Institute for Healthcare Improvement

Innovation Wave 46 - Summary Report
Current State of Social Determinants of Health Screenings
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Intent and Aim

A national shift towards value-based care models, including accountable care model and the Accountable Health Communities model, is incentivizing health systems to address the ways in which social determinants of health (SDOH) affects a patient's health outcomes and well-being. To address patients' unmet social needs, health systems are screening patients and developing systems to connect patients with appropriate community resources. The aim of this initial phase of work is to understand the current state of SDOH screenings—common domains, tools used, and the process of screening. This wave focused on a literature scan as well as select expert interviews from various settings implementing SDOH screenings and is in support of a larger project where the end goal is to understand the mechanism of how to shift funding from health care to social support.

Background

The United States have, in the past, focused on improving the health care delivery system as the key to improving health outcomes. Although medical care is a small contributing factor to the overall health status of a population and interventions outside of the healthcare system are likely to have a larger effect on reducing illness and disparities.[1] Additionally, researchers have found that higher social spending correlated with better health outcomes.[2] A literature review showed that 100% of the studies evaluating income support programs, 88% of the care coordination and community outreach interventions, 83% of the housing support programs, and 64% of the nutritional support programs had statistically significant positive impact on health outcomes alone or on both health outcomes and health care spending.[3] In recent years, health systems have become increasingly aware of the evidence that addressing social determinants of health is critical to advancing population health, improving the quality of care, and reducing the cost of care.

The World Health Organization (WHO) describes social determinants of health as "conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life." Health People 2020 highlights five key areas of SDOH: economic stability, education, social and community context, health and health care, and neighborhood and built environment. Within these five determinants are key underlying issues.

Determinants	Key Issues
Economic Stability	Employment Food insecurity Housing Instability Poverty
Education	Early childhood education and development Enrollment in higher education High school graduation Language and literacy

Social and community context	Civic participation Discrimination Incarceration Social cohesion
Health and health care	Access to health care Access to primary care Health literacy
Neighborhood and built environment	Access to foods that support healthy eating patterns Crime and violence Environmental conditions Quality of housing

Opportunities to Address Social Non-Medical Needs

With the national shift from a volume-based reimbursement model to a value-based reimbursement model, there are opportunities to redesign the delivery system to go beyond the hospital walls and focus on a wider range of social, behavioral, economic, and environmental factors that influence health outcomes. While there have been a number of initiatives the past few years to address social determinants of health, including place-based approaches, this paper will focus on integrating social needs screenings into health care settings.

Alternative payment models that incorporate social needs and realign incentives are becoming the future of value-based care.[4] In fact, both the Secretary of Health and Human Services, Alex Azar, and the Centers for Medicare and Medicaid Services (CMS) administer, Seema Verma, have said that the transition to value-based care needs to be accelerated.[5,6] Nationwide, there has been support for the testing and spread of new delivery and payment arrangements that holds providers accountable for patient health and health care costs.[7] Many states are positioning the accountable care organization (ACO) model as a way to integrate essential, non-medical support into clinical care, which incentivizes team-based care, data sharing, referral networks and resources, and collaboration.[8] The bundled payment model reimburses for an episode of care of a specific condition over a defined period of time, incentivizing providers to integrate health and social services to improve outcomes. Additionally, the Patient Centered Medical Home (PCMH) care delivery model requires primary care providers to address patient social needs before receiving payment, which includes advanced care coordination and supporting linkages of patients to local social service agencies.[9] In February 2018, five Governors released a "Bipartisan Blueprint for Improving Our Nation's Health System Performance," which outlines strategies for improving health system performance and reorient the health care system on value. One recommendation was to expand successful state Medicaid innovations, and a key component under that suggestion was to incorporate social determinants of health into Medicaid as well as measure and incentivize health and critical social outcomes (e.g. reducing poverty, increasing employment, and reducing criminal recidivism).[10]

Furthermore, CMS is currently testing an Accountable Health Communities (ACH) model and an advanced primary care model called the Comprehensive Primary Care Plus (CPC+) program. Health Leads predicts that these pilot programs are expected to increase the number of social needs screenings from tens of thousands per year to about 15 million per year, indicating a trend in the integration of social needs into healthcare.

Methods

The first phase of this 90-day wave consisted of scanning healthcare journals and leading healthcare magazines to identify the current state of SDOH screenings and existing tools used. The second phase consisted of key informant interviews. See Table 1 for the list of organizations that took part of the interviews.

Table 1. Key Informant Interviews: List of Organizations

Organization
CHI Franciscan Health
University of California, San Francisco and Social Interventions Research & Evaluation Network (SIREN)
Contra Costa Health Services
Rush University Medical Center
Health Leads
Contra Costa Health Services
Northwell Health
Kaiser Permanente's Care Management Institute

Results

Our research shows that there are several currently existing tools that have been widely adopted for social care screenings. Table 2 shows some of the more commonly adopted tools and the domains the tools cover. For additional screening instruments, the Social Interventions Research & Evaluation Network (SIREN) has compiled a list of available tools, brief summaries about where and when the tools have been used, and any existing evidence about it. In addition to screening instruments, SIREN has compiled reports, briefs, and commentaries into its Evidence Library, as well as webinars and presentations that may be useful to stakeholders involved in this work.

Table 2. Common Social Needs Screening Tools & Recommended Domains for Assessment

	Health Leads	Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE)	CMS Accountable Health Communities Health-Related Social Needs Screening Tool	Health Begins
Employment	X	X	X	X
Food insecurity	X	X	X	X
Housing instability	X	X	X	X
Housing condition		X	X	
Financial strain	X		X	X
Utility Needs	X	X	X	
Education	X	X	X	X
Social support and isolation	X	X	X	X
Physical activity			X	X

Mental/behavioral health		X	X	X
Substance use	X		X	
Immigration		X		X
Exposure to violence	X	X	X	X
Transportation	X	X	X	X
Other questions asked	Childcare	Veteran Status; Insurance status; Income; Access to health care; phone; incarceration; refugee	Disabilities	Civic engagement
Estimated Time to Complete by Patient	5 minutes	10 minutes	5 minutes	N/A

Common social needs across most tools include questions on education, employment, financial strain, housing instability, food security, exposure to violence, food insecurity, transportation, and social support. This aligns with the five key SDOHs outlined by the WHO. Note that the screening process for pediatric populations slightly differ and may need a different questionnaire and process. The American Academy of Pediatrics' Screening Technical Assistance & Resource (STAR) Center has compiled a list of screening tools for children aged 0 to 5 years. Common tools used to collect pediatric social histories include WE CARE (Well Child Care, Evaluation, Community Resources, Advocacy, Referral, Education Survey Instrument) and Whole Child Assessment for Ages 0-6 months.

Screening without a clear process to effectively and efficiently link patients to resources and follow-up can be harmful and may lead to patients feeling frustrated; thereby, damaging the trust between the patient and provider.[11] To support the screening process, it is important to establish an infrastructure to link patients to the appropriate resource and follow-up. Outlined below are several learnings that consistently emerged from our scan and interviews with key informants who have engaged in the implementation process.

Identifying the Population's Needs

The set of validated questions asked in the screening tool should reflect the top social needs of the community served. Before choosing a tool or questions, ensure that there is a process to engage stakeholders and identify the top needs. This can be done several ways, through a community health needs assessment (CHNA), patient surveys, focus groups with patients, community leaders, and other relevant stakeholders, and/or the analysis of existing data. After the top needs have been identified, understand the organization's aim of engaging in this work and then prioritize which SDOHs to target, which population will benefit most, and which will decrease per health care expenditures. Depending on the needs of the population, health systems have incorporated additional domains not reflected in the four tools outlined in Table 2, such as gender identity, incarceration history, caregiver responsibilities, dental or vision needs, legal assistance, and voting status.

While assessing the population's needs, it is also important to assess their assets. Using a strength-based approach and understanding social connections, resiliency, and other protective factors positively correlates with long-term outcomes.[12]

Ensure Patient- and Family-Centered Processes

While there is an agreement about common domains health systems should screen for – education, employment, exposure to violence, financial strain, food insecurity, transportation, social support, and housing instability – there could be variation among how the tool is administered and who does it.

Depending on the community's needs and assets, determine the process for screening and linkage. The suggested instruments mentioned in Table 2 have been tested and validated for research purposes, though the actual questions used could be adapted in a clinical setting that best fits the needs of the patient population. Test questions to confirm that the meaning of the question is clearly understood by both patients and providers. Translation services should be offered if there is a low health literacy rate. Be sure to look at smaller sub-populations for translation needs. For example, a community can serve a small refugee population, and while the relative number of refugees is small compared to the entire patient population, there may be a higher need within that sub-population for translation services. It is even more important to test questions in advance to check for understanding if the tool is translated to a different language or if the process is dependent on a translator who has not been fully trained on this tool.

Furthermore, some organizations find it most effective to have physicians administer the screening; others use self-administering methods, such as paper, tablet, or computer; others use the original Health Leads model of staffing college students; and others use nurses, medical assistants, health conductors, or other workforce. Understand and respect how your patient population prefers to disclose sensitive information and the most comfortable way to seek assistance. For example, Contra Costa Regional Medical Center decided train their workforce (e.g. *promotoras*, African American health conductors, and re-entry health conductors) to administer the screening after a visit instead of during registration so that patients can build a trusting relationship first.[13]

After the tool is administered, patients should be engaged in the decision-making process on whether they want to be linked to resources and which need they would like to prioritize. Ask patients about their concerns, priorities, existing resources, and desire for assistance. A study found that there was only a 35% overlap between the families who screening positive for food insecurity and those who requested food assistance.[14] For additional advice on creating a screening tool, reference the Health Leads Screening Toolkit, which contains sample questions that asks if the patient would like to receive assistance and if any of the needs are urgent.

Maintain a Database for Community Resources

Ensuring that there are established resource connections in place before the screening occurs is central to assuring successful linkage. Some organizations used software, such as Health Leads Reach and NowPow, to maintain an updated list of community resources; others who are starting out have a paper directory staff can use to connect patients to resources. Some organizations have had long existing relationships with community partners, while others are starting to build and strengthen those relationships. Understand the existing resources within the community and create a system to track these resources, get feedback from patients about their experience, and update the resources accordingly. This can improve the quality of the resources and build patient and provider trust. Strong relationships with community partners is important in the linkage process; in the next wave of IHI research, we will delve into the best ways to establish partnerships for successful linkages.

Integrate the Screening Process into Electronic Health Records

If there is an electronic health record (EHR) system in place, integration of SDOH into the EHR system is critical. Researchers working with the Oregon Community Health Information Network (OCHIN) have found that patient and population health outcomes could be improved when the collection and presentation of SDOH data is standardized and accessible to providers.[15] Additionally, the Institute of Medicine (IOM) organized a committee that recommended social and behavioral domains and measures

that captures the SDOH for electronic health records that will meet the "meaningful use" definition.[16] The 11 recommended domains are: race or ethnic group, education, financial-resource strain, stress, depression, physical activity, tobacco use, alcohol use, social connection or isolation, intimate-partner violence, and neighborhood income. Several major EHR vendors, including EPIC, Cerner, athenahealth and eClinicalWorks, have begun to broaden the types of data they can collect to incorporate social determinants, population health, and other relevant data into their product, thus, creating a Comprehensive Health Record (CHR). In fact, EPIC plans to include a standard SDOH screening based on the IOM recommendations in the 2018 version.

Demographic information is important to keep updated; integrate this into the workflow so that patients are not asked to fill out the same information unnecessarily. Determine what disaggregated data needs to be collected and how often this information needs to be collected. For example, while income level or occupation might be collected more frequently, race/ethnicity might only need to be collected once. A patient may feel frustrated if asked to fill out the same questions multiple times.

Building Will

Starting from leadership, the board and c-suite of the health system should understand why this work is important and how it addresses the Triple Aim. Increasingly, there are more monetary incentives to engage in this work. Still, leaders need to be able to communicate the business case for this, how it fits into its strategic and operational objectives, and allocate the appropriate resources to ensure its success. Additionally, leaders should have a sustainability plan and think about the time and resources needed when it spreads to a larger population. Spreading this process to all patients is important because limiting screening practices based on apparent social status may reinforce stereotypes, stigmatize the process, and could lead to implicit bias and presumptions about certain populations. Further, limiting it to certain populations may fail to support patients who go through a job loss or another adverse life when they were previously economically secure.[17]

At the front-line staff level, planning should start with a way to identify all stakeholders who will be impacted by the changes to the clinical workflow and assess the current activities in the organization related to social care screenings, as there might be individuals or groups who have already been doing the screening and/or linkage or sees this work as part of their scope of work. Understand the challenges staff may feel in implementing any new initiatives, including the fear of increase workload and job security. These stakeholders are a crucial component to identifying existing needs and designing or redesigning the workflow. If there are individuals, such as social workers, who are currently responsible for this work, engage them early in the process and identify how the changes would allow them to work more effectively and at the top of their license. Once the existing assets within the organization have been identified, creating the right structure to fill in the gaps will allow the process to operate more efficiently.

If there are new staff that need to be trained, ensure that there is diversity within the staff and with different skill sets, including motivational interviewing, community involvement, and language capacity. Research and interviews suggest that provider and patient race concordance is associated with great satisfaction with care, suggesting that there should be more efforts to increase the number of minority providers and increasing the ability of providers to interact with patients who are not of their own race.[18]

Conclusion

Although health care is important, considerable scientific evidence has shown that unmet social, nonmedical needs are even more important to impacting health outcomes. There are many organizations and health systems who have engaged in addressing the SDOH for over a decade, and now there is a major shift underway with many others in the healthcare sector joining. Screening and linking patients to resources is a way medical care has started to address this, and this report summarizes the existing tools and processes various health systems have tried to implement social care screenings.

Continued implementation to impact the SDOH would signify a cultural shift in how health is viewed and truly influence the underlying conditions resulting in health disparities. To move our health care system from focusing on sickness to focusing on wellness, collaboration across sectors to address the social determinants that is caused by poverty is critical. Additionally, successful implementation requires systems alignment between medical care and social care. As the number of screenings and linkages to resources increase, it may increase health care's dependence on social services and increase demand for services; thus, impacting the carrying capacity of the social services sector. The next 90-day project will look into how linkages are made after the screening process, what linkages are considered successful, and the ways the medical sector can work with community partners to ensure alignment.

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