

Accountable Health Communities Model: Sustainability in Texas

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Executive Summary

From 2017-2023, the Centers for Medicare & Medicaid Services Innovation Center implemented the Accountable Health Communities (AHC) Model in 28 Bridge Organizations, or hubs, across the United States. The AHC Model aimed to test whether addressing the health-related social needs (HRSN) of Medicare and Medicaid beneficiaries could reduce frequent Emergency Department (ED) utilization and cost of healthcare delivery. Texas was the only state in the US to have three AHC Model Bridge Organizations. This placed Texas in the unique position of being able to evaluate the implementation and subsequent sustainability of the Model in three large, diverse geographical locations, all serving safety-net patient populations. Over the course of our evaluation, we conducted interviews and focus groups with implementors of the AHC Model in Dallas, TX, Houston, TX, and San Antonio, TX. We partnered with Bridge Organization staff, health system front-line implementers, middle managers, leadership, and community-based organization (CBO) leadership and staff to gain comprehensive perspectives of the Model's activities. The objective of this evaluation project was to assess elements of strengthening peer AHC navigation (SPAN) that the three Texas AHC sites are sustaining, scaling or adapting to inform future delivery of social needs services. We used a qualitative natural experiment approach to assess and evaluate post-model changes in implementation (planned and unplanned adaptations), sustainability, fidelity, ongoing technical assistance needs and scaling (expansion) of AHC or AHC-like (social needs) activities in Texas using the six AHC Model essential elements from SPAN: 1) workforce development and training, 2) clinical delivery site staff and leadership engagement, 3) patient navigation, 4) advisory boards and community alignment, 5) data systems, and 6) quality assurance.

Overarching Themes Identified

Human Impact of the AHC Model: The activities of the AHC Model were universally deemed valuable due to the positive human impact the Model had. Connecting patients with needed supports and seeing the human impact sparked the desire for all involved with the Model to continue, if not expand, AHC Model activities in their settings.

Communicating, Documenting, and Reporting: Documentation is key to successfully implementing the AHC Model, but it created a challenge for screening and referral staff. The requirements were sometimes overwhelming to already overloaded and inadequately trained staff. The need for effective and

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accurate screening and documentation processes is critical. By querying staff members working at different points in the screening, referral, and navigation process, we gained a clear understanding of the effects communication miscues could have on patients already in need. Emotionally and resourced strained patients reported that communication missteps that sent them to CBOs that could not assist them left them feeling defeated. Communication was key to successfully addressing patients' needs. Any inroads implementors could leverage to build a trusting rapport with patients proved beneficial in patients getting HRSN assistance.

Supporting and Sustaining Success: The nature of the work in the AHC Model requires continual training and technical assistance. Without the Bridge Organizations and funding provided through the Model, there are now gaps across all capacity building domains. There are even greater gaps in CBO programming, training, implementation, and technology needs due to their limited role in the Model. Increasing expectations on CBOs as HRSN screening becomes a national requirement further need to be coupled with capacity building and funding assistance. The limited capacity of CBOs will quickly be stretched beyond its ability to meet both individual and community needs with the projected increasing demand as HRSN screening becomes required by CMS. To sustain the success of the AHC Model in Texas, the Model's activities would need to be continued at a minimum at the same level they have been implemented over the past six years. While there's consensus regarding the positive impact of the AHC Model, there was not a clear consensus on who should be financially responsible for maintaining its activities, nor who should be in the Bridge Organization role.

Cross-cutting Recommendations

Bridge Organization Functions: Texas lacks a defined entity to provide training, capacity building, and technical assistance to support the continuation of the AHC Model or AHC-like activities (HRSN screening, referral, navigation) going forward. The Texas Bridge organizations and the larger research community have yet to land on the entity best qualified to provide these supports. However, it is universally seen as necessary and is a critical gap post-Model for Texas.

CHW/Navigator Credentialing to Complement New CHW Financing Policies in Texas: In complement to HB 1575, passed by the Texas legislature in 2023, we recommend that the Texas Department of State Health Services develop

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standardized training and certification for social needs navigators under the existing CHW certification program or consider developing credentialing for a patient navigator program. This would address the current need for a competency-based certification for CHWs in the professional role of social needs navigator. Social needs navigators require specialized skill sets to assess and address social needs successfully.

CBO Capacity Building: As mentioned above, CBOs need more capacity to supply the immediate surge in demand that recent policy changes will create. They need to be equipped to provide the Bridge Organization functions, but this isn't currently possible without significant capacity building for the CBOs. Fortunately, other states have been able to implement capacity-building methods for their CBOs. We recommend evaluating these programs, implementation models, and program impacts to determine their viability for implementation in Texas.

Financing and Policy Change: To tackle the fiscal responsibility of AHC activities, we recommend exploring potential policy and financing avenues to provide sustainable, equitable funding to all parties necessary for AHC sustainability. Other states have begun to provide financing for related activities, which may also apply to Texas. We recommend further stakeholder engagement to assess the feasibility and potential fit of various financing mechanisms.

Looking forward, more collaborative work is needed to sustain and scale the AHC Model in Texas. With all three Bridge Organizations keen on continuing the work started by the AHC Model, we encourage conversations on how they and other key stakeholders can come together to leverage their collective knowledge to assist decision-makers in developing sustainability policies and practices for Texas.

Background

Accountable Health Communities Model (AHC)

It is widely recognized that health-related social needs (HRSN), which are factors influencing healthcare usage and associated costs, primarily arise outside the traditional healthcare delivery system. HRSN include food insecurity, housing instability, transportation, ability to pay bills and other related social risks.

The Centers for Medicare & Medicaid Services' overarching aims of better care, smarter spending, and healthier people lead to the desire to test whether addressing the health-related social needs of its beneficiaries would impact healthcare utilization and costs. The Accountable Health Communities Model was borne out of this inquiry. The AHC Model aimed to address the current gap between healthcare delivery and community services in the US healthcare system. A product of CMS's Innovation Center, the AHC Model was implemented from 2017-2023 and brought innovations to the healthcare sphere, like systematic health related social needs (HRSN) screening of all beneficiaries, testing the effectiveness of referrals, testing the effectiveness of community service navigation, and partner alignment at the community level. The AHC Model was the largest test to date of HRSN screening, referral and navigation in the US.

The CMS AHC Model focused on five core HRSN (housing instability, utility needs, food insecurity, transportation, and interpersonal violence) and several supplemental needs that included but were not limited to education, health behaviors, family and social support, and employment and income as defined on the following pages.

Background

Accountable Health Communities Model (AHC)

Core HRSN:

Housing Instability: Homelessness, unstable, unsafe, poor quality housing, or inability to pay rent/mortgage can lead to chronic health conditions, higher emergency department utilization, and difficulty managing illnesses.

Food Insecurity: Lack of consistent access to healthy foods can lead to malnutrition, obesity, diabetes, and other health issues.

Transportation: Without reliable transportation, patients may miss medical appointments, fail to pick up medications, or be unable to access other health-promoting services. This can lead to untreated or exacerbated health conditions.

Utility Needs: difficulty paying utility bills, access to basic utilities such as heat, electricity, and water. Without these, individuals face risks to their health and well-being.

Interpersonal Safety: This relates to safety from harm in personal relationships, intimate personal violence, elder abuse, child maltreatment, or abuse. Such unsafe environments can have profound mental and physical health implications.

Background

Accountable Health Communities Model (AHC)

Supplemental HRSN

Employment and Income Stability: Unemployment or underemployment can lead to a lack of insurance, inability to afford medications, and increased stress. Financial strain can also lead to decisions that adversely impact health, such as choosing between purchasing medication or food.

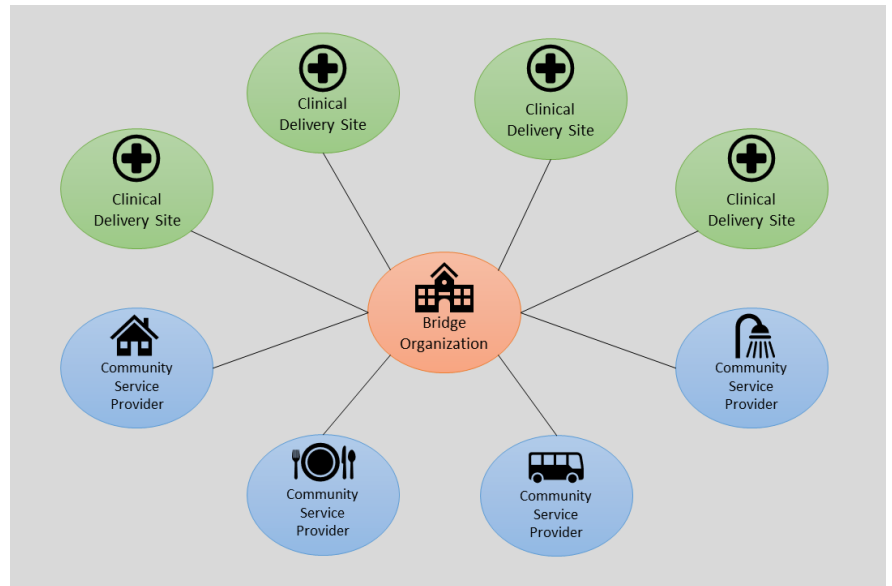
Social Support and Community Safety: Isolation can have significant mental and physical health consequences, and unsafe communities can lead to injury, mental stress, and limited outdoor activity.

Education: Higher education levels are often linked to better health outcomes. This is due to a combination of factors, including better access to health information, higher income potential, and healthier lifestyles.

Accountable Health Communities Model (AHC)

Through the model, CMS funded 28 organizations across the US to serve as hubs called bridge organizations. These bridge organizations were to partner with clinical delivery sites to conduct health-related social needs screenings and referrals for community-dwelling CMS beneficiaries.

Beneficiaries who screened positive for health-related social needs received a timely, coordinated connection to a curated directory of community organizations to meet the health-related social needs via structured patient navigation. A subset of bridge organizations worked to partner with and align community-based organizations with the health-



related social needs of their community beneficiaries. The AHC Model was evaluated using a randomized controlled trial (RCT) for the Assistance Track. The Alignment Track was not randomized but utilized the Assistance Track control group to make comparisons. Recently released national evaluation data showed statistically significant reductions in Emergency Department utilization for Medicare Advantage beneficiaries who received patient navigation versus a referral only (Parish et al., 2023). Data from the National evaluation may not reflect the full impact of the AHC Model in specific population sub-groups or geographic regions. The analyses also did not account for differences in implementation by the Bridge Organizations, which may impact overall Model success.

Accountable Health Communities Model (AHC) in Texas

Three Bridge Organizations participated in the AHC Model in Texas. In Dallas, the Parkland Center for Clinical Innovation (PCCI) served as an Alignment Track Bridge Organization with five partnering clinical delivery sites. PCCI is a mission driven organization affiliated with the Parkland Health System. In Houston, the University of Texas Health Science Center at Houston School of Public Health served as an Assistance Track Bridge Organization. The School of Public Health is the oldest and largest in Texas and collaborated with three large health systems: Harris Health, Memorial Hermann, and UT Physicians at 13 clinical delivery sites. In San Antonio, Christus Santa Rosa served as an Assistance Track Bridge Organization working within their health system at six clinical delivery locations. All three Texas Bridge Organizations worked with safety-net healthcare systems. In addition, Texas was the only State with three AHC Model recipients. To conduct the AHC Model in Texas, all three Bridge Organizations worked closely with the Texas Health and Human Services Commission (HHSC) to both receive healthcare claims data for evaluation and for required reporting to CMMI. The three Texas bridge organizations and Texas HHSC participated in a Texas AHC Collaborative during the Model convened by the Episcopal Health Foundation, which allowed for shared learning and support across the state.

Quantitative evaluation results of the AHC Model for the three Texas Bridge Organizations could yield critical insights into the potential value of sustaining the AHC Model in Texas and could help further inform potential interventions and models that could be applied to reach goals in the ground-breaking Non-Medical Drivers of Health Action Plan, which was published by HHSC in 2023 (Texas Health & Human Services Commission, 2023). The NMDOH plan's goal is to generate healthcare cost savings, reduce use of medical services, and improve health outcomes by going beyond the clinic to the non-medical drivers, such as food insecurity, housing instability, and transportation barriers, that lead to poor health outcomes. Based on the national evaluation data released to date, patient navigation in the AHC Model is a promising practice to reduce ED utilization though further evaluation is pending.

In Texas, PCCI published an evaluation of their data in 2022, which showed an

impact on reducing ED utilization and return on investment of 1 to 1.3 for their AHC implementation (Naeem et al., 2022). UTHealth's analysis from their RCT is pending publication, but also shows a statistically significant impact of patient navigation on ED utilization and a marginal impact of navigation on reducing total cost of care (Highfield, unpublished). While quantitative studies are underway, qualitative data can yield complementary insights into implementation strategies that were used in the AHC Model, which were successful, and potentially should be sustained and scaled to other organizations. To our knowledge, the AHC Model in Texas is the largest implementation and test of a HRSN screening, referral, and navigation intervention in the State.

The UTHealth SPH team created the strengthening peer AHC navigation program (SPAN) to assess and improve AHC Model implementation by Bridge Organizations and their partners during the national model test. Through SPAN, we identified six “essential elements” of AHC that influenced effectiveness. These interconnected domains included workforce development and training, clinical delivery site staff and leadership engagement, community resource navigation (patient navigation), community engagement and alignment, data systems, and quality assurance. We successfully applied SPAN with five Bridge Organizations and improved implementation. To continue moving forward, we believed that an assessment of Texas AHC’s post-Model activities would provide valuable insight into sustainability, fidelity and how to effectively plan for and support maintenance (sustainability) and scaling of HRSN interventions moving forward.

The objective of this evaluation project was to assess elements of SPAN that the three Texas AHC sites are sustaining, scaling or adapting to inform future delivery of social needs services. We used a qualitative natural experiment approach to assess and evaluate post-model changes in implementation (planned and unplanned adaptations), sustainability, fidelity, ongoing technical assistance needs and scaling (expansion) of AHC or AHC-like (social needs) activities in Texas using the six AHC Model essential elements from SPAN: 1) workforce development and training, 2) clinical delivery site staff and leadership engagement, 3) patient navigation, 4) advisory boards and community alignment, 5) data systems, and 6) quality assurance.

We employed three qualitative methods in this study — fireside chat, brief interview/speed dating, and the progressive focus group/world café — to evaluate the sustainability, fidelity, and scaling of the AHC Model in Texas.

While each of these are distinct qualitative approaches, our intention was for each methodology to build into a cohesive assessment of potential sustainability pruned through unique perspectives of roles in the AHC Model including bridge organizations, clinical delivery systems (healthcare partners) and community-based organizations. A multi-method thematic analysis of overarching themes from all three qualitative methods was conducted and is presented first. Based on this analysis, cross-cutting recommendations are provided based on the collective insights of all participants. The three methods also provided distinct insights from bridge organizations to clinical delivery sites to community-based organizations, highlighting their unique experiences with AHC and vision for the future, which are shared subsequently in the report under the headings, Bridge Organization Fireside Chat, CDS Speed Dating and CBO World Cafe.

Multi-method Thematic Analysis & Findings

Our multi-method qualitative data analysis integrates the findings from each method used in this evaluation project. Synthesizing multiple methods such as interviews and focus groups can be described as a "multi-method qualitative analysis." Merging the data collected through our focus groups and brief interviews builds a more comprehensive understanding of the implementation and sustainability of the AHC Model in Texas. This methodology offers a richer perspective of our topic by triangulating data from different sources (Lambert & Loiselle, 2008). We compared and contrasted findings from the different methods to identify overlapping themes or discrepancies. This approach helped us identify central and overarching themes that provide a more complete picture of the AHC model in Texas. The transcribed data and main themes from each research method were combined and analyzed. This cross-method analysis allowed us to compare findings and identify recurring themes or discrepancies.

Overarching Theme 1: Human Impact of the AHC Model

Participants across our evaluation methods emphasized that the AHC Model activities are important and valuable for community health and well-being. This work received recognition at every level within organizations. Participation with AHC provided a better picture of the complicated integration of social needs, social determinants of health, and upstream prevention. Participants discussed the human impact of AHC as the catalyst for both continuing and expanding the work. Brief Interview participants expressed personal satisfaction with AHC activities, particularly in connecting clients/beneficiaries to needed services. Participants from every organizational level—including providers, clinical staff, leadership, and service organizations—spoke about the value and rewards of the AHC approach. They discussed satisfaction with helping patients pay rent and utilities, provide food for their families, and acquiring work-appropriate clothing.

Overarching Theme 2: Communicating, Documenting, and Reporting

Discussions about communicating, documenting, and reporting data provided uneven responses. Clearly, data is important at every step within screening, referral, and navigation. Communication includes successful screening of patients to determine HRSN. Communication breakdowns occurred when staff felt overwhelmed or confused by AHC activities (Zellmer et al., 2022).

A participant in a brief interview expressed challenges with the initial implementation of Accountable Health Community (AHC) activities. They felt inadequately trained and were unclear about the model's purpose and the relevance of the data (Zellmer et al., 2022). Similar findings were found in the national AHC Model evaluation which noted that many organizations needed more training than expected (Johnson et al., 2023; NAM, 2019). Our participants also acknowledged that they lacked a system for documenting their screening and referral activities, which hindered their ability to determine what aspects of the process were effective and what were not.

The participant pointed out shortcomings in the implementation, training, and communication aspects of the Accountable Health Community (AHC) Model. However, they also acknowledged a gap in their own work: the lack of documentation. "It's the one more step of having to document it. That's the burden. We don't capture it really well." This limitation has also been noted nationally with blank or incomplete referrals being transmitted from clinical delivery sites (CDS) to community-based organizations (CBOs) and hindering HRSN resolution (Johnson et al., 2023).

The first screening and interaction with a patient are crucial for identifying health-related social needs (HRSN) and linking individuals with the appropriate resources to address those needs. The documentation piece within AHC helps track referrals, follow-ups, changing needs, and the resolution of those needs, as well as the overall value and impact of the model (Gold et al., 2018). This data is crucial for demonstrating the benefits of AHC activities to individuals, healthcare providers, and health systems.

Overarching Theme 2: Communicating, Documenting, and Reporting

Communication follows each beneficiary through the AHC process. Some participants emphasized that successful communication relies on building a good rapport with patients. In Brief Interviews, participants from one city observed that CHWs who spoke the same language (Spanish) as the patients were able to learn more about an individual's social needs.

The ease with which individuals could communicate their needs had a positive impact on the effectiveness of AHC activities and benefited the communities involved. A high-quality referral is a key element driving the success of AHC. Effective communication, thorough documentation, and accurate reporting of data are all components that contribute to the quality of a referral. Participants described breakdowns in the AHC process when referrals were incomplete, inaccurate, and miscommunicated to service providers and patients. Poor referral quality resulted from missteps in screening and documentation causing stress for both clients and staff at service organizations. This was especially prominent in our progressive focus group discussions with service organizations. They described “defeated” clients not knowing what and where they needed to go for help. Inadequate communication and documentation about available community resources frequently led patients to organizations that either had depleted their resources, offered mismatched services, or had eligibility criteria that the patients didn't meet, thereby preventing them from receiving assistance.

All participants emphasized the critical role of documentation in AHC activities, both at the individual (micro) and broader (macro) levels. On the individual level, proper documentation ensures that patients' needs are clearly understood, met, and followed up on. It also helps in tracking whether patients were successfully connected to organizations and services that can address their health-related social needs (HRSN). However, participants discussed an inconsistent system for recording these outcomes and sharing that information. On a broader level, the absence of consistent documentation, reporting, and communication makes it challenging to assess the overall impact of AHC activities.

Overarching Theme 3: Supporting and Sustaining Success

Supporting and sustaining AHC's success involves many parts. Participants described multiple angles to foster and continue with AHC activities. The technical assistance by Bridge Organizations provided ongoing workforce training and development. Personnel turnover at CBOs and volunteer staff create a constant need for training and education. Our participants expressed a need for continued training on all levels such as technology, CBO resources and requirements, and cultural competency (Morris et al., 2011; Wolf et al., 2014). The training and technical assistance provided by Bridge Organizations will leave major gaps for CBO programming, training, implementation, and data needs. Community-Based Organizations and Community Health Workers were identified as the foundation of the Accountable Health Community (AHC) Model. They require adequate support to fully realize their potential and effectiveness in serving the community. The impact of Community Health Workers is undeniable in building trust and addressing health-related social needs. Participants discussed data from AHC Model activities as evidence of the value of CHWs. Discussions also covered ideas to better integrate CHWs into the healthcare system and gain recognition from insurance providers for their services by bolstering their certification.

Increasing expectations on CBOs need to be associated with increased assistance to build capacity and funding. Increasing referrals for assistance and resources emphasizes the limited capacity of CBOs and signals a system stretched thin in its ability to meet both individual and community needs. Participants were keenly aware of the financial instability affecting some CBOs, particularly the challenge of handling increasing referrals without a corresponding increase in stable funding. Multiple participants relayed instances where CBOs were unable to assist patients due to a lack of funds, goods, or services. When CBOs exhaust their resources or funding, it not only leaves important social needs unmet but also undermines the trust and relationships built through AHC's screening, referral, and navigation processes.

Overarching Theme 3: Supporting and Sustaining Success

All participants acknowledged the challenge of ongoing funding for Accountable Health Community type activities. Everyone recognized the positive impact of the Accountable Health Communities (AHC) Model, but there was no clear consensus on who should be financially responsible for maintaining its activities. While the positive impact of AHC was universally agreed upon, there was uncertainty regarding who should bear the financial responsibility for sustaining it.

Funding was described as complicated and competitive with multiple programs vying for the same limited funding sources, making the pursuit of sustainable funding both challenging and intense.

Cross-cutting Recommendations

Recommendation 1: Bridge Organization Functions

Training and technical assistance are essential to the sustainability and scaling of the AHC Model in Texas (Morris et al., 2011; Wolf et al., 2014, Highfield et al., 2022). With the end of the AHC Model, Texas lacks a formalized structure to provide these functions. We recommend that avenues be explored to provide training and technical assistance in the state.

At this time, there is no consensus on who should provide these functions, nor how to finance them. However, several States have implemented and tested a variety of approaches to provide intermediary support through Medicaid waivers and other programs. We recommend that an evaluation of these specific programs, their implementation models, impact, and potential suitability for Texas be completed (Mongeon et al., 2017; De Marchis et al., 2019). This effort would align with the Texas non-medical drivers of health action plan, goal B.1. to “Identify and facilitate strategic partnerships and a systematic approach for MCOs, providers, and community-based organizations (CBOs) to coordinate their service delivery models and referral systems to address identified food insecurity among Medicaid beneficiaries” (Texas Health and Human Services Commission, 2023).

We further recommend that key stakeholders across the AHC continuum in Texas, and nationally, such as providers, community-based organizations, payors and others be engaged in a working group or learning collaborative to explore feasibility for different intermediary models from the above recommended evaluation and to co-develop an clinic-to-community care system framework for Texas using a co-design approach. These efforts could be linked to the Texas Non-medical drivers of health action plan goal D.2. “Sustain and expand external workgroups or learning collaboratives with key stakeholders (including MCOs, providers, CBOs, other state Medicaid agencies, and CMS) to share best practices and collaborate” (Texas Health and Human Services Commission, 2023).

Cross-cutting Recommendations

Recommendation 2: CHW/Navigator Credentialing to Complement New CHW Financing Policies in Texas

All organizations recognized the critical role that CHWs played in assessing and addressing social needs. However, Texas currently lacks competency-based certification requirements for CHWs as it relates to the professional role of social needs navigator or patient navigator. Importantly HRSN navigators require specialized skill sets for assessing and addressing social needs both within and across the CDS and CBO settings.

We recommend that the Texas Department of State Health Services consider the potential to develop acceptable, standardized, training and certification for social needs navigators under the existing CHW certification program in Texas. This effort would complement HB 1575, which was passed by the Texas legislature in 2023 and directs Texas Health and Human Services Commission (HHSC) to add CHWs as Medicaid provider types within the case management program for children and pregnant women. HB 1575 further requires CHWs to be certified by the Department of State Health Services.

The knowledge of the Bridge Organizations, CDS, and CBOs with experience from the AHC Model could provide key input as stakeholders and knowledge experts on the skills necessary for HRSN screening, referral, and navigation by CHW navigators. Program development in other states could also be evaluated for the potential to translate similar programs to Texas.

Cross-cutting Recommendations

Recommendation 3: CBO Capacity Building

The previous recommendations centered on establishing a self-contained system of care that could continue to support the work being done by CDS' to screen and refer for social needs by formalizing the Intermediary (Bridge Organization) and CHW/Navigator roles from the AHC Model.

Unfortunately, the demand on community systems to address these social needs is vast and many communities lack sufficient safety net resources. Many CBOs are not in the position to supply this demand immediately due to limitations in their role in the AHC Model and capacity-building and funding needs. Insufficient capacity of CBOs to resolve HRSN has also been noted in the AHC Model national evaluation and other studies (Renaud et al., 2023).

Efforts to formalize CBO roles and networks in Texas are necessary to create an clinic-to-community system of care. CBOs will need capacity building in all dimensions of AHC including governance, workforce development, information technology, data and quality assurance, and evaluation. There are a variety of CBO capacity building methods that have been implemented in other states including creating formalized community-based organization contracting networks. We recommend an evaluation of these programs, their implementation models, impacts and potential suitability for application in Texas be completed. In addition, evaluation of national efforts such as Community Care Hubs could provide insight into potential synergy for capacity building efforts and sources of funding support (Chappel et al., 2022).

Cross-cutting Recommendations

Recommendation 4: Financing and Policy Change

Everyone in our evaluation recognized the positive impact of the Accountable Health Communities (AHC) Model, but there was no clear consensus from our evaluation on who should be financially responsible for maintaining its activities. The current funding climate was described as complicated and competitive, with multiple programs vying for the same limited funding sources, making the pursuit of sustainable funding both challenging and intense.

We recommend that potential policy and financing avenues be explored to provide sustainable, equitable funding for HRSN activities.

Fireside Chat with Bridge Organizations

Our first qualitative evaluation method (1) was a virtual fireside chat. This method falls under the umbrella of focus groups (Gundumogula, & Gundumogula 2020).

The primary purpose of a focus group is to gain insights into participants' thoughts, feelings, and opinions rather than collecting quantifiable data. A "fireside chat" is similar, however, more intimate than a focus group and conducted as an informal yet structured conversation.

We led our discussion in a relaxed manner, reminiscent of a casual chat by the fireside; this method allows for a more personal and engaging exploration of a topic, fostering a sense of intimacy and trust. We conducted our fireside chat/focus group virtually to include participants from the three Texas cities. Virtual methods are increasingly popular to allow participation from a broader geographical area. The discussion was conducted over WebEx and lasted approximately 85 minutes.

We focused our discussion on Bridge Organization groups' AHC sustainability efforts and process, successes and challenges encountered thus far, and what an ideal environment to support AHC in Texas should look like. Participants were encouraged to submit questions or topics for discussion in the chat, allowing for a participatory and dynamic exchange. Two representatives from each city site shared their perceptions and insights "coming out of the model." Participants were sent informed consent forms via email. We discussed the project's purpose, informed consent, and confidentiality before our event began. All participants consented to the audio recording.

Chat audio was transcribed and analyzed for thematic content providing valuable insight into the sustainability, fidelity, and support needed for bridge organizations and their partners to maintain (sustain) and scale AHC and HRSN interventions moving forward.

Fireside Chat with Bridge Organizations

The fireside chat participants discussed the following topics:

AHC sustainability:

- o Success vs. struggles
- o Changes needed and made

Current landscape:

- o Sustainability progress
- o How to maintain

Organizational culture:

- o Effects on Implementation
- o Effects on sustainability

Your future AHC:

Questions sent in by participants

- o Whose role is it to fund HRSN screening, referral & navigation?
 - o What are the implications of screening individuals for needs when no community resource is available?
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Message from the Bridge Organizations

All three bridge organizations highlighted the value of ongoing communication and collaboration amongst themselves and a desire to share their knowledge broadly.



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I really like the fact that we have conversations with you and we're still involved with people that, you know, were part of the model because I think that there's still so much more we can do and learn, you know, from one another and so I'm glad that we have these opportunities too.

Priority Areas to Support Sustainability

Bridge Organizations Shared 6 Themes for AHC Sustainability.



While they are all important and interrelated, some will be more relevant to certain organizations than others. This section can identify the specific themes and help readers prioritize areas that align with their interest.



Post Model Wins

Positive changes occurred among all organizational levels as a result of the AHC Model.



Pivots to Sustainability

Sustainability required planning and strategic decisions by bridge organizations.



CBO Capacity Caution

A CBO's "maturity" effects functionality and is important to AHC success.



Funding Drives the Future

The positive impact of AHC was universally recognized but the responsibility of financial support was unclear.



Data Drives Funding

The concern is that post-Model, without Bridge Organizations' assistance, there will be diminished data collection and evaluation.



Data Drives the Future

Data plays an important role in determining the future of AHC efforts and supporting policy change.

Celebrate Post Model Wins

Positive changes occurred among all organizational levels because of the AHC Model. Reinforcement of an overall understanding of the importance and impact of this work on health outcomes. “I think a big win for us coming out of the model was that all of our clinical delivery partners recognize and value health-related social needs. But I think even more importantly, from my perspective, they recognize the difference between those and social determinants of health and the importance of working upstream in a preventative model.”



Pivot for Sustainability

Different AHC Model locations needed different “pivots” to adapt AHC activities as they explored the potential to sustain the Model. Sustainability required planning and strategic decisions by Bridge Organizations. A population pivot changed the model’s eligibility requirements to focus only on uninsured and maintained screening and navigation. A platform pivot streamlined the SDoH referral management system. An operational pivot to centralize functions was seen as a recommendation for others who want to implement HRSN programs going forward. “We just had to do a very substantive rethink on how we were going to organize ourselves to be successful.”

Sometimes a focus pivot is necessary to create systems that can foster permanent social change. “And so what we ended up doing was kind of pivoting, putting our focus in the sustainability work on systems and policy domains and trying to think about how we could work kind of at those higher levels to try to take the learnings that we had from the Model and try to work going forward on how we can address some of those concerns.”

CBO Capacity Caution

A CBO's "maturity" affects functionality and is important to AHC success. CBOs are critical in a post-Model environment; however, many organizations lack capacity-building assistance without the structured guidance of the Bridge Organizations. The training and technical assistance provided by Bridge Organizations will leave major gaps for CBO programming, training, implementation, and data needs. "And the idea is that now everybody's going to be doing this and all the CBOs are going to be linking into this. And again, it brings the tsunami of people that are going to be touched, theoretically, to need these resources, but there's no capacity building happening."

Funding Drives the Future

The positive impact of AHC was universally recognized, but the responsibility of financial support for Bridge Organization functions was unclear. "That's an ongoing challenge from our perspective...is whose responsibility is it to pay for those Bridge Organization functions?"

"Like at least for us in Texas, there's no one doing this right? We don't have an association or an entity or a responsible party to do all this workforce training and workforce development that we know needs to continuously happen not just for the CBOs, but for the health systems too, right."

"It would be great to still have those Bridge Organization functions like training and technical assistance and evaluation support, but we're not going to pay for that."

"So if you guys can't do that for free, then we'll just do all of this kind of in house. And I think that's an ongoing challenge from our perspective is whose responsibility is it to pay for those Bridge Organization functions?"

Data Drives Funding and Data Drives the Future

Data provides insight, funding provides the means, and both collaboratively shape and are shaped by the future. A feedback loop exists where the outcomes from data-informed, funded projects further generate data and support project activities. This iterative process is at the heart of sustainable AHC progress. The concern is that post-Model, without Bridge Organizations' assistance, there will be diminished efforts to collect data and evaluate HRSN programs in Texas, especially those seeking to move upstream. "Demonstrating that this work really makes an impact. I mean, its intuitively, it makes sense that if you help people, then their health will improve."

Participants expressed concern that post-model, without Bridge Organizations' assistance, there will be diminished efforts to collect data and evaluate HRSN programs in Texas, especially those seeking to move upstream. Data plays an important role in determining the future of AHC efforts and supporting policy change. Data, funding, and the future are connected and need each other. "I think we need someone to always be assessing the resource availability and the, I guess, levels of levels of availability. So what is the women's shelter capacity this week? Not just this month."

Where do the AHC Bridge Organizations go from here? Sustainability reports are not just about looking back, but also looking forward.

In an ideal AHC future, we would have an clinic-to-community system of care that is focused on preventive, upstream community change that includes bridge organization functions to link our clinics to the community.

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Funding

To sustain AHC in Texas we would have an ongoing commitment and funding support for all Bridge Organization functions

02

Policy Change

Policy changes would support workforce development, data collection, evaluation and ongoing quality improvement

03

Clinic-to-Community Care

A focus on the creation of a clinic-to-community system of care that crosses clinic-to- community is critical

04

Moving Upstream

Addressing health related social needs is the first step. Bridge organizations recognize the value of moving upstream and focusing on prevention.

AHC Model Clinical Delivery Sites

Speed Dating



Introduction

This qualitative method provides a qualitative assessment of representatives from the healthcare systems clinical delivery sites (CDS) who participated in Texas' Accountable Health Communities Model (AHC) and their post-Model activities and experiences. Participants from Dallas, Houston, and San Antonio participated in a virtual Speed Dating session to discuss their AHC sustainability efforts. Participants were asked to discuss their experiences with implementation, challenges, sustainability plans and activities, dreams, and wishes for the future.

The speed dating method allows for rapid informal discussions to elicit spontaneous feedback and opinions on a given topic. For this project, speed dating was an irresistible hook, "well speed dating is what caught my eye" and we had 100% participation from clinical delivery sites leadership, managers and front-line staff.

Methodology

Our second qualitative assessment (2) approach involved brief qualitative interviews. This method is useful when researchers need rich data in a limited amount of time or when participants might not be available or willing for longer sessions (Vindrola-Padros, 2021). This method is akin to speed dating-style interviews. "Speed dating" in a research context is adapted from the social event of the same name. In the research world, it is often used to gather participants' perspectives, ideas, or feedback quickly. This method involves brief, focused interactions between participants, similar to the format of romantic speed dating. The "date" might last anywhere from a few minutes to 15 minutes. Interviews are kept short to accommodate participants' schedules. Topics or questions are predetermined, and participants move to the next conversation after a set period. This format is particularly useful for rapidly exploring various perspectives or getting a quick sense of participant views on specific topics. The brevity of interactions can sometimes encourage candidness. The speed dating method allows for rapid informal discussions to elicit spontaneous feedback and opinions on a given topic.

Methodology

Interviews were conducted via WebEx or Zoom, ranging from 15 to 25 minutes (De Villiers et al., 2021). Participants received informed consent via email and were briefed on the purpose of the study, how their data would be used, and confidentiality. All participants gave permission for audio recording. The audio was then recorded and transcribed verbatim for analysis. We employed thematic analysis to identify key patterns, themes, and insights from shared experiences, beliefs, and perspectives. Our accelerated analysis tactics encompassed brief speed-dating interviews, a concentrated topic focus, a 2.5-week window for data collection, immediate transcription, and a structured framework for analysis.

Speed-dating interview participants discussed the following topics:

- The continuation of AHC programmatic activities (what, where, & how)
 - The effect of organizational culture on the implementation and sustainability of AHC
 - The support and resources needed to create the ideal social needs screening, referral, and navigation program.
-

Message from the Clinical Delivery Sites

All participants highlighted the value of the AHC Model for their patients and for addressing health related social needs. Going one step further, many expressed a desire to not only sustain AHC, but grow from AHC.

”

“The biggest impact of the AHC [Model] is the human impact”

"Especially one thing that we noticed, because our data centers were able to see and determine how long the telephone calls were, so on average, it was about 15 minutes. So when the pandemic hit, it turned into 30 minutes because people were so lonely. So it's the human impact"

Theme 1: The Human Impact of AHC

Participants shared that discussions to continue and sustain AHC activities began during model implementation. The need for screening, navigating, and aligning community resources and the AHC Model was immediate. Participants discussed the satisfaction in this work and believing in the process. "Because you want to be successful at the end of the day and be like, oh, my God, I helped ten patients pay for the rent, you know?"

"Seeing an impact played a big role even before the program even ended. We were trying to figure out how we can continue to implement this model because they saw great value in what we were doing. It keeps us humble; it keeps us grounded, and it's such a rewarding thing"

Theme 2: AHC "fit" with Values and Culture

Participants described the model's alignment with the values and culture within their organizations. The holistic approach and integration of medical and social services reflected the ideals and principles already rooted in organizational culture.

"Whenever the project was shared with different departments its like, oh, yeah because we definitely have people who could benefit from those programs. Our organization's culture is community oriented that's definitely beneficial to the project because you have people that see need and they actively want to come up with resolution or contribute to resolution to solve those problems"

"Its not so much like oh this extra thing its like, no, yeah, bring it bring it because we want to help people and we definitely know we had a population that needs or would benefit from that help"

Theme 3: Innovation of AHC & Effectiveness

Participants discussed the multiple roles that technology held with AHC activities. They emphasized an ongoing need for improving and accessing technologies to better serve their communities. "I thought it (AHC) was an amazing project. I was like, oh yes, this is going to push us into a more technological stage. It motivated us to see some of the benefits of using technology and not going into the room with the patient with paper and how this could benefit us from a productive standpoint."

"With the patient just allowing them to be a part of their process and making the selection in a very gracious way, allowing them to answer those questions without saying it out loud. I think those are very meaningful pieces of that project."

Theme 4: Implementation



Participants discussed their experiences with the AHC Model over several different locations, Emergency Departments (ED), Ambulatory Pediatric primary care clinics, outpatient clinics, Community Resource Centers, and more. Challenges in implementation included the varied locations, workflow integration and burden on already over-committed staff to collect data.

“To expect that you’re going to push that off on already burdened nursing that doesn’t have enough nurses and doctors, we don’t have enough doctors, is one more thing that’s about ready to break the camel’s back”.

The positive impact of AHC was universally recognized but the responsibility for who should lead social care delivery in the US is still unclear.

“So hospitals, in my opinion, are going to become this big social platform to fix absolutely everything, which we can't even do what we're supposed to do now because of the burden.”

Theme 5: Sustainability Challenges

The concern is that post-Model, there is a lack of continuity and sustainability. A particular issue for the healthcare system is lack of reimbursement for community health workers.

“How can we start to use this evidence to create some different opportunities for more sustainable funding than just private foundations? I think the first step in that is really thinking through how do we get CHWs as recognized and covered providers? And reimbursing them for that service”

“And you can do that by meeting some credentialing standards. That's not hard. We can do something like that. But we've got to get agreement that there is a certain level of certification for CHWs across the state that we all agree is required or something similar, that they have to go through some training so that the payers can feel confident that you've got a consistently trained workforce, that they can check the box and say, okay, well, that works for us.”

Health systems also recognized the vital role of community-based organizations (CBOs) in sustaining AHC. They also recognized the need for capacity building for CBOs and funding support. *The key question is who should provide these in Texas?*

“I think if we had that funding for those CBOs, the program would run itself. You know what I mean? The patients would be able to get the help that they need every month with that funding.”

“One of the biggest things that bothered me was the funding, just the resources where we send our patients to organizations and they're like, we're out of funds.”

“If we put CBOs into a network now, you've really created what I would think is a good network of care for any care and that has the ability to sustain itself and to keep providing services and resources.”



Clinical Delivery Site Recommendations

Clinical delivery systems noted the impact and desire to keep addressing social needs. They also noted the need for ongoing support to sustain and scale AHC across healthcare settings, including several areas where the Bridge Organization previously provided support.

These include:

- ◆ There need to be mechanisms to support CDS to implement AHC and to ensure fidelity
 - ◆ Training and ongoing support for staff and skill-building
 - ◆ Information technology integration
 - ◆ Need for an implementation guide and blueprint
 - ◆ Guidance in adapting AHC
-



AHC Model Community
Based Organizations

World Cafe

Methodology

Our third (3) evaluation method was a progressive focus group, where we incorporated some elements of the "World Café" method (Löhr, et al., 2020). A "progressive focus group" is a methodological variation of the traditional focus group technique. This approach takes participants on a sequential journey through topics or concepts, allowing for deeper exploration and more dynamic interactions. To delve deeper into topics by sequentially building on discussions, enabling participants to explore ideas and refine their perspectives progressively. The world café method is also a progressive conversation that allows for a layered, step-by-step exploration of a topic. The method gets its name because the setup often mimics that of a café, with participants seated around small tables, fostering an informal and inviting atmosphere conducive to open conversation.

Participants move between tables where they discuss different sets of questions or aspects of a more prominent theme, allowing for a cross-pollination of ideas. After a set time, participants rotate to new tables. The moderator guides the participants through a series of evolving topics or stages, ensuring continuity and progression in the discussion. At the end of the rotations, key insights are shared in a collective session, allowing patterns, insights, and deeper questions to emerge. Since there is a progression in the topics discussed, these sessions might be longer than traditional focus groups, often lasting from 90 minutes to a couple of hours. Transcriptions are analyzed using qualitative methods to identify patterns, themes, and deeper insights from the progressive discussion. Informed consent is paramount, with participants aware of the study's objectives, the use of their data, and any associated risks. Confidentiality is maintained in the final reports. This method allows for a layered, step-by-step topic exploration, offering a more comprehensive and nuanced understanding of participants' perceptions, beliefs, and feelings.

Methodology

Our progressive focus group was conducted on July 25, 2023, with twelve participants representing five Dallas area community-based organizations. Recruitment for this activity included multiple emails and phone calls to over 20 CBOs. Our recruitment emails included informed consent with participants made aware of the study's objectives, the use of their data, and confidentiality. A conference room at UTHealth Dallas campus was used and set up with three tables decorated with coffee mugs, colored markers, note pads, and paper cut-outs (heart, hand, crystal ball, money bag, and stars). Our event was scheduled for 2 hours, but discussions extended roughly 30 minutes beyond the planned time. Participants were encouraged to color, doodle, and draw using paper and markers to express their ideas creatively. After each question, participants would move to the next table for the next question round. In each round, table hosts shared a summary from their previous group, facilitating the progression of the discussion. After completing all three rounds of questions, each table compiled summaries. These summaries were then presented to the entire group and recorded on a whiteboard as a "harvest" of our discussions. Drawings and colored paper cut-outs, categorized by each question or round, were photographed to represent participants' ideas and illustrate themes visually.

The discussion questions mirrored earlier our methods (fireside chat and brief interviews) but focused on actions. This approach offered a comprehensive view of AHC experiences from three distinct groups, bridge organizations (virtual focus group/fireside chat), clinical delivery sites (brief interviews/speed dating), and community service providers (progressive focus group/world café).

Methodology

Our progressive focus group included three rounds of questions and probes. Each round was presented on screen at the front of the room to keep table discussions on topic.

Round 1: Volume of referrals

In Jan 2023, healthcare systems started widely screening patients for social needs and sending referrals to organizations like yours; what concerns do you believe need to be considered to successfully receive this massive influx?

Round 2: Funding lines of CBOs

Given the planned increase in referrals, what do you think your organization would need to meet the increased demand?

Funding, Training, Process Improvement, Infrastructure, Staffing

Round 3: Strengthening Peer AHC Networks domains

In your opinion, what is the highest priority topic that should be addressed to adequately meet the coming demand?

Workforce development and training, Health system staff and leadership engagement, Patient/Client navigation, Advisory boards and community alignment, Data systems, Quality assurance

The discussion questions mirrored earlier methods but focused on actions. This approach offered a comprehensive view of AHC experiences from three distinct groups, bridge organizations (virtual focus group/fireside chat), clinical delivery sites (brief interviews/speed dating), and community service providers (progressive focus group/world café).

Theme 1: Community Resource Shortfalls

Participants highlighted how challenges and limitations interrupted services and actions needed to meet patient needs. Challenges included CBO capacity, technology, and training. Participants discussed the ripple effects of insufficient capacity for individuals, families, and the communities they serve. Clients may experience delayed services, reduced support, or even a complete lack of access to vital resources.

Participants discussed capacity examples from their organizations, like their food pantry often had lines extending to over 300 people. They also talked about overcrowded waiting rooms where many could not receive care before the clinic's closing time and clients not having the money to return the next day. This can exacerbate their existing vulnerabilities, pushing them further into cycles of need.

“They need help the day they need it.”

Additionally, an organization’s staff is stressed and burned out, juggling an overwhelming demand with limited resources. This impacts their well-being and the quality of service they can provide. Participants stated, “We are stretched and limited.” And “We don’t have the bandwidth.”

They indicated that both they and their organizations lack the capacity to handle the rising number of referrals. Over time, the trust and reliability attributed to these organizations might wane, making community members hesitant to seek assistance when in dire need.

Theme 2: Communication Breakdown All Around

Poor referral quality was indicative of miscommunication and inaccuracies. The assumption that technology was effectively used to "close the loop" in the patient's screening, referral, and navigation process proved incorrect. Participants stressed that because of a lack of technology, education, and training, "the loop never closed." The AHC process is meant to avoid loose ends or information gaps, and "closing the loop" ensures that the patient actually connects with and benefits from the recommended services. It emphasizes accountability, communication, and collaboration among healthcare providers, bridge organizations, and community service providers to holistically address a patient's needs. However, participants stressed, "You can't automate everything," emphasizing that the human touch was essential in bridging this gap. A hands-on approach was needed at every step; specifically, participants expressed that the process became more effective when there was less reliance on technology and more manual intervention by staff at both the CDS and CBO.

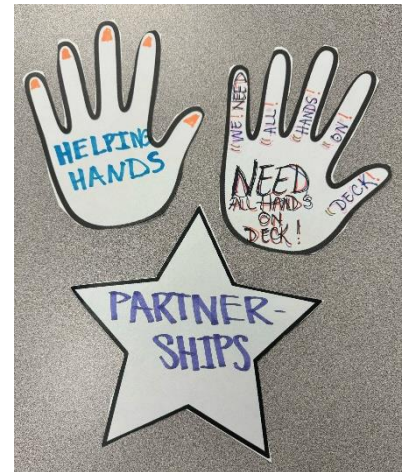
"You can't technology your way out of this."

Participants emphasized the need for training. Training was needed within the health system level to learn "warm referrals," directing patients to CBOs, and matching patients' needs with the appropriate CBOs. They also noted the need for comprehensive education about the CBOs' quality, diversity, accessibility, availability, functionality, and eligibility criteria. Participants also described education needs for the health system and CBO staff, including training in cultural tailoring, cultural competence, understanding national and state benefit policies, and addressing myths and misconceptions about undocumented individuals and families.

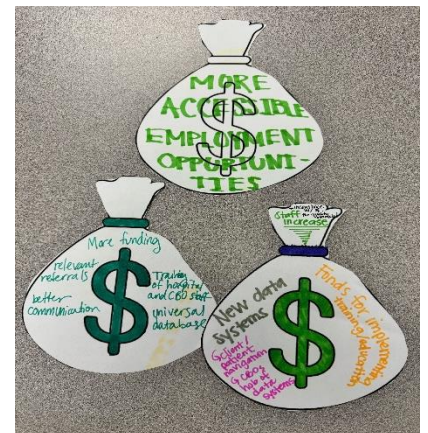
Photo Harvest

In the progressive focus group/world café, participants were prompted to visually represent their thoughts on increased referrals for health-related social needs through coloring and illustrations. The image below displays their chosen shapes and words, highlighting the significance of partnerships and collaborations in serving the community.

All participants stressed that funding fueled their resources, programs, and ability to meet social needs. Funding would support the principles and process of AHC at all levels. The 2 hands and a star to the right displays participants' views on funding needs such as training, technology (data systems & equipment), incentivize quality data and referrals, and employment opportunities.



The money bag drawings illustrate the urgent need for everyone involved—health systems, healthcare professionals, Bridge Organizations, community organizations, policymakers, or even the general public—to come together collaboratively. It signifies that addressing these needs is a collective responsibility and requires the concerted effort of all stakeholders.



Like on a ship where every crew member's contribution is critical for navigation, in addressing health-related social needs, every stakeholder's role is pivotal to ensuring holistic well-being and care for the community.

Photo Harvest

The image with three hearts represents how CBO staff views their work. They illustrated hearts with their passion for community work, the increase in referrals, and the importance of self-care.



The image of multi-colored joined hands with intertwined fingers represented unity and the need for a culturally aware, integrated approach to meet the needs of communities.



The image with the four crystal balls represented participants' views on the future (including a magic 8 ball); helping people find their happiness, and understanding our position, roles, and responsibilities to the world.



Report Conclusion

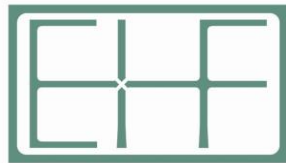
The AHC Model was an innovative approach to address HRSN in Texas. Texas was unique in having three sites around the State who served as Bridge Organizations in the Model, making our AHC implementation in Texas one of the largest in the US. Everyone involved with AHC recognized the significant human impact of addressing health related social needs.

While participating organizations are working to sustain and scale the AHC Model in Texas, there are a number of opportunities to further support sustainability and scaling of AHC in Texas. We recommend further evaluation of best practices for an intermediary, CHW/Navigator certification, and community-based organization capacity building to fill identified gaps from this report. We also recognize the valuable role that policy change and financing play in sustaining AHC and encourage ongoing efforts to develop financing and policy changes.

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References

- Chappel, A., Cronin, K., Kulinski, K., Whitman, A., DeLew, N., Hacker, K., ... & Sommers, B. D. (2022). Improving health and well-being through Community Care Hubs. *Health Affairs Forefront*.
- De Marchis EH, Hessler D, Fichtenberg C, et al. Part I: A Quantitative Study of Social Risk Screening Acceptability in Patients and Caregivers. *Am J Prev Med*. 2019;57(6 Suppl 1):S25-S37. doi:10.1016/j.amepre.2019.07.010
- De Villiers, C., Farooq, M. B., & Molinari, M. (2021). Qualitative research interviews using online video technology – challenges and opportunities. *Meditari Accountancy Research*, 30 (6), 1764–1782. <https://doi.org/10.1108/medar-03-2021-1252>
- Gold R, Bunce A, Cowburn S, et al. Adoption of Social Determinants of Health EHR Tools by Community Health Centers. *Ann Fam Med*. 2018;16(5):399-407. doi:10.1370/afm.2275
- Gundumogula, M. Gundumogula, M. (2020). Importance of Focus Groups in Qualitative Research. *International Journal of Humanities and Social Science (IJHSS)*, 8 (11), 299-302. [10.24940/theijhss/2020/v8/i11/H](https://doi.org/10.24940/theijhss/2020/v8/i11/H)
- Highfield, L., Ferguson, G. M., & Holcomb, J. (2022). Barriers and facilitators to implementation of the Accountable Health Communities (AHC) Model: Findings from a between-site qualitative assessment of implementation strategies. *Frontiers in Health Services*, 2, 926657.
- Johnson , Kate, Barolin, Natalia, Ogbue, Christine, Verlander, Katherine. "Lessons From Five Years Of The CMS Accountable Health Communities Model", *Health Affairs Forefront*, August 8, 2022.DOI: 10.1377/forefront.20220805.764159
- Lambert, S., & Loiselle, C. G. (2008). Combining individual interviews and focus groups to enhance data richness. *Journal of Advanced Nursing*, 62(2), 228–237. <https://doi.org/10.1111/j.1365-2648.2007.04559.x>
- Löhr, K., Weinhardt, M., & Sieber, S. (2020). The “World Café” as a Participatory Method for Collecting Qualitative Data. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920916976>
- Mongeon, M., Levi, J., & Heinrich, J. (2017). Elements of accountable communities for health: A review of the literature. *NAM Perspectives*.
-

References

Morris ZS, Wooding S, Grant J. The answer is 17 years, what is the question: understanding time lags in translational research. *J R Soc Med*. 2011;104(12):510-520. doi:10.1258/jrsm.2011.110180

National Academies of Sciences, Medicine . Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health. National Academies Press; 2019.

Naeem, J., Salazar-Contreras, E., Sundaram, V., Wainwright, L., Kosel, K., & Miff, S. (2022). The Dallas Accountable Health Community: its impact on health-related social needs, care, and costs. *NEJM Catalyst Innovations in Care Delivery*, 3(9), CAT-22.

Parish, W., Beil, H., He, F., D'Arcangelo, N., Romaine, M., Rojas-Smith, L., & Haber, S. G. (2023). Health Care Impacts Of Resource Navigation For Health-Related Social Needs In The Accountable Health Communities Model: Study examines the health care impacts of resource navigation for health-related social needs within the Accountable Health Communities model. *Health Affairs*, 42(6), 822-831.

Renaud, J., McClellan, S. R., DePriest, K., Witgert, K., O'Connor, S., Abowd Johnson, K., ... & Haber, S. G. (2023). Addressing Health-Related Social Needs Via Community Resources: Lessons From Accountable Health Communities: Study examines how the Accountable Health Communities model addresses health-related social needs via community resources. *Health Affairs*, 42(6), 832-840.

Texas Health and Human Services Commission. 2023. Non-medical drivers of health action plan. Available at: <https://www.hhs.texas.gov/sites/default/files/documents/nmdoh-action-plan.pdf>. Accessed Sept. 1, 2023.

Vindrola-Padros, C. (2021). *Doing Rapid Qualitative Research*. Sage Publications Limited.

Wolfe A Miles MB, Huberman AM, Saldaña J. *Qualitative data analysis: a methods sourcebook*. 3rd ed. Thousand Oaks: Sage Publications; 2014.

Zellmer, L., Johnson, B., Idris, A. et al. Post-Identification Approaches to Addressing Health-Related Social Needs in Primary Care: A Qualitative Study. *J GEN INTERN MED* 37, 802–808 (2022). <https://doi.org/10.1007/s11606-021-07033-8>
