SEER*DMS Auto-Consolidation and Validation Work Group
Meeting Summary
Tuesday, September 26, 2023
2:00 to 3:00 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 September 26, 2023. Participants included:

REGISTRIES:

Alaska
Detroit
Idaho
Illinois
Iowa (Bobbi Matt, WG co-chair)
Kentucky
Massachusetts
Minnesota
New Jersey
New York
Seattle
Utah (Loretta Huston, WG co-chair)

NCI: Marina Matatova

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

SCG: Carolyn Fisher, rapporteur

Action Items

Participants agreed to the following action items:

- IMS will generate a SQL data search, examining Metastasis (Mets) at Diagnosis (DX) Summary Stage 9 by cases for registries to review.
- The Kentucky registry will submit a Squish to IMS describing the issue of Extent of Disease (EOD) Mets for death certificate only (DCO) defaulting to code 99.

IMS Updates

Suzanne noted that IMS released Sentinel Nodes Positive and Examined logic into production and that the PSA Lab Value, a prostate site-specific data item (SSDI), is in development.

Revisiting Logic for the following:

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

Suzanne explained that the process entails separating the logic by clinical and pathological fields and taking the pattern, score and grade from the same record.

Steps: Clinical

1. If the Type of Reporting Source is the DCO, set all fields (Gleasons Patterns Clinical, Gleason Score Clinical, Gleasons Clinical) to blank.

2. If there are one or more records with the same known Gleason Score (clinical), and the clinical pattern values are also the same, then take all three fields from the record.

3. If there are two or more records with the same known Gleason Score Clinical value and the Clinical Pattern values are conflicting, then implement the Gleason Pattern Clinical logic to identify the record with the best Clinical Pattern value.
    - If there are one or more records with a best value, take Patterns Clinical, Score Clinical, and Grade Clinical from the record.

4. If there is a conflict in known score values, then the process stops at manual review and the registrar will choose the best clinical score, pattern, and grade values.

Records With the Same Gleason Score

To determine whether it is possible for older records to have the same Gleason Score and Pattern, yet a different Grade, IMS released two data searches (clinical and pathological) for registries to review. From her observations, Suzanne explained that some cases had several differences in Grade. The incorrect value has been frequently the lower value, but not necessarily all the time.

Discussion

Suzanne asked the WG to consider the following options when consolidating tasks when a conflict in Grade exists: take the higher Grade or perform a manual consolidation. Linda noted that a manual task should be considered when data seem unusual and that not all fields are able to be automated.

Iowa registry representative (Bobbi Matt) agreed with the manual consolidation as the best, conservative approach, but could not think of a scenario when the Grade would be different. Suzanne explained that this can occur if the records were coded incorrectly.

The Utah registry (Loretta Houston) representative asked whether a SEER*DMS edit is available that would identify a record with an incorrect Grade would prompt a manual review. Linda noted that edits for resolving conflicts between Gleason Score and Grade do exist. Jennifer Stevens confirmed that edits N4214, N3952, and N6633 (Gleason Score Clinical versus Pathological or Grade) are available in SEER*DMS. The Utah registry representative emphasized that registries will have different practices, noting that a failed edit would prompt the coder to review all underlying records to determine the cause. Suzanne noted that the intent is to not duplicate logic if there is already an existing edit.

Steps: Pathological

Suzanne explained that the major differences between pathological and clinical priority codes is the consideration of neoadjuvant therapy if given and implementation of the Pathological Grade unless the Clinical Grade is higher. The intent is to add Gleason Tertiary Pattern into the Pathological fields because of the need to have them originate from an autopsy and/or prostatectomy.

A preliminary run of SQL in one registry to determine any difference in Gleason Tertiary Pattern showed 600 that were different, primarily due to records being coded as X9, whereas the CTC was coded as X7. Suzanne asked for input on the proposed auto-consolidation logic if this conflict exists.

Discussion

Members explained that if a Pathological Pattern or Score is coded for a radical prostatectomy, then X9 cannot be subsequently coded. After discussion, the WG agreed with the logic and decided to perform a manual review if there are coding conflicts and Tertiary Pattern is the only difference.

Mets at DX Bone, Brain, Liver, Lung, Other

IMS developed a SQL data search testing step 3 of the logic, regarding setting the DX fields to 0 for several conditions. Suzanne noted problems with cases being incorrectly identified because of the exclusion of code 9. The major challenge is when checking to determine that none of the following apply: Summary Stage 2018+ = 7, Derived Summary Stage 2018+ = 7, or EOD Mets = 10–70, 88. She requested input on including 9 or EOD 88.

Discussion

Bobbi noted that a Summary Stage of unknown would not necessarily prompt a change in Mets. According to the guidelines (*SEER Program Coding and Staging Manual 2023*), code 9 is only used for Mets at DX when the primary site or specific Met is unknown.

The WG was unsure of code 9 in the just mentioned scenarios, but was clear that polishing to 0 was not the best option. Suzanne explained that IMS could generate a SQL data search, examining Summary Stage = 9 by cases and provide that information to the registries to review.

The Seattle registry representative (Carolyn Callaghan) commented that setting Summary Stage or Derived Summary Stage to 7 or 9 would only have an effect on EOD primary tumor or EOD regional nodes and to a lesser extent when EOD Mets criteria are achieved.

Suzanne summarized that registries will review the results after IMS runs the SQL data search and that the auto-consolidation logic will remain as proposed.

The Kentucky registry representative (Michele Hoskins) asked about addressing EOD Mets for DCO cases because of the frequent defaults to code 99, resulting in an edit. The WG discussed that this should not be occurring for all cancer sites. Linda will need to review the cases in question in the Kentucky registry. Michelle will submit a Squish to describe the issue.

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

Suzanne reviewed the auto-consolidation logic and noted that updates were made based on feedback from the WG to review all conflicts, regarding the known number of cores positive/examined pairs and to build the values accordingly.

Discussion

Suzanne asked whether the preference is to perform a manual review if a record is priority code 2 (known positive/number examined unknown) or 3 (number positive unknown/known examined), especially since the algorithm will select 2, resulting in a conflict. The Iowa and Seattle registries preferred to manually

review the pairs. Suzanne noted other manual review options in cases (although rare) with zero core positives, which the registries were in favor of doing.

New Fields

Regional Lymph Nodes (LN) Positive and Examined (Technical Report #12501)

Suzanne noted the next set of fields the WG decided to develop auto-consolidation logic for are Regional LN Known Positive/Examined and Date of Regional LN procedure, applying rules and lessons learned from the Sentinel LN logic. She highlighted that the Kentucky registry reported that values that are sent for Regional LN fields are second course rather than the first course. This poses a problem with auto-consolidating these fields when incorrect values may have been uploaded. Suzanne explained that she drafted logic for the Regional LN Known Positive/Examined and wrote a list of questions to be addressed, all of which are posted in Squish 12501.

Discussion

Can the values on the record be trusted as first course?
How often is subsequent LN information provided in these fields?
How far back should the WG seek to apply the rule? 2018+?

Suzanne asked the Kentucky registry to further describe their occurrences, regarding first and second course treatment values. Desiree Montgomery explained that Facility A coded Regional LN Positive 98/Examined 00, which indicates no nodes examined. Facility B coded a different known value indicating resection or dissection of lymph nodes. It appeared that Facility B entered its data as first course and was unaware that this patient received subsequent treatment and had disease progression. Automatically accepting the regional lymph node codes would not be accurate. Desiree noted other scenarios and is considering a SQL data search or a SEER Extended Edit that focuses on delay in treatment to assist in identifying these cases and the frequency of occurrence.

Bobbi wondered whether the dates of the first and second course treatments relative to the Date of DX could be used to identify these cases and help with the data search. Desiree noted that the SEER Extended Edit captures these dates, but some cases are still challenging.

Suzanne suggested developing logic to only auto-consolidate if the Date of DX and the dates of first course treatment are within an appropriate timeframe.

Do things get muddy when you have a positive aspiration/biopsy followed by a negative LN dissection? Any other considerations? Any situations where you would need to look at text?

Desiree explained that positive aspiration biopsy followed by a negative LN has been ongoing in the Kentucky registry cases as well as the subsequent edits to regional nodes positive/examined. She also noted that positive aspirations are being lost once a person has neoadjuvant therapy, and then have a negative Sentinel LN biopsy and/or dissection.

Bobbi commented that guidance is unclear on how to code for positive biopsy or aspiration and LN dissection with negative nodes. Desiree explained that nodes positive are coded as 95 and that nodes examined would be whatever was performed from the biopsy or dissection. She called attention to some

specific cases with disagreements in the coding and text information and asked whether further QC should be considered.

Suzanne clarified that further discussion and comments can be posted to Squish #12501, which the registries and NCI staff can review.

Upcoming SEER*DMS Meetings

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