
Use Case Name:	Social Determinants of Health
Sponsor:	Michigan Department of Health and Human Services
Date:	September 21, 2020

Executive Summary

The executive summary gives a description of the use case's importance while highlighting expected positive impact.

Social determinants of health (SDOH) are the conditions in which people are born, grow, work, live, age, and the wider set of forces and systems shaping the conditions of daily life and drive 80 percent of health outcomes.¹

An integral part of health care delivery involves understanding and integrating these social and environmental conditions with traditional health care information. However, there is a lack of standards or scalable methods to connect at-risk populations with available social service resources in communities. Therefore, there is a need to create a network that connects clinical health and social health in order to improve health outcomes by addressing a more holistic and person-centered approach to care coordination.

To better understand the link between social needs and individual health and well-being, more data is needed across and within the organizations caring for people in the community.

The Social Determinants of Health (SDOH) use case is a first step in building a knowledge infrastructure that streamlines the process of sharing information throughout the State of Michigan. The use case allows organizations to send the data specific to SDOH information through the statewide health information network. Data submitted through this use case will also be available to care team members and participating organizations to support care coordination and population health.

Purpose of Use Case: This use case allows participants to submit SDOH information to the Health Information Network (HIN), integrate with Choices ACRS™ to allow for accurate patient-provider attributions to be identified, create a patient level attribute identifying SDoH situational awareness, and share SDoH information with the active care team. This will allow the provider to be able to view screening, diagnosis, and intervention data for

¹ "Social Determinants of Health," [healthypeople.gov](https://www.healthypeople.gov), accessed October, 17, 2018, <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health#five>

their patient. We will also pair SDOH information received with the Interoperable Referral use case to enable a statewide infrastructure to support vendor agnostic statewide SDOH referrals system.

Overview

This overview goes into more details about the use case.

Identifying and addressing SDOH needs has traditionally been a challenging and siloed process, making coordination of social and health care difficult, if not impossible. Individuals may have numerous SDOH needs, which are handled by different social support organizations. These organizations all operate differently and have differing data collection and communication methods. Creating connections with each organization individually creates an undue burden on providers.

The healthcare system has tools to assist and support SDOH diagnosis and intervention, but they are designed from a physical health perspective. Community Benefit Organizations (CBO) have language, regulatory, consent, financial and licensure considerations that differ from physical and behavioral health settings.

By implementing the SDOH use case, health and social care organizations can communicate with one another simply and easily through the HIN without major disruption to their unique internal processes. Using a Hub and Spoke model, organizations connect once to the HIN, which facilitates connections to all other participating organizations.

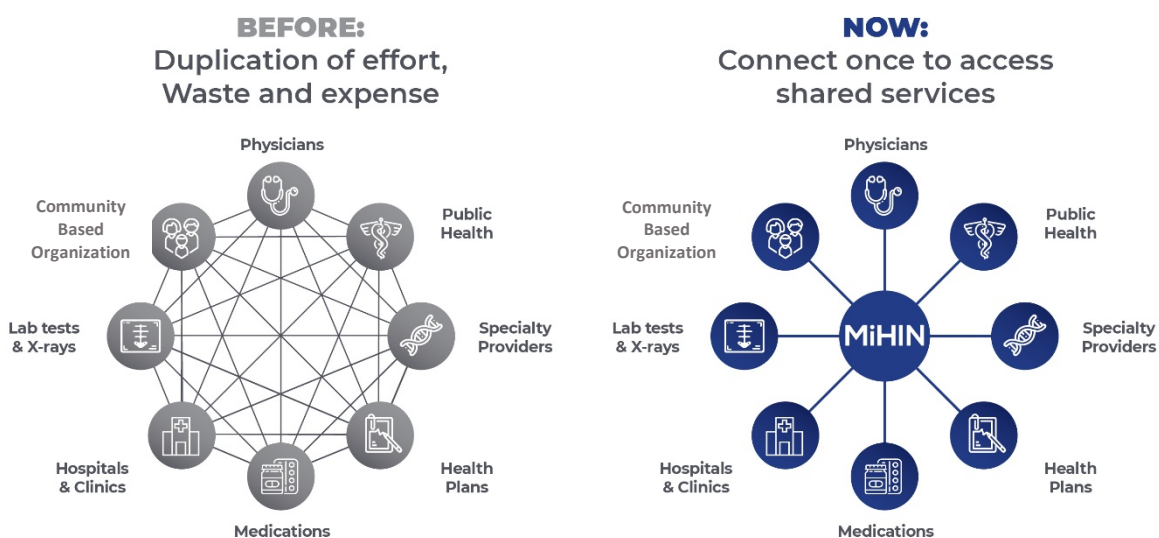


Figure 1. Hub and Spoke Data Sharing Approach

The SDOH use case, partnered with the Interoperable Referral use case, provides the following essential information to those delivering care:

- If the person has been screened for SDOH needs such as housing, food, utilities, transportation, etc. and the results of the screening;
- When and where the screening was done;
- What, if anything, was done to meet that need; and
- The status for that requested intervention/assistance.

The SDOH use case will provide essential information to health care providers and CBOs in a timely and accessible manner. Each type of SDOH need, such as housing or food insecurity, is called a domain. The Use Case will provide screening results for each domain and a simplified data format:

- Yes = There is a need for assistance in this domain
- No = There is no need for assistance in this domain
- Declined = Was offered the question, declined to answer for this domain
- System = System is unable to ask the question or code the response

Persona Story

To explain this use case, this section follows a persona example from start to finish.



Hannah Gibson

Hannah and her husband had big dreams when they first married. Life was perfect when their third child arrived, she felt their family was finally complete. Their idyllic life came to a screeching halt when her husband died suddenly in a car accident. Hannah has had a hard time staying positive since she lost her husband and every day feels like an uphill battle. They had never planned on what to do if something happened to one of them. While the pay-out from his life insurance helped support the family for a while, eventually it wasn't enough.

She had to take on a night job as a janitor to support her three kids and still have time to spend with them. She relies heavily on her mother to watch and take care of the kids while she's at work, since she is unable to afford child-care.

Hannah is trying to stretch her paychecks and it never seems like enough. Some weeks she needs to choose between buying food for her family and paying for her asthma medication. She knows that she needs to keep her asthma under control so that she can continue to



work, but it's hard to prioritize medication when her landlord has told her that she'll be evicted if she misses another rent payment.

When Hannah lost her husband, she also lost a co-parent. She never imagined she would face life and raising their children alone. She feels guilty for not being able to spend more time with her kids, and she wants to try to do something special. She's hoping to save enough money to be able to take a day off and go on a family camping trip, even though she knows that this dream probably won't happen for a while.



Joyce Smith

Joyce Smith got into healthcare to make a difference.

Joyce's first job was as a social worker helping low-income residents of Grand Rapids. She did everything she could to help; counseling, paperwork and sometimes even helping with daily needs. When she began grocery shopping with some clients, even her supervisor felt she may have finally taken on too much.

Joyce liked working closely with her clients, but it also could be quite stressful; not because of her patients, but because of the healthcare system. First-hand she saw the impact of healthcare's bureaucracy on her clients, from difficulties with prescriptions to insurance challenges to massive amounts of paperwork. After one too many times being frustrated by the system, Joyce became convinced that she could make an impact from the inside.

Now Joyce is a care coordinator for a managed care plan. She looks at each call she receives like one of her old clients, a frustrated individual who just wants a solution to a problem. When Hannah was referred to Joyce for assistance, Joyce was able to quickly identify Hannah's needs for housing and food assistance. This information was easy to find in MiHIN's MIGateway service and, using MiHIN's Interoperable Referral use case, she was also able to make a referral to local services that can support Hannah's needs



Diagram

This diagram shows the information flow for this use case.

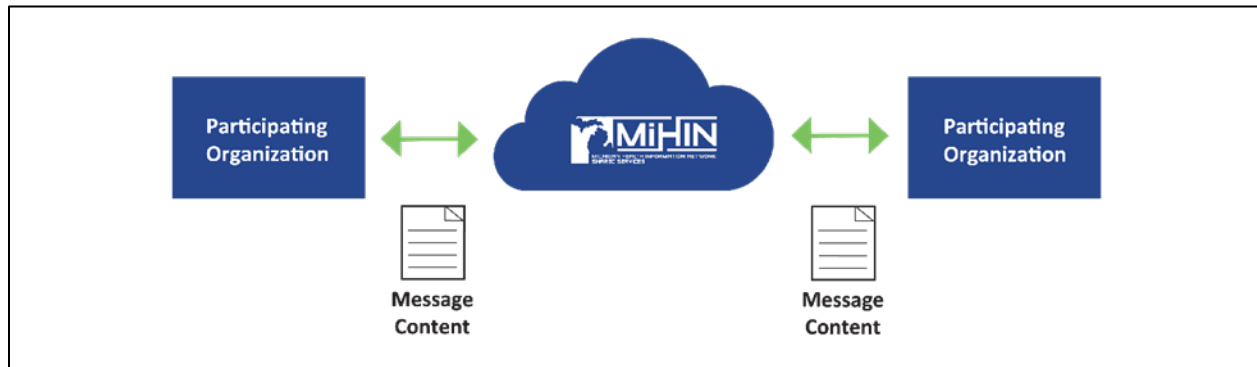


Figure 2. SDOH Use Case Data

1. The Participating Organization sends a SDOH message to the HIN
2. The HIN receives the SDOH message and stores the data
3. The HIN provides the SDOH data to Participating Organizations with an Active Care Relationship via existing MiHIN services.

Regulation

This section describes whether this use case is being developed in response to a federal regulation, state legislation or state level administrative rule or directive.

Legislation/Administrative Rule/Directive:

- Yes
- No
- Unknown

Meaningful Use:

- Yes
- No
- Unknown



Cost and Revenue

This section provides an estimate of the investment of time and money needed or currently secured for this use case.

Costs

The project financially covers the following components:

- Extensive File review and data normalization and mapping
- Development and maintenance of the implementation and user guides
- Technical development and maintenance at MiHIN
- Training
- Participant development and implementation to onboard for this use case
- Implementation of both the screening and referral systems/workflow
- Development and delivery of file systems of the participating organization to deliver the data

Revenue

- Enhanced information of patient status via MiHIN services and tools
- MDHHS support for planning and development

Implementation Challenges

This section describes the challenges that may be faced to implement this use case.

Organizations participating in this use case are required to onboard to the following use cases: Active Care Relationship Service[®] (ACRS[®]), the Common Key Service[®] (CKS), and Health Directory. They are also highly encouraged to participate in the Interoperable Referral use case to exchange SDoH referrals.

The implementation challenges associated with the Social Determinants of Health Use Case include the variation of SDOH screening domains and questions, mapping to the MiHIN SDOH standard and reportable data formats, proliferation of EMR, screening and referral vendor technologies and community collaboration and investment in the work of creating systems to support their work and clientele. Lack of standardization throughout the HIE



(health information exchange) ecosystem as it pertains to the results of SDOH screenings is also a challenge. While suggested data standards do exist, adoption of those standards is sporadic.

Vendor Community Preparedness

This section addresses the vendor community preparedness to readily participate in the implementation of this use case.

Vendors will need to be able to develop and implement standard screening data and payload delivery and updates in real-time as transactions.

Support Information

This section provides known information on this support for this use case.

Support can come from multiple levels (Governor, Federal or State Legislature, Michigan HIT Commission, Michigan State Departments, CMS/ONC/CDC, MiHIN Board, Participating Organizations, payer community, interest groups [e.g. MSMS, MHA], or citizen support).

Political Support:

- Governor
- Michigan Legislature
- Health Information Technology Commission
- Michigan Department of Health and Human Services or other State of Michigan department
- CMS/ONC
- CDC
- MiHIN Board

Other: Comprehensive Primary Care Plus (CPC+) track 2 requires collection of social, psychological and behavioral observations

Concerns/Oppositions:

None



Sponsor(s) of Use Case

This section lists the sponsor(s) of the use case.

- Michigan Department of Health and Human Services

Metrics of Use Case

This section defines the target metrics identified to track the success of the use case.

This use case will be measured by:

- Percentage of organizations sending SDOH information to MiHIN
- Percentage of organizations receiving SDOH information through MiHIN
- Percentage of organizations providing SDOH referral data

