MHDO Member ID v2.0 Proposal Summary

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# Overview

The current MHDO-assigned Member ID is derived from the member’s data of birth, gender, and one of the following identifiers: Member SSN, Subscriber SSN, or Contract Number. This member identification scheme predates HSRI’s involvement with Maine’s APCD, although over the years various enhancements have been made. Whenever possible, the current Member ID assignment process preferences Member SSN over the other two identifiers so that records can better be linked both across time and between payers. Since the MHDO does not always receive Member SSN or even Subscriber SSN, we know that the ability to track all members between payers and across time is limited.

Recently, starting in early 2019, the MHDO began collecting additional member identifying information. This information includes person-specific CMS identifiers (MBI and HICN), as well as member address. The MHDO already received member and subscriber name.

Given that we now have new identifying information to work with, we believe that a new member identification scheme be developed that takes advantage of it. This new scheme, referred to as “Member ID v2.0” would be deployed in parallel to the existing MHDO-assigned Member ID. This will allow the MHDO to provide backwards compatibility for data users and provide a basis for evaluating the quality of both the new and the old identifiers.

The scheme outlined here is based upon that currently in use for Colorado’s APCD.

# Design Goals

This Member ID v2.0 proposal has the following design goals:

* To make assignments based upon the best identification information available at the time
* To prioritize the use of identifiers so that the quality of any matching is as high as possible while allowing for name and address changes, minor typos, etc.
* To implement quality standards to disallow or flag low-quality or “suspect” matches
* To eliminate the ambiguity that arises from having a single identifier that sometimes only applies intra-contract and sometimes applies inter-payer (i.e., to establish a true member ID/person ID distinction)
* To create an identification scheme that can be shared by both the APCD and hospital encounter data systems
* To create a system that can leverage third-party patient information sources, such as the cancer registry

# Member ID versus Person ID

As mentioned above, the current MHDO-assigned Member ID sometimes only applies within a given payer contract and sometimes it represents a person who can be tracked between payers. It all depends on which identifiers we have available when the member identification is made. This can be confusing for end users and it creates difficulties if the initial member ID that is assigned and distributed is based on contract; specialty processing is necessary to try to link this member ID to others should the person change payers.

In order to avoid this situation, we propose two new identifiers: a member ID that represents a person within a payer contract and a person ID that represents a person regardless of payer. Depending on the identifiers we have available at any given point in time, we may be able to assign none, one, or both.

Thus, if a record has a person ID assigned, the data user knows that we have the identifiers available that allow for the tracking of the person across payers and time; if no person ID is assigned, we don’t.

# Matching to Existing Indexes

When new data are received, processing will be performed that will attempt to match it to the Member Index and Person Indexes separately. Each index entry will have a set of canonical values for the entity. Matching will be done hierarchically, attempting to make the strongest-level matches first before moving to more ambiguous ones.

For instance, we would first attempt to match a record to a person ID using Payer ID and member SSN. If that worked, no further matching would be performed. However, if that failed, we might eventually try to match on member name, address, gender, and DOB. Name matching will use a nickname table so that names like “Robert” and “Bob” can be matched. Address matching will use a normalization scheme so “S MAIN ST” and “SOUTH MAIN STREET” can be matched.

The initial matching criteria will be based at that currently in use in Colorado. It will be validated against Maine’s data and may be adjusted depending on observed data quality considerations.

# Addition of New Index Entries

If a new record cannot be matched to an existing index record, a new index entry may be added if the identifiers meet certain minimum quality standards. For instance, to create a new Member ID entry, we might need a minimum of the Payer ID, Contract Number, Member SSN, and Relationship code. If a record came in that didn’t have a contract number, we wouldn’t be able to create a new Member ID entry, since Member ID is defined as a person within a given payer contract.

# APCD Versus Hospital Data

The hospital encounter data has a much more limited set of identifiers available, and some have only become available starting in 2019: patient name, address, DOB, gender, medical record number, patient control number, and an SSN (which may be the patient or the subscriber). Since there is no payer contract number available, no Member ID assignment will be possible. Thus, the only matching we would do would be against the Person Index.

Since it is likely that we will have received some claims for insured individuals before we process the hospital data, the Person Index will likely already include many of the individuals. Since inpatient claims often have the patient control number field populated, we may be able to use that to match encounter records (validating the match using name and DOB).

When a person ID assignment is made to hospital encounter records, we will then be able to use the DOB, gender, and medical record number on that record to attempt to match older hospital encounter records (those received before name and address was collected).

# Linkage to Other Available Data Sources

The Person Index will maintain a set of canonical identifiers associated with each person such as name, date of birth, and current address. If another source of patient information becomes available, this can be matched to the Index on these fields to create a crosswalk. Any persons not found in the index could then be added. If the source is considered a “source of truth” then it could also be used to find and fix errors in the canonical index entries, such as misspelled names or out of date addresses.