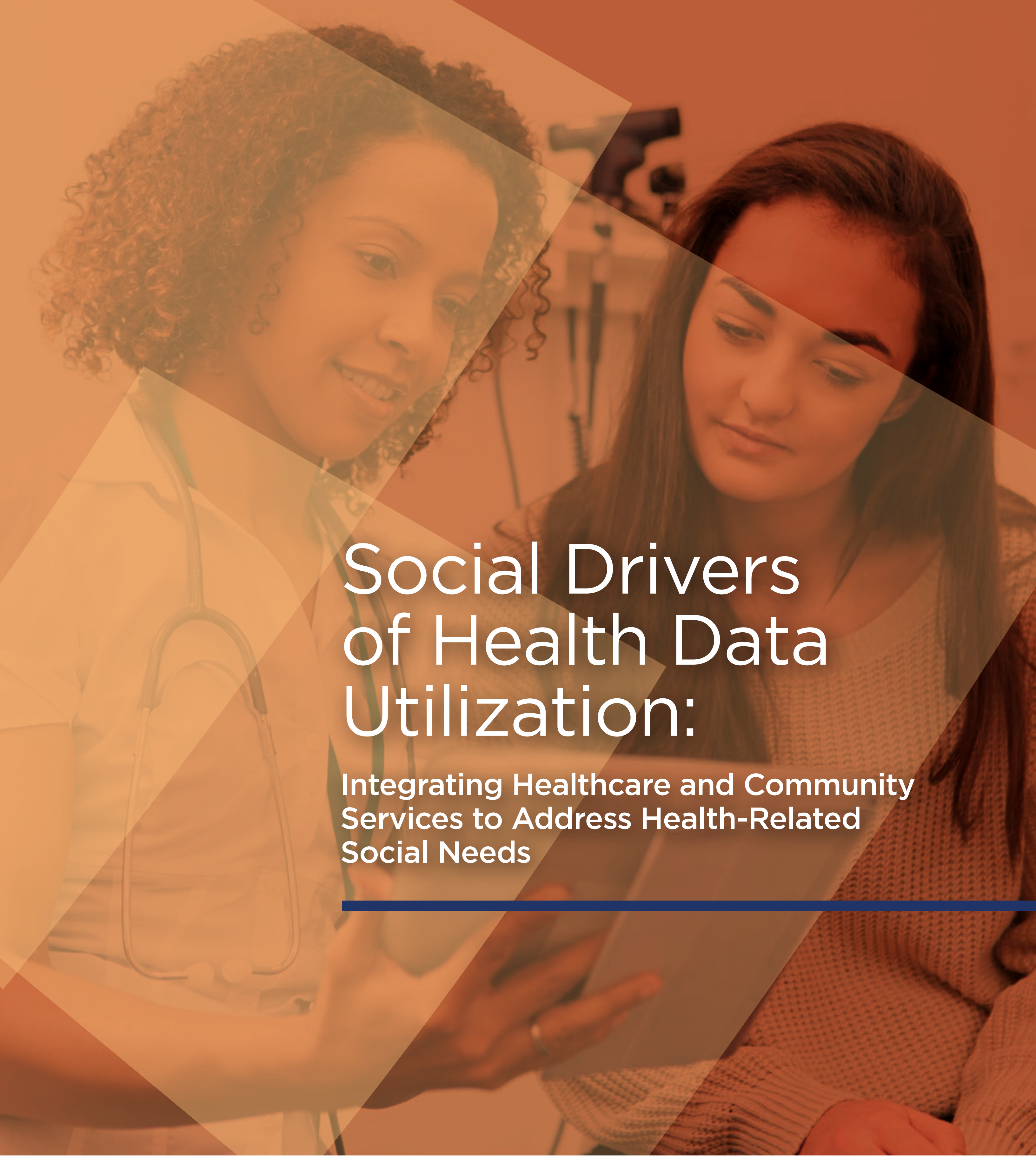

Social Drivers of Health Data Utilization:

Integrating Healthcare and Community Services to Address Health-Related Social Needs

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The National Quality Forum (NQF) is a not-for-profit, nonpartisan, membership-based organization that works to improve healthcare outcomes, safety, equity, and affordability. Our unique role is to bring all voices to our table to forge multistakeholder consensus on quality measurement and improvement standards and practices that achieve measurable health improvements for all. NQF is a proud affiliate of The Joint Commission.

ACKNOWLEDGEMENTS

NQF would like to thank the many individuals who contributed their expertise to informing actionable recommendations for how patients, healthcare teams, community partners, and the broader healthcare community can partner to address health-related social needs. These individuals, along with the NQF member organizations they represented, are listed in Appendix A.

RECOMMENDED CITATION

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Executive Summary

Healthcare organizations collect data on social drivers of health (SDOH), only to encounter barriers to using these data to address patients' health-related social needs (HRSN). In response to these barriers, the National Quality Forum (NQF) Leadership Consortium—a body of multistakeholder leaders from NQF member organizations—identified actionable recommendations to help healthcare organizations address HRSNs by partnering with community services to connect patients with needed resources:

- Leverage digital platforms to augment regional referral networks and resources with real-time information
- Develop methods to include social needs information with healthcare services referrals
- Integrate data (e.g., SDOH, sexual orientation and gender identity [SOGI]) with referral processes to improve understanding of existing disparities and access to affirmative care
- Create and maintain active relationships among healthcare teams, community partners, and the broader healthcare community to support referral networks
- Identify and build relationships with community leaders (e.g., social influencers, faith-based leaders) and/or agencies to facilitate social needs assessments in the community, connect patients to resources, and improve communication among all parties
- Identify organizational and partner roles and responsibilities to optimize collaboration to resolve HRSNs
- Develop pathways of multidirectional communication to increase awareness and transfer of HRSN information among healthcare services, referral sources, and all other networks
- Identify and build collaborative partnerships with experts in healthcare information technology (IT), digital platforms, and artificial intelligence to streamline processes and automate referrals
- Strengthen data interoperability through standardized collection and reporting
- Solicit leadership buy-in for technological investments and methodologies by defining alternative measures of success

The Leadership Consortium offers these recommendations as broad guidance for diverse healthcare organizations to better integrate with community services to address HRSNs

The Leadership Consortium followed a two-year process to identify, refine, and finalize these recommendations. The process included the Implementation Collaborative, in which four members of the Leadership Consortium—the U.S. Department of Veterans Affairs (VA), Case Management Society of America (CMSA), Texas Health and Human Services Commission (Texas HHSC), and Phreesia—tested the recommendations across five projects in diverse healthcare settings.

Because every healthcare organization is unique, the recommendations are not a prescriptive list of must-do tasks. Instead, the Leadership Consortium offers these recommendations as broad guidance for diverse healthcare organizations to better integrate with community services to address HRSNs.

Introduction

Professionals across the spectrum of healthcare must understand patients' social needs to address health disparities.

Up to 90 percent of health outcomes may be attributable to socioeconomic and behavioral factors,[1] and the effects of the COVID-19 pandemic highlighted disparities in SDOH. Health inequities increased the risk of people with health and social disparities contracting COVID-19 and dying.[2] Additional stressors to disparities perpetuated existing mistrust in healthcare, spread of misinformation, and unwillingness of patients to disclose sensitive personal information or allow that information to be shared.[3-5] Healthcare is challenged with addressing these factors through person-centered approaches that mitigate risks to health outcomes for patients, communities, and populations.[6,7]

An increasing number of care delivery settings across the U.S. healthcare ecosystem are screening for SDOH and HRSNs so they can leverage the data to improve care, care delivery, health, and health outcomes. However, healthcare teams face challenges in using these data, once collected, to address identified social needs. Their inability to use these data effectively (e.g., ineffective treatment plans) can foster mistrust and frustrate patients and healthcare workers, reducing the potential for a positive impact on health outcomes.[8]

This report presents opportunities for a diverse group of healthcare stakeholders to improve health outcomes by using SDOH data to create partnerships with community-based organizations (CBOs). This report offers guidance on systematic ways to improve partnerships among patients, healthcare teams, community partners, and the broader healthcare community. The report applies to a wide healthcare audience but is particularly salient for leaders who are navigating the complexities of managing SDOH data and addressing HRSNs to improve health outcomes.

SDOH vs HRSNs: SDOH refer to community-level factors, while HRSNs refer to individual-level factors, both of which affect an individual's health and well-being.[14]

Terms

Community Partners: Groups affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of communities.[9]

Healthcare Teams: Groups of multidisciplinary individuals and resources that work together to satisfy patients' needs. For the purposes of this report, *healthcare teams* can refer to people within a single organization or across organizations who are collaborating to address a patient's HRSNs.[10]

Health-Related Social Needs (HRSNs): Individual-level, adverse social conditions that may negatively affect a person's health or healthcare, such as food insecurity, housing instability, and lack of access to transportation.[11]

Return on Health: Modified from a concept introduced by the American Medical Association, for the purposes of this report, a *return on health* is considered an alternative approach to understand the value of care by incorporating positive impacts for patients, clinicians, payers, and/or society, rather than focusing solely on financial benefits.[12]

Social Drivers of Health (SDOH): Conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risks. (Also referred *to as social determinants of health.*)[13]

The Leadership Consortium Process

The NQF Leadership Consortium convenes thought leaders and experts from public and private sectors to take collective action on the nation's highest priority healthcare issues. The 2022-2023 process began with Leadership Consortium members (see Appendix A) identifying SDOH Data Utilization to Improve Health Outcomes as the priority of focus. The Consortium then developed the following five initial recommendations to address SDOH and HRSN data utilization through partnerships and referrals, emphasizing opportunities to leverage technology and build patient and community engagement:

- Leverage digital platforms to augment regional referral networks and resources with real-time information
- Create and maintain active relationships among healthcare teams, community partners, and the broader healthcare community to support referral networks
- Identify and build collaborative partnerships with experts in healthcare IT, digital platforms, and artificial intelligence to streamline processes and automate referrals
- Identify and build relationships with community leaders (e.g., social influencers, faith-based leaders) and/or agencies to facilitate social needs assessments in the community, connect patients to resources, and improve communication among all parties
- Develop methods to include social needs information with healthcare services referrals

The recommendations focus on improving outcomes by strengthening relationships and communication among patients, healthcare teams, and the broader healthcare community

The Leadership Consortium launched an action-oriented Implementation Collaborative, in which four member organizations (i.e., the Implementers) evaluated the recommendations across five projects in diverse clinical settings. The Implementers shared their findings with the full Consortium, which then worked together to identify key lessons learned, barriers, resources, and outcomes. The Leadership Consortium culminated its work by revisiting and updating its original recommendations, ultimately identifying ten final recommendations that reflect the Implementation Collaborative findings as well as current knowledge of using SDOH data to address HRSNs. The recommendations focus on improving outcomes by strengthening relationships and communication among patients, healthcare teams, and the broader healthcare community.

Limitations

NQF facilitated this quality improvement initiative over two years, with the aim of developing and evaluating actionable recommendations. NQF did not require Implementers to evaluate the same recommendation or follow standardized projects, populations, or methodologies. Implementers elected to share projects at varying stages of implementation.

Implementers and Their Projects

During the Implementation Collaborative, Leadership Consortium members opted to either act as Implementers by conducting and showcasing a new or existing project, or to observe the progress of projects and share experiences and expertise on barriers and achievements. Four member organizations—the U.S. Department of Veterans Affairs (VA), Case Management Society of America (CMSA), Texas Health and Human Services Commission (Texas HHSC), and Phreesia—chose to participate as Implementers and capitalize on the unique opportunity to collaborate directly with a diverse group of thought leaders and experts from across the U.S. The Implementers showcased the following five projects described below:

Promoting Interoperability to Advance Community Partnerships (VA)

Improving Access to Housing and Nutrition with Case Management Intervention (CMSA)

Texas Community Care Partnership for Health-Related Social Needs (Texas HHSC)

Leveraging Digital Tools to Meet Patients' Social Resource Needs (Phreesia)

Using SDOH and the Patient Activation Measure® (PAM®) Data to Target Limited Community Health Worker Resources to High-Need Patients (Phreesia)

PROMOTING INTEROPERABILITY TO ADVANCE COMMUNITY PARTNERSHIPS (VA)

The VA's project addressed opportunities in how it currently collects and uses SDOH data. VA used the Assessing Circumstances & Offering Resources for Needs (ACORN) tool as its standardized national SDOH screening tool for Veterans. VA worked to promote interoperability of these data with a standards-based approach and identified best practices to tie together the collected data to develop tools, training, and community partnerships to improve Veteran outcomes.

Project Goals

VA aimed to develop an enterprise-wide solution for sharing SDOH data and HRSNs for Veterans and families. This solution included the following:

- Assess the current collection and use of SDOH data
- Promote interoperability of these data with a standards-based approach
- Identify existing practices and community playbooks for referrals
    - Disseminate best practices to and with the field
    - Identify metrics (process and outcome) to assess interventions and Veteran well-being

IMPROVING ACCESS TO HOUSING AND NUTRITION WITH CASE MANAGEMENT INTERVENTION (CMSA)

CMSA partnered with Marion Health in Indiana to use SDOH data for interventions aiming for meaningful change in three specific areas: housing, nutrition, and case management.

Project Goals

CMSA set goals to ensure that identified patients received adequate support to improve overall health outcomes, including the following:

- Provide safe and affordable housing
- Offer nutritional support for improved overall health
- Support care coordination with case management intervention
- Improve patient satisfaction with the healthcare system and referral services

TEXAS COMMUNITY CARE PARTNERSHIP FOR HEALTH-RELATED SOCIAL NEEDS (TEXAS HHSC)

Texas Community Care Partnership (CCP) for HRSNs is a collaboration among the Greater Houston Community Care Hub, local CBOs, and the University of Texas School for Public Health (UTHealth) to address patients' and beneficiaries' HRSNs for housing, food, transportation, and ability to pay bills.

Project Goals

Texas CCP aimed to analyze the target population's HRSNs, stratify HRSNs based on frequency, and cross-reference combined CBO capacity. These goals included the following:

- Identify additional CBOs to meet projected demand for interventions based on risk-stratified analysis to support the formation of the new Community Care Hub
- Analyze total cost of care for Accountable Health Communities (AHC) beneficiaries that completed a HRSN screening by UTHealth

LEVERAGING DIGITAL TOOLS TO MEET PATIENTS' SOCIAL RESOURCE NEEDS (PHREESIA)

Phreesia leveraged digital technology to screen patients for social needs and automatically deliver an online social resource directory, such as findhelp.org or NCCare360, to patients who screened positive for a social need. This digital workflow replaced staff labor to screen patients for SDOH and communicate resource information.

Project Goal

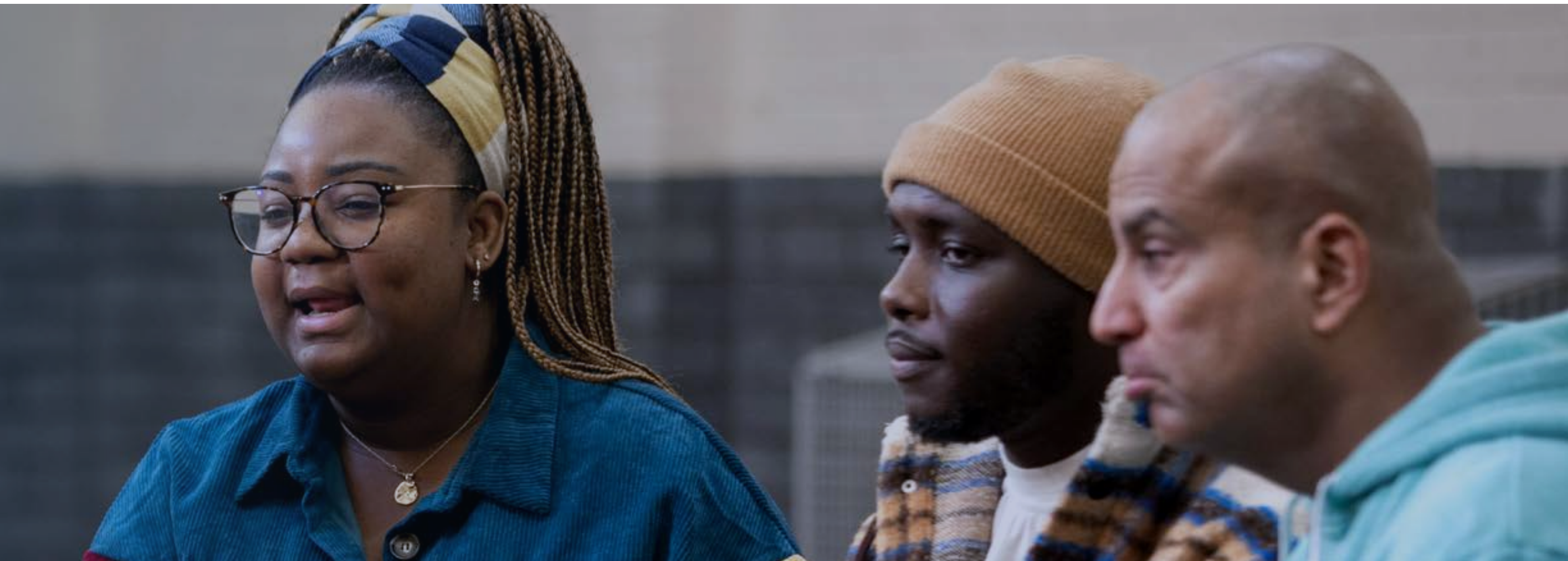
Phreesia aimed to reduce barriers to communicating social resource information to patients in a streamlined way that required minimal staff involvement.

USING SDOH AND PATIENT ACTIVATION MEASURE® (PAM®) DATA TO TARGET LIMITED COMMUNITY HEALTH WORKER RESOURCES TO HIGH-NEED PATIENTS (PHREESIA)

Phreesia digitally administered both the Protocol for Responding to & Assessing Patients' Assets, Risks & Experiences (PRAPARE) to screen patients for social needs, and the Patient Activation Measure® (PAM®) to assess patients' ability to manage their own health. All patients with a positive screen for any social need received follow-up tailored for their level of activation as determined by their PAM® level. Lower-activated patients required more support, such as direct outreach from a community health worker (CHW) and digital outreach, while higher-activated patients could benefit from digital outreach only. This solution was pilot tested by a Phreesia client, HealthLinc, a federally qualified health center (FQHC) in northern Indiana.

Project Goal

Phreesia aimed to test and optimize a solution that enabled HealthLinc to address social needs by tailoring follow-up to each patient's ability to manage their own health.



Integrating Healthcare and Community Services to Address HRSNs

Implementers identified key lessons from the five projects and focused on strengthening relationships and communication with referral resources, individuals, and health services. Implementers' experiences highlight important barriers as well as promising practices and resources that can facilitate multistakeholder engagement in reducing disparities.

Each of the following sections focuses on the unique perspectives of **patients**, **healthcare teams**, **community partners**, **and the broader healthcare community**, yet all stakeholders are critical to optimizing SDOH data utilization to improve health outcomes. The first section identifies ways for healthcare teams to foster patient engagement by using digital platforms to augment referral networks. The second section addresses opportunities to advance collaborations between healthcare teams and community partners by creating and maintaining active interorganizational relationships. The third section discusses ways to share data across the broader healthcare community (e.g., health plans, government agencies) by partnering with health IT experts to improve and automate referral systems. The Leadership Consortium discussions provided insights for navigating the complexities of managing SDOH data and integrating healthcare and community services to reduce disparities.

PATIENTS AND HEALTHCARE TEAMS

Patients respond to many questions during healthcare encounters, and their answers can expose their health and social risks. Informed healthcare teams can respond to these risks with interventions and treatment recommendations to improve health outcomes for their patients. Patients trust their healthcare teams to acknowledge their concerns and help guide their path to better health. Care teams can maintain this trust by providing timely and effective resources to address HRSNs. As screening efforts mature, healthcare teams are navigating growing numbers of identified HRSNs and increasing challenges of referral and resource allocation. This poses a risk of identifying needs without the ability to offer solutions, frustrating both patients and care teams.[15]

To address these challenges, Implementers evaluated digital platforms to operationalize SDOH data and connect patients to referral networks and resources. Increasing the use of digital workflows that automate referrals or access to community resources allows healthcare teams to act on information provided by patients while minimizing additional administrative burden.[16] Digital platforms, such as electronic Community Resource Referral Systems (CRRSs), may identify positive screens from electronic health record (EHR) data, while other platforms, such as findhelp.org, provide directories of community resources. These platforms will continue to evolve, particularly as they incorporate technologies (e.g., machine learning, natural language processing) to pull HRSNs from unstructured data.[16,17]

IMPLEMENTATION COLLABORATIVE RECOMMENDATION:
Leverage digital platforms to augment regional referral networks and resources with real-time information

BARRIERS

Every minute spent documenting excellent care is another minute not delivering that care, and care teams can benefit from efficient workflows created by digital platforms. However, automation does not guarantee a successful connection between patients and needed resources. Individuals with higher health literacy levels and accessibility to technological devices are more likely to seek health-related information online.[18] Individuals with barriers to either may be at risk for inequities when accessing care or resources through digital platforms. Also, patients may disregard or miss care team communications (e.g., emails, calls, text messages) if they are not expecting information via new or different platforms. CMSA initially found that only 8% of discharged patients accessed referral resources. CMSA addressed this by increasing patient education about referral resources prior to discharge and implementing a secure digital messaging platform, TigerConnect, to create an alternative communication approach. The changes led to nearly 50% of discharged patients accessing resources for their identified HRSNs. Phreesia addressed lack of response to email messaging by revising the content to make it more engaging and easily recognized as a communication from the patient's primary care provider.

The success of digital platforms to automate referrals requires both quantitative and qualitative assessments. Phreesia identified the need for both direct patient feedback and quantitative data to capture key evidence of patient engagement with referrals and areas for improvement. Feedback indicated that technological solutions and digital platforms can alleviate some, but not all, challenges for SDOH referrals, and additional healthcare team engagement remains critical to addressing social needs. Patients receiving automated referrals may run into barriers when attempting to access assistance for HRSNs. Community partners may not be able to meet growing community needs or minimize barriers to access (e.g., providing financial assistance, translation services, or gender-affirming care). Patients may not be able to navigate barriers to access, leaving HRSNs unmet and healthcare teams unaware, highlighting the need for improved communication and collaboration between healthcare teams and community partners.

PROJECT HIGHLIGHT: Improving Access to Housing and Nutrition with Case Management Intervention

CMSA and its partners at Marion Health are driving improvements for their population by putting patients front and center in efforts to resolve identified HRSNs. By adapting communication methods and ensuring that patients are clearly educated on how to connect to resources, CMSA has seen patient access to resources rise to nearly 50% post discharge. Furthermore, CMSA assesses patient satisfaction in its evaluation of HRSN resolution to ensure that the patient perspective is considered.

PROJECT HIGHLIGHTS: Leveraging Digital Tools to Meet Patients' Social Resource Needs and Using SDOH and Patient Activation Measure® (PAM®) Data to Target Limited Community Health Worker Resources to High-Need Patients

Phreesia sent more than 15,000 emails and texts containing SDOH resource information to patients with identified HRSNs. These digital platforms enabled patients to self-identify needs and digital outreach to occur quickly. Organizations can use the PAM® to assess a patient's ability to manage their own health and can leverage these data to develop individualized care plans.[19] HealthLinc used PAM® data to strategically employ human resources (e.g., CHWs) for patients needing greater assistance navigating referral sources. CHWs reported more substantive conversations with patients and a perceived improvement in workload. This feedback indicates that digital tools can boost efforts to efficiently connect patients with needed resources.

PROMISING PRACTICES

The Leadership Consortium identified the following key practices for using digital platforms to operationalize SDOH data and connect patients to referral networks and resources:

- Evaluate digital literacy levels of both patients and care teams to reduce the risk of inequities and barriers to engagement
- Improve communication by discussing post-discharge plans and establishing patient preferences and care goals
- Use alternative communication platforms (e.g., secure digital messaging) to allow for multiple avenues to connect with patients and share referral networks and resources
- Regularly review and revise communication language and survey tactics to optimize patient engagement
- Identify language barriers and opportunities to mitigate these barriers for patients using digital platforms
- Use digital platforms for patients able to manage their own health, and prioritize human resources for complex patients
- When possible, create warm hand-offs to case managers outside hospital settings
- Give patients resources tailored to their needs rather than general catalogs of information
- Capture direct patient feedback to assess their engagement with referrals and identify improvement opportunities

RESOURCES

The following resources emerged during collaborative discussions:

- TigerConnect Clinical Collaboration Platform – a HIPAA-compliant communications platform that care teams can use for secure messaging, calls, and video chats with patients and caregivers
- Patient Activation Measure® (PAM®) – a validated survey that measures a patient’s knowledge, skills, and confidence to manage their own health and healthcare
- Pear Suite – a care navigation platform supporting CHWs to address SDOH

ADDITIONAL RECOMMENDATIONS

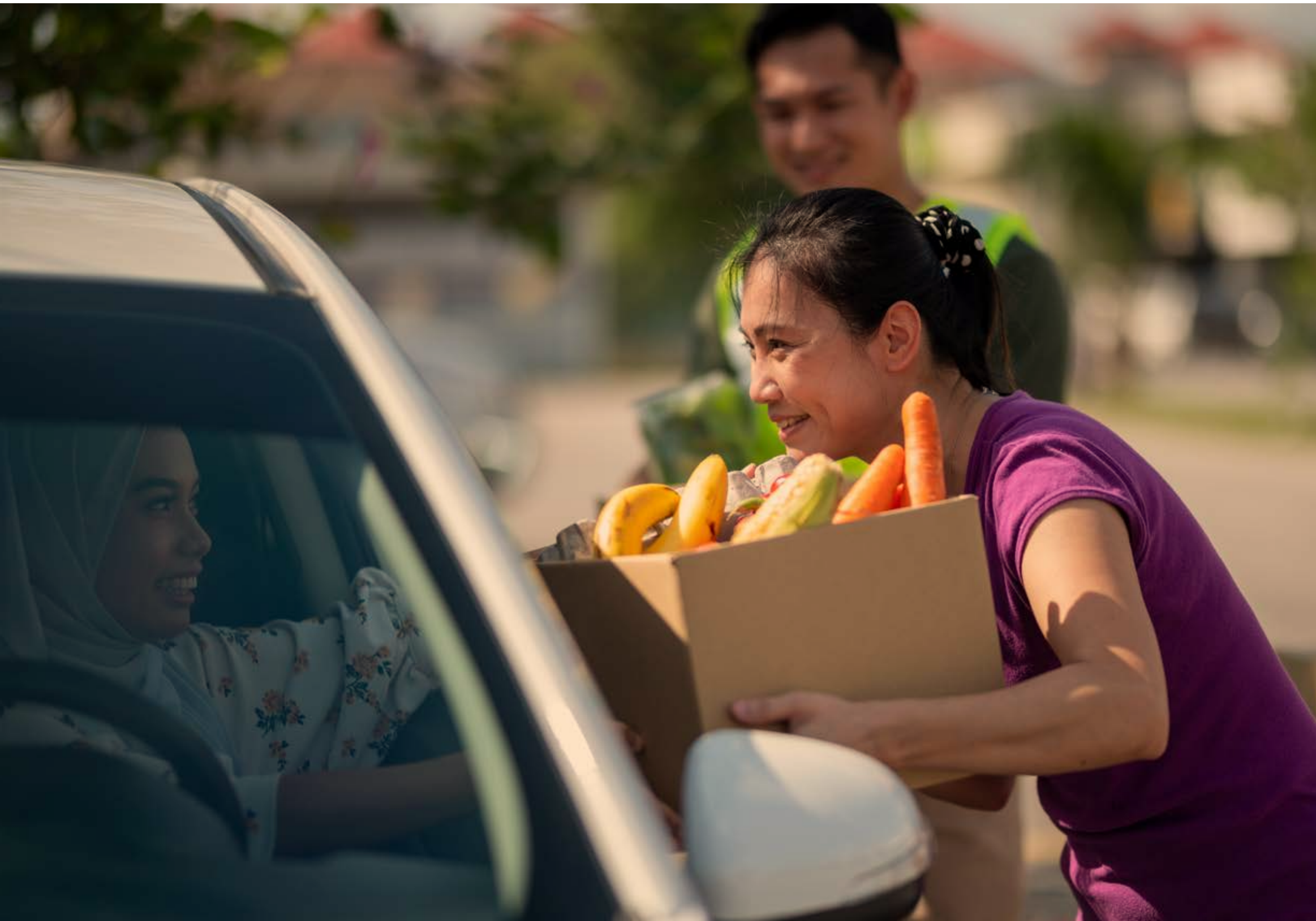
Based on the multistakeholder discussion from the Implementers’ evaluation, the Leadership Consortium submits the following additional recommendations:

- Develop methods to include social needs information with healthcare services referrals
- Integrate data (e.g., SDOH, SOGI) with referral processes to improve understanding of existing disparities and access to affirmative care

HEALTHCARE TEAMS AND COMMUNITY PARTNERS

Healthcare teams are well positioned to identify HRSNs during patient encounters, and with growing incentives to focus on population health, many are working to connect patients with community partners and resources.[11] However, care teams struggle to address patients' needs that may be beyond the scope of the patient encounter. This challenge calls for greater collaboration among patients, healthcare teams, and community partners (e.g., CBOs or community providers) to improve the availability and accessibility of resources. Healthcare teams may direct patients to national and local resource directories as first steps for support, but without clearly defined referral pathways, patients may not receive the assistance needed.

To address these challenges, Implementers evaluated ways to strengthen interorganizational relationships and coordination of referral processes. Multidirectional communication and collaboration between healthcare teams and community partners help simplify processes for patients and address gaps that inhibit patient access to resources.[20] Closed-loop referral systems allow healthcare team members to stay informed of community partner capacity or organizational changes that can inhibit patient access to resources. In addition, healthcare teams can be notified whether HRSNs have been addressed, improving the opportunity to follow up on and track outcomes.[21]



IMPLEMENTATION COLLABORATIVE RECOMMENDATION:

Create and maintain active relationships among healthcare teams, community partners, and the broader healthcare community to support referral networks

BARRIERS

Referral systems are designed to efficiently connect patients to needed resources. Texas CCP and VA found that developing, coordinating, and maintaining networks with multiple community partners pose many challenges. Texas CCP recognized the fragmented care coordination efforts across multiple healthcare and community stakeholders in its community and began surveying community partners' existing practices, processes, and capabilities. This survey identified differences in business models and organizational priorities, highlighting the need for role clarification, alignment, and long-term collaborative agreements among the participants. Early findings also revealed disparate perspectives on how success is defined for HRSN resolution. Some community partners consider HRSNs resolved when a resource is offered, while others consider resolution when the need has been fully addressed. Without successful interorganizational communication, healthcare staff can lose visibility into HRSN resolution following a referral out to the community. The Implementers identified duplicative collection and intervention efforts as a barrier to effectively addressing patients' social needs. CMSA found a lack of synergy among case managers and highlighted an opportunity to collaborate and share resources across domains (e.g., health plans, social services, CHWs). VA found it difficult to track improvements due to a lack of communication feedback loops, namely a lack of data infrastructure to assess outcomes after a community referral is made. Community partners may lack capacity to share data with healthcare teams, limiting the opportunity to identify gaps in referral pathways. These findings highlight the need for interoperable systems to better support patients, healthcare teams, and the broader healthcare community.

Project Highlight: Texas Community Care Partnership for Health-Related Social Needs

Texas CCP is connecting patients to appropriate community resources to directly address their needs through its Greater Houston Community Care Hub, which includes 150 CBOs in the Houston area. Texas CCP will partner with these organizations to analyze the population's HRSNs, stratify those HRSNs based on frequency, and evaluate capacity of CBOs to address HRSNs in the community. To ensure consistency and standardization across numerous partners, Texas CCP surveyed existing networks of CBOs in Texas about their processes for HRSN resolution.

PROMISING PRACTICES

The Leadership Consortium identified the following key practices for advancing collaboration between healthcare teams and community partners:

- Identify internal key decisionmakers before joining larger collaborations with community partners
- Establish regular and inclusive meetings, communications, and shared goals and objectives with community partners
- Build relationships with case managers and community health workers across multiple organizations, including health plans, community partners, and healthcare systems, to expand the known directory of available resources and to reduce duplication
- Analyze the target population's SDOH and HRSNs, catalog existing referral practices, and identify the capacity of existing community partners and resources to address these needs
- Engage impartial third-party consultants or experts as needed to establish structure and processes for multistakeholder collaborations
- Tailor workflows for community partner processes to foster engagement and ease implementation efforts
- Start small and scale efforts slowly

RESOURCES

The following resources emerged during collaborative discussions:

- **Unite Us** – a cross-sector collaboration platform to screen for social needs and connect patients to services and resources
- **FindHelp.org** – an interoperable social care network and nationwide directory of referral resources and services by location
- **OutList®** – a comprehensive source for LGBTQ+ healthcare, including affirming provider directory, nationwide community health resource database, and free care navigation services for individual patients
- **PAN Foundation** – a non-profit organization that assists with select medication, transportation, or treatment out-of-pocket costs for underinsured individuals with certain healthcare diagnoses

ADDITIONAL RECOMMENDATIONS

Based on the multistakeholder discussion from the Implementers' evaluation, the Leadership Consortium submits the following additional recommendations:

- Identify and build relationships with community leaders (e.g., social influencers, faith-based leaders) and/or agencies to facilitate social needs assessments in the community, connect patients to resources, and improve communication among all parties
- Identify organizational and partner roles and responsibilities to optimize collaboration to resolve HRSNs
- Develop pathways of multidirectional communication to increase awareness and transfer of HRSN information among healthcare services, referral sources, and all other networks

THE BROADER HEALTHCARE COMMUNITY

As the broader healthcare community incorporates SDOH data collection into standard practices, enhanced data infrastructure and interoperability are of great importance.[22] Current EHRs were built to gather medical information, leading to often unstructured documentation of SDOH data which is then challenging to capture and analyze. Until those working to address HRSNs—individual facilities, large health systems, and various other stakeholders—can consistently and accurately exchange information, patients may continue to be at risk for disparities. Fully integrated data systems are a growing priority for healthcare organizations (e.g., hospitals, health plans, government agencies, payers, purchasers, quality measurement and research experts) working toward enhanced referral networks, service delivery, and multidirectional communication.[22,23]

The Implementers explored ways to streamline workflows to connect patients to referral sources. Whether incentivized through measurement, reimbursement, or self-directed health equity promotion efforts, many organizations are leveraging digital tools and technologies to facilitate the identification and resolution of HRSNs.[17,24,25] Experts in health IT and digital platforms are crucial partners in developing integrated, automated workflows that are usable today, yet also equipped for new advances (e.g., artificial intelligence), to support data sharing between healthcare teams and community partners.

IMPLEMENTATION COLLABORATIVE RECOMMENDATION:

Identify and build collaborative partnerships with experts in healthcare IT, digital platforms, and artificial intelligence to streamline processes and automate referrals

BARRIERS

Current methodologies for collecting and reporting SDOH data vary widely across organizations, impeding data use for community and population tracking and trending. Phreesia recognized that even with robust data collection processes, at times the data are not available to those organizations or healthcare teams that interact and intervene to improve health outcomes. Standardized data collection tools are available and preferred for collection. However, data can be collected using varied methods such as direct surveying by clinicians, self-reporting on questionnaires, or in unstructured notes documented in EHRs or other digital tools. VA inventoried its screening tools to inform the development of standard processes and found that this would not only assist with streamlining data collection, but also improve the reporting of positive screens. Also, a lack of standardized documentation practices compounds the challenge of interoperability, which leads to varying understanding and use of coded data (e.g., Logical Observation Identifiers Names and Codes [LOINC]; Systemized Nomenclature of Medicine – Clinical Terminology [SNOMED CT; and International Classification of Diseases, Tenth Revision, Clinical Modification [ICD-10-CM] Z codes). Standardization of both data collection and reporting requires institutional prioritization to achieve the level of interoperability and integration to effectively address community-level trends in HRSNs. This level of organizational design and implementation requires multistakeholder buy-in and investments in time and resources.

Texas CCP experienced challenges in sustaining organizational efforts and improvements as fiscal appropriations change from grant funding to internal organizational funding. Resources to address HRSNs can be costly, so healthcare leaders should consider not only the return on investment but also the return on health, an alternative way to assess and understand the value and impact of care. Organizations are actively analyzing SDOH data to identify meaningful ways to quantify the impact of efforts to address HRSNs. VA is working to identify process measures, and Texas CCP has analyzed HRSN prevalence with emergency department (ED) utilization rates. Every sector recognizes the importance of strengthening community health by addressing HRSNs, but without improved data gathering and sharing, coordination of efforts across the broader healthcare community will continue to be challenging.[22]

Project Highlight: Promoting Interoperability to Advance Community Partnerships

VA is developing an enterprise-wide solution to sharing SDOH data and HRSNs for Veterans and their families. This standardization of data practices will allow for a more interoperable, standards-based approach to communication with front line providers across VA, referral sources, and healthcare services. VA began by inventorying existing practices for SDOH data collection and referrals throughout the system to establish a baseline from which they could identify best practices and develop standards-based approaches to tie the collected SDOH data to new tools, training, and community partnerships to improve Veteran outcomes.

PROMISING PRACTICES

The Leadership Consortium identified the following key practices to improve data sharing across the broader healthcare community:

- Conduct data capacity assessments for healthcare organizations, CBOs, and the broader healthcare community
- Establish consensus on outcomes and measures with partners
- Establish processes for data capture, shared data models and metrics, and standard definitions across healthcare teams and community partners
- Use interoperability advances in healthcare data exchange (e.g., Fast Healthcare Interoperability Resources [FHIR®], Health Level Seven [HL7®]) with EHR integrations
- Adopt systemwide data collection and analysis to identify eligible populations most likely to benefit from new resources, interventions, or technologies
- Optimize workflows to increase interoperability with community partners
- Identify measures of success (e.g., process measures) for integrated systems of care
- Inventory current SDOH screening practices of community partners and healthcare teams, and drive toward standardization
- Design communication feedback loops that account for the varied capability of each system's IT infrastructure

RESOURCES

The following resources emerged during collaborative discussions:

- PRAPARE – a standardized screening tool designed to engage patients in assessing and addressing SDOH
- AHC HRSN Screening Tool – a patient-reported screening tool that covers 13 domains of HRSNs that can be incorporated into standard screening processes
- North Carolina Department of Health and Human Services (DHHS) SDOH Screening Tool – a set of standardized screening questions covering four domains of SDOH
- Safe Environment for Every Kid (SEEK) – screening questionnaires that identify psychosocial problems, adverse childhood experiences, or SDOH needs that can affect a child's health, wellbeing, safety, and development
- Gravity Project – a national public collaborative working to develop consensus-based data standards for SDOH
- Sync for Social Needs – an initiative to develop consensus on, and test, standards of a HL7® FHIR®-based approach to collecting and sharing SDOH screening data
- HL7® FHIR® US Core – an implementation guide that provides a data model for standardizing and structuring healthcare data concepts so that they represent the same meaning across systems
- HL7® FHIR® SDOH guidance – an implementation guide that provides a data model for standardizing and structuring healthcare SDOH data concepts and value sets

ADDITIONAL RECOMMENDATIONS

Based on the multistakeholder discussion from the Implementers' evaluation, the Leadership Consortium submits the following additional recommendations:

- Strengthen data interoperability through standardized collection and reporting
- Solicit leadership buy-in for technological investments and methodologies by defining alternative measures of success (e.g., return on health)

Final Recommendations

The NQF Leadership Consortium recognizes that not all recommendations have been fully evaluated but respectfully submits the following recommendations as guidance to organizations focused on using SDOH data to improve partnerships among patients, healthcare teams, and the broader healthcare community. This list is not intended to be all-inclusive and is ordered by appearance in this report.

- Leverage digital platforms to augment regional referral networks and resources with real-time information
- Develop methods to include social needs information with healthcare services referrals
- Integrate data (e.g., SDOH, SOGI) with referral processes to improve understanding of existing disparities and access to affirming care
- Create and maintain active relationships among healthcare teams, community partners, and the broader healthcare community to support referral networks
- Identify and build relationships with community leaders (e.g., social influencers, faith-based leaders) and/or agencies to facilitate social needs assessments in the community, connect patients to resources, and improve communication among all parties
- Identify organizational and partner roles and responsibilities to optimize collaboration to resolve HRSNs
- Develop pathways of multidirectional communication to increase awareness and transfer of HRSN information among healthcare services, referral sources, and all other networks
- Identify and build collaborative partnerships with experts in healthcare IT, digital platforms, and artificial intelligence to streamline processes and automate referrals
- Strengthen data interoperability through standardized collection and reporting
- Solicit leadership buy-in for technological investments and methodologies by defining alternative measures of success

The Path Forward

The 2022-2023 Leadership Consortium's priority, SDOH Data Utilization to Improve Health Outcomes, is ambitious and complex. The Leadership Consortium's focus on using SDOH data to integrate healthcare and community services significantly narrows the scope of this priority, but still presents countless research and quality improvement opportunities. The members of the Leadership Consortium identified several important topics that warrant further action:

Improve and Incentivize Data Sharing

Healthcare delivery in the U.S. consists of diverse organizations with different abilities to address HRSNs with community partners. Technological infrastructures and local referral resources vary greatly across healthcare systems. Stakeholders across the healthcare ecosystem, including but not limited to health IT organizations, policymakers, and private and public payers, are working to prioritize the integration of healthcare and community services to equitably address health disparities. National advisory bodies and the current White House Administration have directly called for improvements in data and transparency to help reduce disparities and are working to improve data collection and interoperability to address SDOH.[22,26]

Despite the benefits of data standardization and interoperability, many organizations will struggle to implement improvements without consistent financial incentives.[27] While recent CMS mandates on SDOH screening are a step toward identifying and addressing HRSNs,[24] screening requirements are neither standardized nor consistently incentivized across care delivery systems. Healthcare organizations and CBOs need significant resources to adopt IT workflows that enhance data sharing and interoperability. Organizations need guidance on how to secure funding for building this infrastructure, maintaining relationships with community partners, and addressing HRSNs. Policymakers and payers can support these organizations by exploring opportunities to offset the cost of resources needed for efficient exchange of health information (e.g., IT infrastructure, community resources) and improvements in health outcomes related to HRSNs.

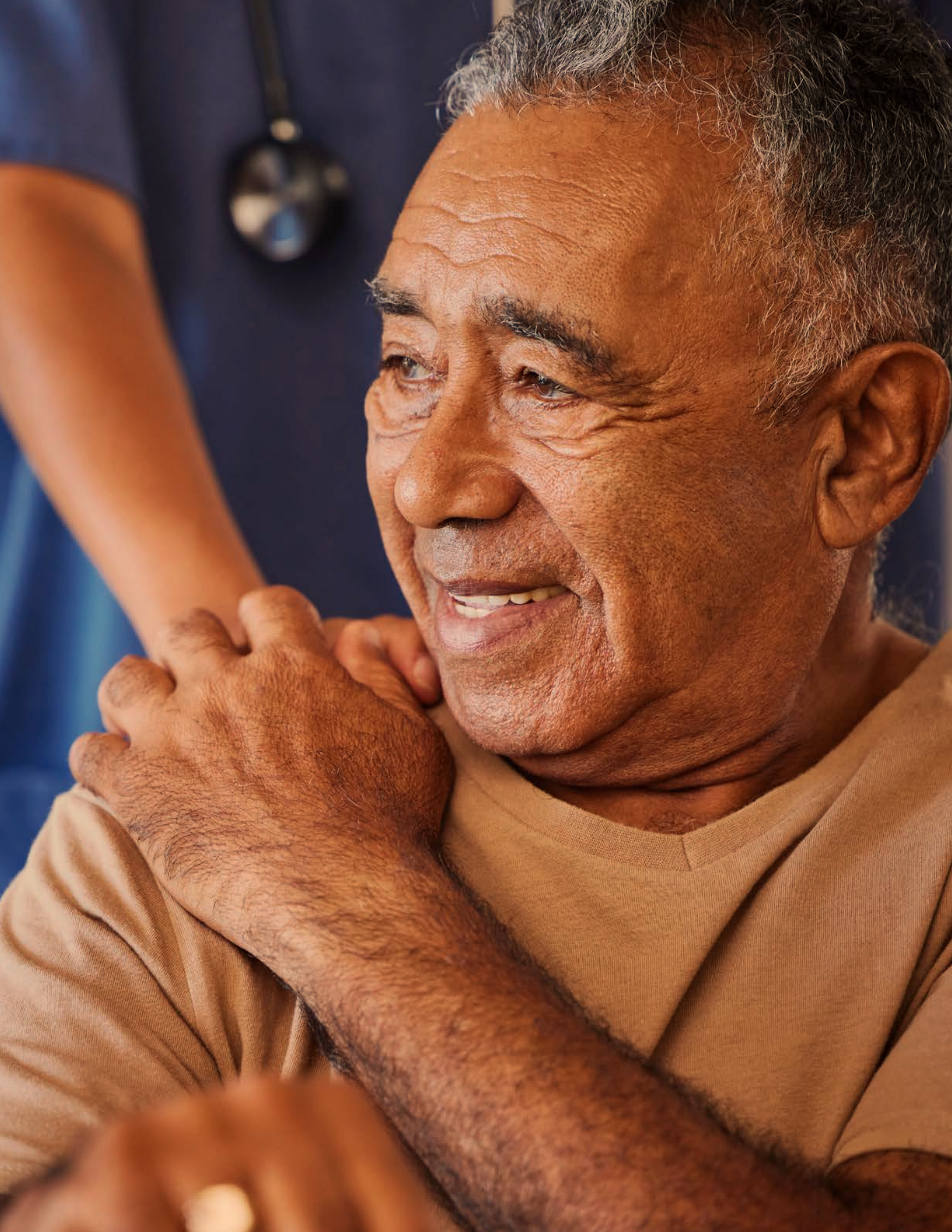
Improve Accuracy and Granularity of Data

Without standardized workflows and screening tools, healthcare systems may capture redundant or conflicting data. The data also may not be granular enough to inform organizations about their populations' needs, which can hinder their ability to connect patients with appropriate community resources. For example, granular SOGI data can enable referral systems to identify patients in LGBTQ+ communities who may benefit from referrals to CBOs or resources for HRSN support that specifically offer affirming care. The ability to collect and analyze SDOH data; SOGI data; race, ethnicity, and language (REL) data; and other metrics (e.g., HEDIS measures, readmissions) is an exciting opportunity to conduct intersectional analyses of disparities that calls for additional research and guidance from private and public stakeholders.[28]

> **The ability to collect and analyze SDOH data; SOGI data; race, ethnicity, and language (REL) data; and other metrics ... is an exciting opportunity**

Build Patient Trust

Patients may be reluctant to share sensitive personal information with healthcare teams or community partners if they do not feel that their information is being managed in a private and secure manner, or if they have previously experienced discrimination in healthcare.[3,29] Healthcare teams and community partners must enable privacy practices and help patients understand that their privacy is of utmost concern. Leaders should also strive to develop a culture that fosters rapport with patients as well as community partners.[30] Healthcare teams can build trust by spending time with patients, treating patients with respect, and asking questions in a caring way.[31] Leaders should not train staff to simply collect data; rather, they should teach staff to understand why different screening questions matter, and how to approach screening and referrals with empathy and a lack of bias. Staff may also benefit from trainings in data management, referral systems, and digital platforms.



Conclusion

SDOH data collection is a critical step toward addressing health disparities and promoting health equity. However, identifying HRSNs without providing adequate follow-up and support can damage partnerships; foster distrust; and cause emotional distress to patients, healthcare teams, community partners, and the broader healthcare community.

Establishing partnerships or leveraging existing relationships with key community partners is crucial to efficiently and effectively resolving identified HRSNs, but these partnerships require thoughtful design and regular multidirectional communications. Transitioning toward collaborative partnerships to overcome challenges requires both flexibility and compromise. Heterogenous coalitions may struggle to identify both operational and decision-making structures that can appeal to all stakeholders. Barriers continue to challenge SDOH data collection and utilization, including financial and human resource availability, referral and communication workflow optimization, and integration and interoperability enhancement. As healthcare organizations navigate barriers and efforts in data collection and utilization, person-centered approaches must remain a clear priority. Patient trust and engagement are paramount to addressing, navigating, and resolving HRSNs. Stakeholders across the healthcare ecosystem must address these challenges proactively and continue to share new developments and best practices not only to foster learning about addressing HRSNs, but to collectively improve the health and lives of patients and communities.

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