Addressing the Social Determinants of Health: The Rhode Island State Innovation Model (RI SIM) Experience

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ABSTRACT

Addressing social determinants of health (SDOH) is important for improving health and reducing longstanding disparities in health and health care. There is growing interest in standardizing SDOH measures and assessment tools for clinicians to help improve health outcomes. In 2015, Rhode Island received a $20 million State Innovation Model Test Grant (RI SIM) from the Centers for Medicare and Medicaid Services (CMS) to carry out health system transformation and to improve population health. As a part of RI SIM's work, state and community partners began the development of an integrated, coordinated, statewide social services directory infrastructure for addressing SDOH. The goal is to transition this project from resource directory development to a broader eReferral system over the next few years. Tracking referral outcomes will improve coordination of care and will also provide data on capacity of services and help to direct policy and funding allocation decisions at the state level.

INTRODUCTION

The social determinants of health (SDOH) are the conditions in which people are born, grow, live, work, and age and can affect a wide range of health risks and outcomes.[1,2] Differences in health are striking in communities with poor SDOH, such as unstable housing, low incomes, unsafe neighborhoods, or substandard education.[3] It has been estimated that SDOH can account for up to 40% of individual health outcomes, particularly among low-income populations.[4] Compared with other industrialized nations, the United States spends much more on health care and much less on social services.[5] Clinical care is only one factor influencing health outcomes and may be responsible for 10–15% of preventable mortality in the United States.[6] Yet, according to 2016 data, health care spending made up 17.9% of the U.S. gross domestic product (GDP), at $3.3 trillion.[7] Payers and providers recognize the importance of these determinants not just to clinical outcomes but also to cost and use of services. Toward that end, both clinical and financial cases have been made for an expanded focus on SDOH for all patients.[8,9]

An Institute of Medicine (IOM) committee identified social and behavioral domains that most strongly determine health that could be used in Electronic Health Records (EHRs).[10] While there are variations among different measurement tools, the following is a list of common SDOH domains:[11]

1. Housing instability including homelessness, poor housing quality, or inability to pay a mortgage or rent;
2. Food insecurity;
3. Transportation needs, both medical and non-medical in nature;
4. Utility needs, specifically screening for difficulty paying utility bills; and
5. Interpersonal safety related to intimate partner violence, elder abuse, and child abuse.

SIM BACKGROUND AND INITIAL SDOH PLANNING

The Rhode Island State Innovation Model Test Grant (RI SIM) is a $20 million grant that Rhode Island received from the Centers for Medicare and Medicaid Services (CMS) to carry out health system transformation – moving from volume-based care to value-based care – and to improve Rhode Island's population health. RI SIM is a public/private partnership, with a broad, representative Steering Committee of providers, payers, community organizations, and state agencies; an Interagency Team of state agency leadership; and an embedded staff model, with RI SIM staff in five participating state agencies. The five agencies are the Executive Office of Health and Human Services (EOHHS), the Office of the Health Insurance Commissioner (OHIC), HealthSource RI and the Departments of Health (RIDOH) and of Behavioral Health, Developmental Disabilities, and Hospitals (BHDDH).

People often face a fragmented system of health and human services that can be challenging to navigate, and providers often operate in disconnected environments and have no meaningful way of coordinating services for their patients. As part of its work, RI SIM engaged in a public process to identify actionable steps to improve coordination between state agencies and community partners to better understand the drivers of risk and to ultimately facilitate improved care management. OHIC had convened a working group to explore best practices in high-risk patient identification, and during this process it became evident that the incorporation of SDOH into risk algorithms and subsequent care management was a critical way to improve outcomes for patients. This

topic was well suited for collaborative effort, as local payers and providers had very limited experience in measuring or addressing these factors.

In the spring of 2017, SIM convened its own work group to discuss SDOH screening and two important takeaways came out of those discussions. First, some provider entities had begun employing SDOH screening tools within their practices, either by their own volition or as a requirement of a larger demonstration. While these providers were using different screening tools, the group identified an opportunity to use common data elements to track the results of the screening to enable systematic data collection and monitoring of SDOH. For example, one tool might ask patients about housing instability and another might ask about risk of homelessness, but the answers could be tracked together under the meta-label Housing. The work group proposed further research and analysis of the potential for statewide use of insurance billing codes, known as Z-codes, to document these meta-identified SDOH needs. Second, some providers were reticent to screen for SDOH because they felt ill-equipped to respond to any social needs that became apparent. Some providers had developed their own resource directories to facilitate referrals, but largely, providers had a fragmented and variable awareness of available social services.

SDOH SCREENING—EARLY IMPLEMENTATION

With the support of federal funds from CMS, EOHHS launched its signature health system reform initiative in July 2018, the Accountable Entity (AE) program, which provides infrastructure funding for the establishment of AEs, or Medicaid ACOs. These provider organizations must meet a set of structural requirements to be able to deliver high quality whole-person care and enter into value-based payment arrangements that create incentives to improve health outcomes and reduce costs for a population of attributed patients. A key strategic goal of this program is to improve quality by driving whole-person care, such that behavioral health and SDOH are fully integrated into primary care delivery. One of the requirements of AEs is that they must screen their patients for SDOH, and EOHHS is currently in the process of developing a clinical quality measures to drive performance improvement in that regard. EOHHS has also encouraged AEs to utilize Z-codes to document responses to SDOH screening – although it is unclear the extent to which AE's have done so – and requires participating providers to engage in arrangements with community-based organizations by which processes for referral and data sharing are made clear.

RI SIM decided to pursue the need identified by providers for better access to information about the range of resources and services that would help them address specific SDOH. The RI SIM Interagency and Staff Teams determined that if providers would only screen if they could access a tangible resource in response to a positive screen, SIM could help by making that information more readily available to providers. A small state work group began to research the problem and determined that multiple organizations throughout Rhode Island had online resource directories and others had printed, paper-based versions – all of which need to be kept up to date, validating their always-changing information.

THE UNIFIED SOCIAL SERVICE DIRECTORY (USSD)

In response to this problem, RI SIM decided to begin the development of an integrated, coordinated, statewide infrastructure for addressing SDOH. The first step for this common infrastructure begins with the maintenance of a single statewide database of community-based organizations, services, and public benefits. The USSD will also serve as a centralized location and process for data validation and will connect with existing referral and case management systems.

United Way's 2-1-1 social service directory is the largest in Rhode Island with over 6,000 resources in its database, so it was the most practical foundation upon which to build a statewide system. The project began with an investment in improving 2-1-1's data, and the SIM contract included funding to clean and validate the records contained in the database. This ensures that the data is as up to date as possible, and as of this writing, over 90% of the data has been validated.

The primary focus of the USSD project is to connect the resource data from 2-1-1 to the various practices and organizations that need it in a way that can support existing workflows. This is challenging because information technology platforms vary across agencies and providers. Providers have indicated a strong preference for compatibility with existing information systems and established practice workflows to help minimize the administrative burden of performing SDOH screening and tracking. Some practices and community agencies have electronic referral systems that allow them to create and track referrals – and building a data feed with 2-1-1 to pull updated and validated resource data into existing systems supports providers in addressing SDOH.

The first test of the SIM and United Way project will be to pilot a data transfer from 2-1-1 to RIDOH's early childhood resource and electronic referral system. As a first step, 2-1-1 was updated to include early childhood health and social services that were not already in the database. SIM dollars are currently funding a technical build of the data feed. While this initial data feed is in process, SIM and United Way are planning how to move the project out into the wider community. Staff from SIM and United Way continue to meet with state and community partners to assess their resource needs, to develop plans for building connections with existing health information technology (HIT) platforms, and to establish protocols for data standardization and maintenance.

Because SIM funding will end on June 30, 2019, United Way is also working to secure sustainable funding by

applying for grants and developing partnerships with state agencies and community stakeholders to optimize funding streams and reduce duplication of resources. The alignment of community and state dollars will be instrumental to the sustainability of the USSD. The goal is to transition this project from resource directory development to a broader eReferral system over the next few years. Planning for the next phase of this eReferral project will be part of EOHHS's upcoming HIT strategic planning process which will begin this coming summer. One of the key components of the project is planning for the system's future integration into EHRs, as well as "close-the-loop" technology, which enables providers to learn what has happened with their referrals.

LESSONS LEARNED

- SDOH Screening processes need to be universal. To avoid stigmatizing anyone – and to avoid dangerous assumptions about patients – it is important to screen all patients, not just those thought to be "high risk."
- Information technology needs to be an integral part of the planning process. Social services and clinical settings often have different systems (or none at all) so addressing the quality and cost of the data connections they need is a crucial step.
- To screen for SDOH, we need:
  - High-quality referral resources;
  - Prompt access to those resources (knowing who/what/where they are and the ability to see if the resource (i.e. bed, appointment, etc.) is available before the connection is made);
  - The ability to track the referral process and close the loop between the referring provider, the service provider, and the patient.
- If possible, screening tools should be the same within a health system, but if they cannot be identical, they should be similar enough using common domains – to help align quality measures, reporting, and search terms in common directories.
- The existence of multiple databases in an organization or health system, which all need to be updated, is burdensome to users. Aligning to a single database, and combining resources to update it, is a much more efficient use of time and money.
- As always, it is useful to share and learn from best practices, such as the examples from San Diego and North Carolina.

SDOH INITIATIVES IN OTHER STATES

California—2-1-1 San Diego: Connecting Partners through the Community Information Exchange (CIE)[12]

The CIE is a cloud-based platform developed by San Diego 2-1-1 designed to allow multiple health and social service providers to see a patient's interaction across systems, agencies, and community services. 2-1-1 San Diego developed the CIE to enable participating providers to better understand a client's interactions with health and community services and to improve care coordination for vulnerable patients. The CIE includes a social risk assessment tool, provides alerts, and facilitates connections across multiple agencies and providers. Health and social service providers may otherwise not know, for example, that their patients have had multiple emergency department (ED) visits, lack a medical home, or face unstable housing and food insecurity. In addition, a housing provider can use information such as the number of ED visits to prioritize case management services for those with high-risk and improper health care use. Recent CIE data show that among clients with a history of frequent EMS transports to EDs who were enrolled in the CIE, there was a 26% reduction in calls to EMS. In addition, CIE clients who were connected to housing were more likely to remain housed compared to those who were not enrolled.

North Carolina—NCCARE360[13]

North Carolina's NCCARE360 is the first statewide coordinated care network to electronically connect those with identified needs to community resources and allows for a feedback loop on the outcome of that connection. Community partners will have access to a robust statewide resource directory that will include a call center with dedicated navigators; a data team verifying resources; and a shared technology platform that enables health care and human service providers to send and receive secure electronic referrals in real-time, securely share client information, and track outcomes. This solution ensures accountability around services delivered, provides a "no wrong door" approach, and closes the loop on every referral made. Rollout of NCCARE360 began in January 2019, with full statewide implementation in every county in North Carolina by the end of 2020.

CONCLUSION

As Rhode Island seeks to recognize the importance of SDOH on health outcomes, we need to create systems that support their integration into care delivery. The use of common domains by providers, community-based organizations, and payers will help to ensure that SDOH assessment and interventions efforts are standardized and trackable. By aligning our approach to SDOH across providers and health care systems, we can facilitate the collection and aggregation of data that will ultimately inform payment reform and support healthier communities. Closing the referral loop is important for coordination of care and quality measurement and will become even more valuable to providers and payers as they carry out more significant health system transformation, including the assumption of downside risk. Tracking referral outcomes will also provide data on capacity of services and help to direct policy and funding allocation decisions at the state level.

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