SEER*DMS MU2 Work Group
Teleconference Summary
May 30, 2019
3:00 to 4:30 p.m. EDT

Representatives from NCI, IMS, the Scientific Consulting Group, Inc. (SCG), and 12 cancer registries participated in the SEER*DMS MU2 Work Group conference call on May 30, 2019. Participants included:

REGISTRIES:
California Central
Georgia
Greater California
Idaho
Iowa
Kentucky
Minnesota
New Jersey
New Mexico
New York
Seattle
Utah

NCI: Peggy Adamo, Marina Matatova, Serban Negoita, Jennifer Ruhl

IMS: Suzanne Adams, David Angelaszek, Linda Coyle, Nicki Schussler

Westat: Laura Lourenco

SCG: Kathy Brown-Huamani, rapporteur

Action Items

- Linda agreed to create a Squish issue for documentation on the EHR Dashboard.
- All registries that have Electronic Health Record (EHR) data should test the EHR Dashboard using these data. The Dashboard refreshes every night so registries will need to refresh it to see the data they loaded.
- Linda agreed to create a Squish issue on how best to identify the main facility in the Dashboard when many care locations are part of a larger group.
- David agreed to create a Squish issue about examining the approach used by the Seattle registry to identify the main facility when many care locations are part of a larger group; and to add Parent facility to the Facility Table.
- IMS will move forward with creating an import warning for missing data. David Angelaszek agreed to create Squish issue on this task.
- April Austin agreed to create a Squish issue on Brent Mumphrey's documentation on the EHR Dashboard. WG members should review this documentation and let Linda and Brent know what issues remain to be discussed on the next call regarding this Dashboard.

Electronic Health Record (EHR) Dashboard

April Austin took over as lead in Brent Mumphrey's absence. The WG discussed the EHR Dashboard that is under development. The purpose of the Dashboard is to assess data quality. The quality of EHR data varies by facility, provider, and other variables and registry staff will be able to use the Dashboard to identify problems with EHR data quality. If they find a lot of missing values and blanks, they could work with the vendor to correct these issues.

Staff at the New York registry developed a prototype of the Dashboard and presented it at the March Principal Investigators meeting. IMS already has begun work on this tool and will create the final version of the EHR Dashboard.

April presented several questions about the functionality and data items that registries want included in this Dashboard. Many of these questions were addressed during the last MU2 WG call. Participants added that the Dashboard should:

- Produce counts by reporting facility
- Manage information about practices
- Show the total number of primaries by patient
- Show the number of records onboarded by facility and how many are linked to a patient
- Show whether treatment data are included in each record
- Allow the user to query by diagnosis codes, which would help with processing

Currently, the Dashboard shows data for the past 5 months.

One EHR can relate to multiple tumors but only one patient. April asked whether the Dashboard should count the number of CTCs for each patient or the number of diagnoses. She also asked if the Dashboard should split the multiple cancer diagnoses found for one patient (each cancer is a case). The challenge is deduplicating multiple tumor reports.

The Dashboard shows the number of reports by provider. Linda recommended that the Dashboard show the number of reports by patient and participants agreed.

The Dashboard will identify the reporting facility associated with the physician. If this information is not available, it will use Custodian Organization. Some facilities have different locations (Custodian Facility Organization). The National Provider Identifier (NPI) and facility name are included in the EHR, but the NPI will be used in the Dashboard for the most part. This approach helps registry staff resolve Custodial Organizations from the same general practice. Individual NPI usually is available but the facility identifier is not always available. Some hospitals have more than 100 NPIs registered. The Iowa registry handles this problem by using the most closely associated oncology clinic. The New Jersey registry calls freestanding facilities to find the central hub for the group. Participants suggested adding “Parent NPI” as a grouping mechanism. IMS was considering including facility identifiers in tables. The Seattle registry has metadata fields to link facilities. Participants agreed to examine Seattle’s approach.

Data Quality

Registry staff want to assess EHRs to see if they have minimum critical data elements that were noted in Linda’s presentation. Providers might need feedback to know what to include in the EHR (e.g., diagnosis date, histology, procedure). Some participants wanted the record to fail if it was missing critical data items. Other participants noted that the record still could be used for passive follow up without a primary site. Currently, EHRs are rejected only if they are in the wrong format (e.g., XML instead of MU2). IMS could create an option in SEER*DMS that would allow registries to identify critical fields and configure associated actions in response to missing data in those fields. Participants wanted information presented on the Dashboard, prior to import, when a record is received with missing data in the critical fields. Others clarified that information on these data would not be available until after import.

Discussion

Participants suggested including a table in the Dashboard that shows whether a value was provided for each critical field for each reporting facility. Other participants preferred reports that allow them to view data values for each critical field in each record. On the Dashboard, they also wanted to see statistics on records missing critical values by facility. Participants discussed whether to configure the import process so that records missing critical data such as a cancer diagnosis would fail. Linda recommended examining the MU2 data in more depth before making final decisions about the import criteria and process.

The critical field list is easy to query. Registries first should look at the proportion of records that have missing values. The Utah registry validates and filters out records with critical field errors. Few records are filtered out, but the proportion varies by practice. The New Jersey registry receives many oncology practice records from Flatiron, and about 70 percent of those records have histology coded. Flatiron is one of most engaged vendors and is working with the Centers for Disease Control and Prevention. User error might explain many of records that are missing histology information, rather than errors in the vendor's software. The New Jersey registry has a User Error procedure code. Participants agreed that IMS should go forward with creating an import warning for missing data.

MU3 supposedly has stricter requirements for missing data. This functionality will help identify problematic data submissions from specific practices. Participants clarified that registries should begin using the MU3 structure in 2019. Registries will be able to import MU3 data into SEER*DMS soon.

Linda asked participants if they would like to use the Dashboard to assess data elements other than the critical ones, such as race/ethnicity. Participants indicated that demographic information rarely is a problem and were more concerned about cancer diagnosis fields.