



# Health Directory Batch Data Contributor Implementation Guide

*Version 1*  
*October 4, 2019*

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# Document History

Date	Version	Sections Revised	Description	Modifier
10/04/10	#1	All	Document created	Michael Taylor
12/18/19	1	All	Proof/Edits	A. Jones



# Table of Contents

Acronyms and Abbreviations Guide .....	1
Definitions.....	3
1. Introduction .....	12
1.1 Purpose of Use Case .....	12
1.2 Message Content .....	12
1.3 Data Flow and Actors .....	12
1.3.1 Use Case Summary .....	13
2 Standard Overview .....	14
2.1 File Format .....	14
2.2 File Example.....	14
3 Onboarding Process .....	15
3.1 Initial Onboarding .....	15
3.1.1 Initial Legal Process.....	15
3.1.2 Initial Technical Connectivity Process .....	15
3.2 Onboarding Additional Sending Facilities.....	16
4 Troubleshooting .....	17
4.1 Production Support.....	17
5 Legal Advisory Language.....	18
Appendix A .....	20
Active Care Relationship Service Delivery File Specification.....	20



# Acronyms and Abbreviations Guide

<b>AA</b>	Assigning Authority
<b>ACRS®</b>	Active Care Relationship Service®
<b>AD</b>	Advance Directive
<b>ADT</b>	Admission, Discharge, Transfer
<b>API</b>	Application Programming Interface
<b>CAH</b>	Critical Access Hospital
<b>CAT 1</b>	Category 1
<b>CAT 3</b>	Category 3
<b>CCD®</b>	Continuity of Care Document®
<b>CDA®</b>	Clinical Document Architecture®
<b>CEHRT</b>	Certified Electronic Health Record Technology
<b>CGS</b>	Common Gateway Service
<b>CHAMPS</b>	Community Health Automated Medicaid Processing System
<b>CHDR</b>	Clinical Data Repository/Health Data Repository
<b>CMS</b>	Centers for Medicare & Medicaid Services
<b>CQM</b>	Clinical Quality Measure
<b>CQMRR</b>	Clinical Quality Measurement Reporting and Repository
<b>DQA</b>	Data Quality Assurance
<b>DSM</b>	Direct Secure Messaging
<b>DSO</b>	Data Sharing Organization
<b>eCQM</b>	Electronic Clinical Quality Measure

<b>EH</b>	Eligible Hospital
<b>EHR</b>	Electronic Health Record
<b>EHR-MIPP</b>	Electronic Health Record Medicaid Incentive Payment Program
<b>EP</b>	Eligible Professional
<b>EPID</b>	Enterprise Patient ID
<b>esMD</b>	Electronic Submission of Medical Documentation
<b>FHIR</b>	Fast Healthcare Interoperability Resources
<b>HEDIS</b>	Healthcare Effectiveness Data and Information Set
<b>HIE</b>	Health Information Exchange
<b>HIE-QO</b>	Health Information Exchange Qualified Data Sharing Organization
<b>HIN</b>	Health Information Network
<b>HIO</b>	Health Information Organizations
<b>HITSP</b>	Health Information Technology Standards Panel
<b>HL7®</b>	Health Level Seven®
<b>HTTPS</b>	Hypertext Transfer Protocol Secure
<b>HPD</b>	Health Provider Directory
<b>ICBR</b>	Integrated Care Bridge Record
<b>ICN</b>	Identification Control Number

<b>ICO</b>	Integrated Care Organization
<b>ICT</b>	Integrated Care Teams
<b>IDN</b>	Integrated Delivery Network
<b>IHE</b>	Integrating the Healthcare Enterprise
<b>MDHHS</b>	Michigan Department of Health and Human Services
<b>MIDIGATE</b>	Medical Information Direct Gateway
<b>MiHIN</b>	Michigan Health Information Network Shared Services
<b>MPI</b>	Master Person Index
<b>MUCA</b>	Master Use Case Agreement
<b>NHIE</b>	Nationwide Health Information Exchange
<b>NHIO</b>	Nationwide Health Information Organizations
<b>NIST</b>	National Institute of Standards and Technology
<b>NwHIN</b>	Nationwide Health Information Network
<b>OID</b>	Object Identifier
<b>ONC</b>	Office of the National Coordinator
<b>PD</b>	Patient Discovery
<b>PDQ</b>	Patient Demographic Query
<b>PI</b>	Promoting Interoperability
<b>PO</b>	Participating Organization
<b>PoM</b>	Peace of Mind
<b>PQRS</b>	Physician Quality Reporting System
<b>QD</b>	Query for Documents
<b>QRDA</b>	Quality Reporting Document Architecture

<b>RAS</b>	Registration and Attestation System
<b>RD</b>	Retrieve Documents
<b>REST</b>	Representational State Transfer
<b>SAML</b>	Security Assertion Markup Language
<b>SMTP</b>	Simple Mail Transfer Protocol
<b>SOAP</b>	Simple Object Access Protocol
<b>SOM</b>	State of Michigan
<b>SSA</b>	Social Security Administration
<b>SSO</b>	Single Sign On
<b>SSSO</b>	State Sponsored Data Sharing Organization
<b>SCD</b>	Statewide Consumer Directory
<b>TDSO</b>	Trusted Data Sharing Organization
<b>UCA</b>	Use Case Agreement
<b>UCS</b>	Use Case Summary
<b>URL</b>	Uniform Resources Locators
<b>VA</b>	Department of Veterans Affairs
<b>VLER</b>	Virtual Lifetime Electronic Record
<b>VPN</b>	Virtual Private Network
<b>XCA</b>	Cross Community Access
<b>XCPD</b>	Cross-Community Patient Discovery
<b>XDR</b>	Cross-Enterprise Document Reliable Interchange
<b>XDS</b>	Cross-Enterprise Document Sharing
<b>XML</b>	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 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 Accounting 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 (TDSO) authorized to receive message content under an exhibit which specifies that an 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® (ACR®).

**Active Care Relationship Service® (ACRS®).** The MiHIN infrastructure service that contains records for Trusted Data Sharing Organizations (TDSOs), their participating organizations participants or any health providers who have an ACR 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 ADT event occurs when a patient is discharged from a hospital. An ADT event also occurs when a patient arrives in 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 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 ADT event. An ADT Notification is not a complete ADT Message.

**Advance Directive.** A document in which a patient specifies 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.** Health Information Technology Standards Panel (HITSP) Summary Documents Using HL7 Continuity of Care Document Component -  
[http://www.hitsp.org/ConstructSet\\_Details.aspx?&PrefixAlpha=4&PrefixNumeric=32](http://www.hitsp.org/ConstructSet_Details.aspx?&PrefixAlpha=4&PrefixNumeric=32).

**C62.** The HITSP 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 IHE -  
[http://www.hitsp.org/ConstructSet\\_Details.aspx?&PrefixAlpha=4&PrefixNumeric=62](http://www.hitsp.org/ConstructSet_Details.aspx?&PrefixAlpha=4&PrefixNumeric=62)

**C83.** The 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](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.

**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 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 (NwHIN) 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.** A Critical Access Hospital (CAH) as defined under the Medicaid Electronic Health Record (EHR) 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, 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.

**Document Submission or 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 (SMTP)) 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 Measures (CQM) that are specified in a standard electronic format and are designed to use data from health information technology (IT) 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). 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).

**End Point.** An instance of an electronic address or Electronic Service (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 (SSA) or Department of Veterans Affairs (VA).

**Health Directory.** The statewide shared service established by Michigan Health Information Network Shared Services (MiHIN) that contains contact information on health providers, electronic addresses, end points, and Electronic Service Information (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 (HL7) 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 (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.

**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 Health Level Seven® (HL7®) 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 (NwHIN) specifications utilize underlying IHE specifications for various services for health data exchange



**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 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 (MSH) segment 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 internet for information services for the State of Michigan operated by the Michigan Department of Health and Human Services (MDHHS).

**Michigan Health Information Network Shared Services.** The Health Information Network (HIN) for the state of Michigan.

**MiHIN Infrastructure Service.** Certain services that are shared by numerous use cases. Michigan Health Information Network Shared Services (MiHIN) infrastructure services include, but are not limited to, Active Care Relationship Service® (ACRS®), Health Directory (HD), Statewide Consumer Directory (SCD), 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.

**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 (NwHIN) 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 (HIOs) participating in the eHealth Exchange network. This enables a responding Nationwide Health Information Organizations (NHIO) to evaluate the request based on the initiating NHIO 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 (HIE) using configuration on the sender side.

**NwHIN Gateway.** An implementation of the Nationwide Health Information Organizations specified web service interfaces. These web service interfaces communicate over secured Hypertext Transfer Protocol Secure (HTTPS) 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 (HTTPS) 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 acknowledgement (ACK) or negative acknowledgement (NACK).

**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 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 Services to assist in finalizing a use case and use case exhibit upon conclusion of the pilot activity.

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

**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.

**Provider Community.** A healthcare provider with an Active Care Relationship with the applicable patient.

**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.

**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.

**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 Extensible Markup Language (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 Secure (HTTPS).

**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.

**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 (SDK) with a robust set of application program interfaces (APIs) 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 (HIE) or eHealth Exchange Node that the message or feedback is being addressed.

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

**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, 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](http://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® (IHE®) 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® (IHE®) 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

Contributing batch data to the Health Directory is a method to get large volumes of healthcare provider and organization data updated. This approach can be used to update demographic information (e.g., contact information, hours of operation, handicap accessibility, etc.) which can be used to support provider directories or end point information for use in health information exchange (e.g., Admission, Discharge, Transfer Notifications, Medication Reconciliation Information at Discharge, Statewide Labs, etc.).

**The Health Directory use case allows participating organizations to manage information regarding healthcare professionals – utilizing a centralized directory service – to allow health professionals to efficiently share health information.**

## 1.2 Message Content

For this use case, Message Content means healthcare provider and healthcare organization data.

## 1.3 Data Flow and Actors

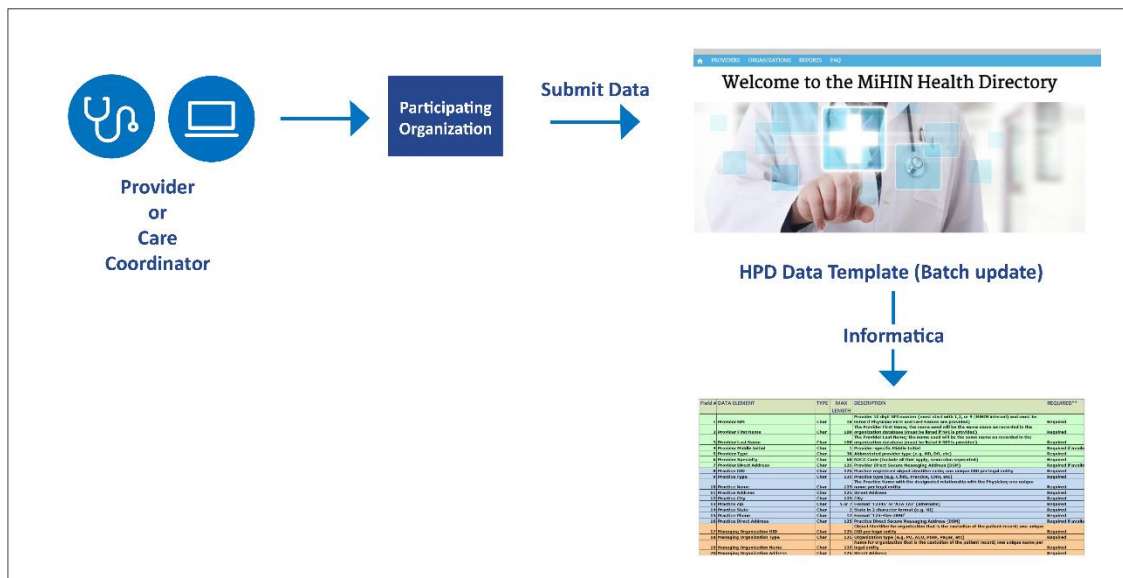


Figure 1. Batch Data Contributor Diagram

1. Data contributor sends file(s) to Michigan Health Information Network Shared Services (MiHIN) through a participating organization.
2. Files are validated.
3. Files are loaded into the Health Directory (HD) with an Extract-Transform-Load (ETL) tool.

For more information about this use case, refer to the use case summary documents linked below.

### *1.3.1 Use Case Summary*

The use case summary is available online at <https://mihin.org/wp-content/uploads/2016/09/MiHIN-UCS-Submit-Data-to-HPD-PUBLISHED-v11-9-16-15.pdf>. You can contact MiHIN at [help@mihin.org](mailto:help@mihin.org) for more information.





## 2 Standard Overview

### 2.1 File Format

Contributing batch data to the Heath Directory for health information exchange requires conforming to the Active Care Relationship Service (ACRS) Delivery File specification. (See Appendix A for more information.)

### 2.2 File Example

#### **ACRS 2.0 Non-PO Delivery File**

<https://mihin.org/wp-content/uploads/2018/08/FINAL-MiHIN-Active-Care-Relationship-Service-2.0.3-Non-PO-Attribution-File-V30-4-18-17.pdf>

#### **ACRS 2.0 PO Delivery File**

<https://mihin.org/wp-content/uploads/2018/08/Copy-of-FINAL-MiHIN-Active-Care-Relationship-Service-2.0.3-PO-Attribution-File-V28-4-18-17-1.pdf>



# 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 master organization agreement and master use case agreement which then allows the organization to enter into one or more use cases via use case exhibits.

Once an organization has entered into a master organization agreement, the organization can enter into an unlimited number of use cases with MiHIN. All of MiHIN's use cases are available at <https://mihin.org/use-case-factory/>.

### 3.1.2 Initial Technical Connectivity Process

MiHIN considers itself “transport agnostic” and offers multiple options for organizations to establish technical connectivity to transport data to MiHIN. Organizations should select one or more connectivity methods for message transport based on their technical capabilities, and put in a service request at [www.mihin.org/requesthelp](http://www.mihin.org/requesthelp). Currently, MiHIN accepts the following transport methods:

- SFTP – Secure File Transfer Protocol.
- DSM – Direct Secure Messaging.

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. Secure File Transfer Protocol – MiHIN accepts files sent through its own SFTP service. Files are transferred to the specified directory either manually or systematically.
  - b. Direct Secure Messaging – MiHIN accepts Direct Secure Messages from Health Internet Service Provider (HISPs) that have EHNAC-DTAAP (DirectTrust) accreditation. Test messages are sent to verify HISP connectivity (“ping pong”).

2. Test messages are sent by the organization to MiHIN.
3. Messages are validated.
4. Sender receives confirmation that production files may be loaded.

## 3.2 Onboarding Additional Sending Facilities

When an organization wishes to onboard additional sending facilities, those facilities must first register with MiHIN. The new sending facility should then begin sending test messages to MiHIN in the same fashion as the initial facility as detailed in section 3.1.2. MiHIN determines the sending facility's production status.



# 4 Troubleshooting

## 4.1 Production Support

	Severity Levels			
	1	2	3	4
<b>Description</b>	<b>Critical Impact/ System Down:</b> 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.	<b>Significant Business Impact:</b> Software component severely restricted. Entire organization is unable to continue business functions, causing all communications and transfer of messages to be halted.	<b>Partial Failure or Downtime:</b> 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.	<b>Minimal Business:</b> A non-critical software component is malfunctioning, causing minimal impact, or a test system is down.
<b>Example</b>	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.
<b>Primary Initiation Method</b>	<i>Phone:</i> 517-336-1430	<i>Phone:</i> 517- 336-1430	Web form at <a href="https://mihin.org/requesthelp/">https://mihin.org/requesthelp/</a>	Web form at <a href="https://mihin.org/requesthelp/">https://mihin.org/requesthelp/</a>
<b>Secondary Initiation Method</b>	Web form at <a href="https://mihin.org/requesthelp/">https://mihin.org/requesthelp/</a>	Web form at <a href="https://mihin.org/requesthelp/">https://mihin.org/requesthelp/</a>	Email to <a href="mailto:help@mihin.org">help@mihin.org</a>	Email to <a href="mailto:help@mihin.org">help@mihin.org</a>
<b>Tertiary Initiation Method</b>	Email to <a href="mailto:help@mihin.org">help@mihin.org</a>	Email to <a href="mailto:help@mihin.org">help@mihin.org</a>	N/A	N/A
<b>Initial Response</b>	Within 2 hours	Within 2 hours	1 business day	1 business day
<b>Resolution Goal</b>	24 hours	24 hours	3 business days	7 business days

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

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

## 5 Legal Advisory Language

This reminder applies to all Use Case Exhibits (UCEs) or Pilot Activity Exhibits (PAEs) covering the exchange of electronic health information:

The data sharing agreement establishes the legal framework under which Participating Organization can exchange messages through the MiHIN 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 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.



# Appendix A

## Active Care Relationship Service Delivery File Specification

### **ACRS 2.0 PO Attribution File**

<https://mihin.org/wp-content/uploads/2018/08/Copy-of-FINAL-MiHIN-Active-Care-Relationship-Service-2.0.3-PO-Attribution-File-V28-4-18-17.pdf>

### **ACRS 2.0 PO Delivery File**

<https://mihin.org/wp-content/uploads/2018/08/Copy-of-FINAL-MiHIN-Active-Care-Relationship-Service-2.0.3-PO-Attribution-File-V28-4-18-17-1.pdf>

### **ACRS 2.0 Non-PO Attribution File**

<https://mihin.org/wp-content/uploads/2018/08/MiHIN-Active-Care-Relationship-Service-2.0.3-Non-PO-Attribution-File-V30-4-18-17.pdf>

### **ACRS 2.0 Non-PO Delivery File**

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