#### WORK IN PROGRESS AND LESSONS LEARNED

# The Neighborhood Health Initiative: An Academic-Clinic-Community Partnership to Address the Social Determinants of Health

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### **ABSTRACT**

Background: A medical school, federally qualified health center, and community-based organizations wanted to improve social determinants of health and health outcomes in an urban area with economic and health inequities.

Objective: To describe the development of the partnership called the Neighborhood Health Initiative (NHI).

Methods: Community-engaged strategy with multidisciplinary partnerships used an established framework to develop trust, assess needs, and respond.

Results: Community Centered Health Home: Co-locating primary care services, traditional healers, mental health and legal services in response to community partners' and residents' concerns. Needs Assessment: Community health workers conducted multiple visits to build trust and ascertain community members' strengths and challenges. Community Driven Initiatives: selected shared projects provide solutions to locally identified problems.

Conclusions: The NHI is working toward sustainable strategies to improve population health in an underserved area of Austin, TX. Consistent and frequent contact contributed to developing relationships and trust; limiting partners and objectives focused activities on meeting initial goals of the NHI. Next steps include evaluation of the three aims of the NHI and process evaluation to guide future initiatives.

**KEYWORDS:** Community health partnerships, Health disparities, Power sharing, Process issues, Poverty, Health Care Economics and Organizations, Needs Assessment, Social Change, Medically Uninsured

### Introduction

People in many U.S. cities are adversely affected by health inequities such as disparately higher levels of stress, depression and chronic diseases. Health disparities are due to lack of access to primary care and high costs of care, as well as to social and environmental inequities such as access to few economic opportunities, substandard and unstable housing or food, insufficient transportation options, unsafe neighborhoods, discrimination, and insufficient social support. Non-medical social and structural environmental inequities determine people's health, far more than medical care. Non-medical influences account for 85% of physical and mental health compared with the 10-15% that access to quality medical care contributes to health. The social, environmental, and economic conditions in which people live, collectively called social determinants of health, significantly impact health over the lifespan. Secondary of the such as disparately and the such as disparately impact health over the lifespan.

Each social determinant is a complex issue that no single organization in the health or human services sector has the capacity to address.<sup>3,6</sup> For example, current healthcare systems lack the required expertise to address non-medical social determinants and human service organizations are often not sufficiently aligned in their efforts to improve health.<sup>3</sup> Cross-sector collaborations are essential to achieve individual and community level health.<sup>7</sup>

This paper describes the collaboration called the Neighborhood Health Initiative (NHI), formed to align and synergize efforts of multiple agencies to improve the health of a large and diverse urban community in Austin, TX. The collaboration partners include a medical school, a Federally Qualified Health Center (FQHC), and community-based social service organizations whose clients live in the area surrounding the clinic. The process of forming collaborations, the strategies used for community engagement, the NHI activities undertaken to address social

determinants of health with the aim of improving population health and health equity, are described with lessons learned about forming multisectoral partnerships.

#### Methods

Setting

The setting for the NHI is a community that encompasses two adjacent zip codes. The population is predominantly of Latinx residents and people of non-White races (<72%); about one third are immigrants and refugees. The median income is approximately \$50,000 and about one quarter of residents have no health insurance. Real Like many areas of the city and across the country, the community lacks affordable housing and long-time residents have been displaced by rising housing costs. In addition, residents experience relatively high rates of chronic diseases, substance abuse, and mental illness. 11

## Partnership Development

The NHI was initiated by the Dell Medical School (DMS) at The University of Texas at Austin. DMS is a new medical school, supported by county property taxes, which drives its mission to make the city and surroundings into a "model healthy city" with the goal of increasing both quantity and quality of life, especially for lower-income residents. DMS's promise to "rethink everything" pertaining to health and healthcare attracted the attention of the CEO of the Lone Star Circle of Care (LSCC), a local FQHC system with 21 clinics in six counties in southeast Texas. In 2016 she invited the leaders of DMS to partner in developing and evaluating the impact and sustainability of an innovative value-based primary care redesign for a new clinic in their system. The clinic is situated in an area with high rates of poverty, chronic disease, crime, substance abuse, and people experiencing homelessness. The conversations between DMS

and LSCC and their shared commitment to improve population health formed the foundation for the NHI collaborations.

The medical school's partnerships with community organizations were guided by its Community Strategy Team (CST), a group of nine community members representing many subpopulations, including Latinx, Black, Asian American, formerly homeless, formerly incarcerated, and immigrants. DMS formed the CST was formed in 2016 to provide guidance on community engagement to improve community health, medical education, research, and healthcare service delivery. For the NHI, the CST contributed to the development of interview and survey questions and facilitated deep connections between DMS and community members and organizations by making introductions, promoting NHI activities, and showing visible support by attending NHI events. Two other community-based organizations – Go Austin! / Vamos Austin! (GAVA) and Building and Strengthening Tenant Action (BASTA) – joined the NHI in 2018 (see Table 1).

These two organizations provided social services and acted as community organizers to build coalitions for tenants' rights and housing availability, neighborhood safety, and food access. Both types of expertise, service provision and community organizing, are needed to shift the power that is at the root of the inequities that influence social determinants of health. The social service organization partners link clinic patients with programmatic solutions for their specific needs (e.g. connecting a household identified as food insecure with a food pantry). The medical school serves as an ally to community organizers to amplify their messages and provides resources (e.g. hosting community convenings and promoting a coalition's platform for action) that support their efforts to mobilize stakeholders across the community.

BASTA is well-regarded for its work in building coalitions and organizing and mobilizing community members to recognize and wield their power to create healthier spaces and opportunities. GAVA works with community members to reduce barriers to healthy foods and physical activity, advocate for accountability and neighborhood safety, and create neighborhood stability and resilience despite economic inequities and climate-related disasters. Equally important to GAVA's work is to create more equitable policies and programs for the people and neighborhoods that they serve. Therefore, a partnership between GAVA and the NHI focused on improving healthcare access and living conditions in the neighborhoods surrounding the clinic and benefited the clinic personnel who had little experience in health outside the clinic walls.

The NHI began with regular, usually biweekly meetings among community partners. Initially, the medical school hosted the meetings but eventually LSCC and occasionally the other partners hosted meetings in the community. This was preferable because of heavy traffic near the medical school and costs of parking were a deterrent to attendance. More importantly, meeting at sites in the community gave all attendees the opportunity to interact more with community residents and support businesses. The partner organizations shared their missions, values, and approaches in addition to setting mutual goals for the partnership and outlining priorities.

The collaboration was guided by the understanding that the deleterious effects of current social determinants of health on the residents of the Rundberg area community are predicated on a long, deliberate history of discrimination, disenfranchisement and disinvestment. In this view, poor health and well-being – caused in large part by a series of public- and private policies enacted over time, with catastrophic consequences, intended or otherwise – must be undone through collective action. Performanchisement of residents into community and civic

processes is critical for change that leads to lasting better health and wellness. This work requires long-term commitment to see results.

#### Results

The first three NHI projects were: 1) embedding the community-centered health home (CCHH) model<sup>6</sup> into a primary care clinic; 2) a Household Level Assessment (HoLA) of residents' social risks and needs used to inform clinic services and community-based improvement efforts; and 3) a program, called the Community Driven Initiatives, that supports residents' ideas about how to improve health in their neighborhoods. The collaborations and communication among the NHI partners underly the success of each of the components.

## Community-Centered Health Home

A CCHH is a model for community-engaged primary care described by the Prevention Institute in which a primary care clinic takes action to improve population health for its surrounding neighborhood. <sup>15</sup> The CCHH's core practices include gathering data on the medical and social needs among the clinic's patients and the residents of the surrounding community, analyzing the data for trends, sharing the findings with community partners, identifying strategies and coordinating plans for integrating medical and non-medical services, activating patients and community residents to improve neighborhood conditions, advocating for improvements and resources in the neighborhood, strengthening partnerships, and improving organizational practices to disrupt systemic problems that perpetuate health disparities. <sup>15</sup> The CCHH aimed for the clinic's multidisciplinary team of health care providers to identify and manage patients' physical, mental, and social needs in partnership with community organizations.

The NHI collaborative sought to develop a comprehensive CCHH to advance health of the surrounding neighborhood and health equity. To that end, the first step for the NHI partnership was to jointly hire and employ a primary care physician to serve the NHI. Both clinic and medical school leaders co-wrote the job description, promoted the position, and interviewed candidates and jointly selected the finalist. Half of the physician's salary is paid by the FQHC and half by the medical school, where the physician holds the rank of Assistant Professor. The goal of co-hiring the physician was to bring DMS's academic missions of research and teaching to support and enhance Lone Star Circle of Care's health delivery mission. The physician needed to have excellent primary care clinical skills, an orientation towards working in and with a community to improve health beyond the provision of healthcare, and skills to plan, implement, and evaluate innovations like value-based care models. However, co-hiring was challenging because the NHI partnership between the two organizations was new and required patience to work through the administrative processes of both organizations. As with all successful partnerships, the medical school and the clinic needed to be transparent about priorities in order to build trust. The result was a stronger relationship that formed the foundation for collaborations with other organizations in the NHI partnership.

To become a CCHH, a hub where people are already getting health services that also addresses the health of their family and community, the clinic needed to engage with community-based organizations. The physician, with guidance from the medical school, helped further the transition to a full CCHH model by introducing services into the clinic building, including psychotherapy, an indigenous traditional healer, and a medical-legal partnership. These services were not offered directly by the FQHC but were streamlined for patients because they were located on the clinic site. Clinic and service staff worked to create seamless bidirectional

referrals. Selection of these services were based on the city's community health assessment<sup>8,9</sup> and on patient and neighborhood feedback. For example, the indigenous healer is a revered member of the community who initiated a conversation with the medical school about teaching students about complementary alternative healing practices. The medical school introduced her to the clinic staff who recognized that, by locating her practice in the clinic, her clients were more likely trust the clinic's healthcare services. Clinic providers heard anecdotally that patients appreciated having the indigenous healer available at the clinic. The medical legal partnership was welcomed onsite to facilitate patients' legal needs, often related to housing, employment, or family legal issues, that contributed to worse health. By offering these co-located services, the CCHH demonstrated a holistic view of health and support for community members.

## Household Level Assessments of Social Determinants

To assess the impact of social determinants on residents' health, the NHI employed Community Health Workers (CHWs) who conducted homes visits to assess the needs of household members, learn about the joys and challenges of living in the neighborhood, and connect residents to a variety of services (e.g., food pantries, pharmacy, transportation). The household level assessment (HoLA) is the first US adaptation of the Household Counseling and Testing (HCT) program developed by the Academic Model Providing Access to Healthcare (AMPATH) program in western Kenya. We used AMPATHS's HCT as a model for HoLA. <sup>16-18</sup>

In Kenya, HCT counselors approached more than 1.2 million persons, with a 97% participation rate, to test for HIV and other infectious and chronic diseases, assess vaccine utilization, and pregnancy in females 13 and older, provide health education, and refer patients to health services. Besides improving health of individuals, the HCT initiative improved knowledge and decreased stigma of HIV and TB among community members. <sup>16</sup> HCT

demonstrated the importance of gaining trust in the community before beginning the household assessment, establishing a long-term presence, and helping residents meet their medical and social health needs. Although other initiatives have used CHWs to conduct community assessments, the NHI emulated and built on the Kenyan HCT model because of its success in improving population health.<sup>16-18</sup>

Because is critical to work in partnership with communities, the NHI sought to discover how to build trust and earn community members' desire to collaborate using a slow, deliberate, and stepwise approach. First, DMS program managers formed relationships with leaders and clients of key community-based organizations including a community group originally formed to create better relationships with local police and with parent support specialists in the neighborhood schools. The community organizations provided access to community members and allowed NHI staff to hear from them about their priorities for their neighborhood. Next, after IRB approval, NHI conducted focus groups with predominantly African American and Latinx community residents and stakeholders to learn from people with social barriers to health and those directly affected by health inequities. The focus groups discussed how to gain trust and access to people in their homes. Participants identified conditions in their neighborhoods that affected their health, such as the cost of housing, immigration, lack of transportation. Details about the focus group process and findings have been published elsewhere. 20

The focus group findings, recommendations from the CST, and items from several different surveys were used to create a comprehensive survey (about 40 items depending on skip patterns) to assess social needs and the impact of social determinants of health (housing, food, transportation, healthcare access, mental health, substance use, exposure to violence). The HoLA survey was pilot tested in 2018 with a convenience and snowball sample (n=100) of adult

residents of the target neighborhoods. IRB approval was not needed for this stage as the aim was not to conduct research but rather to provide the NHI partnership with information to improve services in the area.

Trained CHWs who were familiar with the local community conducted the HoLA pilot. As guided by the focus groups, CHWs did not go door-to-door, as the original HCT had done, but instead developed relationships with residents and made appointments for the home visits. In addition, the first version of the survey focused on social determinants rather than on individual health status. During the home visit, the CHWs asked about what contextual factors make it easier and harder to be healthy, administered the HoLA survey, assessed the household representative's highest priority needs, and connected residents to appropriate local resources, including food pantries, clinic services, housing support, transportation services, and a medicallegal partnership. The NHI partners hosted a community event for community members and stake-holding organizations to report the HoLA findings and engage with community members in interpreting the findings and discussing next steps. Community members' feedback was vital to an accurate interpretation of the HoLA findings. For example, the survey found that a high proportion of respondents had spent the night in the hospital in the last year, which implied a high level of illness in the community although the survey had not asked the reason for hospitalization. However, one of the community residents suggested that one reason for the hospital stays might be because there was a high birth rate in the community and it was normal for women to stay overnight after delivering their babies in the hospital. The community members' interpretation of the findings served to change the NHI partners' view of the community and informed revisions to the HoLA survey. A second and expanded round of HoLA surveys were halted by the pandemic although CHWs switched methods to telephone HoLA participants to inquire about and respond to their health and social needs early in the pandemic.

### Community-Driven Initiatives: Call for Ideas

In addition to identifying and helping overcome social barriers to health identified by individuals and households, the NHI also strives to collaborate with people who live, love, work, play, and pray in the communities of focus. People with lived experience in social and health inequities are the experts in identifying what can be done to enhance the health of their communities. The Community-Driven Initiatives (CDI) program has widely broadcast three Calls for Ideas in the past four years throughout Central Texas, including the Rundberg area, that invited community members to 1) identify a health need, problem or opportunity specific to them or their community, and 2) suggest an intervention to meet this need, solution to a problem, or way to leverage an opportunity. Just over half of the 268 ideas were submitted by individuals, the rest by organizations including social service, educational, financial, municipal parks, and businesses. Idea originators include people of all ages, from middle schoolers to seniors; people living with chronic physical and mental health conditions, caregivers, and cancer survivors; affluent people as well as people living in poverty; and people experiencing homelessness. All ideas were evaluated by a Project Development Team composed of professionals and students with expertise in research, healthy behaviors, community planning, and public health, in addition to members of the CST.<sup>21</sup>

CDI staff have helped people with lived experience and expert viewpoints plan and implement place-based solutions with a focus on sustained community impact. Topics most commonly promoted physical activity, mental health, living with chronic conditions, access to healthy foods and gardening, healthcare delivery, parks, housing, and economic empowerment.

A few ideas proposed experiences to help medical students learn about the people they will serve. For example, the originator of one of the selected ideas proposed to use a mobile food truck, an iconic feature in the city's culinary scene, to teach healthy cooking to youths. Another originator of a selected idea proposed an inter-generational gardening program, which paired teenagers with senior citizens. The seniors taught the teens how to grow vegetables while the young people did the harder physical labor of preparing the vegetable beds. At the end of the program, seniors, teens, and their families enjoyed the harvest. A third example of a selected idea was submitted by an advocate for people experiencing homelessness. She helped university faculty develop an elective course for medical and social work students about the experiences and health needs of people experiencing homelessness.<sup>21</sup>

Twenty-two of the ideas were selected by the CST and Project Development Teams for further development. Many more idea originators were connected with government agencies, community organizations, or academicians, received training or participated in shared learning, or were coached on grant or program opportunities. The lasting impact of CDI may be the policies it created that fostered inclusivity. For example, CDI staff scheduled partner meetings in community settings rather than at the medical school where parking policies and costs were prohibitive, or instead of hosting the meeting CDI staff would request to be on a community organization's agenda, which balances power dynamics and respects the community's leadership. Another important example is that at the suggestion of the CST, the CDI staff altered the proposed idea rating form to include the impact of the project on gentrification, a significant issue in the city, but frequently overlooked by the University in its community interactions.<sup>21</sup>

#### Discussion

The NHI is an innovative approach to improve the health of a diverse population and advance equity in a geographic area by addressing social factors like housing conditions, food access, economic opportunities, education, safety, and health care access. The NHI leverages members of academic, healthcare, governmental, and nonprofit sectors to build a team in partnership with the residents of a geographic community who are directly impacted by health inequities. The goal was to build a partnership that provides healthcare and that cares for the health of individuals, the members of their household, and neighborhood in which they live. Key to success are identifying the most common and impactful health needs and best practices through shared knowledge and experience; starting small, assessing frequently, and rapidly evolving local initiatives. Key to sustainability is establishing a payment model that eschews feefor-service in favor of value-based, outcomes-focused healthcare financing. Reduction in healthcare costs will provide sufficient funds to sustain the CCHH model. 22.23 Trust is essential to all parties in the NHI: trust between healthcare providers in multiple sectors and the community members they serve is mandatory for people to engage as active partners. The NHI will succeed in the quadruple aim of improving the experience of healthcare, improving the health of populations, increasing workforce capacity to promote community as well as clinical health, and lowering healthcare costs.<sup>24</sup>

The NHI projects have relied on building and sustaining trust among the partners and with community members. Trust was developed slowly through consistency and via frequent contact. NHI partners met biweekly and rotated place of meetings. NHI staff attended community meetings and events, and met with public school principals and liaisons. More important than merely being visible in the community, NHI staff interacted with community members, hearing from them about issues that were important to them. Another important

component of trust-building was not promising more than NHI could deliver. All of these community engagement strategies required that NHI staff demonstrate their respect for and commitment to the community.

A constant obstacle to progress is pursuing funding from foundations and research institutes for the NHI activities. A patchwork of funding successes has made NHI activities over the last four years possible and the search for funds that would allow a more strategic and coordinated approach continues. Although all academic and non-profit organizations are challenged to fund their activities, NHI partners have learned to adapt to different priorities, timelines, and business processes. As the NHI partnership evolved over time and in the context of the COVID-19 pandemic, meetings were held via online video platforms and the focus shifted to assessing and ameliorating the effects of the pandemic on the community and responding to community needs for health and security.

Another lesson learned in the NHI partnership has been not to add many partners too quickly. While the partner organizations share common goals, each organization brings its own perspective and approaches. The partners need to take the time to learn from each other and come to agreement about the best ways to achieve NHI goals. Another important challenge to maintaining the NHI is that the partner organizations bring different resources to the work. Partner organizations have been attentive to the imbalance in resources and the requirement that no single organization take disproportionate control of the partnership.

Collaborative partnerships are required for every component of the NHI. Engaging with people directly affected by health inequities identified particular circumstances that affected health and healthcare in the neighborhood. However, it is common for community members to mistrust universities and see faculty, healthcare providers, and social service providers as

outsiders with their own agenda.<sup>25</sup> Thus, the NHI is a developing system that is grounded in community partnerships and engagement that works to shift the balance of power that is at the root of health inequities.

Qualitative evaluation (e.g., user satisfaction and in-depth descriptions about the community members' and patients' experiences) and quantitative evaluation (e.g., change in service utilization, number of ideas' generated) of the three activities is in process. It is also important to evaluate the processes of the NHI and the partners' satisfaction with the partnership. These data will provide a solid foundation for planning, implementing, and evaluating interventions the build on partner strengths and contributions and community members' priorities.

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Table 1. Founding Partner Organizations of the Neighborhood Health Initiative

| Partner                                  | Role  |
|--|---|
| Lone Star Circle of Care (LSSC) at       | A clinic in a Federally Qualified Health      |
| Collinfield                              | Center; its CEO initiated the NHI partnership |
|  | with DMS. Provided clinicians and             |
|  | administrative support for developing a       |
|  | community-centered health home, hosted        |
|  | meetings and community events.                |
| Dell Medical School at The University of | Academic medical school with an interest in   |
| Texas at Austin (DMS)                    | population health. Provided academic          |
|  | leadership and expertise, staff support,      |
|  | clinicians, community engagement specialists, |
|  | community health workers, and the             |
|  | Community Strategy Team.                      |
| Go! Austin / Vamos! Austin (GAVA)        | Community-based organization with expertise   |
|  | in community organizing, particularly for     |
|  | healthy food and physical activity, and       |
|  | neighborhood stability.                       |
| Building and Strengthening Tenant Action | Community-based organization with expertise   |
| (BASTA!)                                 | in helping renters work together to improve   |
|  | their living conditions.                      |