The Surveillance, Epidemiology, and End Results Data Management System (SEER*DMS)
Meaningful Use (MU2) Work Group
Teleconference Summary
May 24, 2018
1:00 p.m. to 2:00 p.m. EDT

Representatives from NCI, IMS, the Scientific Consulting Group, Inc. (SCG), and nine SEER registries participated in the SEER*DMS MU2 work group conference call on May 24, 2018. Participants included:

REGISTRIES:
California Central
Georgia
Hawaii
Iowa
Minnesota
New Jersey
New York
Seattle
Utah

NCI: Marina Matatova

IMS: Linda Coyle, Chuck May and Suzanne Adams

Westat: Laura Lourenco

The Centers for Disease Control and Prevention (CDC): Wendy Blumenthal

SCG: Glendie Marcelin, rapporteur

Action Items

- Brent Mumphrey (MU2 WG chair) agreed to create a list of CDA records that IMS can use to examine duplications.
- Linda Coyle agreed to create a Squish issue with queries to address record duplication.
- IMS will review the New York registry's use case data.
- IMS will investigate the possibility of a matching algorithm for treatment information.
- IMS will verify that RxNav links values from NDC and RxNorm.
- Registry participants agreed inform NCI how they receive data from vendors.
- Brent agreed to create a Squish issue so the WG can review his draft workflow for casefinding.

Update on the Mapping Plan (Squish 5305)

IMS distributed the mapping plan to the registries via Squish issue 5305 and the WG agreed to move forward with production. The Utah and New Jersey registries also presented their data evaluation results.

The Utah registry analyzed 50 electronic health records (EHRs). Of the 25 EHRs that did not match a record in SEER*DMS, five did not match to a patient set. Out of those five, four had no social security number (SSN) and one had a conflicting SSN. Fourteen unmatched EHRs were unreportable. Out of the 14 unreportable, seven were unreportable tumors and seven were unreportable due to residence. Among the 25 EHRs that matched at the patient level, one new case was discovered, one was unreportable, four lacked detail, and 19 should have linked to a CTC. Out of those 19 EHRs, six provided information on chemotherapy, hormone therapy, active surveillance, and tumor site. Because of the nonmatching to patient sets, the Utah registry wondered how to manually link EHRs to patient sets or CTCs. At the CTC level, 12 provided new information, mostly on treatment. The EHRs examined primarily came from a single oncology practice and a dermatology practice. Several of the unreportable oncology cases were hematopoietic with missing pathology reports.

Discussion

Participants discussed the source of EHRs received by their registries. The Utah and Louisiana registries received EHRs from Flatirion Health, Inc. and Modernizing Medicine, Inc. The New York registry performs testing with dermatology clinics using fictional data from Medical Intelligence Patient Centered Research and Modernizing Medicine, Inc. The New York registry has performed user testing with MedTech Analytics and Meditab. The Georgia registry uses NexTech, Amazon Athena, and Flatirion Health, Inc. The Iowa registry receives data from Epic Systems Corporation, Flatirion Health, Inc., and Modernizing Medicine, Inc. The New Jersey registry receives data from Flatirion Health, Inc. and MedTech Analytics.

Duplicate CDAs

Brent previously spoke with Wendy about appending duplicate CDAs before data goes into production. Wendy advised the WG on how to deal with duplicate CDAs. CDC's Implementation Guide for Ambulatory Healthcare Provider Reporting to Central Cancer Registries indicates that CDAs should be cumulative but this is not always the case with MU2 data.

For MU3 data, duplicates can be handled by creating an updated file document. Electronic Mapping, Reporting, and Coding Plus consolidate data when a report has exact matches on provider, patient, and tumor type. CDC has consolidation rules for automation in the Central Cancer Registry database software.

Chuck recommended verifying whether records are resubmissions. He suggested that David create an algorithm to assess data files for duplication. Linda suggested discarding previous duplicate files and keeping the most recent record. She asserted that the issue of duplicate CDAs must be resolved prior to moving data into production.

Data Validation

Participants discussed the workflow for validating data. The Georgia registry representative discussed with Wendy the failure National Institute of Standards and Technology (NIST) file testing. CDC does not expect vendors to test files through NIST algorithm except during the onboarding phase. The NIST website has an online tool to check fictional data. The Kentucky registry has a free online tool (https://wp.kcr.uky.edu/informatics/public-projects/cda-evaluator/ that the WG could use to check real data. Wendy suggested that registries not use Kentucky-specific rules when using this tool and be aware that the website lists caveats for anonymization. Several registries agreed that having an additional tool would be useful. The New York and Utah registries use the CDC Validation Plus tool; the New York registry also plans to use the Schematron HL7. Participants suggested revising the Validation Plus tool to allow pass or fail criteria for fields. Wendy agreed to consider updating the Validation Plus tool. Several participants indicated that their registries adhere to CDC's current validation rules.

Next Steps

Participants discussed use cases for follow up and casefinding. The Louisiana registry drafted workflow instructions for casefinding. IMS evaluated Claims and CDA data and found that CDA data are easier to work with but Date of Last Contact information needs to be updated. The New Jersey registry reported finding insufficient treatment information (e.g., hormone) in data that matched a CTC. Data from dermatology practices might lack treatment information because they refer cancer patients to other specialists. IMS will analyze the New York registry's data and present results during the next WG call. Participants discussed the need for a matching algorithm for treatment data. NCI and CDC need to discuss ways to improve dataflow from vendors to the registries.

Some registries reported setting values based on RxNorm. Wendy proposed a crosswalk between National Drug Codes NDC and RxNorm. NCI is evaluating a new database that will be released by the North American Association of Central Cancer Registries.

Next MU2 Work Group Call

The agenda for the next MU2 WG call scheduled for June 28, 2018 will include:

- A process for using MU2 data for casefinding.
- An algorithm to analyze duplicates.