California Cancer Registry

Auditing Female Breast Cancer Cases

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The Data Standards and Quality Control Unit (DSQC) of the California Cancer Registry (CCR) initiated an audit of breast cancer cases that bypassed the visual editing process. The audit was performed utilizing the peer review method. Each case was audited blindly and independently by two separate auditors. When both the primary and secondary auditors completed their assigned region, the primary auditor then compared the discrepancies that both auditors identified. The two auditors then reconciled their differences and discussed any issues that they may have discovered during the audit process. There were 260 cases recoded and 17 data items recoded per case for a total of 1020 possible discrepancies. The list of recoded data items are presented in Table 1.

Audited Data Items	Visually Edited	
	YES /	' NO
Date of Diagnosis	Х	
Primary Site (including subsite)	Х	
Laterality	Х	
Histology ICD-O-3	Х	
Behavior		Х
Grade	Х	
CS Tumor Size	Х	
CS Extension	Х	
CS Lymph Nodes	Х	
CS Mets	Х	
CS Site Specific Factor #1	Х	
CS Site Specific Factor #1	Х	
CS Site Specific Factor #1	Х	
CS Site Specific Factor #1	Х	
CS Site Specific Factor #1	Х	
CS Site Specific Factor #1	Х	
Regional Nodes	Х	
Positive/Examined		

Table 1

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There were a total of 277 discrepancies noted in the visually edited data items. The discrepancies identified in all data items are demonstrated in Graph 1.



Graph 1

Of the 277 discrepancies identified by this audit, the data item, CS Site Specific Factor #6 (Size of Tumor-Invasive Component), had the greatest number of discrepancies (37), which represented 13.4% of all discrepancies. CS Lymph Nodes had the second highest number of discrepancies with 34 (12.3%) discrepancies, while Grade had 24 (8.7%) discrepancies noted.

CS Site Specific Factor #6 (Size of Tumor – Invasive Component)

The impact of the lack of documentation is significant for CS Site Specific Factor #6. Twenty-two discrepancies (59.5%) were due to a lack of text documentation. This issue accounted for nearly 60% of the discrepancies in

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this data item, which would have lowered the number of discrepancies in this data item from 37 to 15. Complete text documentation will significantly reduce the number of discrepancies of this type in the future.

When coding this data item, it is imperative that attention is paid to the details in the pathology report and clearly document that information on the abstract. Most of the discrepancies noted in CS Site Specific Factor # 6 (37; 13.4%) are the result of either no or poor text documentation to support the distinction between the invasive and in situ component.

Nine (24.3%) discrepancies were recodes from XXX (any code between 000 and 060) to 888. The code 888 was defined as "Unknown if invasive and in situ components present. Clinical size coded." Another nine discrepancies (24.3%) were recoded from 020 to 050 because there was no text documenting an invasive component. There were four (10.8%) discrepancies that were recoded from 020 to 000. In all four cases, the text clearly stated that the tumor was entirely invasive and in one of those cases, the text stated "no in situ component." The remaining 15 cases (40.5%) were various recodes between the remaining valid codes for this field and an inaccurate interpretation of pathology text and the available codes for this data item.

CS Lymph Nodes

The issues identified in CS Lymph Nodes are more complex. More than half of the discrepancies identified in the data item CS Lymph Nodes are the result of the abstractor not applying the correct code when there is specific information that represents the extent of disease more accurately. A few examples of the information not being used to code the correct CS Lymph Node code includes micrometastasis identified on H&E or IHC, or not capturing a supraclavicular lymph node involvement (code 80).

Of the 34 discrepancies in CS Lymph Nodes, 50% (17) were cases involving codes 00, 60, 79 and 99. There were 11 (32.4%) discrepancies involving the recoding 00 to 99 and vice-versa or code 00 to codes 60 or 79. The remaining six (17.6%) discrepancies involved codes recoding code 60 to 25.

<u>00 vs. 99</u>

The 11 recodes involving the codes 00 and 99 directly impact the stage of each case. Code 00 indicates *no* regional lymph node involvement, while code 99 indicates *unknown* lymph node involvement. Particular concern is focused on the eight (23.5%) discrepancies that were recoded to specific lymph node codes. Five (5; 14.7%) were recoded from 00 (no lymph node

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involvement) to either code 60 (Axillary/Regional Lymph Nodes, NOS) or code 79 (Stated as N3, NOS). These types of discrepancies directly affect the overall stage of the case.

<u>25 vs. 26</u>

There were eight cases that required a recode from code 26 to code 25 or another more specific code. In other circumstances, these cases were recoded to codes 51 and 60. CS Lymph Node code 26 is defined as "Stated as N1, NOS." Code 25 is defined as "Movable axillary lymph node(s), Ipsilateral, positive with more than micrometastasis (i.e. at least one metastasis greater than 2mm). According to the Collaborative Staging Manual and Coding Instructions, Part I, CS Lymph Nodes, #3f, page I-34, applying a CS Lymph Node code designated as N_ "should *only* be used after an exhaustive search for more specific information" has been conducted. In these eight (23.5%) cases, the text clearly documented information that should have been used to code a more specific code.

<u>Grade</u>

The issues identified in the data item, Grade are confined to the incorrect use of the grading tables and instruction in Volume I, Section V.3.5.8. This accounted for over 60% of the discrepancies in Grade.

Section V.3.5.8 of Volume I clearly states "the Bloom-Richardson grading system should be used, *if available*." If the Bloom-Richardson system is not used or it is unknown if it is used, then there is a priority order list located in this section that is to be followed. It is clear there is some confusion regarding this concept and how to code Grade when there is no mention of Bloom-Richardson grading system in the pathology report.

Audit Action

While performing the audit, the auditors identified areas needing coding instruction clarification. As a result, several questions were submitted to SEER via the SEER Inquiry System (SINQ). Thus far, we have received responses to the following SINQ queries: 20091129 and 20091130. A third question was submitted to SEER and subsequently referred to the I&R. We are still waiting for a response.

The DSQC Unit has produced a breast educational module that incorporates the audit findings. The module is posted on the CCR website.