# The Surveillance, Epidemiology, and End Results Data Management System (SEER\*DMS) Change Control Board (CCB) Teleconference Summary January 11, 2018 3:00 p.m. to 4:00 p.m. EST

Representatives from NCI, IMS, the Scientific Consulting Group, Inc. (SCG), the Nielsen Norman Group, and 16 registries participated in the SEER\*DMS CCB Committee conference call on January 11, 2018. Participating registries included:

Alaska
Connecticut

NCI: Peggy Adamo, Kathy Cronin, Paul Fearn,

Detroit Steve Friedman, Marina Matatova, Serban

Negoita, Alyssa Wang

Hawaii Iowa

Kentucky IMS: Dave Annett, Linda Coyle, Nicki Schussler,

Los Angeles Suzanne Adams

Louisiana
Minnesota
SCG: Kathy Brown-Huamani, rapporteur

New Jersey

New Mexico Westat: Laura Lourenco
New York

Seattle Nielsen Norman Group: Page Laubheimer, Hoa

Utah Loranger

Greater Bay Area Greater California

### **ACTION ITEMS**

- Participants should propose agenda topics for the March 2018 CCB meeting.
- Registry staff should look for the link to the survey from NCI for the communication strategy. They should complete and submit the survey as quickly as possible.
- Participants should ensure that the right people at their registry see Squish issue 5903.
- Linda Coyle agreed to check with Kevin Ward about the status of testing templates that would allow registries to run the same checks on claims data that the Georgia registry ran.
- Marina asked that WG chairs present their work and findings to date during the March or May 2018 CCB call.

### **USABILITY TESTING**

### NIELSEN NORMAN GROUP

Nielsen Norman Group will perform usability testing of SEER\*DMS. Mr. Laubheimer and Ms. Loranger of the Nielsen Norman Group delivered a presentation on usability testing and plans for usability testing of SEER\*DMS. The purpose of usability research is to resolve problems in systems such as:

- Inefficient, error-prone processes
- Confusing interfaces
- Unexpected, mismatched workflows
- Tasks that require heavy memory and cognitive load on the part of human users
- Unnecessary, repetitive processes in workflows
- Features that require a steep learning curve, particularly features that seldom are used.

Usability research involves measuring:

- Learnability (How easy is it to train new users and cross train experienced users?)
- Efficiency (How long does it take to complete tasks in terms of key strokes and seconds relative to the users' expectations?) which is balanced with error reduction
- Memorability
- Error prevention
- User satisfaction (e.g., how much users like using the system, the mental workload required).

All of these elements are interrelated.

The Nielsen Norman Group will perform user-based research with people who use SEER\*DMS daily but will strive not to disrupt work. The SEER\*DMS technology, not workers, will be evaluated. The goal of this collaborative evaluation will be to learn processes, pain points, and user needs with the goal of improving SEER\*DMS efficiency, ease of use, and accuracy. The evaluation will produce evidence-based recommendations to improve SEER\*DMS usability but findings will not be published. The general steps in this evaluation will include:

- 1. Discovery work between Nielsen Norman Group staff and NCI leadership to understand system design and the decision process that led to the current SEER\*DMS as well as to understand program goals and opportunities for improvement. They will develop the research plan at this stage.
- 2. Identification of potential registries to involve in the first phase of the usability research. These registries should have unique needs and workloads.
- 3. Site visits (approximately 3 days) involving:
  - One-on-one and possibly group interviews to obtain suggestions and opinions and hear concerns about changing SEER\*DMS.
  - Field studies that involve observing people at work.
  - One-on-one usability tests that involve realistic task scenarios with testers observing people working on the tasks. These task-oriented tests will help testers understand how people working at registries use SEER\*DMS.

Although site visits will be limited to a sample of registries using SEER\*DMS, other registries might be involved later in the usability testing process. NCI staff also would like to receive feedback on SEER\*DMS from all registries.

Nielsen Norman staff likely will reach out to registries about 3 months from now. Usability test results will be presented at the September 2018 face-to-face meeting. Participants should submit questions about the SEER\*DMS usability study via Squish.

# **CCB WORKGROUPS UPDATES**

CCB Workgroup (WG) chairs or other members provided updates on the activities of the WGs.

Autoconsolidation WG Bobbi Jo Matt

IMS created logic that should facilitate the auto-consolidation of the Ttype of Reporting Source field. Once this task is complete, the WG will work on rules for Diagnostic Confirmation.

Claims WG Linda Coyle

Kevin Ward was not present to provide a full update on the Claims WG. Linda Coyle noted that IMS connected the automatic feed to the registries that have the paperwork. The weekly import of Unlimited data to registries no longer is manual. The WG is reviewing a draft version of a Dashboard. In addition, Kevin Ward is working on testing templates so registries can run the same checks on claims data that the Georgia registry ran.

MU2 WG Brent Mumphrey

The MU2 WG did not meet in December. The MU2 WG is working on two different draft workflows for the CDA data. One workflow is for updating follow-up fields, and the other is for using CDAs for case finding. The draft workflows will be distributed at the next MU2 WG meeting on January 25, 2018.

The WG also is trying to create a template for the analysis of CDA data to ensure consistency across registries in the evaluation of CDA data quality.

# UPDATES ON THE COMMUNICATION STRATEGY FOR SEER\*DMS Alyssa Wang

Ms. Wang is examining ways to increase receipt and use of input from registries and to improve NCI/IMS communication to the registries. Ms. Wang expects to present the SEER\*DMS communication strategy during the CCB call in March. NCI/IMS plan to implement the strategy this year.

Ms. Wang is seeking input from registries on what they want to learn about SEER\*DMS as well as lessons/best practices they would like to share with the SEER\*DMS community. To obtain this information, IMS will distribute an email containing a brief survey for registry staff to complete. Survey results will drive communication efforts this year. Some of the survey feedback will be reviewed during the next CCB call.

# **SURVEY FOR EPATH**

Linda Coyle

IMS is exploring the feasibility of having pathology reports sent to a dedicated ePath server in the IMS Computer Center. IMS is preparing a list of questions to see how registries use ePath (requirements analysis). Representatives from the Connecticut, Alaska, Louisiana, Detroit, New Mexico, Iowa, and Utah registries expressed interest a dedicated ePath server.

### NAACCR XML

NAACCR plans to switch the Volume II standard from fixed column to NAACCR XML by 2020. In support of this effort, IMS has been making changes to all software including SEER\*DMS, SEER\*Abs, SEER\*Edits, SEER\*Prep, and the SEER Data Viewer. IMS is currently focused on converting all SEER\*Abs registries to NAACCR XML. This involves changes in SEER\*Abs to create the files and changes to the SEER\*DMS imports.

# CHANGE IN THE COMPLETENESS MEASURE FOR DATA QUALITY

SEER released a new definition for the completeness measure. This will be used for the 2018 submissions. The estimate will no longer exclude prostate cases from the calculation. These values are currently shown in SEER\*Edits and SEER\*DMS, but are currently not marked as scored. New versions of these software will be released in the next two weeks.

Requirements for the February submission should be posted by next week.

# **SQUISH ISSUE 5903**

Squish issue 5903 relates to future changes in the way that records link to treatment procedures and facility admissions. Currently, Treatment Procedure links to a record or pre\_record (e.g., claims) but there is no linkage between facility admission and a record. IMS plans to create two new linkage tables (record\_tx and pre\_record\_tx) that will allow multiple records or claims to point to the same treatment procedure. These changes will help to better track the source of treatment data. When a record is moved from one CTC to another, more data could be auto-removed from the CTC. At the same time, IMS will create a new table (record\_facility\_admission) to link records and facility admissions.

The changes should have minimal impact on CTRs, but will affect queries that use the record or pre\_record to treatment procedure linkages. Data in the treatment procedure table should not be affected, unless the user goes to the source record for that treatment procedure. Registry staff will need to update SQL code that uses this relationship. IMS will notify registries when it is about to implement the changes so that they have adequate time to check SQL or external reports that use the record (or pre\_record) to treatment procedure linkages.

The changes will take some time to implement, but will be important as autolinking is increased in SEER\*DMS. Participants should ensure that the right people at their registries review Squish Issue 5903.

### **Discussion**

IMS does not need feedback from every registry regarding the impact of Squish Issue 5903. IMS only needs to know whether each registry updated its SQL before the changes go live. IMS will require a response from every registry to ascertain that it has updated SQL.

Once the changes are implemented, SEER\*DMS will prompt users to move treatment information or it will automatically move that information to the new CTC when the record is moved. This change should help CTRs to reverse incorrect autolinkages.

## PRIORITIZATION AND LIFE CYCLE

NCI and IMS continually are working to improve project life cycles by examining different schematics, methods, and processes. WGs are creating goals and prioritizing objectives for the year. NCI/IMS staff conduct polls and review Squish issues to determine registry needs and concerns. In early 2018, IMS is preparing for NAACCR changes. The priority for IMS throughout the rest of 2018, however, will be to develop infrastructure for the changes that the WGs are planning.