play a role in ensuring the health, wellbeing and care of individuals in the community.

AITF was created in 2009 as a means of organizing the growing number of leaders and practitioners in various fields promoting the engagement of anchor institutions in their communities. AITF has grown to a network of over 900 individual members in the U.S. and abroad since its inception. It has become an important voice in making the case for increasing the engagement of anchor institutions in their localities and regions in the United States and around the world. Members represent various types of anchor institutions, and share a common belief that anchor institutions should demonstrate a commitment to their localities, work democratically in their environments, collaborate effectively, and promote social justice and equity.

In 2016 a group of representatives of healthcare institutions and universities coalesced to learn from and support each other in AITF's Health Professionals' Subgroup within the Taskforce's broader learning community. The purpose of the Subgroup is to provide a forum for health professionals from anchor institutions to share ideas, challenges and best practices on how to address health inequities and disparities in their communities. Additionally it serves as an avenue for peer learning and exchange among the health professionals as they work to develop, refine and implement programs focused on enhancing the well-being of communities. The current Subgroup members are diverse in many ways, representing a number of nonprofit healthcare institutions. They are public and private, and many are connected or affiliated with universities. All reside in major urban cities throughout the United States. Current members include: SBH Healthcare System, Bronx, NY; University of Connecticut, Hartford, CT; University of Pennsylvania School of Nursing, Philadelphia, PA; University of Maryland, Baltimore, Baltimore, MD; Nationwide Children's Hospital, Columbus, OH; Florida International University, Miami, FL; The University of Chicago Medicine, Chicago, IL.

Members of the Subgroup found common ground regarding their commitment to adopting a health equity lens and emphasizing the importance of Social Determinants of Health (SDOH) for understanding health outcomes. As a result of this commitment these institutions have cultivated a robust framework to guide their involvement and investments within their communities. They

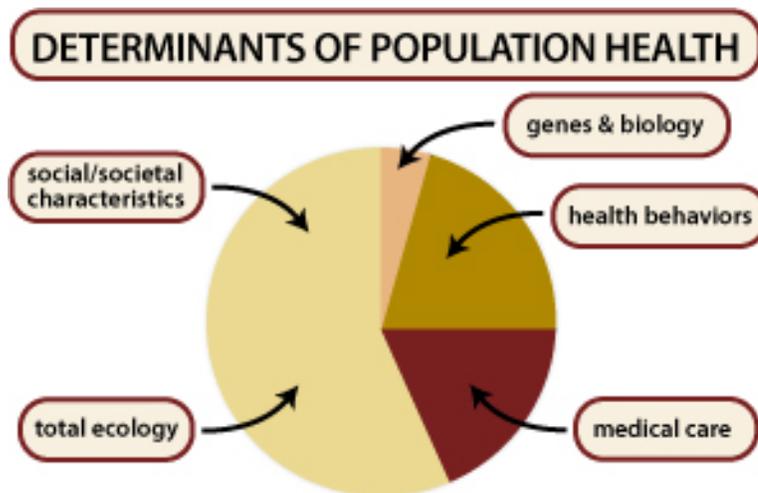
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find that identifying as an anchor institution and focusing on SDOH makes them more fiscally nimble and effective in addressing long-standing negative health indicators.

SDOH and Impact on Health Outcomes

SDOH can be defined as the “conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a range of health, functioning and quality-of-life outcomes and risks” (Office of Disease Promotion and Prevention, n.d.). According to the Centers for Disease Control and Prevention (2014) there are generally 5 recognized determinants of health: genes and biology; health behaviors; social environment; physical environment; and health services or medical care. While research is still lacking on the precise contribution of each determinant it is estimated that genes, biology, and health behaviors account for only 25% of population health. The remaining three categories of social environment, physical environment, and health services represent SDOH and influence 75% of health outcomes (see Figure 1).

Figure 1



Source: Centers for Disease Control and Prevention (2014). NCHHSTP Social determinants of health. Retrieved from <https://www.cdc.gov/nchhstp/socialdeterminants/faq.html>

The passage and implementation of the Affordable Care Act (ACA) in 2010 allowed providers and others in the healthcare field to significantly expand care for marginalized populations. From the ACA’s implementation in 2010 to 2016, an estimated 20 million people gained access to the healthcare system, including many young adults, Hispanics, African Americans, and those with low incomes (Cohen, Zammitti & Martinez, 2017). While addressing access to care is critical in creating and sustaining a healthy community, it is only a small part of SDOH.

Health outcomes are influenced by an individual’s access to resources that enhance the quality of life, such as employment, safe and affordable housing, high quality education, access to healthy foods, social support systems, and health services (see Figure 2). When individuals are born into poverty caused by barriers of access, health inequities arise creating systematic differences in the health outcomes of population groups. These barriers and the resulting disparities in health outcomes disproportionately affect racial and ethnic minorities (U.S. Department of Health and Human Services, 2011).

Figure 2

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations



Source: Heiman, H & Artiga, S. (2018). Beyond health care: The role of social determinants in promoting health and health equity. The Henry J. Kaiser Family Foundation. Retrieved from <http://files.kff.org/attachment/issue-brief-beyond-health-care>

In neighborhoods with lower-median incomes and less educational attainment access to healthier foods is limited, there is less access to space and facilities for physical activity, and residents are more likely to be exposed to environmental toxins. In addition, these neighborhoods experience elevated crime levels and offer less access to health care facilities (Zimmerman, Woolf and Haley, 2015). Exposure to these conditions can increase the risks of developing chronic diseases such as obesity, hypertension, and asthma among others.

In fact, research demonstrates the association between various health conditions and social determinants such as:

- Exposure to allergens and asthma incidence and morbidity is linked to living in substandard housing (Krieger, 2010).
- Diabetes is more prevalent among food-insecure households (Gucciardi, Vahabi, Norris, Del Monte, & Farnum, 2014).
- Among patients with pneumonia, a higher risk of hospital readmission or mortality is associated with low income and unemployment; for patients with heart failure, a higher risk of hospital readmission or mortality is associated with low income, lack of social support, and lack of home resources (Calvillo-King et al., 2013).

A recent study (Berkowitz et al., 2016) also found that patients reporting unmet social needs, such as difficulty affording food, health care and utilities, reported higher rates of depression, diabetes, hypertension, emergency department visits and no-shows to clinic appointments compared to those who did not report social needs.

As such, addressing health inequities by instituting policies which address SDOH is vital to influencing the health outcomes of patients and improving the quality of care. Given that a patient's zip code may have a stronger influence on health outcomes than the care they receive makes it imperative to systematically address these social, economic and environmental disparities.

Healthcare institutions are recognizing the importance of addressing social determinants with the understanding that many healthcare problems require solutions that exist beyond the hospital and the provision of acute care. Universities are recognizing that preparing practitioners to treat patients in a holistic way requires equipping them with an understanding of social determinants, and experiences with community engagement.

Awareness about the significance of SDOH continues to grow among scholars, health professionals, policymakers, and others. There is a need for a greater understanding of what this means in practice. AITF's Health Professionals' Subgroup has assembled representatives of institutions that are attempting to apply a SDOH lens to their local community partnerships.

AITF Health Professionals' Subgroup Members

Subgroup members are using their clinical and non-clinical resources to address SDOH upstream in their local communities. By acting as engaged anchor institutions and addressing the social, economic, and environmental issues that impact health they can begin to target the broader drivers of health outcomes in their communities.

Each of the Subgroup members has a unique footprint in the communities where they are located and serve. The distinctiveness of each institution influences how it operates and consequently its adoption of strategies to address SDOH. The level of buy-in by key stakeholders (especially executive leadership), community engagement, and the ability to leverage resources to engage strategic partners and drive community investment shape the nature and scope of their chosen

strategies. Reflective of their diversity, buy-in and strategies vary from each institution and are based upon the needs identified by the communities in which they reside. All of the anchors have sought to address multiple determinants from housing, employment and education, to economic development, food, and safe spaces. Some have been in the driver's seat while others have played a supporting role enhancing the capacity of those already working within the community to deepen their impact. Many of the university anchors are also playing a catalytic role as they transform the way they train and prepare future practitioners, multiplying the impact that they can have beyond their immediate communities. The healthcare anchors in the Subgroup are serving as innovators as they partner with community based groups, local businesses, schools, and government to create cross-sector investments in the health and well-being of communities. They are changing the traditional model of care from treating the symptoms of disease to holistically addressing the root causes, seeing the place-based conditions of patients as integral to their health.

Leveraging Assets and Cultivating Partnerships

Adopting a SDOH lens can be mutually beneficial to the institution and community. It can facilitate stronger relationships with patients, partners and community members and improve the long-term viability of the communities in which these institutions reside. By monitoring and evaluating their efforts and responding to the needs of the community, they can build community support and legitimacy. This allows them to develop new partnerships across sectors and leverage additional assets that can be deployed to improve the well-being and economic vitality of their communities. This strategy of leveraging resources to build cross-sector partnerships is a key part of the success of Nationwide Children's Hospital as they address SDOH in Columbus, OH.

Leveraging Assets and Cultivating Strategic Partnerships: Nationwide Children's Hospital- Columbus, OH

Nationwide Children's Hospital is located in Columbus Ohio and is committed to providing the best quality healthcare for children. As an anchor institution they believe that healthcare begins before a patient enters the hospital for medical services and that a person's zip code should not determine health outcomes. As a result, Nationwide Children's views the neighborhood as the patient.

In 2008, Nationwide Children's announced Healthy Neighborhoods Healthy Families (HNHF), a place-based initiative focused on impacting SDOH for area residents. This initiative engages over 25 partners composed of faith-based organizations, community development organizations, youth-serving nonprofits and local public schools.

The focus is on revitalizing Columbus' South Side, which is the area surrounding Nationwide Children's Hospital, to support the health and well-being of children and families living in the 43205, 43206, and 43207 zip codes. HNHF targets five impact areas: affordable housing, education, health and wellness, safe and accessible neighborhoods, and workforce development.

Nationwide Children's identified housing instability as one of the biggest challenges affecting the neighborhood. Through hospital seed funding they were able to leverage public and private dollars and pull in multiple partners to address this challenge.

The HNHF initiative - a \$25.6 million investment through a partnership between Nationwide Children's, Community Development for All People, United Way and the City of Columbus - has resulted in the improvement of over 300 homes and a 20% reduction in home vacancy rates since 2009.

Subsequently, a new partnership was created with the Ohio Housing Finance Agency and Nationwide Children's Hospital investing over \$15 million to open the 'Residences at Career Gateway', offering affordable rentals and onsite workforce training. The goal is to not only help residents obtain affordable housing but to enable them to acquire jobs in the hospital or at nearby employers and create a pipeline of employees among residents.

The success of the HNHF initiative is driven by community support and participation. Engaging partners with expertise that are respected and hold deep ties within the neighborhoods, has been a critical element of Nationwide Children's success within the South Side.

Nationwide Children's acknowledges their partners as equals; recognizing they are assets in the community as they successfully conduct their own work and help to positively transform the neighborhoods. Working closely with partners and following through on community commitments has been essential to Nationwide Children's success.

Investing in Communities to address SDOH

Health anchors are not only investing in healing individuals but healing the cities and neighborhoods where those individuals reside. They are seeking collaborations with non-traditional partners such as local businesses, government, and nonprofits, to transform communities and create healthier environments.

With health care expenditures accounting for 17.9 percent of Gross Domestic Product in 2017 (Centers for Medicaid and Medicare Services, n.d.) optimizing the performance of the healthcare system is critical. The Institute for Healthcare Improvement (n.d.) refers to the ‘Triple Aim’ approach to improving healthcare, which focuses on improving the quality and care experience for patients, improving population health outcomes, and decreasing costs. As noted earlier, given the contribution of SDOH to chronic health conditions such as diabetes, asthma and hypertension, efforts that focus only on addressing acute health care needs of patients will be unsuccessful in reducing the cost of care. As the Institute for Healthcare Improvement notes communities and organizations that effectively accomplish the ‘Triple Aim’ will not only reduce the cost of care but will “lessen the pressure on publicly funded health care budgets, and provide communities with more flexibility to invest in activities, such as schools and the lived environment, that increase the vitality and economic wellbeing of their inhabitants”.

Increasingly healthcare institutions are recognizing the important role they can play in communities beyond simply providing clinical services. By adopting the mission of an anchor institution they are choosing to invest in the health and well-being of their communities, which can simultaneously improve their quality of care and cost-effectiveness. Many healthcare institutions and universities are integral to the economic vitality of a community as they provide significant employment, manage large sections of real estate, and procure a large volume of goods and services. By choosing to pursue these activities with the goal of community development they create the conditions for other potential investors to see these communities as less risky investments. As a result they can leverage additional resources beyond what most hospitals and universities can afford to invest at one time. By drawing in partners from the public and private sectors they can direct more resources towards areas such as affordable housing, education, infrastructure, healthy food, and small businesses. This fosters a healthier and more equitable environment in which communities can thrive. For the University of Maryland-Baltimore, investing in community development is a key part of transforming SDOH.

Investing in Community Development: University of Maryland, Baltimore- Baltimore, MD

As one of the largest anchor institutions in Baltimore, University of Maryland, Baltimore's (UMB) primary community role is to improve the lives of those living in West Baltimore. UMB is a health, law and human service university strategically located at the interface between Baltimore's downtown and West Baltimore community. The West Baltimore community has a 20 year shorter life expectancy (particularly among African American men) than a community six miles away that is largely white and upper middle to middle class. UMB believes the largest contributor to this gap is SDOH.

The community UMB serves is predominantly African American with a median income of less than 20K annually. School attendance, in general, is among the lowest across the Baltimore City school system. Violence is prevalent, and unemployment far exceeds the state average. UMB's SDOH strategy is focused on improving K-12 education, strengthening the health and well-being of the community, and workforce development.

A federally funded program allows UMB to secure community governance and participation in community-based research. This strategy allows them to focus their efforts on studying the SDOH by partnering with the affected community.

In fall of 2015, UMB opened a Community Engagement Center (CEC) to create a place where many of its resources could be easily accessed by their neighbors. The CEC is the front door for the community. It gives West Baltimore residents a place to access services while promoting neighborhood and economic development. The center brings the University and community together to solve complex and persistent problems that diminish residents' quality of life. For example they provide legal assistance, a healthy food market, resume writing workshops, child care, and job search navigation. Here, UMB can cultivate a workforce pipeline as residents learn new skills, and connect with the university.

In its 3 years of existence, the CEC has had 25,000 visits. With such successful utilization UMB was able to justify the need to expand - growing into a larger physical space. The new site will enable UMB to provide neighborhood residents additional community-building tools - a larger safe space for children to play and the ability to offer a greater number of skill building workforce training classes. Demonstrable commitment to community development is part of UMB's approach to addressing SDOH.

Shifting from Volume to Value and Opportunities for Innovation

With the passage of the ACA and the growing focus on the ‘Triple Aim’ approach to health care, new models of payment are providing a business case for providers to invest in interventions that address SDOH (Bachrach, Pfister, Wallis & Lipson, 2014). Traditionally, health care has utilized a fee-for-service approach which pays providers based on the volume of services provided. However, the transition to value-based-care emphasizes improving quality and outcomes, rather than quantity of services, while reducing costs.

The Centers for Medicaid and Medicare Services (CMS), have introduced healthcare delivery and payment reforms that create financial incentives for meeting quality performance metrics and managing utilization. One example is Accountable Care Organizations (ACOs), which encourage groups of doctors, hospitals and health care providers to coordinate care and holds them accountable for quality, care experience, and cost for a Medicare population. Providers can then benefit from any shared savings based on cost and quality performance measures (CMS, n.d.). Other examples of Medicare quality-based payment models include Medical Homes (team-based care delivered and coordinated by a primary care practice) and Bundled payments (providers receive a single payment for all services provided to a patient for treatment of a certain condition) (Baseman, Boccuti, Moon & Dutta, 2016).

Several states have also begun to create Medicaid ACOs to improve patient outcomes and manage costs (Center for Health Care Strategies Inc., 2018). This model encourages a focus on population health and provides an incentive to address health-related social needs. In fact, of the 12 states which have created statewide Medicaid ACOs many encourage or require SDOH interventions (Crumley & Pierre-Wright, 2018).

According to a recent survey by Change Healthcare (2018a), 80% of respondents (including national and regional payers, and healthcare leaders across provider, government, academic and vendor spaces) have taken steps to address SDOH into their programs to improve value-based care. They have employed a range of strategies such as, including community programs, integrating geographic and census data with medical data to better understand patient populations, and providing social assessments along with health risk assessments. For some healthcare institutions, adopting SDOH into their risk assessments improved their readmission predictions and would result in fewer penalties to hospitals treating low-income patients (Reidhead & Kuhn, 2016).

By focusing on value over volume, healthcare institutions can explore opportunities to improve quality and redefine how they provide services. They can also creatively cultivate new services that can mitigate negative SDOH and decrease the cost of care over time.

For one Subgroup member, new payment models as a result of the changing focus on value over volume created opportunities for innovation. In New York, the Delivery System Reform Incentive Payment Program (DSRIP) aims to reduce avoidable hospital use by providing funding to Medicaid providers who are required to “collaborate to implement innovative projects

focusing on system transformation, clinical improvement and population health improvement” (New York State Department of Health, n.d.). For SBH Health System this funding provided an opportunity to innovate and collaborate with developers in the South Bronx in order to address the health and wellness of the community in a holistic way.

**Taking a Risk on Innovation:
SBH Health System (SBH)- Bronx, NY**

Founded in 1866 and located in the South Bronx of New York City, SBH Health System (formerly St. Barnabas Hospital) is an independent not-for-profit hospital serving a diverse economically challenged community with limited direct public transportation (no subway station within one mile) and few local job opportunities. It is the largest employer in the area, but many employees are not currently living within the immediate community due to the lack of safe and affordable housing. SBH serves as both a social net for many and an opportunity net for some.

SBH’s current emphasis is on the connection between safe and environmentally friendly permanent housing and wellness. This entity has long understood the connection between health, wellness and the impact of SDOH. It recognizes that social and economic factors have a significant impact on health. This has been amplified since health equity is a major component of the NY State Delivery System Incentive Payment (DSRIP) program, which is redefining how Medicaid recipients receive their care - focusing on the value of population health and wellness over volume.

The Bronx remains anchored at the bottom of New York State Counties (62/62) in terms of health and wellness according to the 2018 RWJF/University of Wisconsin “County Health Rankings and Roadmaps”. DSRIP funding encourages innovation and collaboration over organizational individualism and has allowed SBH to innovate and partner in order to determine the best ways to manage and prevent chronic health care conditions.

Subsequently, SBH received \$22.6 million in NYS funding to operationalize a Wellness Center that will serve the residents of a combined affordable housing and wellness program, and the community at large. It will include a number of preventative clinical programs as well as expanded urgent care, holistic services, teaching kitchens, rooftop vegetable gardens and greenhouse, and a flexible community meeting space.

In order to ensure the viability of the project, SBH partnered with a mission driven developer to build 314 units of affordable housing on two parcels of land owned by SBH for many years, but undeveloped. The housing includes 95 units reserved for formerly homeless individuals and families as well as high utilizers of the Medicaid system.

Prior to this partnership, operational costs and the resources needed to manage and maintain the land on the hospital's campus were prohibitive. SBH didn't have the capacity or capabilities to build and manage housing, so it decided to donate the land in exchange for a discounted lease of the clinical and wellness space at a 30% market rate. This eliminated its role as property manager, decreased expenditures and allowed them to focus on delivering high quality healthcare.

The overall goal of the mixed use development is to improve the well-being of the community by creating safe, clean and supportive environments while addressing other SDOH, such as food insecurity and access to care.

Enhancing the Capacity of Community Partners

A recent study commissioned by Change Healthcare (2018b) surveying health care payers indicates that fee-for-service reimbursement is decreasing faster than originally predicted and now accounts for only 37.2 percent of reimbursements. Interestingly, despite rollbacks or changes to federal mandates, commercial lines are leading the way in investing in value-based innovation. Additionally, the study finds that payers report a 5.6 percent reduction of unnecessary medical costs as a result of their value-based care strategies along with an improvement in care quality and patient engagement.

As evidenced by this study, the healthcare business model is changing from a fee-for-service model to a value-based model that focuses on population health. In this new model providers can be more cost-effective by keeping their members healthy.

Healthier communities in turn will be cultivated as healthcare systems and hospitals work to advance health equity. However, advancing health equity requires community-based solutions and the formation of effective community partnerships. Healthcare institutions and universities can optimize their role in promoting health equity by supporting partner organizations and social entrepreneurs who can better address some of the SDOH in their communities. By enabling these partners to address issues that they may have lesser internal capacity or competency to address they can avoid overcommitting. Developing and supporting partnerships allows healthcare institutions and universities to be better stewards of their resources and to optimize their ability

to improve the health outcomes of a population. The University of Chicago Medicine is illustrative of how enhancing the capacity of community partners can deepen impact when addressing SDOH.

**Deepening Impact by Enhancing the Capacity of Community Partners:
University of Chicago Medicine- Chicago, IL**

As an anchor institution on the South Side of Chicago, the University of Chicago is committed to supporting strong, vibrant communities in the neighborhoods surrounding its campus. Through partnerships with local communities and the City of Chicago, the University of Chicago seeks to catalyze economic growth, expand educational opportunities, improve public health, connect through arts and culture, and enhance public safety.

The University of Chicago Medicine (UChicago Medicine) has organized its community-based efforts through the Urban Health Initiative ((UHI) which was established in 2005. The (UHI) is UCM's community health department through which community-based research, population health and community benefit programs are administered.

Through the UHI, UCM seeks to understand and mitigate SDOH, reduce or eliminate health disparities, and provide residents on the South Side of Chicago with tools to manage their health and wellbeing, all with an eye toward developing scalable models of care and solutions that can be replicated in similar communities. This is accomplished through collaboration with community-based organizations and partners, innovative strategies, and resource allocation. UHI fosters strong, lasting relationships with civic leaders, community organizations, health care providers and residents to strategically improve health and access to quality care on the South Side of Chicago.

To address complex health issues impacting its community, the UHI executes initiatives and programs that provide direct health and wellness services in collaboration with community partners; provides community education and outreach programs to promote population health and self-management; and offers community benefit grants to community-based organizations to address priority health needs of community members as determined by the Community Health Needs Assessment (CHNA).

The UHI offers a [range of programs](#), to increase awareness of health issues and to improve the health of people all over the Chicago metropolitan area.

The UHI connects patients and community members to appropriate primary and specialty care providers within their communities, while supporting research into chronic health care problems that vex the city and its communities.

An initiative to build the capacity and improve the capabilities of nonprofit community organizations is the Community Benefits Grants program. Mindful that non-profit organizations play an important role in the health and vitality of local communities, the Community Benefit Grants program was launched in 2014. The Community Benefits Grants program at UChicago Medicine supports the success of nonprofit organizations whose work benefits residents on the South Side of Chicago by providing funding to support operations, programs, and initiatives based on priority health issues as determined by the CHNA.

The Community Benefits Grants Program enables nonprofit organizations to seek grant funding up to \$100k annually for up to 3 years. Each non-profit organization is aligned with faculty collaborators to assist with program design and evaluation to better ensure that the program/initiative will achieve the expected impact and outcomes.

The success of this program has resulted in improved health outcomes for residents on the South Side of Chicago. Additionally, it has also increased the capability and capacity for several nonprofit organizations to earn larger grants that has enhanced or expanded programming to target the health and SDOH for South Side communities and assisted with the sustainability of the respective programs.

Transforming the Preparation of Future Health Care Professionals

The traditional fee-for-service model inhibits the focus on value. It decreases the incentive to provide optimal health care and doesn't heal people or communities. Stagnancy engenders the same culture and learning style. For example there is no incentive for new and burgeoning health professionals to learn the impact of SDOH and focus on community health. There is no reason for hospitals to incentivize faculty or providers to teach or work differently. It also limits the incentive to decrease readmissions as it rewards hospitals for a higher volume of services. Without the adoption of a value-based system, there is less focus on community health and patients indirectly assume additional burdens that impact wellness.

A lack of focus on value-based care also shapes how future health care professionals are educated. Students may undervalue community engagement since they have been inculcated and incentivized to focus on acute care settings. Faculty may lack sufficient incentives (including promotion, tenure, funding etc.) to undertake community-based research, teaching and practice. As a result they may avoid or marginalize community engagement. These factors limit the number of faculty with expertise in community health. Yet active learning and community engagement is essential to improving health outcomes. The National Academies of Sciences, Engineering and Medicine report titled ‘A Framework for Educating Health Professionals on the Social Determinants of Health’ (2016) highlights the importance of supporting experiential learning opportunities for students that are cross-sector, interprofessional and focused on partnerships with communities. Such learning opportunities would improve students’ cultural competence by increasing their comprehension of health disparities and community needs. Additionally, faculty competencies would increase as they learn how to engage their students in community-based research and practice.

Adopting a value-based perspective and a SDOH lens influences the entire healthcare system including the education pipeline. There is an incentive for hospital systems to transform their standard operating procedures to not only address acute symptoms presented in the hospital setting but to also focus on the external factors that contribute to those symptoms. It also creates an incentive to change the way that future providers are trained in educational settings. The University of Pennsylvania- School of Nursing is an example of this as they integrate SDOH throughout their curriculum and promote the development of empathetic future health professionals.

**Moving beyond the Walls of the Hospital:
University of Pennsylvania School of Nursing- Philadelphia, PA**

Located in West Philadelphia, the University of Pennsylvania School of Nursing (SON) is intrinsically linked to the neighborhoods where it resides. It imbues knowledge and expertise through education, research and practice and partners with communities and the University to improve the health and well-being of its neighbors.

The SON focuses their local community engagement on the area that is geographically contiguous to the University; the population is underserved and over 40% live in poverty. The congressional district of the University is one of the hungriest in the nation- second only to the Bronx, New York. It is this geographic area where the School of Nursing has invested to help solve universal problems as they are manifested locally, such as inadequate healthcare.

As an anchor, the SON believes it is within the immediate local community that it can have the greatest influence and benefit and where it can best evaluate the impact that the SON is having on the community and on the University.

Penn SON articulates that governments, health professional and educational associations and organizations, and community groups should foster an enabling environment that supports and values the integration of the principles of a SDOH framework into their mission, culture, and work. The SON integrates social determinants throughout the curriculum as a vehicle to decrease health disparities and to promote optimal health for all populations. In addition, they believe addressing SDOH promotes the development of empathetic future health professionals with a desire to combat health care access barriers.

The SON commitment to addressing SDOH is supported by extensive community engagement experiences that provide a platform for learners to develop an understanding of, and compassion for, the life experience of the patient populations with whom they engage- thereby improving the provision of nursing care regardless of health care setting.

To quantify Penn SON engagement, faculty were surveyed regarding their engagement in community based education, research, practice and service throughout the City of Philadelphia, and the data were documented on a heat map. The faculty's commitment to community engagement and addressing SDOH is evidenced by the efforts in 380 community initiatives in 95 locations within Philadelphia.

The Penn Compact 2020 (innovation, inclusion, impact) motivates members of the Penn community to innovate, be radically inclusive, and positively impact their local, national, and global communities. The mission/vision/ values and strategic plan of the SON are anchored in social justice and a holistic approach to promoting health and advancing equity.

The SON strives to ensure that its conceptual and methodological approaches to research, education, and practice, which include community engagement, are informed within the context of SDOH.

One such effort included the development of a 'Global and Community Health Competencies Within A Social Determinants of Health Framework' and evaluated the integration of these competencies throughout its curriculum.

A sophomore level course, “Psychological and Social Diversity in Health and Wellness”, explores and integrates the intersection of individuals, families, and communities across the lifespan in order to conduct socially contextualized health assessments and health teaching.

A new course for upper level students, “Addressing Social Determinants of Health: Community Engagement Immersion”, was developed to provide experiential opportunities for nursing students to be educated on SDOH through engagement with communities.

Adopting a SDOH framework when caring for individuals, families and communities is a significant paradigm shift. It requires nursing students to look beyond the context of the patients within the walls of the hospital, and examine and understand the patients’ lived environment.

The SON has developed and implemented educational frameworks to build collaborative education across the University- in partnership with communities- to reduce health inequities. Through funding from the Provost Fund for Diversity, the SON developed a three part seminar series, “The Penn Interprofessional Forum to Address Social Determinants of Health”. The seminars brought national and international speakers to Penn to raise the profile and issues related to SDOH and interprofessional education. A total of 685 health professional faculty, students and community members attended the seminar series- evidence of the University’s commitment to addressing SDOH. Another interprofessional initiative, “The Penn Futures Project “ is a partnership between three professional schools at the University of Pennsylvania— the [School of Nursing](#), the [Graduate School of Education](#), and the [School of Social Policy & Practice](#)- pioneering a bold, integrative approach to collaboratively addressing the challenges of SDOH facing marginalized children and their families.

All of the Subgroup members seek to positively impact the health and well-being of their communities, recognizing that their institutions are only as viable as the communities in which they reside. They see themselves as socially accountable to their communities for addressing health disparities. For one university anchor, Florida International University’s Herbert Wertheim College of Medicine, this mission has driven them to change the future of medical education by training the next generation of physicians to address SDOH in a team-based interdisciplinary way. The mutual benefit to the community and the students is undeniable.

Transforming the Future of Medical Education
Florida International University's (FIU) Herbert Wertheim College of
Medicine- Miami, FL

FIU- Herbert Wertheim College of Medicine was established in 2006. From its inception, the school's stated mission has been to "prepare socially accountable, community-based physicians, scientists, and health professionals who are uniquely qualified to transform the health of patients and communities."

Because of its relative newness, the College of Medicine learned from the medical and public health fields. It took the fields' best practices and applied it within an interdisciplinary model. Partnering from the onset with their social science counterparts to design an educational experience that emphasized SDOH, students subsequently learned to see beyond pathologizing patients.

Their training begins by learning that the leading cause of disease isn't non-compliance or non-adherence. Because social determinants are inextricably linked to health outcomes, as future practitioners medical students learn they need to identify these factors within their diagnosis and collaborate with other stakeholders to mitigate these external factors. The Green Family Foundation Neighborhood Health Education and Learning Program (NeighborhoodHELP) sends interprofessional teams of FIU medical, nursing, social work, public health, education, biomedical engineering, and physician assistant students (supervised by faculty) to provide care and facilitate services to households in underserved neighborhoods in Miami-Dade.

The school understands health outcomes as social accountability. To embody this belief administrators intentionally shifted away from the industry standard and took risks. By centralizing the patient and viewing them and other stakeholders as assets and partners the College is effectively implementing pedagogy with a 99% pass rate for the U.S. Medical Licensing Exam Step 1 and all students receiving matches for residency. The critical shift in pedagogy is because of the willingness of leadership- from the board of trustees through the administration.

The fundamental shift in the College's framework has impacted how they operate. As the College authentically partners with the patients and stakeholders of the neighborhood they also hire residents and are a reflection of the community where they reside. They collaborate more effectively, eliminating duplication of efforts and saving money as they share resources.

For some universities, while they may identify as an anchor institution the commitment to address SDOH may primarily be at the faculty or department level, guiding faculty scholarship and pedagogy, and student learning and service. This is the case for University of Connecticut as their commitment to SDOH is demonstrated by specific initiatives spearheaded by various faculty in different schools and departments. Many faculty members at the University of Connecticut recognize the importance of developing more culturally competent practitioners as well as improving the diversity of the healthcare workforce by cultivating practitioners from within underserved communities. This commitment is reflected in their strategies.

Developing Culturally Competent and Diverse Practitioners University of Connecticut- Hartford, CT

University of Connecticut (UConn), located in Hartford, is a land, sea and space grant institution that is deeply committed to the communities and the state in which it resides. They believe that engagement in their communities makes the University's collective activity more impactful and benefits the community. Their engagement with the community is based on the goals of being responsible, relevant and reciprocal. In practice this means that their efforts should be sustainable, important to the community, and mutually beneficial.

Hartford is one of the poorest cities in the nation. According to the U.S. Census Bureau, 30.5 percent of people in Hartford live in poverty compared to the State rate of 9.6 percent. Residents are affected by many SDOH resulting in lower graduation rates from high school, lower life expectancy rates, and greater incidence of chronic disease.

UConn's engagement with addressing SDOH occurs at the program level with faculty scholarship and pedagogy, and with student learning and service. Several UConn faculty members have spearheaded initiatives that address specific SDOH in their courses and programs.

One example of this is Husky Sport, which began in 2003, and is a community-campus partnership focused on youth development through physical activity, nutrition education, and mentorship. The program partners with the city, schools and non-profits to embed these activities within an elementary school and at afterschool settings in North Hartford.

Through a series of service learning courses that are grounded in equity and social justice, university students have an opportunity to engage with youth, families and community partners in shared teaching, learning and practice around nutrition education, physical activity, life skills, and academic enrichment. The success of this program is evident in the fact that it has continued for 16 years despite the challenge of leadership changes at the city and school level. It has served as a way to bridge the gap between the University and the North Hartford community as the community recognizes that the University can be an enduring partner. Some of the North Hartford students who participated in the program have subsequently gone on to attend UConn or been hired to work in the program. Additionally, it has resulted in increased cultural competency and understanding among college students about the challenges that underserved communities face.

Another example of faculty leadership around SDOH is the Urban Service Track (UST), which began in 2007 and is a health based interprofessional educational opportunity addressing care for the underserved in urban areas. Several faculty members recognized that learning in interprofessional teams is critical for improving patient outcomes particularly among underserved communities. The Schools of Dental Medicine, Medicine, Nursing, Pharmacy, and Social Work designed nine interprofessional competencies for students to master and then apply while caring for vulnerable populations in homes, clinics, senior centers and community agencies. The UST includes approximately 75 students per year who make a two year commitment to the project. Meeting monthly in interprofessional teams, students and the faculty mentors learn together and then deliver care in the underserved areas in between the monthly meetings. Now in its 11th cohort, the UST has delivered more than 10,000 hours of annual service to the vulnerable populations of Connecticut. Outcome data also demonstrate a significant difference in attitudes toward understanding interprofessional role as a result of these sessions.

Recognizing that the diversity of the healthcare workforce was not reflective of the diversity of the populations served, in 2007 UConn faculty members from the School of Nursing began working with the Academy of Nursing and Health Sciences in Hartford. The Academy is a diverse public high school which prepares students to successfully pursue a degree in nursing or healthcare fields. UConn faculty members have worked with the school to focus on content integration, content relevance, and life skill development to ensure that more students graduate and are prepared for higher education in healthcare fields.

Faculty are also engaging in collaborative efforts to transform SDOH within the community. In 2017 after North Hartford was designated a Promise Zone, a group of city leaders and organizations came together to launch the North Hartford Triple Aim Leadership Collaborative, which aims to improve the health, wellbeing, and value of investment in North Hartford. Faculty from UConn joined other residents and partners from the city, organizations, and funders to serve on the Leadership Council. The Council provides overall direction and support to the Collaborative as it focuses on addressing food security, child health, and education.

UConn is illustrative of how various faculty members can develop strategies for addressing SDOH through scholarship and pedagogy, and by creating experiential service learning opportunities even without a formal institutional commitment to addressing SDOH. Additionally, the faculty commitment to preparing culturally competent practitioners as well as cultivating practitioners from within underserved communities is evident in their chosen strategies.

Conclusion

Emboldened by the focus on value-based care, hospitals have the opportunity to shift from addressing patients' symptoms to supporting their overall wellness. The shift will impact how hospitals, healthcare institutions and universities operate. Ultimately, the benefits and long term impacts of healthier populations and communities will outweigh the time and resources needed for transformation.

The institutions in this paper have demonstrated their willingness to address SDOH albeit with different goals and strategies. They have focused on addressing multiple determinants such as education, employment, housing, economic development and food insecurity among others. Some of the institutions have also used the SDOH lens to transform curriculum and the way that nurses, physicians and health care professionals are trained.

All of these anchors have faced challenges along the way. For many of the healthcare institutions the biggest challenge has been in creating a culture change among doctors and medical staff away from a focus on volume of services and towards a focus on value and quality of care. Given that it takes time to see the results of investing in SDOH strategies, it can be difficult to provide data to convince practitioners. Therefore, it is important to find champions who are influencers and risk takers. Additionally, having the support of the CEO and board can ensure that buy-in is established at the highest level and passed on to departments.

Some healthcare institutions have also found that in trying to focus on quality of care and reduce the number of unnecessary hospitalizations, they have had to transform a culture of use among the community. For some patients in low-income communities, the hospital may be a safer place when they are confronting violence, housing instability, and food shortages. That is why addressing SDOH and helping patients overcome these challenges ultimately can also decrease the cost of care and improve community well-being.

For universities focused on community development one of the challenges is overcoming a lack of trust among residents. Given the history of universities conducting research in minority communities, many residents may be reluctant to participate in university sponsored programs. For this reason, it is critical to approach communities as partners and ensure that they are in the driver's seat in terms of identifying issues and needs. Establishing a community advisory board and using community-based organizations as partners in implementing strategies is one way to overcome this challenge.

In changing the way that practitioners are educated one of the challenges that some universities face is finding faculty with expertise in the area of SDOH and experience in community engagement in their research, teaching and practice. Part of the problem is that the current system undervalues community-based research and engagement and doesn't provide incentives for faculty in terms of tenure, promotion and funding. Transforming this culture will take time, but universities can begin to make that change by fostering an educational environment that views addressing social justice and health equity as integral to the mission of the university. Additionally, recognizing the importance of diversity and inclusion and identifying strategies to develop practitioners from within underserved communities is critical.

For some anchors that have been addressing affordable housing in their communities, one of the biggest challenges has been the uncertainty of the housing market. While initially pricing or availability of housing units may not be an issue, over time as the housing market experiences an upswing anchors may have to compete with the private market and out of town investors resulting in inflated sales pricing. One way to address this issue is to 'land bank' properties, which involves buying properties for future development or sale. Therefore, as anchors develop their strategies they also have to consider and plan for future market changes that may result from their community investment.

All the anchors are at different stages in their journeys. Some have been employing these strategies for a number of years and are seeing measurable results, such as a decrease in home vacancy rates in the community or high utilization of a community engagement center. Others are still early in their journeys and success for them is developing partnerships and leveraging resources to begin implementing their strategies. For university anchors focused on curricular approaches, success at this stage might be the growing number of faculty and students engaged in interdisciplinary experiential community initiatives. Over the long term the anchors hope to see measurable results such as: an increase in high school graduation rates; a decrease in unemployment rates; reduced trauma and violence in the community; and impacts on chronic health conditions such as asthma and diabetes rates. Above all in the long term the anchors hope

that their efforts will lead to a decrease in health disparities and improvements in the overall health of communities.

Regardless of where the anchors are in their journeys there are several critical elements that have helped: strong leadership to ensure buy-in; community partnerships that create trust and help identify and implement strategies; the ability to leverage their assets; and an interdisciplinary approach to SDOH. They are focusing on systemic change by transforming the way that providers treat patients, shifting the focus to the communities where they reside. By creating practitioners who are better informed, they are developing future advocates of change who realize that the only way to address health inequities is by targeting SDOH.

Inculcation and adoption of a SDOH lens is a mechanism for comprehensively addressing health-related social needs. But, in the long run, this will require an integrated approach. Implementing initiatives that grow to systemic models requires hospitals, health systems and universities to work across disciplines, sectors, and issues. In the process they can share promising practices, challenges, and outcome measures and catalyze further change. By sharing their experiences, the Subgroup members hope that this paper will encourage greater dialogue and sharing among other healthcare institutions and universities about how to adopt and apply a SDOH lens as they move towards a value-based approach to health care. The Subgroup itself provides an ongoing forum for mutual learning about how to stimulate healthier neighborhoods, municipalities, and regions by incorporating SDOH into their community partnerships.

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