



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

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.

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 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 Direct GATEway (MIDIGATE®).

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 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

Allows organizations to send data through MiHIN to the state, where the data is analyzed for social determinants of health information to promote overall public health.

“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

In an effort to better understand the link between social needs and individual health and well-being, more data is needed by the state of Michigan and other stakeholders in the healthcare 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 with the state.

To support this use case, the Michigan Health Information Network Shared Services (MiHIN), which oversees the statewide health information network (HIN), utilizes pre-existing technology to collect SDOH information from participating organizations and then automatically transfers this data to the State of Michigan.

1.2 Message Content

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

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

1.3 Data Flow and Actors

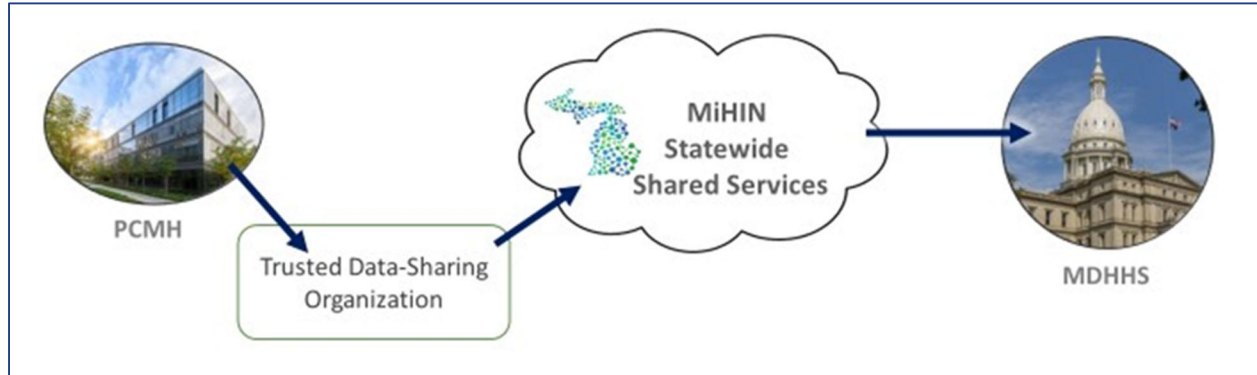


Figure 1. Data flow for sending SDOH information to the state for analysis.

1. The PCMh collects the SDOH information and sends it to MiHIN (possibly via a trusted data-sharing organization [TDSO])
2. MiHIN receives the message and shares it with the state (Michigan Department of Health and Human Services or MDHHS)

2 Standard Overview

2.1 Message Format

The current message format that will be supported is CSV. Example found in Appendix A.

2.2 Message Example

For an example of what a properly formatted CSV should look like for this use case, refer to Appendix B.

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

- | | |
|-----------------------------------|--|
| ■ Participating Organization Name | ■ Address |
| ■ Row Identifier | ■ Screening Date |
| ■ Medicaid ID | ■ Screening Practice |
| ■ First Name | ■ Hub Referral Date |
| ■ Last Name | ■ Screening question responses |
| ■ Date of Birth | ■ 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. A listing MiHIN's use cases are available upon request.

3.1.2 Initial Technical Connectivity Process

MiHIN will receive message content via Secure File Transfer Protocol (SFTP). Organizations participating in this use case will be required to establish SFTP with MiHIN.

To establish SFTP, organizations will fill out the following form and deliver it to: help@mihin.org



4 Specifications

4.1 Message Trigger Events

Sending organizations will deliver message content to MiHIN by the last day of the month following the end of a quarter. For example, April 30 for the January-March quarter.

MiHIN will deliver message content to the State of Michigan upon receipt from sending organizations within one business day.

4.2 Specific Segment and Field Definitions

4.2.1 CCL Header Row

Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED**
1	Submitter Name	Char	125	User readable name	Required
2	File_Creation_Date	Char	10	Date file created (format: MM/DD/YYYY)	Required
3	Record_Count	Num	8	Overall Count of Records in the file	Required

4.2.2 Data 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	Required
4	Medicaid_ID_Number	Char	10	Client Medicaid ID Number	Required if available
5	SSN	Char	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	Address_1	Char	100	Patient Home Street Address	Required
10	Address_2	Char	100	Patient Home Additional Street Address	Required if available



Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
11	City	Char	30	Patient City	Required
12	ZIP	Char	10	Patient ZIP Code (format: 12345 or 12345-1234)	Required
13	Screen_Date	Char	10	Date Patient was screened for SDoH needs (format: MM/DD/YYYY)	Required if available
14	Screening_Practice_OID	Char	125	Practice Organization Identification Number	Required
15	Screening_Practice_Name	Char	125	Practice name that conducted screening	Required
16	Hub_Referral_Date	Char	10	Date referred to CHIR hub (format: MM/DD/YYYY)	Situational
17	CM/CC_Service	Char	1	Practice-based care management/care coordinator provided service to patient ("Y", "N", or "S")	Required
18	Patient_Assisted_In_MI_Bridges	Char	1	Patient assisted in creating a MI Bridges account ("Y", "N", or "S").	Optional
19	Healthcare_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
20	Healthcare_Q2	Char	1	Screening question ("Y", "N", "D", "S")	Required
21	Food_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
22	Employment_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
23	HousingShelter_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
24	Utilities_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required

Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
25	FamilyCare_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
26	Education_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
27	Transportation_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
28	Safety_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
29	General_Q1	Char	1	Screening question ("Y", "N", "D", "S")	Required
30	General_Q2	Char	1	Screening question ("Y", "N", "D", "S")	Required
31	Linkage_Opened_Healthcare_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
32	Linkage_Opened_Healthcare_Q2	Char	10	Date in (format: MM/DD/YYYY)	Required if available
33	Linkage_Opened_Food_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
34	Linkage_Opened_Employment_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
35	Linkage_Opened_HousingShelter_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
36	Linkage_Opened_Utilities_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
37	Linkage_Opened_FamilyCare_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
38	Linkage_Opened_Education_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
39	Linkage_Opened_Transportation_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
40	Linkage_Opened_Safety_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
41	Linkage_Opened_General_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
42	Linkage_Opened_General_Q2	Char	10	Date in (format: MM/DD/YYYY)	Optional

Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
43	Linkage_Closed_Healthcare_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
44	Linkage_Closed_Healthcare_Q2	Char	10	Date in (format: MM/DD/YYYY)	Required if available
45	Linkage_Closed_Food_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
46	Linkage_Closed_Employment_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
47	Linkage_Closed_HousingShelter_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
48	Linkage_Closed_Utilities_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
49	Linkage_Closed_FamilyCare_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
50	Linkage_Closed_Education_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
51	Linkage_Closed_Transportation_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
52	Linkage_Closed_Safety_Q1	Char	10	Date in (format: MM/DD/YYYY)	Required if available
53	Linkage_Closed_General_Q1	Char	10	Date in (format: MM/DD/YYYY)	Optional
54	Linkage_Closed_General_Q2	Char	10	Date in (format: MM/DD/YYYY)	Optional
55	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 provided to assist with your mapping: 1=Linkage open 2=Linkage closed (need met) 3=Linkage closed (unable to contact)	Required if available
56	Linkage_Status_Healthcare_Q2	Char	2		Required if available
57	Linkage_Status_Food_Q1	Char	2		Required if available
58	Linkage Status Employment_Q1	Char	2		Required if available
59	Linkage Status HousingShelter_Q1	Char	2		Required if available
60	Linkage_Status_Utilities_Q1	Char	2		Required if available
61	Linkage Status FamilyCare_Q1	Char	2		Required if available
62	Linkage_Status_Education_Q1	Char	2		Required if available

Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED
63	Linkage_Status_Transportation_Q1	Char	2	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)	Required if available
64	Linkage_Status_Safety_Q1	Char	2		Required if available
65	Linkage_Status_General_Q1	Char	2		Optional
66	Linkage_Status_General_Q2	Char	2		Optional

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 “meaningful use” 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.



Appendix A. Sample PCMH Data Output

A sample PCMH Data Output file is attached as an Excel document.



Appendix B. SIM PCMH Social Determinant of Health File Format

Field #	DATA ELEMENT	TYPE	MAX LENGTH	DESCRIPTION	REQUIRED**
1	Submitter Name	Char	125	User readable name	Required
2	File_Creation_Date	Char	10	Date file created (format: MM/DD/YYYY)	Required
3	Record_Count	Num	8	Overall Count of Records in the file	Required

