

SEER*DMS Auto-Consolidation and Validation Work Group
Meeting Summary
Tuesday, April 4, 2023
1:00 to 2:30 p.m. EDT

Representatives from the NCI, IMS, the Scientific Consulting Group, Inc. (SCG), and 12 cancer registries participated in the SEER*DMS Auto-Consolidation and Validation Work Group (WG) call on April 4, 2023. Participants included:

REGISTRIES:

Alaska
California Central Registry (Mary Brant, Jenna Mazreku, WG co-chairs)
Detroit
Idaho
Iowa (Bobbi Matt, WG co-chair)
Kentucky
Minnesota
New Jersey
New Mexico
New York
Seattle
Utah (Loretta Huston, WG co-chair)

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

IMS: Suzanne Adams, Linda Coyle, Fabian Depry, Nicki Schussler, Jennifer Stevens

SCG: Carolyn Fisher, rapporteur

Action Items

Participants agreed to the following action items:

- Registries should review their SQL data searches for Number of cores positive and examined by April 25, 2023, and report feedback to Squish 11726. (Tech Report #11726)
- Registries should review their SQL data searches for Gleason Score/Pattern/Grade and Tertiary Pattern by April 19, 2023, and report input to Squish 11724. (Tech Report #11724).
- IMS staff plan to review the surgery summarization codes to determine frequency of code 76 in Breast and applicability of manual reviews.

IMS Updates

Changes to View Source Data: Display of Rejected Values in Strike-through (Technical Report #11962)

Linda noted that IMS released a feature where rejected values in View Source Data appear with a strikethrough. When a user rejects a value, the value will not be selected if it comes in on a new record. She also noted that the rejects only are used within the new auto-consolidation framework, which includes rules implemented in the past 2 years. As older rules are converted to the new framework, IMS sends a Squish issue to registries announcing this change and asking them to check the logic. IMS intends to make amendments to old rules in the near future. The auto-consolidation rules for demographic fields also are being imported into the new framework.

Discussion

Bobbi (Iowa registry) asked why the entire line is being rejected for staging. Linda explained that each auto-consolidation rule can consider a single field or a group of fields. With a group of fields, as is the case with staging, the reject applies to all fields in that group.

Linda pointed out that the WG needs to continue examining the CTC-level fields and consider rules for specific fields. IMS implemented the known over unknown rules to produce a better outcome when a CTC is built from a pathology report and linked to an abstract. Fields such as Extent of Disease (EOD) were grouped into a single known over unknown rule.

Bobbi had questions about when the strike-through rules would be applicable and whether they helped in determining whether manual review is needed for cases after receiving a second report. Linda confirmed that a new manual consolidation task will not be triggered for already reviewed and selected values but will be able to prevent overwriting the unknown value.

Number of Cores Positive/Examined (Technical Report #11726)

Suzanne reminded the WG that IMS released a data search on the differences in Number of cores positive and examined for prostate, which shows patients who have a conflict in the number of cores positive on the CTC and one or more of the records. The system displays multiple data items for the records all in one column. The Squish issue explains what that string of values means. Suzanne reminded the WG that the *SSDI Manual* states that only the first biopsy should be coded, which is not necessarily the one with the highest value. The current logic addresses this and requires a manual review for conflicts and the number of positives. The goal is to review the cases in the data search to determine if there is a way to automate which value to choose that might be completed based on date or class of case. Automation may not be an option.

Gleason Pattern/Score/Grade (Technical Report #11724)

Suzanne reported that IMS released two data searches: Gleason Score Clinical Differences and Gleason Score Pathology Differences, and has received feedback from registries. The registries found that the higher value is correct only half of the time. The lower value is correct for a many reasons, which are detailed in Squish issue #11724. Because registry staff manually code these data items when they create CTCs from pathology reports, two registries do not want this auto-consolidation rule to overwrite the values they enter. Suzanne asked whether all had reviewed the SQL results and opened the floor to discussion.

Discussion

The Iowa registry representative asked whether the order of the priority of codes (e.g., 1, 2, 4, X7, X9) had been further considered.

Marina asked registries if they needed more time to review the data in Squish issue #11726. Participants agreed to allow 2 more weeks for review. Suzanne agreed to set a date to receive feedback on Squish issue #11724.

Sentinel Nodes Positive and Examined

Suzanne noted that IMS received the feedback and has been working on writing the logic for the developer, which is anticipated to be ready soon.

New Topics

Surgery Code Consolidation

IMS began the summarization rules for surgery codes several years prior based on information from then-Health Statistician Lynn Ries at NCI. Participants were concerned that the existing logic might not be suitable for current procedures. IMS has been updating 2003 surgery code logic in SEER*DMS, but progress has been slow. Nicki noted two issues:

- Code 80 (Organ/Structure, removal NOS), when present, typically are more specific surgery codes for the same level of surgery.
- Codes 26 (Polypectomy) and 27 (Excisional biopsy), which appear to be more recently added and the order varies.

Nicki reviewed the summarization rules dating back to 2003 and in priority order across the various cancer sites based on the current *SEER Program Coding and Staging Manual*. She annotated rules that remain a concern for the WG's review and discussion. Peggy Adamo confirmed the proposed updates.

Discussion

Participants reviewed the various codes/cancer sites and proposed updates and made the following points:

- Bobbi Matt (Iowa registry) noted that the higher code usually is taken as the more specific priority.
- Peggy pointed out that codes 21, 23, and 24 appear to be no longer used based on the 2022 surgery codes. Nicki explained that an edit would be necessary to indicate that these specific codes are not applicable for a given year but still need to be accounted for in the consolidation. The changelog can provide information about the history of these codes.
- Nicki agreed to examine how often code 76 (Bilateral mastectomy) is used. This code could originate in hospital records.
- Nancy Lozon (Detroit registry) asked whether a histology rule could be added. Linda explained that the data must show that such a rule would significantly reduce manual reviews to make it worth adding complexity to the consolidation process.
- Tiffany Janes (Seattle registry) asked whether the order should be changed in the surgery schemas for rectosigmoid and rectum.

After discussion, clarifications in consolidation logic (lowest to highest) were confirmed for several sites. These included Anus, Colon, Breast, Lung, Bladder, Bones, Joints, and Articular Cartilage, Esophagus, Larynx, Lymph nodes, Kidney, Oral Cavity, Parotid, Pharynx, Prostate, Rectosigmoid, Rectum, Skin, Stomach, Thyroid, and All Other Sites.

Development Efforts Related to Consolidation

Linda noted that IMS is working on the rules and will post updates to a Squish issue. IMS also will incorporate new logic as it is determined.

Upcoming SEER*DMS Meetings

The next Auto-Consolidation and Validation WG meeting is TBD.