



Social Determinants of Health Implementation Guide

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Acronyms and Abbreviations Guide

DQA	Data Quality Assurance
DSO	Data Sharing Organization
HIE	Health Information Exchange
HIN	Health Information Network
MDHHS	Michigan Department of Health and Human Services
MiHIN	Michigan Health Information Network Shared Services
OID	Object Identifier
PCMH	Patient-Centered Medical Home
PO	Participating Organization
SDOL	Social Determinant of Health
SSSO	State Sponsored Data Sharing Organization
SCD	Statewide Consumer Directory
TDSO	Trusted Data Sharing Organization
UCA	Use Case Agreement
UCS	Use Case Summary



Definitions

Active Care Relationship Service® (ACRS®) The Michigan Health Information Network Shared Services infrastructure service that contains records for those Trusted Data Sharing Organizations, their participating organizational participants or any health providers who have an active care relationship with a patient.

Attribution. The connection between a consumer and their health care providers. One definition of attribution is “assigning a provider or providers, who will be held accountable for a member based on an analysis of that member’s claim data.” The attributed provider is deemed responsible for the patient’s cost and quality of care, regardless of which providers actually deliver the service.

Applicable Laws and Standards. In addition to the definition set forth in the Data Sharing Agreement, the federal Confidentiality of Alcohol and Drug Abuse Patient Records statute, section 543 of the Public Health Service Act, 42 U.S.C. 290dd-2, and its implementing regulation, 42 CFR Part 2; the Michigan Mental Health Code, at MCLA §§ 333.1748 and 333.1748a; and the Michigan Public Health Code, at MCL § 333.5131, 5114a.

Caregiver. An individual such as a health professional or social worker who assists in the identification, prevention or treatment of an illness or disability.

Community Benefit Organization (CBO) CBOs work at the local level to meet community needs. They include social service agencies and nonprofit organizations. CBO do not generally deliver/provide medical services or care.

Data Sharing Agreement. Any data sharing organization agreement signed by both MiHIN and a participating organization. Data sharing organization agreements include but are not limited to: Qualified Data Sharing Organization Agreement, Virtual Qualified Data Sharing Organization Agreement, Consumer Qualified Data Sharing Agreement, Sponsored Shared Organization Agreement, State Sponsored Sharing Organization Agreement, Direct Data Sharing Organization Agreement, Simple Data Sharing Organization Agreement, or other data sharing organization agreements developed by MiHIN.

Health Directory (HD) The statewide shared service established by Michigan Health Information Network Shared Services that contains contact information on health providers, electronic addresses, end points, and Electronic Service Information, as a resource for authorized users to obtain contact information and to securely exchange health information.

Health Information. Any information, including genetic information, whether oral or recorded in any form or medium, that (a) is created or received by a health provider, public health authority, employer, life insurer, school or university, or healthcare clearinghouse; and (b) relates to the past, present, or future physical or mental health or condition of an individual; the provision of health care to an individual; or the past, present, or future payment for the provision of health care to an individual.



Health Information Network (HIN). An organization or group of organizations responsible for coordinating the exchange of protected health information (PHI) in a region, state, or nationally.

Health Plan. An individual or group plan that provides or pays the cost of medical care (as “group health plan” and “medical care” are defined in section 2791(a)(2) of the Public Health Service Act, 42 U.S.C. 300gg-91(a)(2)). Health plan further includes those entities defined as a health plan under HIPAA, 45 C.F.R 160.103.

Health Professional means (a) any individual licensed, registered, or certified under applicable Federal or State laws or regulations to provide healthcare services; (b) any person holding a nonclinical position within or associated with an organization that provides or coordinates healthcare or healthcare related services; and (c) people who contribute to the gathering, recording, processing, analysis or communication of health information. Examples include, but are not limited to, physicians, physician assistants, nurse practitioners, nurses, medical assistants, home health professionals, administrative assistants, care managers, care coordinators, receptionists and clerks.

Health Provider means facilities/hospitals, health professionals, health plans, caregivers, pharmacists/other qualified professionals, or any other person or organization involved in providing healthcare.

Master Use Case Agreement (MUCA). Legal document covering expected rules of engagement across all use cases. Trusted data sharing organizations sign master use case agreement one time, then sign use case exhibits for participation in specific use cases.

Message. A mechanism for exchanging message content between the participating organization to MiHIN services, including query and retrieve.

Message Content. Information, as further defined in an Exhibit, which is sent, received, found or used by a participating organization to or from MiHIN services. Message content includes the message content header.

Michigan Care Improvement Registry (MCIR). The IIS for the State of Michigan operated by the Michigan Department of Health and Human Services (MDHHS).

Michigan Health Information Network Shared Services. The MiHIN for the State of Michigan.

MiHIN Infrastructure Service. Certain services that are shared by numerous use cases. MiHIN infrastructure services include, but are not limited to, Active Care Relationship Service (ACRS), Health Directory, Statewide Consumer Directory (SCD), and the Medical Information Gateway (MIGateway®).

MiHIN Services. The MiHIN infrastructure services and additional services and functionality provided by MiHIN allowing the participating organizations to send, receive, find, or use information to or from MiHIN as further set forth in an exhibit.



Patient Data. Any data about a patient or a consumer that is electronically filed in a participating organization or participating organization participant's systems or repositories. The data may contain protected health information (PHI), personal credit information (PCI), and/or personally identifiable information (PII).

Person Record. Any record in a MiHIN infrastructure service that primarily relates to a person.

Pilot Activity. The activities set forth in the applicable exhibit and typically includes sharing message content through early trials of a new use case that is still being defined and is still under development and which may include participating organization feedback to MiHIN to assist in finalizing a use case and use case exhibit upon conclusion of the pilot activity.

Trusted Data Sharing Organization (TDSO). An organization that has signed any form of agreement with MiHIN for data sharing.

Use Case. (a) A use case agreement previously executed by a participating organization; or (b) the use case summary, use case exhibit and a use case implementation guide that participating organization or TDSO must follow to share specific message content with the MiHIN.

Use Case Exhibit. The legal agreement attached as an exhibit to the master use case agreement that governs participation in any specific use case.

Use Case Implementation Guide (UCIG). The document providing technical specifications related to message content and transport of message content between participating organization, MiHIN, and other TDSOs. use case implementation guides are made available via URLs in exhibits.

Use Case Summary. The document providing the executive summary, business justification and value proposition of a use case. Use case summaries are provided by MiHIN upon request and via the MiHIN website at www.mihin.org.



1. Introduction

1.1 Purpose of Use Case

The purpose of the Use Case is to integrate HIE/MiHIN services that drive access, care coordination, increased patient engagement, transitions of care, coordinate and align social and clinical care planning, and support population health priorities. (e.g., support clinical information exchange, community clinical linkages, and social care records)

“Social determinants of health are conditions in the environments in which 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.”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 in aggregate to participating organizations to support population health.

Finally, a statewide SDoH data strategy must go beyond the simple exchange of SDoH screening data. The national Gravity Project collaborative has described a conceptual framework for SDoH data standards that involves collection, exchange and use of three defined types of SDoH data – Screening, Diagnosis and Intervention – all of which are necessary to enable accurate identification and management of social problems. Standards for coding and exchange will be needed for each type of data.

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>



1.2 Message Content

For this use case, Message Content means a CSV file containing SDOH screening and patient information

1.3 Data Flow and Actors

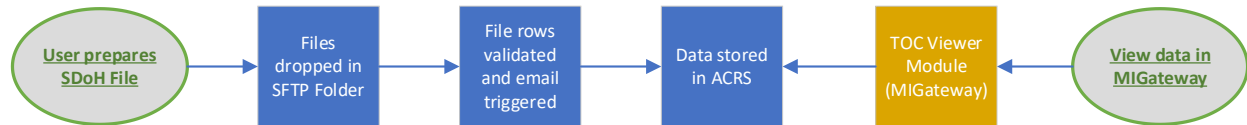


Figure 1. Data flow for sending and viewing SDOH screening data

1. The Organization submitting the SDOH assessment sends it to MiHIN via Secure File Transfer Protocol (SFTP)
2. MiHIN validates the file and triggers an email to the submitter detailing rows with errors
3. MiHIN stores the data in ACRS
4. Participating organizations who use MIGateway can then view the data via the TOC Viewer Module

2 Standard Overview

2.1 Message Format

The current message format that will be supported is CSV. A file specification with a sample file can be found on MiHIN's website .

2.2 Message Example

For an example of what a properly formatted CSV should look like for this use case, refer to the file specification found on MiHIN's website. For a listing of fields see Section 4 of this document.

The following fields are an example of the type of information that will be received by MiHIN and sent to the state.

- Participating Organization Name
- Row Identifier
- Organization Unique ID for patient or Common Key
- First Name
- Last Name
- Date of Birth
- Gender
- Address
- Screening Date
- Screening Practice
- Hub Referral Date
- Screening question responses
- Screening question tracking statuses



3 Onboarding Process

3.1 Initial Onboarding

For organizations to share data with MiHIN under this use case, the organization undergoes two onboarding processes simultaneously. The two onboarding processes are legal onboarding and technical connectivity onboarding. These may occur in parallel – i.e., the organization can review and complete legal agreements with MiHIN while simultaneously establishing and testing technical connectivity. To initiate these two parallel onboarding processes, notify MiHIN via <http://mihin.org/requesthelp/>.

3.1.1 Initial Legal Process

The first time an organization undergoes the legal onboarding process with MiHIN, the organization negotiates and enters into a data sharing agreement which then allows the Participating Organization (PO) to enter into one or more use cases via Use Case Exhibits (UCEs) or Pilot Activity Exhibits (PAEs).

Once an organization has entered into a data sharing agreement, the organization must sign the Master Use Case Agreement (MUCA) which then allows the PO to enter into an unlimited number of UCEs or PAEs with MiHIN.

To send SDoH data to MiHIN an organization must sign the SDoH, Active Care Relationship Service® (ACRS®), Common Key Service® (CKS), and Health Directory (HD) Use Case Exhibits. Participation in the Interoperable Referral use case to exchange SDoH referrals is also highly encouraged.

Organizations wishing to view SDoH data in MIGateway® should contact help@mihin.org to learn more about onboarding to that tool.

3.1.2 Initial Technical Connectivity Process

Before onboarding to the SDoH use case, organizations must complete onboarding for HD and ACRS®. Implementation guides for these use cases which provide detailed implantation information can be found on MiHIN's website.

When onboarding to SDoH, an onboarding coordinator will work with the organization to:

- (1) Create an Organization ID (OID) if one is not already assigned
- (2) Create a Secure File Transfer Protocol (SFTP) folder which is used for file submission.

Once the SFTP folder is created, organizations can upload their CSV file to the SFTP folder which triggers processing of the file.

Future enhancements will allow for submission to occur through a Fast Healthcare Interoperability Resources (FHIR) API.



Organizations wishing to view SDoH data in MIGateway® should contact help@mihin.org to learn more about onboarding to that tool.

4 Specifications

4.1 Message Trigger Events

Sending organizations will deliver message content to MiHIN at least monthly, with the goal of sending daily by the end of fiscal year 2021.

4.2 Specific Segment and Field Definitions

Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
1	PO_Name	Char	125	PO user readable name	Required
2	PO_OID	Char	125	Provider Organization Identification Number	Required
3	Row_ID	Num	8	Unique row identifier starting with 1	Optional
4	ORG_Unique_ID	Char	125	Subject's unique identifier at the screening org or Common Key	Required
5	SSN	Num	4	Patient Social Security Number - Last 4 digits	Optional
6	First_Name	Char	50	Patient First Name	Required
7	Last_Name	Char	50	Patient Last Name	Required
8	DOB	Char	10	Patient Date of Birth (format: MM/DD/YYYY)	Required
9	Gender	Char	1	Patient Gender	Required
10	Address_1	Char	100	Patient Home Street Address	Required
11	Address_2	Char	100	Patient Home Additional Street Address	Required
12	City	Char	30	Patient City	Required
13	ZIP	Num	5	Patient ZIP Code (format: 12345)	Required

Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
14	Screen_Date	Char	10	Date Patient was screened for SDoH needs (format: MM/DD/YYYY)	Required
15	Screening_Practice_OID	Char	125	Practice Organization Identification Number	Required
16	Screening_Practice_Name	Char	125	Practice name that conducted screening	Required
17	Hub_Referral_Date	Char	10	Date referred to CHIR hub (format: MM/DD/YYYY)	Situational
18	CM_CC_Service	Char	1	Practice-based care management/care coordinator provided service to patient ("Y", "N", or "S")	Optional
19	Patient_Assisted_In_MI_Bridges	Char	1	Patient assisted in creating a MI Bridges account ("Y", "N", or "S").	Optional
20	Healthcare_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Optional
21	Healthcare_Q2	Char	1	Screening question ("Y", "N", "D", "S")	Required
22	Food_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
23	Employment_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
24	HousingShelter_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
25	Utilities_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
26	FamilyCare_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Optional

Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
27	Education_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
28	Transportation_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
29	Safety_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Optional
30	Stress_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
31	Anxiety_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
32	Depression_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
33	General_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
34	General_Q2	Char	1	Screening question ("Y", "N", "D", "S")	Required
35	Linkage_Opened_Healthcare_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
36	Linkage_Opened_Healthcare_Q2	Char	10	Date in (format: MM/DD/YYYY)	Optional
37	Linkage_Opened_Food_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
38	Linkage_Opened_Employment_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
39	Linkage_Opened_HousingShelter_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
40	Linkage_Opened_Uilities_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
41	Linkage_Opened_FamilyCare_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
42	Linkage_Opened_Education_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
43	Linkage_Opened_Transportation_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional



Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
44	Linkage_Opened_Safety_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
45	Linkage_Opened_General_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
46	Linkage_Opened_General_Q2	Char	10	Date in (format: MM/DD/YYYY)	Optional
47	Linkage_Closed_Healthcare_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
48	Linkage_Closed_Healthcare_Q2	Char	10	Date in (format: MM/DD/YYYY)	Optional
49	Linkage_Closed_Food_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
50	Linkage_Closed_Employment_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
51	Linkage_Closed_HousingShelter_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
52	Linkage_Closed_Uilities_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
53	Linkage_Closed_FamilyCare_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
54	Linkage_Closed_Education_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
55	Linkage_Closed_Transportation_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
56	Linkage_Closed_Safety_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
57	Linkage_Closed_General_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
58	Linkage_Closed_General_Q2	Char	10	Date in (format: MM/DD/YYYY)	Optional
59	Linkage_Status_Healthcare_Q1	Char	2	Map each internal linkage status generated by your local system to one of the status codes below. No need to provide description. Please only provide code (1 through 8), description is only	Optional
60	Linkage_Status_Healthcare_Q2	Char	2		Optional
61	Linkage_Status_Food_Q1	Char	2		Optional
62	Linkage Status Employment_Q1	Char	2		Optional
63	Linkage Status HousingShelter_Q1	Char	2		Optional



Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
64	Linkage_Status_Uilities_Q1	Char	2	provided to assist with your mapping: 1=Linkage open 2=Linkage closed (need met) 3=Linkage closed (unable to contact) 4=Linkage closed (lack of patient follow up) 5=No resource available 6=Need handled internally 7=Patient declined services 8=Linkage closed (other reason)	Optional
65	Linkage Status FamilyCare_Q1	Char	2		Optional
66	Linkage_Status_Education_Q1	Char	2		Optional
67	Linkage_Status_Transportation_Q1	Char	2		Optional
68	Linkage_Status_Safety_Q1	Char	2		Optional
69	Linkage_Status_General_Q1	Char	2		Optional
70	Linkage_Status_General_Q2	Char	2		Optional

Note: LOINC taxonomy will be incorporated into future data definitions and message requirements



5 Troubleshooting

5.1 Production Support

	Severity Levels			
	1	2	3	4
Description	Critical Impact/ System Down: Business critical software is down or critical interface has failed. The issue is impacting all production systems, causing all participating organizations' or other organizations' ability to function to be unusable.	Significant Business Impact: Software component severely restricted. Entire organization is unable to continue business functions, causing all communications and transfer of messages to be halted.	Partial Failure or Downtime: Program is useable and less significant features unavailable. The service is online, though may not working as intended or may not currently working as intended or may not currently be accessible, though other systems are currently available.	Minimal Business: A non-critical software component is malfunctioning, causing minimal impact, or a test system is down.
Example	All messages to and from MiHIN are unable to be sent and received, let alone tracked	MiHIN cannot communication (send or receive) messages between single or multiple participating organizations, but can still successfully communicate with other organizations.	Messages are lost in transit; messages can be received but not sent.	Additional feature requested.
Primary Initiation Method	Phone: (517) 336-1430	Phone: (517) 336-1430	Web form at http://mihin.org/requesthelp	Web form at http://mihin.org/requesthelp
Secondary Initiation Method	Web form at http://mihin.org/requesthelp	Web form at http://mihin.org/requesthelp	Email to help@mihin.org	Email to help@mihin.org
Tertiary Initiation Method	Email to help@mihin.org	Email to help@mihin.org	N/A	N/A
Initial Response	Within 2 hours	Within 2 hours	1 business day	1 business day
Resolution Goal	24 hours	24 hours	3 business days	7 business days

A list of common questions regarding the Social Determinants of Health use case can be found at:

<https://mihin.org/social-determinants-of-health-use-case/>

If you have questions, please contact the MiHIN Help Desk:

- www.mihin.org/requesthelp
- Phone: (517) 336-1430
- Monday – Friday 8:00 AM – 5:00 PM (Eastern)

6 Legal Advisory Language

This reminder applies to all UCEs or PAEs covering the exchange of electronic health information:

The data sharing agreement establishes the legal framework under which PO can exchange messages through the HIN Platform, and sets forth the following approved reasons for which messages may be exchanged:

- a. By health care providers for Treatment, Payment and/or Health Care Operations consistent with the requirements set forth in HIPAA;
- b. Public health activities and reporting as permitted by HIPAA and other Applicable Laws and Standards;
- c. To facilitate the implementation of “promoting interoperability” criteria as specified in the American Recovery and Reinvestment Act of 2009 and as permitted by HIPAA;
- d. Uses and disclosures pursuant to an Authorization provided by the individual who is the subject of the Message or such individual’s personal representative in accordance with HIPAA;
- e. By Data Sharing Organizations for any and all purposes, including but not limited to pilot programs and testing, provided that such purposes are consistent with Applicable Laws and Standards; and
- f. **For any additional purposes as specified in any UCE or PAE, provided that such purposes are consistent with Applicable Laws and Standards.**

Under these agreements, “**Applicable Laws and Standards**” means all applicable federal, state, and local laws, statutes, acts, ordinances, rules, codes, standards, regulations and judicial or administrative decisions promulgated by any governmental agency, including the State of Michigan, or the Michigan Health Information Technology Commission as any of the foregoing may be amended, modified, codified, reenacted, promulgated or published, in whole or in part, and in effect from time to time which is enforceable against a Party. Without limiting the generality of the foregoing, “Applicable Laws and Standards” includes HIPAA “; the federal Confidentiality of Alcohol and Drug Abuse Patient Records statute, section 543 of the Public Health Service Act, 42 U.S.C. 290dd-2, and its implementing regulation, 42 CFR Part 2; the Michigan Mental Health Code, at MCLA §§ 333.1748 and 333.1748a; and the Michigan Public Health Code, at MCL § 333.5131, 5114a.

It is each PO’s obligation and responsibility to ensure that it is aware of Applicable Laws and Standards as they pertain to the content of each message sent, and that its delivery of each message complies with the Applicable Laws and Standards. This means, for example, that if a UCE is directed to the exchange of physical health information that may be exchanged without patient authorization under HIPAA, the PO must not deliver any message containing health information for which an express patient authorization or consent is required (e.g., mental or behavioral health information).

Disclaimer: The information contained in this implementation guide was current as of the date of the latest revision in the Document History in this guide. However, Medicare and Medicaid policies are subject to change and do so frequently. HL7 versions and formatting are also subject to updates. Therefore, links to any source documents have been provided within this guide for reference. MiHIN will apply its best efforts to keep all information in this guide up-to-date. It is ultimately the responsibility of the Participating Organization and Sending Facilities to be knowledgeable of changes outside of MiHIN's control.

