SEER*DMS Meaningful Use (MU2) Work Group
Teleconference Summary
June 29, 2017
2:00 p.m. to 3:00 p.m. EST

Representatives from NCI, IMS and 7 SEER registries participated in the SEER*DMS MU2 Work Group conference call on June 29, 2017. Participants included:

Registries:
Connecticut
Georgia
Hawaii
Iowa
Louisiana
New Jersey
New Mexico
New York
Utah

NCI: Marina Matatova
IMS: Linda Coyle, Chuck May, Michael Depry, David Angelaszek
SCG: Kathy Brown-Huamani, rapporteur

Action Items

Participants agreed to the following action items:

- IMS will make data available on registries' test servers this week. Registries should import CDA data and perform searches for patient sets with matches to the CDA data.
- Chuck agreed to distribute the design document for mapping MU2 fields. This document provides the mapping from the XML file to JSON.

Testing the Data Set

IMS is working on the import to allow registries to load their data. Registries will be able to import CDA data once their test server is updated. "CDA EHR" should appear as an import option once the test server is updated if the registry has CDA data. Once CDA data are imported, registries will need to conduct searches for patient sets with matches.

In the current system, users will be able to see the raw data, and these data should be examined as part of the test. Chuck May is testing data from the Louisiana registry on their host and development server. These data mostly include reports created in 2015 with service dates in 2015. Unlike claims data, lack of a Social Security number has not been a problem with test CDA data, resulting in high match rates.

The Los Angeles registry is set up to start testing now. Other registries will have CDAs loaded into their test servers in next week or so. Once data are loaded, registries should examine CDA data and decide how they want to use them.

Discussion

The New York registry does not have useful data yet. The registry had provided fictitious cases for initial testing. New Mexico and Connecticut registries also do not have data to test. IMS can provide fictitious data so these registries can see how CDA data look. New Jersey, Georgia, Hawaii, Iowa, and Utah registries have data and are ready to test them.

Marina proposed that this Work Group develop a list of MU2 variables for testing. IMS will start a template and registries will be able to contribute to this testing document.

IMS can assist with importing CDA data if needed. Louisiana registry staff will take care of importing their own CDAs.

CDA Workflow and Interface in SEER*DMS

Chuck presented the CDA workflow in SEER*DMS. This process begins with the receipt of electronic health record (EHR) data. Automated processes transfer data to SEER*DMS autoloader files. The import algorithm has been implemented, which loads the EHR into the PRE_RECORD table. EHRs are then coded, performing some data standardization to facilitate reporting and analyses. Additional fields might be coded in the future. EHR data can then be screened to determine whether the data are useful to the registry. Screening of CDA data currently is not being performed. Participants would need to determine whether they want to exclude CDAs that do not meet certain criteria. Finally, EHR data are matched against patient sets and tumor-level matching is performed within the patient sets.

Currently, there are three ways to view CDA data within SEER*DMS:

1. Data search/Data viewer that permits queries into the PRE_Record table for certain aspects of CDA records or to create a list. Once users generate results through a search, they can examine them in the Data Viewer, which displays details. The Data Viewer notes the facility where data were loaded and includes the matching information. Users also have access to the JSON PostgreSQL and the original XML in the Data Viewer.
2. EHR tab in Patient Set Editor. Linked CDAs will be displayed in an EHR tab in the right panel. This option is designed to help users identify what CDAs are present and what can be done with them. The tab lists every CDA linked to the specific patient. This option will be useful for reviewing the information to determine what should be captured by SEER*DMS. The “Demographics” section of the tab shows linkage information.
3. Pop up viewer using XSLT that shows the original CDA XML records. Every piece of EHR information is not copied to SEER*DMS and this viewer allows users to see everything in the original record, including what was excluded.

Physicians usually create an initial CDA for a patient and then send additional CDAs that add information for that patient. A CDA, therefore, represents the latest report sent from a physician linked to a specific patient with the same start date. This process creates multiple CDAs on a patient set rather than a single report. Participants need to discuss the best approach for addressing this challenge. A text tab currently is available that shows how text is repeated. This tab probably will not be retained in the long term. If participants decide not to trim the old reports and leave all information in the database, they will need an interface to facilitate rapid review of information.

Participants need to consider how they want to use CDAs in SEER*DMS and the kind of information that would be useful to summarize from CDAs when using a patient set. For example, registries could use CDA data to identify missing cases. Registry staff also should consider how much they want to automate the potential uses of CDA data.

Discussion

Linda noted that CDA data might be more useful than claims data for correcting missing cases. The New York registry uses physician reporting for missed cases. CDA data from EHRs might provide information on treatment. CDA data also could help registries determine last contact dates and vital status.

Registries also could use CDA data for case finding and rapid case ascertainment for research and follow up. Follow up could easily be automated. Case finding might be the best initial use of CDA data. Once registries have an opportunity to examine the kind and amount of CDA data available, they can investigate ways to use these data for missing treatment and other kinds of information. Registries might not want to automate the process for using CDA data to complete treatment information now.

Participants suggested an option for constant overwrite (for minor updates that occur each time a patient is seen). Linked records would be automatically changed to the newest one. Other participants agreed that they only want to see one CDA within each patient set, for each physician. Specifically, they want the latest report with the same start date. Older, duplicative CDAs could be retained but not displayed. The text tab in the visual editor could show the text from the CDAs. Documentation indicates that the CDA data are cumulative so the most recent one should contain all relevant data. The consistency of CDA data, however, will depend on the vendor.

Participants suggested linking by organization/practice to reduce duplication within the same practice. If a patient used different providers within the same practice, the start date also should change but this needs to be confirmed. CDAs include both encounter date and submission date but encounter dates sometimes are reported as ranges. Initial encounter date should be in the low field. High fields can provide different types of information. The date in the low field should make it easier to select the most complete CDA. IMS will need to investigate this structure to determine the best procedure in SEER*DMS.

Next Steps

SEER*DMS Work Groups will be discussed during the second day of the SEER*DMS in-person meeting, on July 13, 2017. Updates on the Work Group activities will be delivered in the morning, and discussions of Work Group goals and activities will be discussed in the afternoon. Brent Mumphrey will provide the update on the MU2 Work Group.

Next steps for the MU2 Work Group include:

- IMS will set up the test servers for each registry.
- Registries that have CDA data will load those data. IMS will work on providing dummy data for registries that do not have CDA data at this point.
- IMS will develop data searches to allow users to find the data that links to patient sets.
- Registry staff should become familiar with the CDA data.
- Registry staff should begin deciding on use cases for how to they would like to use CDA data.

Announcements

The next MU2 Work Group call is scheduled for Thursday, July 27, 2017, at 2:00 p.m. EST.