Path Report Processing in SEER*DMS

A change was made in the v17 workflow. As many of you have noticed, "unscreened" records can be linked to Patient Sets.

A record is "unscreened" if the auto-screener could not set reportability. Reportability is unknown and the record is in a manual screening task. This almost exclusively effects path reports. Reportability cannot be auto-set when there is no site, histology, behavior.

But reportability, site, hist, behavior do not affect patient-level matching. The record will be linked to a patient set, but will also be in a manual path screening task.

This gives us an opportunity to process HL7 records in new ways. Each registry can define a method that works best for their registry. In today's call, we will discuss possibilities.

The questions that each registry should consider include:

1. When does your registry need to code site, histology, behavior on a path report? These are a few of the reasons that we have coded site, hist, behavior, laterality, and grade on path reports:
    - Consolidation. A DMS user may look at these values when linking records. However, this user would also be looking at text. And in registries that use auto-coding algorithms, the site/hist are considered "suspicious" by the user consolidating the data. The values are more reliable when they are manually coded.
    - Workflow. In the past, DMS required a site, hist, beh to move the record to the next step in the workflow. A record was not matched against the database until it was screened. That is not true in v17. The record can be linked at the patient level automatically; a user can link the record to a CTC – even if it does not have site, hist, behavior. If we ever attempt to auto-link path reports to CTCs then we may need a reliable site, hist, beh.
    - Special Studies. Site, hist, and behavior might be used by queries to find path reports for rapid case ascertainment. This will continue to be true for at least some studies. However, some studies do not need a coded site (eg, LA has a study that only uses patient age). Some of the special study queries could use the epath site and epath morph lists.
    - Research projects.
    - Other reasons that a coded site needs to be entered on a path report?
2. When does the site, hist, and behavior need to be coded by a person? In other words, think about times when your registry needs an accurate site, histology, behavior that is based only on the data on the path report. Registry operations staff may not care – their only concern may be linking it to the appropriate CTC. Researches may have different needs.
3. When is it appropriate to auto-code the site, hist, behavior on an HL7 path report?
    - A very small percentage of HL7 records have coded fields for site, hist, beh. If available, these are typically used to code site, hist, beh.
    - Many registries will auto-code if the epath site list has a single value.
    - Some registries use logic to pick one of the sites from the epath sites list; and pick values from the epath morphology lists.

- Some registries do not trust the epath site and epath morphology list. A person manually codes site, hist, beh unless the path report has coded fields (3a).

4. When should C809 be used and what does it mean to your registry?
5. Other considerations?

Example 1 – Auto-coding rule for Site and Histology (Record)

Sets the site, histology, behavior and grade based on the epath sites and morphologies lists if both site and histology are blank.

The list of sites is split by spaces and the following de-duplication logic is applied:

1. Take the more specific site. In other words, if one site ends with 9 then ignore that site and use the other site.
2. If both sites are specific then use the first site.

The following logic is then applied:

1. If there is only one site code then use that site code.
2. Else if there are multiple site codes then exclude Lymph nodes (C77x), Skin (C44x), and C809. If a single site remains then code that site.

If a site was coded then code histology and behavior. The list of morphologies is split by spaces and the following logic is applied:

1. Use the highest code with a /3 behavior.
2. Else if not /3 codes, use the highest code with a /2 behavior.
3. Else if not /2 codes, use the highest code with a /1 behavior.
4. Else if not /1 codes, use the highest code with a /0 behavior.
5. Else if there were no morphologies then code histology to 8000 and behavior to 3.

If site, histology, and behavior were coded then set grade to 9.

Example 2 – Auto-coding rule for Site and Histology (Record)

Codes Primary Site from 'epathSites' and Histology03/Behavior03 from 'epathMorphologies'.

If 'epathSites' is not blank, the first code in the list that starts with 'C' is used, if any. The sites must be separated by spaces. Periods are removed from the code and it is trimmed to 4 characters ('C12.3 C45.6' would be coded as 'C123').

If site cannot be coded then it is set to a default value of C809.

If 'epathMorphologies' is not blank, the first histology/behavior in the list of

histologies/behaviors (separated by a blank space) where behavior is 3 is taken. If there is no behavior 3, the first histology/behavior where the behavior is 2 is taken. If there is no behavior 2, the first histology/behavior in the list is taken.

The expected format for each code is 'M-HHHHB' where 'HHHH' is the histology and 'B' is the behavior. So 'M-81002 M-82003 M-83003' would be coded as '8200/3'

If histology and behavior cannot be coded then they are set to 8000/3.

Example 3 – Auto-coding rule for Site and Histology (Record)

1. If there is a single site and single histology – code that site and histology.
2. If there is a single site and multiple histologies – code the site, set morph to 8000/3
3. If there are multiple sites or no sites – code C809; 8000/3.

Example 4 – Auto-coding rule for Site and Histology (Record)

Codes Primary Site from epath sites and sets HistologyIcdO3/BehaviorIcdO3 to '8000/0'.

Set site to 'C539', histology and behavior to '8000/0', and site title to 'Auto-coded' if the following are true:

- Pathology number starts with 'Cnn-'
- Ordering facility id is 'FAC-0007'
- Epath sites contains a site 'C53X' and primary site is blank or 'C53X'
- Epath morphologies is blank
- Sex is '2'

Set site to the first site in epath sites, histology and behavior to '8000/0', and site title to 'Auto-coded' if the following are true:

- The only codes in epath sites and primary site are 'C18X', 'C19X', 'C20X' and 'C21X'
- Epath morphologies is blank or does not have a 3,2, or 6 in the behavior
- Text_path_formal_dx and text_path_supp_reports_addenda do not contain "NEUROENDOCRINE TUMOR", "LEIOMYOMA,MALIGNANT", "MALIGNANT LEIOMYOMA"

Set site to the first site in epath sites, histology and behavior to '8000/0', and site title to 'Auto-coded' if the following are true:

- The only codes in epath sites and primary site are 'C76X' and 'C44X'
- Epath morphologies is blank or does not have a 3,2, or 6 in the behavior
- Text_path_formal_dx and text_path_supp_reports_addenda do not contain "LOW GRADE SARCOMA", "LANGERHANS CELL", "HISTIOCYTOSIS", "MYCOSES FUNGOIDES", "MYCOSIS FUNGOIDES", "SCHWAN(N)OMA|T-CELL LYMPHOMA"