

Lessons from Texas: Social Care Activities in Four Community Health Centers

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Executive Summary

What did we do?

We explored how four Community Health Centers (CHCs) in Texas collect and use social data both to provide patients social assistance and to inform clinical care. Our initial intention was to observe clinic activities in person and to meet with clinicians, staff, and patients on site. As a result of the COVID-19 public health emergency, however, we converted the study to be 100% remote by eliminating clinic observations and making all interviews virtual. We also had the unique opportunity to assess the impact of the pandemic on social care activities.

What did we learn?

Some CHCs were able to increase screening activities over the study period despite the COVID-19 pandemic's enormous financial and emotional burdens. Though sites temporarily paused activities as they adapted to pandemic-related care delivery challenges, many appeared to come back stronger, with higher rates of screening and greater provider and staff appreciation for social care. The four study CHCs primarily used screening data to influence social services referrals for individual patients; fewer described routinely using these data to inform either clinical care decisions or community-level activities.

Despite those largely encouraging findings, implementation and delivery of social care activities both pre- and peri-pandemic faced big obstacles. Provider and staff reported barriers to social care efforts such as lack of time and staffing for implementation, language and cultural barriers, limited community resources to meet patient needs, and poor coordination and communication about implementation efforts. From the one CHC with the capacity to share full demographic and encounter data from their electronic health record (EHR), a deeper dive showed statistically significant differences in the likelihood of patients being screened for social risks by age, gender, race/ethnicity, preferred language, and type of encounter. Screening inequities might signal that social care activities could exacerbate existing disparities (e.g. if not all patients are provided the opportunity to participate in and benefit from these interventions). Equally concerning, most of our study sites were not routinely reviewing their patients' social risk data, largely due to limitations in their capacity to pay for and utilize technology and data analytics, which means these types of inequities may occur but go undetected.

Supporting CHCs to provide social and medical care integration

Vibrant communities provide equitable opportunities for everyone to achieve good health. As we orient towards that vision, a strong and interwoven safety net is critical to meet the social and economic needs of many patients and communities served by CHCs. As a result, in concert with investments in both community economic development and social services, targeted CHC supports will be needed to augment CHCs' capacity both to identify patients' needs and to use social needs data to improve patient care and population health. Strengthening social care initiatives—including the reach of social screening—will require intentional supports in the following areas:

- ***Social care workforce capacity.*** CHCs are deeply committed to providing high-quality equitable care for the diverse populations that they serve. In social care, ensuring equity will require sufficient capacity so that staff can meaningfully engage with patients who need supports, including low literacy patients and English as a second language patients, for whom care is likely to require more time and other population-specific adaptations.
- ***Social care implementation training/education for staff and providers.*** Training and education is needed on the “why” behind this work (i.e. its potential impacts) and the “how”, including best practices for integrating data collection (e.g. screening for diverse populations) and interventions (i.e. what can be done with the data). As an example, our findings indicate that most CHCs focused on screening as a strategy for connecting patients with social services and may overlook other ways they might leverage social data to improve care for patients and communities.
- ***Social care IT and analytics capacity.*** CHCs experience many barriers to both using and maximizing the impacts of technology. New social care-specific technology—e.g. EHR-based standardized screening, community-based referral platforms, and clinical decision-supports—might increase the ability to provide social care, but these need to be accompanied by quality improvement/analytics capacity that can help institutionalize the use and impact of this technology.

Better attending to social care capacity and infrastructure in these ways will help CHCs in their pursuit of health equity, which has always been at the center of their collective work.

Introduction

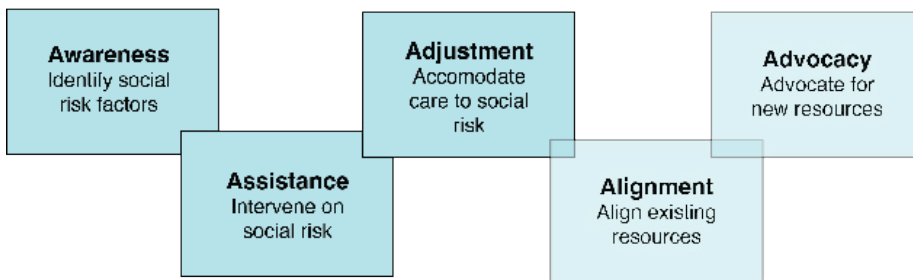
In the context of urgent dual demands for equitable and high-quality care,¹ increased attention has focused on how the health care sector can mitigate the health and utilization impacts of social and economic adversity, such as food insecurity and unstable housing. Multiple health professional societies, including the American Academy of Family Physicians,² American Academy of Pediatrics,^{3,4} and the National Academies of Medicine,^{5,6} have endorsed strategies for strengthening social and medical care integration, including efforts to better identify and respond to patient social risk factors in health care settings (hereafter referred to as ‘social care activities’). A 2019

National Academy of Sciences, Engineering and Medicine (NASEM) Committee report provided a framework defining different ways health care systems can integrate social and medical care (5A Framework, Figure 1).⁷ The enthusiasm for integration is based on a growing evidence base suggesting that awareness of social needs and efforts to address identified social barriers in health care settings can prompt action to improve health and wellness.⁸⁻¹⁴

Under the umbrella of social care activities, multiple recent initiatives have focused on assessing patients’ social risks in clinical settings and using that information to facilitate referrals to relevant government or community resources. In several recent publications, including the 2019 NASEM report, these types of referral interventions are grouped under the category of social risk-targeted assistance.¹⁵⁻¹⁷ A growing cluster of studies explores how assisting patients to connect with social services can reduce social needs and avoidable utilization, and improve health and both patient and clinician experience of care.¹⁸⁻²⁶ A second category of interventions that relies on social risk data was described in the NASEM report under the category of social risk-informed care. These types of interventions incorporate social risk information to improve care plan adherence or chronic disease management but are not targeted towards reducing or resolving patients’ social risks. Instead, these interventions involve adjusting care to accommodate patients’ social conditions. Social risk-informed adjustments apply social risk information to point-of-care decisions (like selecting and dosing medications) in ways that do not depend on the availability of community and government resources or navigators to bridge clinical and social services but do require a patient-centered approach to decision-making (Table 1). **Despite the expansion of social risk data collection in many clinical settings,²⁷ little existing research has examined how the availability of social risk information influences the delivery of either social risk targeted or informed care.**

In this report, we explore how four Texas community health centers (CHCs) conceptualized and implemented social care activities and how the COVID-19 pandemic impacted those initiatives. We aimed to understand the collection and use of social risk data in CHC settings in Texas, as well as facilitators and barriers to these activities in both pre- and peri-pandemic periods.

Figure 1. NASEM 5A Framework on integrating social and medical care^{*7}



*Our study describes social care strategies in community health centers under the NASEM framework categories Awareness, Assistance, and Adjustment.

Table 1. Examples of how social risk Awareness informs Adjustment

Social risk examples	Adjustment examples
Food insecurity	Adjust insulin dosing over the course of a month to avoid hypoglycemia if a patient reports decreased food supply at end of the month when food benefits run out ²⁸
Financial strain	Provide higher-dose prescriptions with pill splitter to decrease medication co-pays
Homelessness	Choose non-diuretic medications for patients with inconsistent restroom access (e.g. experiencing homelessness)

Methods

We recruited a convenience sample of four CHCs in Texas that reported screening all or most of their patients using a multi-domain social risk screening tool for at least six months on a pre-recruitment survey. Two sites were based in the greater Houston area and two sites were based in the greater Austin area. All sites were in urban or suburban areas. Study data collection involved three components (Figure 2):

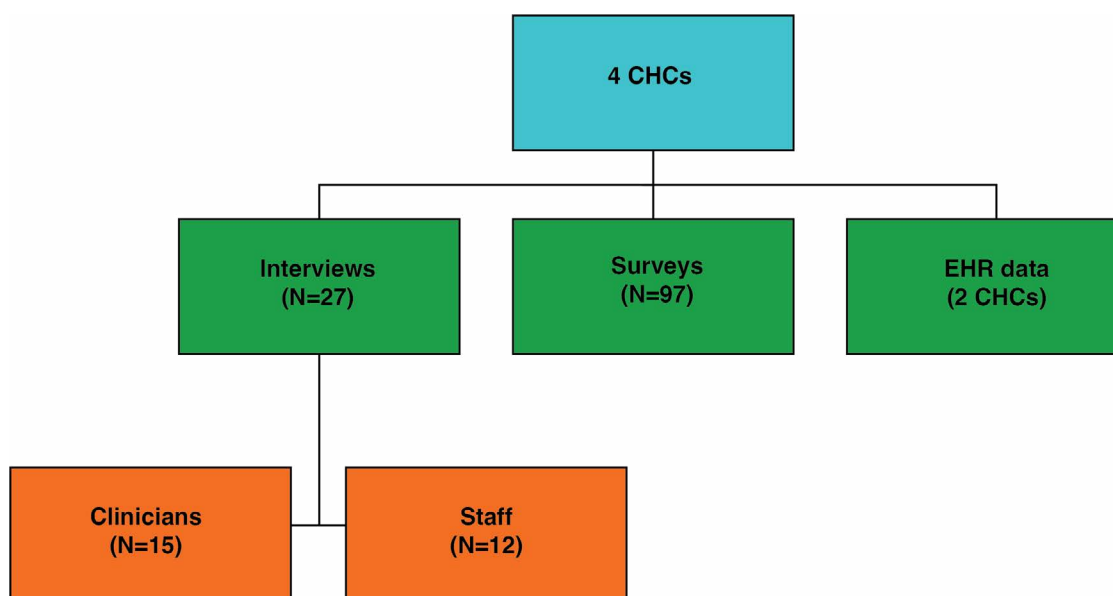
- 1. Key informant interviews:** We conducted 27 key informant interviews with clinicians¹ (N=15) and staff (N=12) at six clinical sites across the four CHCs. (One CHC had three different clinical sites participate in interviews.) Due to the COVID-19 pandemic, all interviews were conducted virtually. Semi-structured interview guides included questions about existing social care tools, knowledge of clinic-wide and individual-level social care practices, barriers and facilitators to social care activities, perspectives on social care activities, and ways in which the COVID-19 pandemic affected social care practices. Clinician stakeholders were also asked about their perspectives on and practices related to social care adjustments. We then used basic thematic analysis and constant comparative methods to code and analyze transcripts.
- 2. Provider surveys:** We conducted online surveys with CHC providers² (N=97) across the four participating CHCs' clinical sites. Surveys assessed respondents' social care practices and perspectives, including on adjustment, and the impact of the COVID-19 pandemic on social care activities.
- 3. Electronic health record (EHR) data:** We analyzed EHR data across two of the participating CHCs' clinical sites³ to explore social risk screening practices and the impact of the COVID-19 pandemic on social risk screening. We conducted additional analyses with EHR data from one CHC with the capacity to share full demographic and encounter data.

¹ Clinicians included: physicians (MD/DO), nurse practitioners and physician assistants

² Providers included: clinicians (N=82; physicians [N=59], nurse practitioners [N=19] physician assistants [N=4]); dentists (N=3); clinical pharmacists (N=3); speech language pathologists (N=3); dietitians (N=3); and other behavioral health specialists (N=2)

³ One CHC lacked IT capacity to extract and send data; another required patient permissions to use EHR data for study purposes, which was outside the scope of this study. Both CHCs that provided clinical data were located in one urban region.

Figure 2. Study data sources



Results

Health care teams' attitudes about CHC involvement in social care

Overall, key informant interviews and surveys demonstrated broad conceptual support for CHC-based social care activities. Clinicians and staff uniformly recognized that patients were experiencing social risks that impacted their health and medical care. Informants indicated it was therefore relevant and important for the health care team to be aware of patients' social contexts. Informants also noted that social care was core to the mission of CHCs. They emphasized feeling that this work was part of the historical tradition of CHCs, which were established with the goal of both working in and with communities to improve patients' health and wellness.

Enthusiasm around social care activities appeared to grow in the context of the COVID-19 pandemic: over 75% of provider survey respondents reported that social care activities had become more important since the pandemic began in March 2020. Interviewees underscored this point by frequently describing patients' pandemic-related financial strain when endorsing the importance of CHC work to connect patients with community and government resources.

"It all goes with their medical necessities. It's just another extra way to help the patient...I don't feel it's like an extra activity. I just think if they are getting those services, that's great for our patients."
– CHC Staff Member

The following sections present more detailed study findings about CHCs' social care activities, grouped according to the NASEM framework's health care delivery-relevant categories: 1) Awareness, 2) Assistance, and 3) Adjustment (Figure 1).

Awareness: Identify social risk factors

The four participating study CHCs engaged different models to more systematically identify patient social risks. Two of the study CHCs had incorporated [NACHC and AAPCHO's PRAPARE tool](#);⁴ two others had developed their own screening tools with the goal of tailoring items to their patient populations (both in terms of the domains covered and the language and framing used).⁵ Interestingly, of the 97 provider survey respondents⁶ across the four CHCs, 29% (N=26) of providers were not aware that their clinic had a social risk screening tool, though each of the participating clinics had endorsed at least one standardized screening tool. Regardless, 90% (N=81) reported asking about social risks during patient-provider clinical conversations; an overlapping 46% (N=42) reported using the clinic's standardized social risk screening tool to collect patient information.

Though each of the participating clinics had endorsed at least one standardized screening tool, 1/3 of the providers in those clinics were not familiar with the standardized instrument.

Implementation approaches evolved over the study period as many sites were continually improving activities and responding to internal and external disruptions, e.g. EHR transitions and then more profoundly, the COVID-19 pandemic. Adaptations to screening included: changes in who administered screening, when screening was done, and if/how screening was integrated within the EHR.

EHR data from two of the study CHCs showed that both numbers of screenings conducted per month and rates of screening per total clinic encounters increased over time

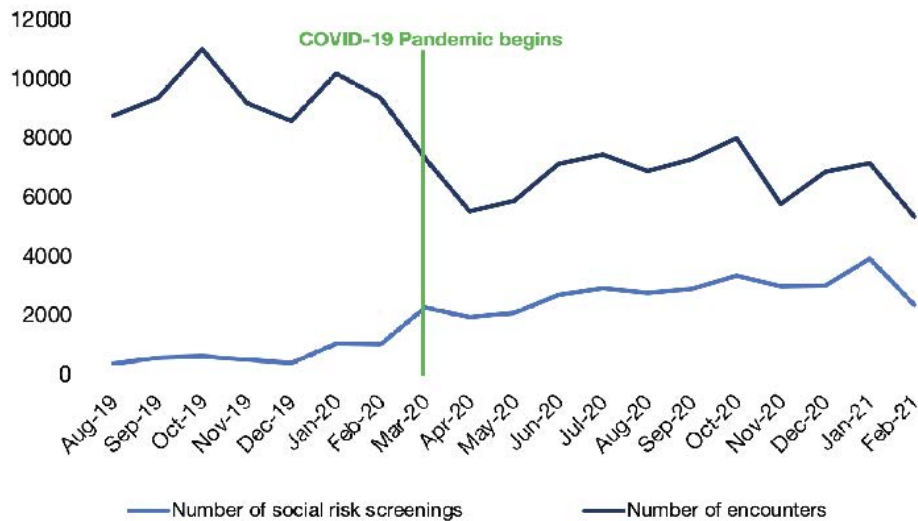
(Figure 3), including during the pandemic. The rates increased from 4% of patient encounters in August 2019 to 44% of encounters in February 2021 and peaked at 51% in November 2020. These increases were attributable to many factors, one being that some organizations widened screening initiatives to involve more of their affiliated clinics (e.g. a CHC that had started screening in only one clinical site expanded to include other clinical sites). This increase occurred in the context of an overall decrease in total number of encounters, which leadership and staff attributed in winter/spring 2020 to the COVID-19 pandemic and then in February 2021, to a [devastating winter storm](#).

⁴PRAPARE includes questions on patient race/ethnicity, preferred language, migrant farm or armed forces work, housing, zip code, education, employment, insurance, income, basic needs (food/utilities/clothing/childcare/health care/phone/other), transportation, social isolation, and stress.

⁵One CHC switched from using a screening tool adapted from a combination of the CMMI Accountable Health Communities screening tool, HealthBegins, Health Leads and PRAPARE tools pre-COVID, to a CHC-developed tool that included questions on patient zip code, whether they needed help accessing basic needs (childcare, computer/tablet for online learning, high-speed internet, federal stimulus checks, food, utilities, housing, employment, medications, transportation, welfare/cash assistance, WIC or other), and whether they were interested in assistance from a clinic community health worker (CHW). A second CHC initially screened patients using the social and behavioral determinants of health screener recommended by the National Academy of Medicine that came embedded in their EHR and includes one question each on: financial resource strain, educational attainment, and social connection/isolation. This clinic subsequently developed and began using a unique tool in September 2020. The new tool included screening for education, employment, current receipt of benefits (ranging from Medicaid to food stamps and/or WIC), housing, utilities, food, transportation, legal needs, health care access and communication, and community safety. It also asked whether patients wanted a staff member to contact them for urgent assistance.

⁶Respondents could skip questions; not all survey questions had 97 respondents. Listed percentages throughout this section rely on the denominator of respondents for that question, unless otherwise stated.

Figure 3. Trends in monthly encounters and screenings at two CHCs



Informants (including from the CHCs from which there are no EHR data) reported that the COVID-19 pandemic temporarily disrupted screening activities, but also that all CHCs found ways to restart and sustain screening. One site began screening patients outside of clinical visits via text messaging (data were not directly integrated in EHRs). This strategy stemmed from the staff's recognition that the pandemic had contributed both to new patient financial burdens and reduced in-person encounters.⁷

Key facilitator: Integration with continuous quality improvement initiatives

Facilitators of Awareness activities:

- *Mission alignment:* In interviews, staff and clinicians strongly articulated the importance of whole person care, including asking about and understanding patients' social and community contexts, as part of CHCs' core mission. In some cases, they viewed the introduction of new screening activities as a way to standardize work that had previously been more implicit.
- *Relationships with community agencies:* Relationships with community agencies often pre-dated the formalized social care programs under development; regardless of when they started, they were considered an important strategy for strengthening patient trust, which itself facilitated engagement in both screening and navigation to local services.
- *Integration with continuous quality improvement initiatives:* Informants often referenced the continual evolution of screening at their CHCs and appreciated time to think with their teams about how to incrementally improve screening workflow and experience for staff and patients.

"The reason why we passed the torch to the back is because once the patient gets to the back of the clinic, that's when they open more. Another thing that I did...was trying to figure out where should we be screening for SDoH, 'Should it be in the front...in the back? Should it be the doctor?... the MA? Should it be once we connect them to the care coordinator?' to see when the patient would actually give us... the honest answers." – CHC Staff Member

⁷ At the end of the study period, this same CHC was transitioning to embedding CHWs in clinic waiting rooms with the goal of conducting social screening before visits. The clinic had received grant funding to hire more CHWs and perceived a benefit to in-person screening at the point of care.

- *Education and training:* Most surveyed providers reporting receiving training on:
 - Racial equity and/or cultural competency (71, 82%)
 - Trauma-informed care (61, 69%),
 - Rationale for social risk screening and referrals (58, 65%)
 - Motivational interviewing (58, 65%)
 - Using health IT or EHR for social care (49, 56%)
 - How to ask about social needs and facilitate social risk screening (48, 55%).

No type of training received a usefulness score lower than 7/10, where 1=“Not at all useful” and 10= “Very useful.” Racial equity and/or cultural competency and trauma-informed care received the highest mean training usefulness scores (both 8/10).

Barriers to Awareness activities:

- *Lack of time:* Interviewee perceptions of social risk screening barriers were influenced by whether they saw social care as part of medical care, or as a separate or additional service. Viewing medical and social care as separate services generated more tension for clinicians and staff as they prioritized their clinical obligations; in these cases, screening was apt to be seen as taking time away from medical care. On surveys, 80% of providers reported that time was a barrier to screening (54% reported it as a “major” barrier). Interviewees discussed time barriers related to the actual time it took to screen patients, but also time associated with follow up. When the pandemic began, competing demands for COVID-19 related care and vaccinations, for instance, took precedence over social screening.

Key barrier: Lack of time

“I know they’ve been working on it and trying to get it. But that sometimes delays the care because your, your front office, and your MAs are spending all this time putting this data in, and then we’re in there for basically five minutes, but not addressing the care that they need. So, it’s good and bad. It’s good in the sense that, definitely, these are important factors that influence medical health, the patient’s health care, but at what cost that we’re using all this time to input this data.” – Clinician

- *Language and cultural barriers:* Time and staffing concerns relevant to screening administration were especially prominent when interviewees discussed screening patients with literacy and/or language barriers, who required additional staff time or interpreters to administer and explain the screening. Interviewees also noted that lack of time and/or dedicated staff to assist with administering screening meant many screens were not completed.

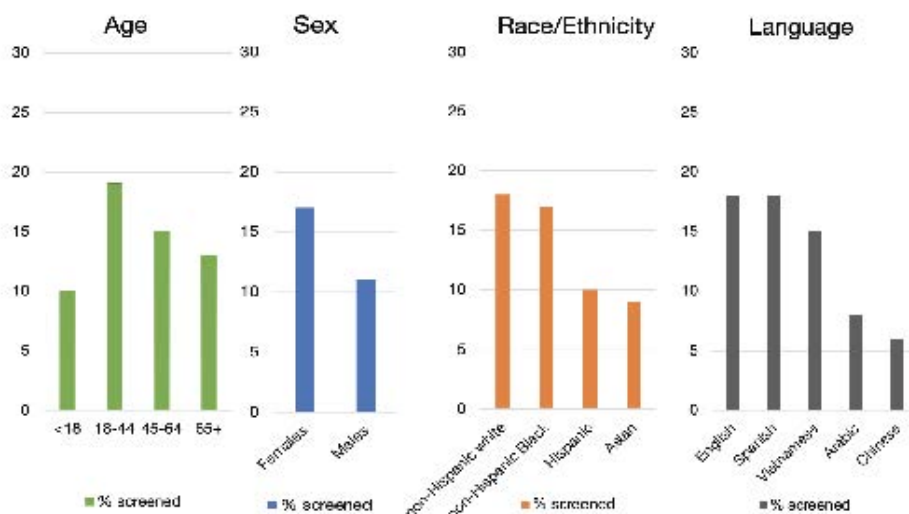
The EHR screening data also suggested that patient factors influenced whether screens were completed. In the one CHC that was able to share demographic information for both patients who were and were not screened, we were able to assess differences in screening documentation by different demographic characteristics. We found statistically significant differences in EHR-documented screening data by patient age, sex, race/ethnicity, and preferred language (Box 1, Figure 4).

Box 1. Screening by the numbers at one CHC

Screening data was collected in 24% of encounters (N=22,637/96,275 total encounters). There were statistically significant differences in whether patients were screened or not screened for social risks by age, gender, preferred language, and type of encounter ($p<0.001$).

- Young adult patients were more likely to be screened than elderly or pediatric patients: 19% vs. 13% and 10%, respectively.
- Female patients were more likely to be screened than male: 17% vs. 11%, respectively.
- Non-Hispanic white and non-Hispanic Black patients were more likely to be screened than Hispanic and Asian patients: 18% and 17% vs. 10% and 9%, respectively.
- English and Spanish-speaking patients were more likely to be screened than Arabic and Chinese-speaking patients: 17% vs. 8% and 6%, respectively.
- Patients were more likely to be screened during routine care (e.g. gynecologic, obstetric, or primary care visits) than during clinic-based urgent/walk in care: 18% vs. 6%, respectively.
- Patients were more likely to be screened during in-person encounters than in telehealth encounters: 16% vs. 8%, respectively.

Figure 4. Differences in rates of screening by patient demographics at one CHC



Note: Denominator for each graph = number of total encounters (N=96,275); bars show % screened in each demographic category out of total encounters across the CHC

Some of the differences in screening rates by patient demographics are likely easily explained. As an example, one of the CHC's four clinical sites screened only prenatal patients, which would result in a greater proportion of screening documentation for females of reproductive age. The racial and language differences in screening rates, however, are consistent with interviewees' concerns that screenings were more challenging and/or more often incomplete for patients with limited literacy and/or language barriers. This raises the concern that current screening practices might inadvertently worsen inequities if certain patient populations are left out of screening, and therefore not receiving related assistance and adjustment interventions. The participating CHCs did not have the infrastructure in place to routinely review and share information on screening equity, which means these types of inequities might go unnoticed and unaddressed.

- *Top-down approach to developing and communicating program implementation plans:* Many clinician informants noted that clinics had made top-down decisions about implementing new standardized screening and referral programs. While clinicians appreciated that the teams spearheading these programs were adapting and improving implementation processes over time, they also expressed concerns that leadership lacked an understanding of the reality of on-the-ground barriers to implementation.

Key barrier: Top-down approach to implementation plans

“I don’t think they seek out clinician feedback. They kind of just decide a workflow, try it out, and then if it doesn’t work, they’re like, ‘Oh.’ But it seems like, and I’ve mentioned this to them before, it’s wasted effort...if you have someone on the clinical side...someone who’s on the floor present at these discussions about clinical workflow, then, one, it will probably flow better when it’s actually implemented. And two, you haven’t put in a lot of work to something that might not work.”
– Clinician

The top-down approach to decision-making around social care activities was sometimes by design: it was done because leadership knew the on-the-ground workforce was overburdened. But this led to a Catch-22 scenario: clinical teams that were not involved in decision-making were then frustrated that their input had not been solicited. An example comes from the same CHC that switched to the text message social risk screening approach. While this decision to take screening out of clinical encounters was an attempt to both increase program reach during the COVID-19 pandemic and simultaneously reduce the burden on the clinical staff during clinic visits, an unintended consequence was that clinicians were disappointed they no longer had social risk information about their patients at the point of care. These clinicians both noted the burden of screening during visits while also being dissatisfied that screening was no longer being done during visits. Some clinicians continued to screen their patients for social risks even after the screening was removed from the standardized workflow, creating potential labor redundancies. (This CHC is now working to reintegrate screening into clinic visits with the use of grant-funded community health workers (CHW).)

- *Communication:* Informants noted that encouragement around screening seemed to come in waves wherein screening would occasionally rise to the forefront of clinic initiatives, but then be replaced by other clinic priorities.

The fact that over 25% of providers who responded to our survey did not know their CHC was using a social risk screening tool underscores the challenges to intra-clinic communication.

Key barrier: Communication

“...we have periods where we hear a lot and others where we just don’t hear anything at all. I would say maybe two or three times a year, we have a push for, ‘Don’t forget to do the screening, now this is happening.’ ...when they have an initiative, they announce it and it becomes big, and with time it kind of starts fading. Then we hear it again, and then it starts.”
– Clinician

Summary and Implications: Awareness

Key Findings	Implications
Lack of time and staffing for screening leads to variable uptake and may contribute to inequities if non-English speaking patients and/or patients with lower educational attainment are not completing screening at the same rates.	Opportunity to strengthen implementation by increasing staff capacity and awareness that can promote implementation equity (e.g. by using lower literacy assessments & translations). As an example, PRAPARE has been translated into 30 languages. (See https://prapare.org/the-prapare-screening-tool/)
Data for social risk screening are not routinely evaluated by sub-populations though acquired data suggest inequities in distribution by race, ethnicity, age, language.	Opportunity to both incentivize and strengthen quality improvement activities around social risk screening.
Neither lack of an incentive to screen nor concerns about the impact of screening on visit reimbursement were noted as barriers (or conversely potential facilitators) to screening.	Opportunity to educate providers and staff on existing and/or draft recommendations for quality metrics and billing codes tied to screening for social risks.

Assistance: Intervene on social risk factors

The majority of clinicians in this study understood the primary goal of social risk screening as facilitating connections to community and government social services. Informants noted that patient interest in these connections had increased with the pandemic. Yet just under half of the participating providers reported believing that the work that they did to connect patients to resources positively impacted their patients' lives. While provider involvement in screening activities was common, fewer providers reported on the survey that they were directly involved in helping to connect patients to social resources (44%). In interviews, providers said they occasionally offered informational handouts about resources but more often, social workers or CHWs assumed the responsibility for resource connections and these were mostly related to food and, in the pandemic context, rental assistance.

Facilitators of Assistance activities

- *Community health workers or other dedicated staff:* Many of the CHCs had CHWs and/or social work staff to assist with patient screening follow-up and referrals. While these roles were seen as essential to enabling assistance activities, informants also acknowledged that they were understaffed, and the sustainability of these typically grant-funded positions was not always clear.
- *Relationships with community organizations and/or technology supports to facilitate resource referrals:* One of the CHCs had begun using the [Findhelp](#) (formerly Aunt Bertha) navigation platform. At this site and an additional CHC, staff were outreaching directly to community-based organizations (CBOs) to improve referral success and information sharing. To overcome patient barriers to resource access (including time and transportation), interviewees commonly called for co-location of community resources at the CHCs, which one CHC was actively developing.

Barriers to Assistance activities

There was considerable overlap between the reported barriers to awareness/screening and barriers to providing assistance to facilitate patient access to social services. Barriers to assistance included: limited time and workforce, language and cultural barriers, planning and communication challenges, and limited government and community resources.

- *Time and workforce limitations:* These were cited across the interviews and emerged from the survey data. Several interviewees were not sure whose role it was to follow up with patients who had social needs. This lack of clarity led some interviewees to be uncomfortable with their CHC's current social care practices. The workforce capacity limitations also contributed to concerns about the equity of assistance activities, as interviewees again noted that language barriers could diminish patients' engagement with assistance efforts. Fewer than 50% of providers thought that their clinic had the resources to address patient social needs. Workforce and time constraints worsened during the pandemic.

Key barrier: Time and workforce limitations

“I think with COVID to an extent, it's hard for like myself and our clinicians and leadership to kind of put a hundred percent of every single project that we're working on. So I know I've started a lot of implementation work roughly last September to December, and then I got pulled out to do a lot more work with the COVID vaccine distribution.” – CHC Staff Member

Key barrier: Communication program implementation plans

**“I do feel like they talk about it enough, but I think that it is helpful when the actual teams do it too, because we're all so spread out and everybody has their own thing going on. And it's easy for these emails to just get washed over. And I think it's important and even more helpful for the actual care teams to talk about it more than maybe like an email or a meeting, because it gets glossed over sometimes.”
– Clinician**

- *Developing and communicating program implementation plans:* During our interviews, teams voiced a range of concerns about communication within their clinical teams about social care programs. As an example, one staff person described the time and effort they had spent putting together a resource handout for patients that was rarely being used, and a clinician from the same site complained about the lack of a local resource list. These competing frustrations were caused by glaring gaps in communication. Participants noted that some of the difficulty sharing information across health care teams was connected to the time/staff capacity barrier, since time pressures made it impossible to stay up-to-date with clinical communications.

- *Language and cultural barriers:* As described in the awareness/screening section above, interviewees noted that language barriers often limited their patients' engagement with resource navigation. This was in part because of health care capacity to provide language-concordant services and in part because of what services were available in the community for specific populations.

Key barrier: Inadequacy of resources

“We know the hardships were increasing based on unemployment, increasing in a bunch of different things. So we made sure initially to support it with food drives and working with food bank on our own, then we had partnerships with other partners such as YMCA, Catholic Charities. And eventually we grew into working with DoorDash and United Way to get those boxes actually delivered at the doorstep of the patients.” – CHC Staff Member

Key barrier: Language and cultural barriers

**“Lack of interest, lack of ability to follow up and then a big one, language barrier. I don't think our new social worker speaks Spanish. I am under the impression that they call with an interpreter line and you can lose things in translation.”
– Clinician**

- *Inadequacy of community/government resources:* Not surprisingly, clinical teams worried about the availability of relevant resources within the community. Among interviewees, there was consensus that the COVID-19 pandemic had increased the social needs of patients yet reduced the accessibility and availability of resources in the community. As a result, some CHCs expanded services they provided. This was in part related to pre-pandemic plans to grow social care activities, but also in response to the increased needs of patients.

Some interviewees voiced concerns about even asking about social risks or needs when there were insufficient resources to meet patient needs. Notably, others described the importance of understanding patients' social context, trying to connect patients with resources, and simultaneously using those data to advocate for resources. One CHC led advocacy efforts within the community—these activities offered avenues for using patient social data to advocate at the community level for more social service resources.

Summary and Implications: Assistance

Key Findings	Implications
Increased recognition during COVID that social care assistance is needed.	The state may benefit from leveraging pandemic-generated interest in this area to augment incentives and supports around assistance-related activities.
Clinicians and staff noted internal and external barriers to providing assistance.	Opportunities to improve clinic supports (e.g. quality improvement capacity) and workforce (e.g. CHWs) to facilitate assistance strategies alongside investments in community social services.

Adjustment: Accommodate medical care to social risk

While clinicians universally endorsed that their patients experienced many forms of social adversity that impacted their ability to adhere with treatment, no clear consensus emerged from interviews or surveys about how clinicians could themselves use patient-reported social data to improve medical care decision-making. In interviews, clinicians at times struggled to conceptualize what adjustment meant, yet they were almost all able to describe concrete examples of adjustments they were routinely doing with their patients (Table 2). The most cited types of adjustment were prescribing lower cost alternatives for medications or sending prescriptions to low-cost pharmacies. In fact, about one quarter of surveyed providers reported always changing medical care plans based on patients' social needs; only 4% noted never making adjustments. And according to 64% of providers, adjustment-related activities had increased since the start of the COVID-19 pandemic. A commonly noted facilitator for medication adjustments was the availability of CHC-based pharmacies and/or embedded pharmacists, or knowledge of pharmacies with low-cost medication lists.

Table 2. Examples of social care Adjustments

Adjusting medication by cost	"I have to make sure that everything that I ever prescribed to them, is going to either be on the \$4 list, or it's going to be very, very cheap, or have to do a separate coupon or something for them so they're able to actually fill it. I think, and then obviously, the amount of tests that I can order, or the amount of work up I can do, or if the patient needs a specialist, that's where my hands get really tied, because then I just don't know what to do, because we don't have specialists at the clinic. It gives me a heads up to what I'm walking into, and how I have to change stuff around for the patient..." – Clinician
Adjusting medication by side effects / monitoring parameters	"Hypertension and diabetes is the biggest example. ...it really does impact how I practice. In hypertension, people that aren't housed I try to give a lot of amlodipine because I don't have to monitor and dehydration usually won't affect them ...And then with diabetes, where insulin can be stored, if someone's insulin dependent, and which types of insulin I'm giving are affected by, if they have a fridge, access to a fridge or not." – Clinician
Adjusting the pharmacy to which medications are sent	"if there is even a speck of anything on the questionnaire then I know that I have to change the patient's pharmacy ...to [a] cheaper pharmacy." – Clinician
Adjusting diagnostic work-up	"Some patients say, 'I can't. I'm not going to do it because I can't afford it,' so I do adjust for that. For example, if there's a patient that has post-menopausal bleeding, yes ideally we do have an ultrasound, but if they really cannot do the ultrasound at least I'm going to do the endometrium biopsy and go from that because they're already telling me they cannot do it." – Clinician
Adjusting follow-up care plans	"There's a couple patients like this, but people who really don't have access to transportation to get to the clinic or they're very dependent on their family for financial means, for example, even just to get medications and stuff like that, adults. So I think when I know that that's an issue, I again, try to just anticipate what they need and maybe even potentially at some visits, do a little bit more at one time, because I know that maybe they won't be able to get to the next visit" – Clinician

Only a few clinician informants explicitly acknowledged including patients in shared decision-making around medical care adjustments based on social context.

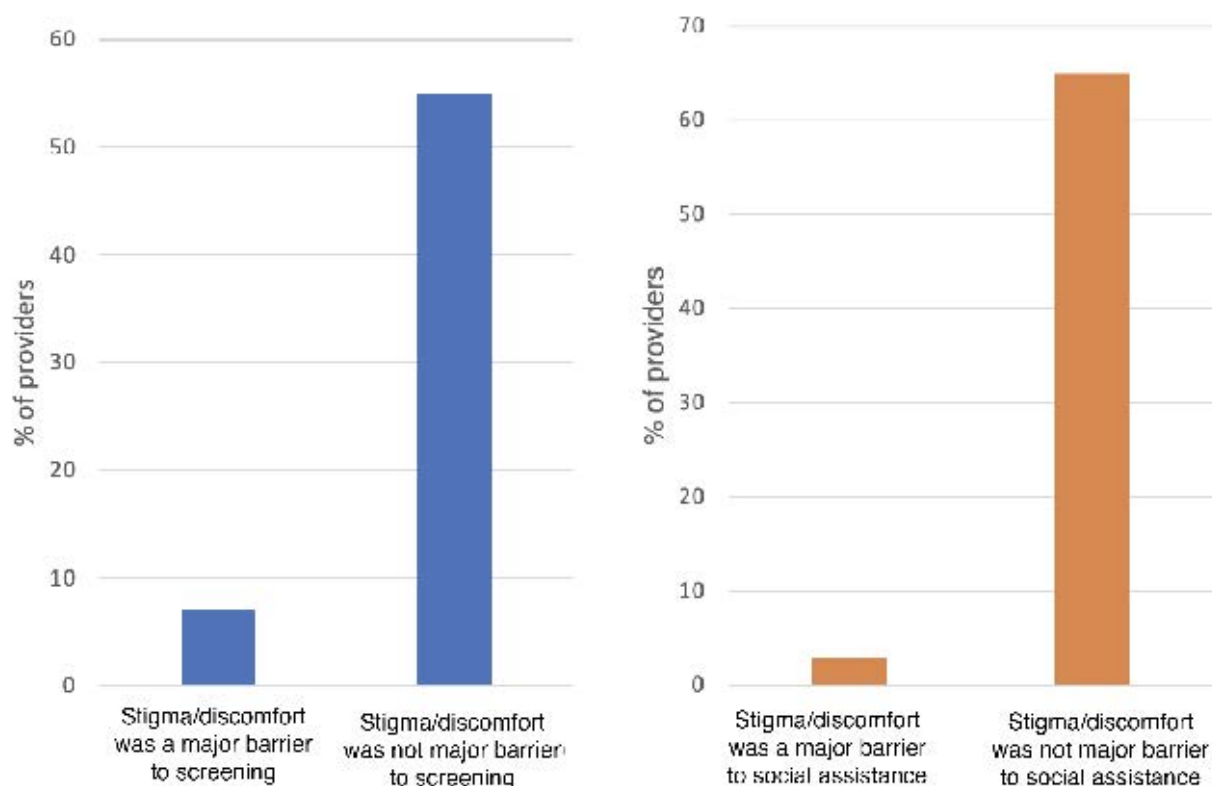
Factors that influenced how and when clinicians adjusted care included:

- being aware of social needs at the point of care;
- having sufficient time and training/experience to feel comfortable adjusting care; and
- concerns about providing patients the highest quality care.

In interviews, no providers reported receiving training in how to adjust care based on patients' social context (as opposed to, e.g., overarching training in shared decision-making or other patient engagement strategies), but interviewees did express interest in more guidance on both how and under what circumstances to change care. In the surveys, relatively few providers endorsed concerns about patient discomfort or stigma associated with social care

"I try to include the patients as part of the medical decision-making and see what they can or cannot [do], because I don't like to just order a test and assume the patient is going to go and do it or order a treatment and assume they're going to go and buy it. I guess I just try to get feedback to see if that makes sense."
– Clinician

Figure 5. Providers' views of stigma/discomfort being a barrier to social screening and social assistance



Summary and Implications: Adjustment

Key Findings	Implications
Access to low-cost pharmaceuticals is a high priority adjustment approach.	New strategies are needed to improve medication affordability.
The range of adjustments used by clinicians currently is relatively limited (e.g. medication affordability and follow up care).	Opportunity to strengthen evidence, training, and tools to facilitate and standardize a wider range of social risk adjustments.
Clinician adjustment activities are facilitated by increased awareness of risks at the point of care.	Opportunity to promote EHR-integrated social risk screening tools.
Rationale for social care is often tied solely to ability to provide assistance, but clinicians see other forms of social care as relevant to health.	Opportunity for state to more clearly outline multi-dimensional rationale for social screening. If a goal of screening is to advance equity, this rationale should include other potential benefits, e.g. patient-specific adjustment and population health management activities.

Limitations

Findings reported should be interpreted in light of multiple study limitations.

1. This is a case study of four urban/suburban CHCs in Texas, which limits its generalizability to other health care settings, regions, and populations.
2. This was a convenience sample of participating CHCs and of individual interview and survey participants. By design, we recruited CHCs that had been screening a majority of their patients for at least six months. Participants at the CHCs may represent a biased sample of those whose experience with social care activities had led to more favorable perspectives. Given our robust findings on perceived barriers to social care activities amongst our participants, we feel confident that we surfaced key obstacles to social care activities. As with all survey and interview-based research, responses are also subject to social desirability bias.
3. We faced substantial recruitment challenges and were forced to make protocol changes secondary to the COVID-19 pandemic and the natural disaster Texas experienced during the study period. Our sample sizes reflect these challenges. The original study plan included onsite observations and patient surveys. As a result of these changes, this report does not represent patient perspectives on social care in Texas CHCs.
4. Only two CHCs were able to share EHR data and datasets provided by those two clinics did not include sufficient comparative data to conduct all planned analyses. Of the other two CHCs, one did not have the capacity to extract and share their EHR data and the other site had established internal rules prohibiting sharing of de-identified EHR data without patient consent.

Recommendations

Based on the experiences of our four study CHCs in Texas, the state and other stakeholders may want to explore strategies to:

1. Increase resources that support the spectrum of social care activities. This will require special attention to:
 - ***Social care workforce capacity.*** CHCs are deeply committed to providing high-quality equitable care for the diverse populations that they serve. In social care, ensuring equity will require sufficient capacity so that staff can meaningfully engage with patients who need supports, including low literacy patients and English as a second language patients, for whom care is likely to require more time and other population-specific adaptations. Texas Medicaid managed care organizations can bill for quality improvement initiatives focused on social care, including work done by CHWs; this might help to support the sustainability of what are often grant-funded positions for social care.²⁹ Equally important is ensuring adequate staff are available for continuous data quality review to monitor equity in these programs, track their effectiveness, and share data across CHCs for population health-level interventions and advocacy efforts.
 - ***Social care implementation training/education for staff and providers.*** Training and education is needed on the “why” behind this work (i.e. its potential impacts) and the “how”, including both empathic, trauma-informed practices for screening and best practices for subsequent interventions (i.e. what can be done with the data). For example, our findings indicate that most CHCs focused on screening as a strategy for connecting patients with social services and may overlook other ways they might leverage social data to improve care for patients and communities. Continuous training on how to view social risk data in the EHR is likely to influence both the teams’ awareness of patient context and improve clinicians’ activities around adjusting care. Existing implementation training and resource guides targeted to the unique CHC environment are likely to additionally support CHCs that are launching, strengthening, and/or expanding their social care activities. (See Box 2)

Box 2. Examples of implementation training and resource guides relevant to social care

- [Texas Community-Centered Health Homes Initiatives](#)
- [NACHC and AAPCHO PRAPARE teams](#)
- [OCHIN/Kaiser](#)

- **Social care informatics, technology and analytics capacity.** CHCs experience many barriers to both using and maximizing the impacts of technology. New social care-specific technology—e.g. EHR-based standardized screening and related analytics programs (e.g. <https://www.azarahealthcare.com/> and <https://www.nextgen.com/products-and-services/analytics>), community-based referral platforms (e.g. [Unite Us](#) and [Findhelp](#)), and clinical decision-supports (e.g. prescription management tools)—might increase the ability to provide social care, but these need to be accompanied by training and greater capacity for quality improvement and analytics that can help institutionalize both their use and effectiveness, particularly to reduce health inequity. Vendors such as Azara Healthcare or the EHR platform NextGen’s Population Health and Analytics Solutions tool offer services to assist clinics with accessing and reviewing social risk-related data, but at added costs.

Coding Tools: Gaps in existing medical standards/codes make it additionally challenging to define patients’ social needs and to collaborate across sectors to provide the necessary support and interventions. Collecting standardized information about social risks/assets and interventions would facilitate more coordinated and person-centered care and expand understanding of the quality of healthcare provided and how it may differ by population.

Conclusion

Across the four CHCs participating in this study, providers and staff expressed strong support for social care activities. These findings indicate significant progress in both the prevalence and depth of social care activities since a 2017-2018 pilot implementation of NACHC and AAPCHO’s PRAPARE tool that took place in several Texas CHCs.³⁰ Our new work also highlights on-the-ground barriers to implementing, sustaining, and scaling social care activities, including activities related to developing awareness, providing assistance, and otherwise using social risk information to improve medical care decision-making. Overcoming these barriers to widen reach, support sustainability, and improve equity will require more supports targeted to program design and development, the clinician and staff workforce, internal quality improvement capacity, and ultimately community investments in social services. Given CHCs’ dedication to whole person care, they are likely to benefit from social care tools, including social risk screening tools, community resource referral technology, and population management platforms that are designed to facilitate CHC actions to address patients’ social needs. Maximizing the uptake and effectiveness of these types of social care tools will require new and increased investments.

References

1. Dzau VJ, Mate K, O’Kane M. Equity and quality—Improving health care delivery requires both. *JAMA* 2022;327:519-20
2. Czapp P, Kovach K. Poverty and health - The family medicine perspective (position paper). *AAFP policies* 2015.
3. Council on Community Pediatrics, Gitterman BA, Flanagan PJ, et al. Poverty and child health in the United States. *Pediatrics* 2016;137.
4. Council on Community Pediatrics, Committee on Nutrition, Gitterman BA, et al. Promoting food security for all children. *Pediatrics* 2015;136:e1431-8.
5. Committee on the Recommended Social and Behavioral Domains and Measures for Electronic Health Records, Board on Population Health and Public Health Practice, Institute of Medicine. Capturing social and behavioral domains and measures in electronic health records: Phase 1. The National Academies Press 2014.
6. Committee on the Recommended Social and Behavioral Domains and Measures for Electronic Health Records, Board on Population Health and Public Health Practice, Institute of Medicine. Capturing social and behavioral domains and measures in electronic health records: Phase 2. The National Academies Press 2014.
7. National Academies of Sciences, Engineering, and Medicine. 2019. Integrating social care into the delivery of health care: Moving upstream to improve the nation’s health. Washington, DC: The National Academies Press. Available online.
8. Kangovi S, Mitra N, Grande D, Long JA, Asch DA. Evidence-based community health worker program addresses unmet social needs and generates positive return on investment. *Health Aff.* 2020;39:207-13.
9. Berkowitz SA, Delahanty LM, Terranova J, et al. Medically tailored meal delivery for diabetes patients with food insecurity: a randomized crossover trial. *J Gen Intern Med.* 2019;34:396-404.
10. Rhodes HM, Simon HL, Hume HG, et al. Safety-net accountable health model partnership drives inpatient connection to outpatient social services, reducing readmissions in a population experiencing homelessness. *Prof Case Manag.* 2021;26:150-5.
11. DeLia D, Nova J, Chakravarty S, Tiderington E, Kelly T, Cantor JC. Effects of permanent supportive housing on health care utilization and spending among New Jersey Medicaid enrollees experiencing homelessness. *Med Care.* 2021;59:S199-S205.
12. Jones LJ, VanWassenhove-Paetzold J, Thomas K, et al. Impact of a fruit and vegetable prescription program on health outcomes and behaviors in young Navajo children. *Current Developments in Nutrition.* 2020;4.
13. Pantell MS, Hessler D, Long D, et al. Effects of in-person navigation to address family social needs on child health care utilization: A randomized clinical trial. *JAMA Netw Open.* 2020;3:e206445.
14. Tyriss J, Keller S, Parikh K. Social risk interventions and health care utilization for pediatric asthma: A systematic review and meta-analysis. *JAMA Pediatr.* 2021:e215103-e.
15. Alderwick H, Gottlieb LM. Meanings and misunderstandings: A social determinants of health lexicon for health care systems. *Milbank Quarterly.* 2019;64:243-57.
16. Hessler D, Bowyer V, Gold R, Shields-Zeeman L, Cottrell E, Gottlieb LM. Bringing social context into diabetes care: Intervening on social risks versus providing contextualized care. *Curr Diab Rep.* 2019;19:30.
17. Gottlieb L, Fichtenberg C, Alderwick H, Adler N. Social determinants of health: What’s a healthcare system to do?. *J Healthc Manag.* 2019;64(4):243-257.
18. Gottlieb L, Hessler D, Long D, Amaya A, Adler N. A randomized trial on screening for social determinants of health: the iScreen study. *Pediatrics.* 2014;134:e1611-8.
19. Garg A, Sarkar S, Marino M, Onie R, Solomon BS. Linking urban families to community resources in the context of pediatric primary care. *Patient Educ Couns.* 2010;79:251-4.
20. de la Vega PB, Losi S, Martinez LS, et al. Developing an EMR-based screening and referral system to address social determinants of health (SDOH) in primary care: A feasibility study. *J Gen Intern Med.* 2018;33:S773-S.
21. Garg A, Toy S, Tripodis Y, Silverstein M, Freeman E. Addressing social determinants of health at well child care visits: a cluster RCT. *Pediatrics.* 2015;135:e296-304.
22. Fleegler EW, Lieu TA, Wise PH, Muret-Wagstaff S. Families’ health-related social problems and missed referral opportunities. *Pediatrics.* 2007;119:e1332-41.
23. Hassan A, Scherer EA, Pikcilingis A, et al. Improving social determinants of health: Effectiveness of a web-based intervention. *Am J Prev Med.* 2015;49:822-31.

24. Berkowitz SA, Catherine Hulberg A, Standish S, Reznor G, Atlas SJ. Addressing unmet basic resource needs as part of chronic cardiometabolic disease management. *JAMA Intern Med.* 2017;177:244-52.
25. Berkowitz SA, Delahanty LM, Terranova J, et al. Medically Tailored Meal Delivery for Diabetes Patients with Food Insecurity: a Randomized Cross-over trial. *J Gen Intern Med.* 2018.
26. Kangovi S, Mitra N, Norton L, et al. Effect of community health worker support on clinical outcomes of low-income patients across primary care facilities: A randomized clinical trial. *JAMA Intern Med.* 2018;178:1635-43.
27. Cartier Y, Gottlieb L. The prevalence of social care in US health care settings depends on how and whom you ask. *BMC Health Serv Res.* 2020;20:481.
28. Texas Health and Human Services. Quality Improvement Cost Guidance. 2021. Available at <https://www.hhs.texas.gov/sites/default/files/documents/laws-regulations/policies-rules/Waivers/medicaid-1115-waiver/quality-improvement-cost-guidance.pdf>.
29. National Association of Community Health Centers, AAPCHO, Oregon Primary Care Association. Assessing and addressing social risk: Piloting PRAPARE in Texas. April 12, 2018. Available at https://www.episcopalhealth.org/wp-content/uploads/2020/01/PRAPARE_in_Texas_Final_Report_Designed_4_12_18.pdf.