Social Determinants of Health
Healthcare
Implementation Guide

Version 6
August 15, 2023

Document History

Date	Version	Sections Revised	Description	Modifier
7/7/2023	6	All Sections	Update to reflect changes to routing SDOH data to receivers and migration to IHDU.	M. Allen
8/3/2023	6	1,2,3,4	Updated information based on reviews. Updated sections to better reflect proper verbiage, workflows, and spec references.	M. Allen, H. Burseth, J. Davis
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9/7/2023	7	Sections 2.2.1 and 2.2.2	Updated legal document language	S. Patel, M. Allen

Table of Contents

Acronyms and Abbreviations Guide

AA	Assigning Authority
ACRS®	Active Care Relationship Service®
AD	Advance Directive
ADT	Admission, Discharge, Transfer
API	Application Programming Interface
CAH	Critical Access Hospital
CAT 1	Category 1
CAT 3	Category 3
CCD®	Continuity of Care Document
CDA®	Clinical Document Architecture
CDC	Centers for Disease Control and Prevention
CEHRT	Certified Electronic Health Record Technology
CGS	Common Gateway Service
CHAMPS	Community Health Automated Medicaid Processing System
CHDR	Clinical Data Repository/Health Data Repository
CMS	Centers for Medicare & Medicaid Services
CQM	Clinical Quality Measure
CQMRR	Clinical Quality Measurement Reporting and Repository
DQA	Data Quality Assurance
DSM	Direct Secure Messaging
DSO	Data Sharing Organization
eCQM	electronic Clinical Quality Measure
eCR	Electronic Case Reporting
EH	Eligible Hospital
EHR	Electronic Health Record
EHR-MIPP	Electronic Health Record Medicaid Incentive Payment Program
eICR	Electronic Initial Case Report
EP	Eligible Professional
EPID	Enterprise Patient ID
esMD	CMS Electronic Submission of Medical Documentation
FHIR®	Fast Healthcare Interoperability Resources®
HEDIS	Healthcare Effectiveness Data and Information Set
HIE	Health Information Exchange
HIE-QO	Health Information Exchange Qualified Data Sharing Organization
HIN	Health Information Network
HITSP	Health Information Technology Standards Panel
HL7®	Health Level Seven®
HPD	Health Provider Directory

ICBR	Integrated Care Bridge Record
ICD	International Classification of Diseases
ICN	Identification Control Number
ICO	Integrated Care Organization
ICT	Integrated Care Teams
IDN	Integrated Delivery Network
IHE	Integrating the Healthcare Enterprise
JSON	JavaScript Object Notation
LOINC	Logical Observation Identifiers Names and Codes
MDHHS	Michigan Department of Health and Human Services
MIDIGATE®	Medical Information Direct Gateway
MiHIN	Michigan Health Information Network Shared Services
MIP	Merit-Based Incentive Payment System
MPI	Master Person Index
arNHIE	Nationwide Health Information Exchange
NHIO	Nationwide Health Information Organizations
NIST	National Institute of Standards and Technology
NPI	National Provider Identifier
NwHIN	Nationwide Health Information Network
OID	Object Identifier
ONC	Office of the National Coordinator
PD	Patient Discovery
PDQ	Patient Demographic Query
PHA	Public Health Agency
PO	Participating Organization
PoM	Peace of Mind
PQRS	Physician Quality Reporting System
PI	Promoting Interoperability
QD	Query for Documents
QRDA	Quality Reporting Document Architecture
RAS	Registration and Attestation System
RD	Retrieve Documents
REST	Representational State Transfer
RR	Reportability Response
SAML	Security Assertion Markup Language
SNOMED-CT	Systemized Nomenclature of Medicine – Clinical Terms
SOAP	Simple Object Access Protocol
SOM	State of Michigan
SSA	Social Security Administration
SSO	Single Sign On
SSSO	State Sponsored Data Sharing Organization

SCD	Statewide Consumer Directory
TDSO	Trusted Data Sharing Organization
UCA	Use Case Agreement
UCS	Use Case Summary
URL	Uniform Resources Locators
VA	Department of Veterans Affairs
VLER	Virtual Lifetime Electronic Record
VPN	Virtual Private Network
XCA	Cross Community Access
XCPD	Cross-Community Patient Discovery
XDR	Cross-Enterprise Document Reliable Interchange
XDS	Cross-Enterprise Document Sharing
XML	Extensible Markup Language

Definitions

Attribution. The connection between a consumer and their healthcare 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.

Active Care Relationship (ACR). (a) For health providers, a patient who has been seen by a provider within the past 24 months, or is considered part of the health provider's active patient population they are responsible for managing, unless notice of termination of that treatment relationship has been provided to Michigan Health Information Network Shared Services (MiHIN); (b) for payers, an eligible member of a health plan;(c) an active relationship between a patient and a health provider for the purpose of treatment, payment and/or healthcare operations consistent with the requirements set forth in Health Insurance Portability and Accountability Act (HIPAA); (d) a relationship with a health provider asserted by a consumer and approved by the health provider; or (e) any person or Trusted Data Sharing Organization authorized to receive message content under an exhibit which specifies that an Active Care Relationship (ACR) may be generated by sending or receiving message content under that exhibit. ACR records are stored by MiHIN in the Active Care Relationship Service.

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

Admission, Discharge, Transfer (ADT). An event that occurs when a patient is admitted to, discharged from, or transferred from one care setting to another care setting or to the patient's home. For example, an Admission, Discharge, Transfer (ADT) event occurs when a patient is discharged from a hospital. An ADT event also occurs when a patient arrives in a care setting such as a health clinic or hospital.

ADT Message. A type of Health Level Seven® (HL7®) message generated by healthcare systems based upon Admission, Discharge, Transfer (ADT) events and the HL7 *"Electronic Data Exchange in Healthcare"* standard. The HL7 ADT message type is used to send and receive patient demographic and healthcare encounter information, generated by source system(s). The ADT messages contain patient demographic, visit, insurance, and diagnosis information.

ADT Notification. An electronic notification that a given patient has undergone an Admission, Discharge, Transfer (ADT) event. An ADT Notification is not a complete ADT Message.

Advance Directive. A document in which consumers specify what type of medical care they want in the future, or who should make medical decisions if they become unable to make decisions for themselves.

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.

C32. Healthcare Information Technology Standards Panel Summary Documents Using Health Level Seven® Continuity of Care Document Component - http://www.hitsp.org/ConstructSet_Details.aspx?&PrefixAlpha=4&PrefixNumeric=32.

C62. The Healthcare Information Technology Standards Panel Unstructured Document Component is provided for the capture and storage of patient identifiable, unstructured document content, such as text, PDF, and images rendered in PDF. It is based on the Cross-Enterprise Sharing of Scanned Documents (XDS-SD) profile from Integrating the Healthcare Enterprise - http://www.hitsp.org/ConstructSet_Details.aspx?&PrefixAlpha=4&PrefixNumeric=62

C83. The Healthcare Information Technology Standards Panel (HITSP) Clinical Document Architecture (CDA) Content Modules Component. The CDA Content Modules Component defines the content modules for document based HITSP constructs utilizing clinical information- http://www.hitsp.org/ConstructSet_Details.aspx?&PrefixAlpha=4&PrefixNumeric=83

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

Clinical Document Architecture (CDA). A message structure that uses XML and is made up of Templates and Profiles with RIM attributes and codes. One of the main advantages to using XML is the human readable structure.

Common Gateway. The method by which data is sent and received by Michigan Health Information Network Shared Services using various national standard protocols (e.g., NwHIN SOAP, IHE XCA, IHE XDS.b).

Conforming Message. A message that is in a standard format that strictly adheres to the implementation guide for its applicable use case.

CONNECT. An open-source software solution that supports health information exchange – both locally and at the national level. CONNECT uses Nationwide Health Information Network standards and governance to make sure that health information exchanges are compatible with other exchanges being set up throughout the country (http://www.connectopensource.org/). This software solution was initially developed by

federal agencies to support their health-related missions, but it is now available to all organizations and can be used to help set up health information exchanges and share data using nationally recognized interoperability standards.

Critical Access Hospital (CAH). A Critical Access Hospital as defined under the Medicaid Electronic Health Record Incentive Program.

Data Sharing Agreement. Any data sharing organization agreement signed by both Michigan Health Information Network Shared Services (MiHIN) and a participating organization. Data sharing organization agreements include but are not limited to: Qualified Data Sharing Organization Agreement, Simple Data Sharing Organization Agreement, Participation Agreement, or other data sharing organization agreements developed by MiHIN.

DS Message. A message specific to the document submission (DS) specification that conforms in content and format to the Integrating the Healthcare Enterprise's Cross-enterprise Document Reliable Interchange specification.

EdgeSim. Simulators that are utilized in a testing environment to simulate testing with a data sharing organization.

eHealth Exchange. See the definition for The Sequoia Project.

Electronic Address. A string that identifies the transport protocol and end point address for communicating electronically with a recipient. A recipient may be a person, organization or other entity that has designated the electronic address as the point at which it will receive electronic messages. Examples of an electronic address include a secure email address (Direct via secure Simple Mail Transfer Protocol) or secure URL (SOAP/XDR/REST/FHIR). Communication with an electronic address may require a digital certificate or participation in a trust bundle.

Electronic CQM (eCQM). Clinical Quality Measure that are specified in a standard electronic format and are designed to use data from health information technology systems for measurement.

Electronic Medical Record or Electronic Health Record (EMR/EHR). A digital version of a patient's paper medical chart.

Electronic Service Information (ESI). All information reasonably necessary to define an electronic destination's ability to receive and use a specific type of information (e.g., discharge summary, patient summary, laboratory report, query for patient/provider/healthcare data). Electronic Service Information (ESI) may include the type of information (e.g., patient summary or query), the destination's electronic address, the messaging framework supported (e.g., SMTP, HTTP/SOAP, XDR, REST, FHIR), security information supported or required (e.g., digital certificate) and specific payload definitions (e.g., CCD C32 V2.5). In addition, ESI may include labels that help identify the type of recipient (e.g., medical records department).

Eligible Hospital (EH). An Eligible Hospital as defined under the Medicare and Medicaid Electronic Health Record Incentive Programs.

Eligible Professional (EP). An Eligible Professional as defined under the Medicare and Medicaid Electronic Health Record Incentive Programs.

End Point. An instance of an electronic address or ESI.

Exhibit. Collectively, a use case exhibit or a pilot activity exhibit.

FedSim. Simulators that are utilized in a testing environment to simulate testing with a federal partner e.g., Social Security Administration or U.S. Department of Veterans Affairs.

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

Health Level Seven® (HL7®). An interface standard and specifications for clinical and administrative healthcare data developed by the Health Level Seven organization and approved by the American National Standards Institute (ANSI). HL7 provides a method for disparate systems to communicate clinical and administrative information in a normalized format with acknowledgement of receipt.

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 healthcare to an individual; or the past, present, or future payment for the provision of healthcare to an individual.

Health Information Network (HIN). An organization or group of organizations responsible for coordinating the exchange of protected health information 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.

ICD-10. Diagnosis codes is the 10th revision of the International Statistical Classification of Diseases and Related Health Problems, a medical classification list by the World Health Organization.

Immunization Information System (IIS). A registry that stores immunization records.

Information Source. Any organization that provides information that is added to a Michigan Health Information Network Shared Services infrastructure service.

Integrating the Healthcare Enterprise. An initiative by healthcare professionals and industry to improve the way computer systems in healthcare share information (http://www.ihe.net/). Integrating the Healthcare Enterprise (IHE) promotes the coordinated use of established standards such as DICOM and Health Level Seven® to address specific clinical needs in support of optimal patient care. Systems developed in accordance with IHE communicate with one another better, are easier to implement, and enable care providers to use information more effectively. The Nationwide Health Information Network specifications utilize underlying IHE specifications for various services for health data exchange.

LOINC. Logical Observation Identifiers Names and Codes is a database and universal standard for identifying medical laboratory observations.

Master Use Case Agreement (MUCA). Legacy 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 Michigan Health Information Network Shared 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 Michigan Health Information Network Shared Services. Message content includes the message content header.

Message Header ("MSH") or Message Content Header. The Message Header segment is present in every Health Level Seven® (HL7®) message type that defines the Message's source, purpose, destination, and certain syntax specifics such as delimiters (separator characters) and character sets. It is always the first segment in the HL7 message, with the only exception being HL7 batch messages.

Michigan Care Improvement Registry (MCIR). The Immunization Information System for the State of Michigan is operated by the Michigan Department of Health and Human Services.

Michigan Health Information Network Shared Services. The health information network for the State of Michigan.

MiHIN Infrastructure Service. Certain services that are shared by numerous use cases. Michigan Health Information Network Shared Services infrastructure services include, but are not limited to, Active Care Relationship Service®, Health Directory, Statewide Consumer Directory, and the Medical Information Direct Gateway (MIDIGATE®).

MiHIN Services. The Michigan Health Information Network Shared Services (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.

Merit-Based Incentive Payment System. The program that will determine Medicare payment adjustments. Using a composite performance score, eligible clinicians (ECs) may receive a payment bonus, a payment penalty or no payment adjustment.

Nationwide Health Information Network (NwHIN). See the definition for The Sequoia Project.

Nationwide Health Information Organizations (NHIO). Nodes on the eHealth Exchange that use the Nationwide Health Information Network web services to facilitate exchange of information with other nodes in the network.

NwHIN Authorization Framework Specification. The purpose of this specification is to define the required exchange of information describing the initiator of a request between Health Information Organizations participating in the eHealth Exchange network. This enables a responding Nationwide Health Information Organizations (NHIO) to evaluate the request based on the initiating NHIOs assertions and its own local policies and permissions.

NwHIN Document Submission (DS) Web Service Interface Specification. The purpose of this specification is to provide the ability to "send" data for a given patient from an exchange partner to a health information exchange using configuration on the sender side.

NwHIN Gateway. An implementation of the Nationwide Health Information Network specified web service interfaces. These web service interfaces communicate over secured Hypertext Transfer Protocol Secure using Public Key Infrastructure supported by the Nationwide Health Information Network Operational Infrastructure.

NwHIN Interface. An implementation of the Nationwide Health Information Network (NwHIN) specified web service interfaces. These web service interfaces communicate

over secured Hypertext Transfer Protocol Secure using Public Key Infrastructure supported by the NwHIN Operational Infrastructure.

NwHIN Messaging Platform Specifications. The purpose of this specification is to define a base set of messaging standards and web service protocols which must be implemented by each node in the eHealth Exchange network and applies to all eHealth Exchange transactions.

NwHIN Patient Discovery Web Service Interface Specification. The purpose of this specification is to define the mechanism by which one eHealth Exchange node can query another to reciprocally establish patient identity and to determine if a node may be a source of information for a specific patient.

NwHIN Query for Documents Web Service Interface Specification. The purpose of this specification is to define the mechanism by which an initiating eHealth Exchange node can request a patient-specific list of available documents from a responding node using the patient ID obtained by a prior Patient Discovery transaction.

NwHIN Retrieve Documents Web Service Interface Specification. The purpose of this specification is to define the mechanism by which an Initiating eHealth Exchange node can retrieve specific documents from a responding node using the Document Reference IDs obtained using a prior Query for Documents transaction.

Negative Acknowledgment (NAK or NACK). "Not acknowledged" and is used to negatively acknowledge or to reject previously received message content or to indicate some kind of error.

Notice. A message transmission that is not message content and which may include an acknowledgement of receipt or error response, such as an Acknowledged or Not Acknowledged.

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, personal credit information, and/or personally identifiable information.

Person Record. Any record in a Michigan Health Information Network Shared Services 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 Michigan Health Information Network Shared Service to assist in finalizing a use case and use case and use case exhibit upon conclusion of the pilot activity.

Promoting Interoperability. Using certified electronic health record technology to improve quality, safety and efficiency of healthcare, and to reduce health disparities as

further contemplated by Title XIII of the American Recovery and Reinvestment Act of 2009.

Principal. A person or a system utilizing a federated identity through a federated organization.

Provider Community. A healthcare provider with an active care relationship with the applicable patient.

Public Health Agency. Entities that have the legal authority to receive case reports on conditions of interest to them (Ex. Michigan Department of Health and Human Services).

Query for Documents Message. A message specific to the Query for Documents Web Services Interface Specification that references the Integrating the Healthcare Enterprise's Cross-Community Access specification.

Reportability Response. A message is used to communicate the reportability of a case report.

REST. REST stands for Representational State Transfer, which is an architectural style, and an approach to communications that is often used in the development of web services.

Retrieve Documents Message. Retrieve documents web services interface specification that references the Integrating the Healthcare Enterprise's Cross-Community Access specification.

Send/Receive/Find/Use (SRFU). Means sending, receiving, finding, or using message content. Sending involves the transport of message content. Receiving involves accepting and possibly consuming or storing message content. Finding means querying to locate message content. Using means any use of the message content other than sending, receiving and finding. Examples of use include consuming into workflow, reporting, storing, or analysis. Send/Receive/Find/Use (SRFU) activities must comply with Applicable Laws & Standards or State Administrative Code as that term is defined in this agreement and the data sharing agreement.

Service Interruption. A party is unable to send, receive or find message content for any reason, including the failure of network equipment or software, scheduled or unscheduled maintenance, general Internet outages, and events of force majeure.

SNOMED – CT. Systemized Nomenclature of Medicine – Clinical Terms is a systematically organized computer processable collection of medical terms providing codes, terms, synonyms and definitions used in clinical documentation and reporting.

SOAP. SOAP originally defined as Simple Object Access Protocol is a lightweight protocol intended for exchanging structured information in a decentralized, distributed environment. It uses XML technologies to define an extensible messaging framework providing a message construct that can be exchanged over a variety of underlying

protocols. The framework has been designed to be independent of any particular programming model and other implementation specific semantics. For the eHealth Exchange to be a truly scalable, secure and interoperable network, a common transport layer is essential. The messaging platform is based on SOAP 1.2 messages over Hypertext Transfer Protocol.

Source System. A computer system, such as an electronic health record system, at the participating organization, that sends, receives, finds or uses message content or notices. This can include health-related social needs.

Specifications. Specifications provide a standard set of service interfaces that enable the exchange of interoperable health information among the health information exchanges.

Statewide Consumer Directory (SCD). A Michigan Health Information Network Shared Services infrastructure service that helps organizations provide tools to consumers, which allow the consumers to manage how their personal Health Information can be shared and used. The Statewide Consumer Directory is essentially a Software Development Kit with a robust set of Application Programming Interfaces that can be used by consumer-facing applications that enable consumers to take an active role in viewing and editing their preferences for how their health information is shared.

Target HIE. The health information exchange or eHealth Exchange Node where the message or feedback is being addressed.

The Sequoia Project. An organization that manages the nationwide network formerly known as Nationwide Health Information Network now called eHealth Exchange, which uses a set of standards, services and policies that enable secure health information exchange over the Internet.

Transactional Basis. The transmission of message content or a notice within a period of time of receiving message content or notice from a sending or receiving party as may be further set forth in a specific exhibit.

Transitions of Care. The movement of a patient from one setting of care (e.g., hospital, ambulatory primary care practice, ambulatory specialty care practice, long-term care, rehabilitation facility) to another setting of care and can include transfers within a healthcare organization.

Trusted Data Sharing Organization (TDSO). An organization that has signed any form of agreement with Michigan Health Information Network Shared Services 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 Trusted Data Sharing Organization must follow to share specific message content with the Michigan Health Information Network Shared Services.

Use Case Exhibit. The legal agreement attached as an exhibit to the master use case agreement or Participation 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, Michigan Health Information Network Shared Services, and other Trusted Data Sharing Organizations. 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 Michigan Health Information Network Shared Services (MiHIN) upon request and via the MiHIN website at www.mihin.org.

View Download Transmit (VDT). A requirement for Promoting Interoperability with the objective to provide patients with the ability to view online, download and transmit their health information within a certain period of the information being available to an eligible professional.

XCA. The Integrating the Healthcare Enterprise® standard for Cross-Community Access which provides specifications to query and retrieve patient relevant health information held by other communities.

XDS.b. The Integrating the Healthcare Enterprise® standard for Cross-Enterprise Document Sharing revision b, which provides specifications to query and retrieve patient relevant healthcare data held within a community.

1. Introduction

1.1 Purpose of Use Case

This use case begins documenting the social care process within healthcare with social needs screening data. Participating organizations screen individuals for health-related social needs. This data is submitted to the Health Information Network (HIN), integrated with Active Care Relationship Services (ACRS)™ to allow for accurate person-care team relationships to be identified. This creates individual social need observations which can be shared among care team members, and for a holistic understanding of the individual receiving care. Access to this data allows care teams to assess and intervene as driven by the individual. Health related social needs screening data will be an input to future use cases that continue to document the social care process, like the Interoperable Referral (IR) Use Case that supports a vendor agnostic cross sector data sharing pathway for social care referrals.

Identifying and addressing Health Related Social Needs (HRSN) has traditionally been a challenging and siloed process, making coordination of social and health care complicated, duplicative, and expensive, without clear metrics for quality improvement or payment. Individuals with numerous social related health needs may be cared for by multiple social support organizations. These organizations all may operate with different missions, funders, data needs, and processes. Creating connections with each organization individually creates an excessive administrative and cost burden on care teams.

Healthcare is well supported with Information Technology (IT) infrastructure that provides tools for HRSN identification. Awareness of an individual's social needs allows care team members the widest possible view of an individual from which to base the development of person-centric treatment plans. Despite the reality of the existing the social care systems lack of infrastructure and challenges related to language, regulatory, consent, and financial considerations that differ from physical and behavioral health care teams, there is belief that coordination with healthcare holds transformational potential and is therefore willing to begin a partnership towards data sharing.

By implementing the SDOH-Healthcare use case, health and social care organizations gain access to HRSN screening data distributed through the HIN. Using a Hub and Spoke model, organizations connect once to the HIN, which facilitates connections to all other participating organizations across sectors of care.

Screening data is the beginning data set to enable effective solutions that address a person's health related social needs but does not represent a solution in itself.

The SDOH- Healthcare use case data used as an input to, the Interoperable Referral use case, provides the following essential information to those delivering care:
- Health related social needs identified in the health care screening process can be made available to care team members across health and social services through legally permissible and standard data sharing agreements
- When and where the screening was performed

- If a referral was made to an organization to for further evaluation in community or for a specific service request to meet a health-related social need and the status of that referral

The SDOH-Healthcare use case will provide essential information to health care providers and CBOs in a timely and accessible manner. Each type of health-related social need, such as housing or food insecurity, is called a domain. The data holds value in direct care coordination to ensure individuals with identified needs find care in the community to help meet those needs. Additionally, the aggregation of screening data can support policy and program administrators' valuable data about the prevalence of needs in communities that can be used to determine if actions to reduce overall needs are working and ultimately to substantiate the best use of scarce human and financial resources.

1.2 Message Content

For this Use Case, Message Content means a .csv file containing social need screening and patient information. Based on MiHIN's social needs screening (SDOH) file specification.

1.3 Data Flow and Actors
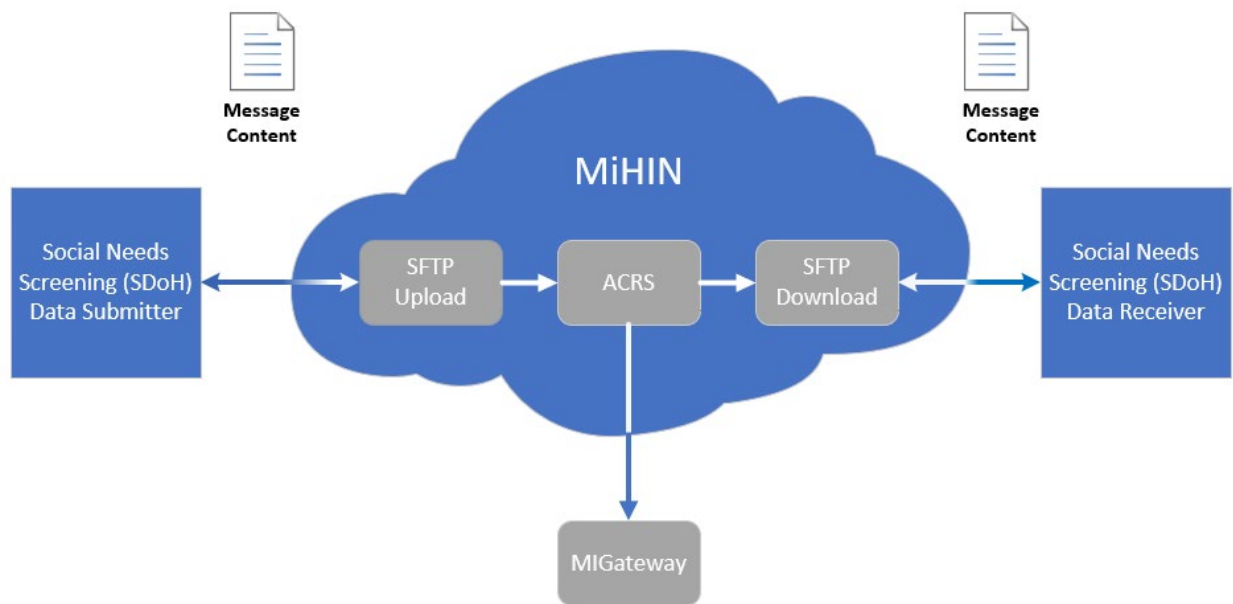
1.3.1 Data Flow

Figure 1. Data flow to send and receive Social Needs Screening (SDOH) data.

1. The Organization submitting the social needs screening (SDOH) data sends a .CSV file to MiHIN via Secure File Transfer Protocol (SFTP). **Note:** Data submitters may also receive data and vice versa.

2. MiHIN validates the file and triggers an email to the submitter detailing rows with errors.
3. MiHIN stores the data in the HIE SDOH Sender Database
4. MiHIN filters the patient social needs screening (SDOH) data through ACRS and creates a list of ACRS populations that list the patient.
5. MiHIN sends an SDOH .csv file to organizations with at least 1 matching patient in their ACRS population
6. Participating Organization who uses MIGateway can also view submitted SDOH data via the TOC viewer module

1.3.2 Actors

- *Actor:* Screening Submitter
  - *Role:* Provides social needs screening (SDOH), compiles screening data into a .csv file and submits via a Secure File Transfer Protocol (sFTP)
- *Actor:* HIN
  - *Role:* Receives and process social needs screening (SDOH) data .CSV file and ingests them into SDOH database. Filters patients through ACRS and finds matches within organization's ACRS patient populations. Compiles a .csv file of matched patients and routes to a Secure File Transfer Protocol (sFTP) folder for receive organization based on OID information.
- *Actor:* Screening Receiver
  - *Role:* Submits ACRS files to HIN list patients for which they are a care team and receives social needs screening (SDOH) data based on matches to their ACRS file.

You can contact MiHIN at www.mihin.org/requesthelp for more information.)

2 Onboarding

2.1 Prerequisites

Participating organizations should begin two parallel onboarding tracks simultaneously:

- Obtain, review, and execute legal agreements, and

- Establish technical transport and testing.

2.1.1 Universal Legal Prerequisites

Legal agreements for organizations who are onboarding for the first-time consist of a Participation Agreement and Business Associate Agreement.

Once an organization signs the two legal documents necessary, they can opt into the SDOH Product through the Legal Portal. This encompasses use of the Active Care Relationship

Service, Health Provider Directory, Common Key Service, and the SDOH for Community Based Organization Use Cases.

To initiate the legal onboarding contact, email legal@mihin.org.

2.1.2 Social Determinants of Health Prerequisites

Participation in the Social Determinants of Health - Healthcare (SDOH) Use Case requires participation in the following use cases/services/products:

- *ACRS Use Case*
- *Health Directory*
- *Common Key Service Use Case*
- *SDOH For Community Based Organizations Use Case*
- *MIGateway (if planning view SDOH data in MIGateway)*

2.2 Implementation of *Social Needs Screening (SDOH)*

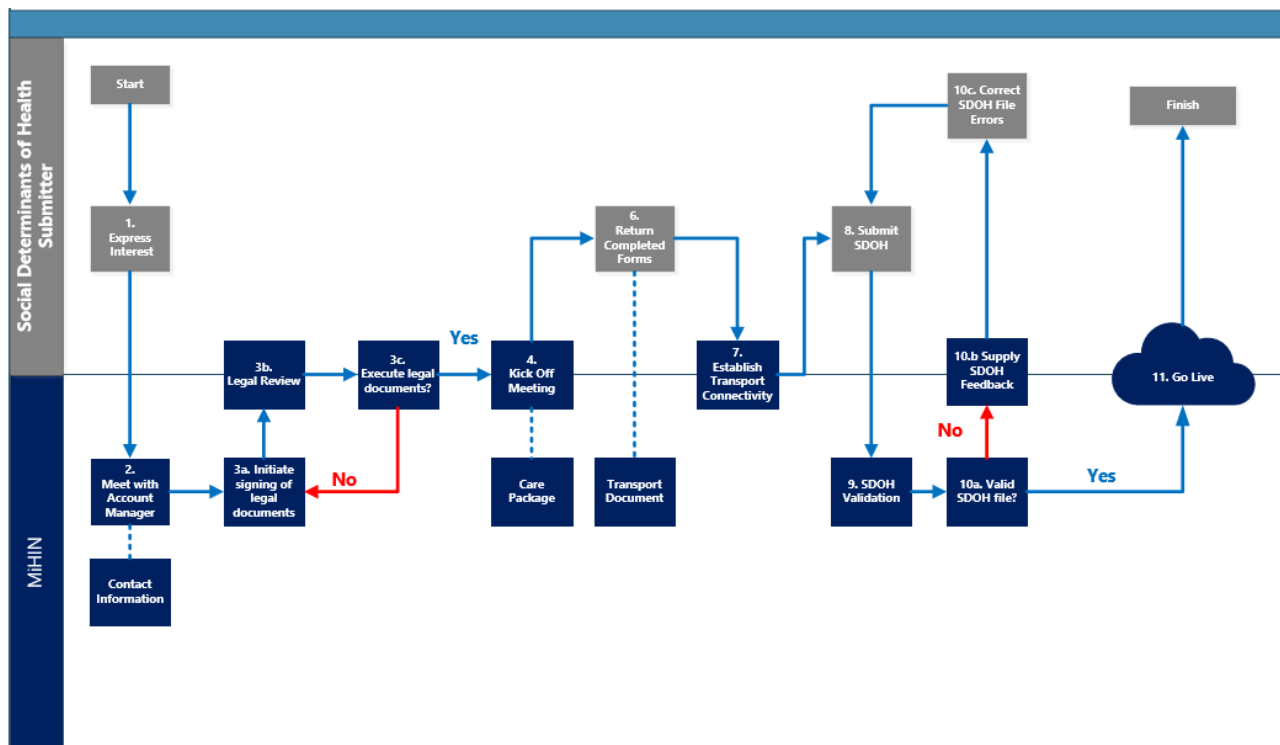### 2.2.1 Social Needs Screening (SDOH) Data Sender Onboarding Process

Figure 2. MiHIN Social Needs Screening (SDOH) Data Submitter Onboarding Workkflow

For participating organizations who will submitting Social Determinants of Health csv files, onboarding steps are as follows:

- Express interest in participating in the use case
- Meet with Account Manager

- Exchange contact information
- Initiate signing of legal documents
- Legal Review
- Execute legal documents
  - Participation Agreement
  - Exhibit A – Business Associate Agreement
  - SDOH for Healthcare Product Selection on Legal Portal (Inclusive of ACRS, CKS, HPD, and SDOH for Healthcare Use Cases)
- Kick-Off Meeting
  - Distribute SDOH Care Package
- Exchange required documents.
  - Transport Document (SFTP Request Form)
  - OID Request Form (if needed)
  - Social Needs Screening (SDOH) data Spec Sheet
- Establish Transport Connectivity
- Submit Initial SDOH File
- SDOH File Validation
  - If valid, proceed to Go-Live
  - If invalid, MiHIN provides error feedback and submitter makes corrections and resubmits.
- Go-Live

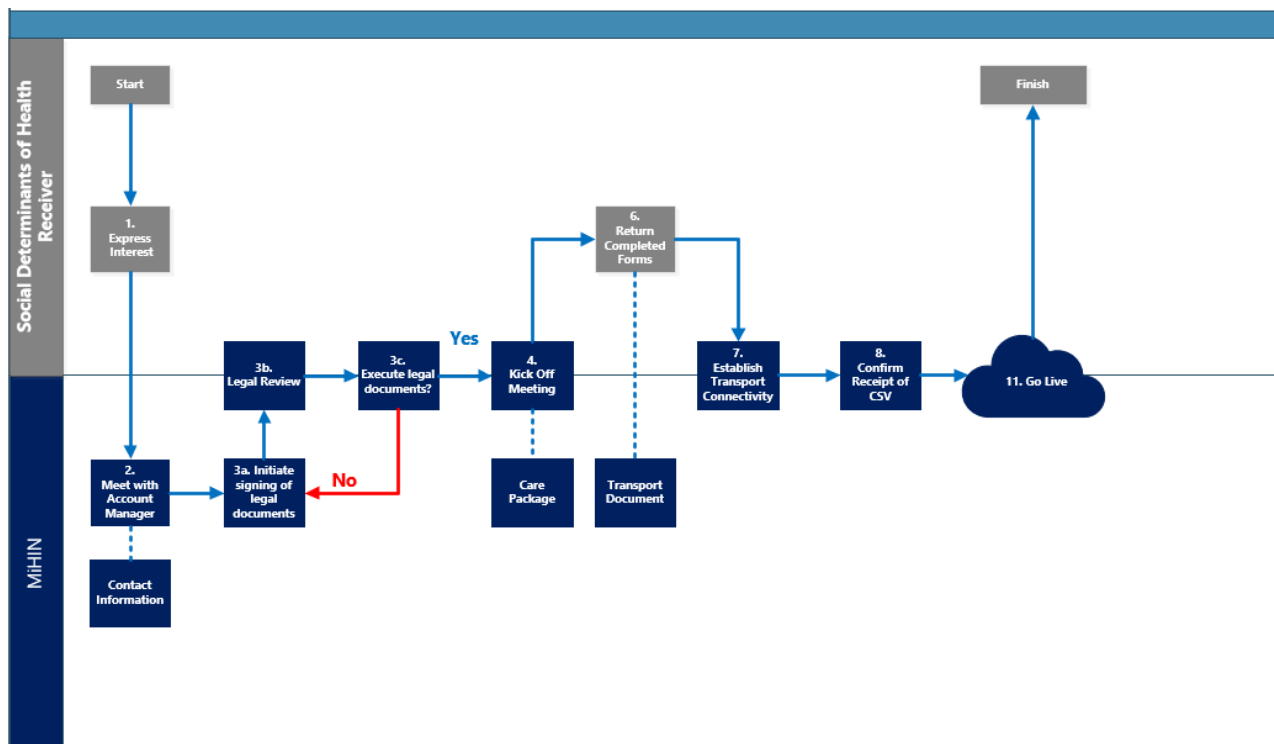## 2.2.2 Social Needs Screening (SDOH) Data Receiver Onboarding Process

Figure 3. MiHIN Social Needs Screening (SDOH) Data Receiver Onboarding Flowchart

For participating organizations who will receiving Social Determinants of Health csv files, onboarding steps are as follows:

- Express interest in participating in the use case
- Meet with Account Manager
  - Exchange contact information
- Initiate signing of legal documents
- Legal Review
- Execute legal documents
  - Participation Agreement
  - Exhibit A – Business Associate Agreement
  - SDOH for Healthcare Product Selection on Legal Portal (Inclusive of ACRS, CKS, HPD, and SDOH for Healthcare Use Cases)
- Kick-Off Meeting
  - Distribute SDOH Care Package
- Exchange required documents.
  - Transport Document (SFTP Request Form)
  - OID Request Form (if needed)
  - Social Needs Screening (SDOH) Data Spec
- Establish Transport Connectivity
- Confirm receipt of Social Determinants of Health ACRS match .csv file

■ Go-Live

2.2.3 Social Needs Screening (SDOH) Data Technical Connectivity Process

HIN considers itself "transport agnostic" and offers multiple options for organizations to establish technical connectivity to transport data to HIN. Organizations should select one or more connectivity methods for message transport based on their technical capabilities and should communicate the selection(s) to www.mihin.org/requesthelp early in the onboarding process. Currently the ONLY transport methods the HIN accepts are:

■ SFTP – HIN-Hosted Secure File Transfer Protocol

Additional transport methods may be added in the future. These can include NwHIN, XCA, REST/RESTFUL APIs, FHIR, and others.

The following steps describe the technical onboarding process. However, MiHIN typically conducts "onboarding kickoff" meetings with new organizations to go through each of these steps in detail and answer any questions.

1. The organization selects one or more supported transport methods and establishes connectivity with MiHIN. This step varies based on the method selected.

   a. SFTP – HIN-Hosted Secure File Transfer Protocol on the HIE Platform.

2. All connectivity testing, regardless of whether it is for Social Needs Screening (SDOH) Data Submitters or Receiver data flows are accomplished through the transfer of files via SFTP folder and confirmation of receipt. Unless otherwise requested, all testing communications can be done via email.

   a. In the case of submitters, test or production csv files are loaded to the Social Needs Screening (SDOH) Data submission folder, and the HIN confirms receipt and pickup of the file.
   b. In the case of receivers, test or production .csv files are uploaded to the organization SFTP folder, and the organization confirms receipt of those files.

4 Specifications

4.1 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 the https://mihin.org/social-determinants-of-health-use-case/.

The following list shows examples of the type of information that will be received by MiHIN and sent to the State of Michigan.

- Participating Organization Name
- Participating Organization Unique ID (OID)
- Patent First Name
- Patient Last Name
- Patient Date of Birth
- Patient Gender

- Patient Address
- SDOH Screening Date
- SDOH Screening Practice Name
- SDOH Screening Practice Organization - Unique ID (OID)
- SDOH Screening Question Responses
- SDOH Screening Question Tracking Statuses

4.2 Message Trigger Events

Sending organizations will deliver message content to MiHIN at least monthly, with the goal of increasing the frequency of submissions.

4.3 File Specification Information

Organizations must submit files that adhere to the current published specifications information. Please refer to the MiHIN website for all SDOH specifications: https://mihin.org/social-determinants-of-health-use-case/
If you have questions about which specifications your organization should use, please contact the Help Desk: help@mihin.org.

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,	*Significant Business Impact:* Software component severely restricted. Entire organization is unable to continue business	**Partial Failure or Downtime:** Program is useable and less significant features unavailable. The service is online, though may not working as	**Minimal Business:** A non-critical software component is malfunctioning, causing minimal impact, or a test system is down.

	causing all participating organizations' or other organizations' ability to function to be unusable.	functions, causing all communications and transfer of messages to be halted.	intended or may not currently working as intended or may not currently be accessible, though other systems are currently available.	
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 features requested.
Primary Initiation Method	*Phone:* 517-336-1430	*Phone:* 517-336-1430	Web form at https://mihin.org/requesthelp/	Web form at https://mihin.org/requesthelp/
Secondary Initiation Method	Web form at https://mihin.org/requesthelp/	Web form at https://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 Standard Time)

6 Legal Advisory Language

This reminder applies to all legal documents covering the exchange of electronic health information:

The data sharing agreement establishes the legal framework under which Participating Organization (PO) can exchange messages through the Michigan Health Information Network Shared Services Platform, and sets forth the following approved reasons for which messages may be exchanged:

a. By healthcare providers for Treatment, Payment and/or Healthcare Operations consistent with the requirements set forth in Health Insurance Portability and Accountability Act (HIPPA);
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 PO and Sending Facilities to be knowledgeable of changes outside of MiHIN's control.