

**SEER*DMS MU2 Work Group
Teleconference Summary
July 25, 2019
3:00 to 4:30 p.m. EDT**

Representatives from NCI, IMS, the Scientific Consulting Group, Inc. (SCG), and nine cancer registries participated in the SEER*DMS MU2 Work Group (WG) conference call on July 25, 2019. Participants included:

REGISTRIES:

Georgia

NCI: Peggy Adamo

Idaho

IMS: Suzanne Adams, David Angelaszek, Linda Coyle

Iowa

Louisiana (Brent Mumphrey, Chair)

Minnesota

New Jersey

SCG: Kathy Brown-Huamani, rapporteur

New York

Seattle

Utah

Action Items

- Linda agreed to have IMS make the default setting “Yes” for the SQL query parameter on the left. Some participants had difficulty with this process.
- IMS will examine approaches for building AFLs from EHRs and recommend algorithms for various tasks requiring these AFLs.
- IMS will examine possible approaches for consolidating all information on a patient without a CTC.

Electronic Health Record (EHR) Dashboard

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 registry staff find a lot of missing values and blanks, they could work with the vendor to correct these issues.

IMS is testing “Facilities” functionality in the EHR Dashboard under development, which is the current priority task. IMS added a parent NPI concept to the facility table and subsidiaries can be grouped under the parent facility.

SQL Sample Queries

IMS just released an improved SQL samples. Staff at registries who have MU2 data should login, go to the data search and then samples. The “EHRs that do not match a patient set” category offers a parameter that de-duplicates by patient. This functionality will help prevent multiple EHRs for a single patient in SEER*DMS. It also will help registries examine data and decide how to move forward with casefinding.

Discussion

The SQL query should pull in the most recent EHR. Some participants had difficulty with this process. Users should select “SQL Search” on the left and then select the SQL Samples tab on the right. The “EHRs that do match a patient set” query was discussed with the group (found under the “Under the “MU2 Electronic Health Records (EHR)” section). Linda explained that they need to set the parameter “Show Latest EHR” on the left to “Yes” in order to deduplicate EHRs. She will have IMS make the default setting “Yes.” Linda added that Test has not been updated with this functionality. Registry staff only can access the functionality in Production. Linda added that this functionality will not be added to the Iowa registry’s Test server until SEER*DMS is updated until July 27, 2019.

SEER*DMS matches EHRs for a patient set. Linda asked what registries want to happen when an EHR does not match a patient set (e.g., Send a letter to the facility requesting more information? Trigger an investigation?).

Registries need to consider the number of EHRs they have that do not match a patient set, how to respond to that issue, and what data are needed for that response. One registry found many EHRs without a patient set, but they had an HL7. Participants agreed that creating a patient set as soon as a record comes in would be the best approach. Linda has discussed this approach with IMS staff who indicated that the process of implementing the approach would be complex. Some other problems need to be resolved first. For example, data without proper identifiers could generate duplicates. The WG members still agreed on the need to start building patient sets without CTCs once some of the barriers have been addressed.

MU2 Import

IMS reviewed the critical field list in SEER*DMS and modified it so that registries receive an import warning if an EHR is missing a critical field. IMS might automate this process more in the future.

Linda reassured WG members that the impact of the NAACCR data standard format changes to XML in 2020 would be minimal. Registries with SEER*Abs already are loading NAACCR abstracts in XML. Once parsed, the file format is not important.

Questions from the Iowa Registry

Bobbi Matt

Bobbi Matt is considering follow back on EHRs that do not match a patient set and wanted to know how to follow back on records that technically are not in SEER*DMS. A mail merge using MU2 data might be useful. Records do not indicate whether a patient is a state resident at the time of diagnosis, which is a barrier to conducting follow back. Bobbi clarified that she primarily is seeking a method for selecting records, creating an incident case, and then would consider whether to follow back. Specifically, she wants to be able to create an AFL so that registry staff can create a CTC later or query the reporting facility. Linda indicated that creating an AFL could be automated, but registries would need to be careful not to duplicate. She asked registry participants to consider whether IMS should explore creating AFLs from the records and if registries would want this option for second cancers. Too many AFLs could create a lot of work. Linda recommended automatically creating AFLs from EHRs and registry staff can close the ones they do not want. Participants asked about running an AFL search for patients that are not in their database. The Georgia registry ran AFL searches for pathology reports not in the database. Ideally, registries would be able to access all patient data

through the HL7 in the future. This capability is something IMS can work on but would not be feasible for at least 1 year.

Bobbi noted that registries should be able to examine every record and create a case for those that do not have one regardless of data completeness. Specifically, she would like to query state residency while being able to access information about cancer diagnosis and recurrence. As a minimum, she would like to perform these tasks for older records (currently, those with a diagnosis year of 2017 or earlier) to obtain a more accurate incidence rate for those years. Further examination of EHRs is needed to determine whether they generally have enough information to create a case. Registries that have many records that do not match a patient set might want to use a different approach. Linda noted that an AFL probably would need to be created to allow registries to identify EHRs they do or do not want to build. If the AFL is used, a casefinding record would not be needed. Records already reviewed would need to be marked.

The EHR ID would be used to identify the record in patient sets and CTCs. The goal is to avoid duplication by recognizing the cases across record types and consolidating rather than rejecting records on the same patient. One option would be to create a patient set without a CTC so that everything is linked at the patient level. If this approach was implemented, registrars could create a CTC later, if needed. Linda agreed that this approach would work but IMS currently is not able to build a patient set without a current CTC, which results in many unlinked records. This problem is exacerbated by prerecord data. Participants would like to be able to search for EHRs by patient name to determine if there are any other unlinked records for the patient in question.

Discussion

Participants discussed the possibility of creating an AFL on every patient, site, or facility; but not every EHR. Others noted that an AFL for each EHR would help identify records that do not match a patient set.

Evaluating EHR Content

Participants discussed approaches for efficiently reviewing EHRs that match a patient set to identify additional treatment or other important information. WG members would like to be able to evaluate the content of EHRs and mark the ones that do not provide useful information. Members also want an automated approach for identifying EHRs with specific information of interest so that they do not need to review all EHRs.

SEER*DMS workflow for a reportable record requires a registrar to create a CTC for a record, link the record to an existing CTC, or mark the record as not reportable. This process is not suitable for EHR data. Linda recommended that EHRs be handled like Claims, which means that if an EHR matches a patient set, an AFL is not created initially because registrars do not need to review every EHR. When registrars are working in a patient set, however, they should be able to flag EHRs that they have reviewed and that require no further action. If registrars want to generate a review of an EHR later, they could create an AFL or a manual task. The Claims WG performed Quality Control tasks during which they opened a patient set to review and determine whether or not to use the record. Participants agreed that they did not want to create an AFL for every EHR.

Linda clarified that registrars should review and consolidate EHRs during manual editing and flag them to indicate they have been reviewed. That would allow registries to run a query for the EHRs that were not reviewed. This is the process proposed for Claims. Linda did not think registries would want to trigger a task or AFL for every EHR that is received because of the volume of EHRs. Examination of EHR data should identify patterns that will determine the type of EHRs that merit review (i.e., those with additional treatment or incidence information). Right now, WG members would like to have a checkbox to indicate registrars have

reviewed an EHR. The Claims WG has a proposed an approach and IMS will review the interface. IMS probably will create a checkbox for all reviewed Claims.

Discussion

Some participants want SQL searches to identify cases that potentially have treatment information. WG members also would like to be able to determine how many EHRs match at the patient but not the tumor level and possibly generate a list of those records.

In response to a participant question, Linda noted that SEER*DMS currently does not allow users to create a CTC from EHRS. SEER*DMS is set up to pull together all EHRs for a patient. The system offers the option to show all EHRs for a patient or only the most recent EHR for that patient.

Next Meeting

The next SEER*DMS MU2 WG meeting is scheduled for August 22, 2019, after the QIE meetings.