Collaborative Staging: Identifying Common Coding Discrepancies

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Objectives

- Review the accuracy rates for selected CS fields from the major cancer sites
- Identify problem areas
- Focus on improvement efforts
- Re-evaluate data items not previously meeting the 97% accuracy rate

Background

- The CCR has a 97% accuracy rate for 19 data items
- CCR required CS fields: All CS fields except the CS Evaluation fields
- Feedback provided to abstractors January – June 2005
- Accuracy rates for the required CS fields became effective July of 2005

Background

- Sites Reviewed for CS fields in 2006:
  - Breast
  - Colon
  - Lung
  - Prostate
  - Melanoma
  - All Sites Combined

Breast

- All CS fields met the 97% accuracy rate

CS Data Items Below 97%

- Colon:
  - CS Extension
  - CS Lymph Nodes
- Lung
  - CS Tumor Size
  - CS Extension
  - CS Lymph Nodes
  - CS Mets at Diagnosis
- Melanoma
  - CS SSF 1 – Breslow's thickness, depth measurement
- Prostate
  - CS Extension
- All Sites Combined
  - CS Extension

Collaborative Staging Investigation (CSI) Begins!

Launch CS Data Mining Project

CS Data Mining Project

- Time Period: January – July, 2006
- Generate cross tabulation reports, original CS code versus CS recode by the visual editor
- Identify the common CS coding errors for the following fields:
  - Colon
    - CS Extension
    - CS Lymph Nodes
  - Lung
    - CS Tumor Size
    - CS Extension
    - CS Lymph Nodes
    - CS Mets at Diagnosis

CS Data Mining Project

- Identify the common CS coding errors for the following fields (continued):
  - Melanoma
    - SSF 1 – Breslow's Thickness, Depth of Invasion
  - Prostate
    - CS Extension

CS Data Mining Project

- For each CS data item below 97%, the DSQC unit “investigators” examined significant number of cases
  - Reviewed the original code
  - Reviewed the Visual Editor’s recode
  - Reviewed why and how the discrepancy was made

Common Coding Discrepancies: Colon - CS Extension (N=619)

- 182 (29%) were originally coded to 40
  - 113 (62%) were recoded to 45
  - 27 (15%) were recoded to 50
- 61 (10%) were originally coded to 45
  - 26 (43%) were recoded to 40
- 44 (7%) were originally coded to 10
  - 11 (25%) were recoded to 99
  - 17 (38%) were recoded to a code in the 11 – 16 range (polyps)

Common Coding Discrepancies: Colon - CS Extension

- Problems identified:
  - Not coding to furthest documented extension
  - Miscoding documented extension
  - Coding “known” instead of “unknown”
  - Not capturing invasion in polyps
  - Confusion regarding terminology (non-peritonealized pericolic adipose tissue vs pericolic fat; subserosa vs serosa; invades vs confined to, etc)

Common Coding Discrepancies: Colon - CS Extension

- CS Extension codes 40 and 45 differ in Summary Stage
  - Code 40 = T3, Localized
  - Code 45 = T3, Regional

Common Coding Discrepancies: Colon - CS Lymph Nodes (N=287)

- 106 (37%) were originally coded to 10
  - 91 (86%) were recoded to 30
- 64 (22.3%) were originally coded to 00
  - 47 (73%) were recoded to 99
- 63 (21.9%) were originally coded to 20
  - 49 (78%) were recoded to 30
- 19 cases were submitted with code 99
  - (95%) of these were recoded to 00

Common Coding Discrepancies: Colon - CS Lymph Nodes

- Problems identified:
  - Appropriate use of code 10 versus code 30
  - Coding when there is no work up documented
  - Inappropriate application of the inaccessible site rule

Common Coding Discrepancies: Lung - CS Tumor Size (N=391)

- 124 (31%) cases originally coded to 999, recoded to specific tumor sizes
- 100 (25%) cases orginally coded as specific tumor sizes and were recoded to 999
- 20 (5%) cases originally coded to 060, recoded to another specific code
  - (11 were recoded to 999)
- 19 (5%) cases were recoded from 030 to another specific code

Common Coding Discrepancies: Lung - CS Tumor Size

- Problems Identified:
  - Coding 999 when multiple tumors are identified
  - Coding 999 when no tumor is seen or identified instead of 000 (No tumor identified)
  - Coding the size of paratracheal, mediastinal and hilar masses and not the primary tumor
    - Not applying the Note in CS Manual, Lung CS Tumor Size: Do not code size of hilar mass unless primary is stated to be in the hilum.
  - Not coding what is documented

Common Coding Discrepancies: Lung – CS Extension (N=1,156)

- 179 (15%) cases recoded from 99 to another code
  - 60 cases (34%) recoded to 10
  - 36 cases (20%) recoded to 72
- 141 (12%) cases recoded from 10 to another code
  - 28 cases (19%) recoded to 45
  - 28 cases (19%) recoded to 72
  - 22 cases (15%) recoded to 65
- 101 (9%) cases recoded from 70 to another code
  - 18 (18%) recoded to 72

Common Coding Discrepancies: Lung – CS Extension

- Problems identified:
  - Confusion: Extension vs. metastatic disease
  - Not coding to furthest documented extension
  - Not coding separate tumor masses in same lobe

Common Coding Discrepancies: Lung – CS Lymph Nodes (N=638)

- 158 (25%) cases recoded from 20 to another code
  - 79 cases (50%) recoded to 60
  - 36 cases (23%) recoded to 99
  - 24 cases (15%) recoded to 00
- 146 (23%) cases recoded from 00 to another code
  - 63 cases (43%) recoded to 20
  - 53 cases (36%) recoded to 99
- 127 (20%) cases recoded from 99 to another code
  - 56 cases (44%) recoded to 20
  - 53 cases (41%) recoded to 00

Common Coding Discrepancies: Lung – CS Lymph Nodes

- Problems identified:
  - Not coding contralateral and/or bilateral hilar or mediastinal lymph nodes, OR scalene or supraclavicular lymph node involvement
  - Not coding regional lymph node involvement

Common Coding Discrepancies: Lung – CS Mets at Diagnosis (N=728)

- 231 (32%) cases recoded from 00 to another code
  - 66 cases (29%) recoded to 40
  - 60 cases (26%) recoded to 99
  - 43 cases (18%) recoded to 35
- 142 (20%) cases recoded from 50 to another code
  - 122 cases (86%) recoded to 40
- 115 (16%) cases recoded from 40 to another code
  - 35 cases (30%) recoded to 99

Common Coding Discrepancies: Lung – CS Mets at Diagnosis

- Problems identified:
  - Confusion: Extension vs. metastatic disease
  - Coding bilateral pleural effusion
  - Coding distant LNS + distant mets without documentation of distant met involvement
  - Ambiguous terminology used to describe possible metastasis

CS Manual, Melanoma SSF # 1 Codes & Descriptions

Code	Descriptions
000	No mass/tumor found
001-988	0.01 -9.88 millimeters Code exact measurement in HUNDREDTHS of millimeters *Examples:*

Code	Measured Thickness (in path report)
001	0.01 millimeters
010	0.1 millimeter
100	1 millimeter

989	9.89 millimeters or larger
990	OBSOLETE see Code 999
999	Microinvasion; microscopic focus or foci only; no size given Not documented in patient record, Unknown; measured thickness not stated

Common Coding Discrepancies: Melanoma – SSF 1 (N=543)

- 99 cases originally coded to 000
  - 94 were recoded to 999
  - 5 were recoded to other specific depths
- 39 cases originally coded to 999
  - 21 were recoded to 000
  - 18 were recoded to other specific depths
- 27 cases were recoded from 004 to another specific depth
  - 19 were recoded to 040
  - 4 were recoded to 400
  - 3 were recoded to other specific depths
  - 1 was recoded to 999
- 19 cases were recoded from 002 to another specific depth
  - 11 were recoded to 020
  - 5 were recoded to 999
  - 3 were recoded to other specific depths

Common Coding Discrepancies: Melanoma – SSF 1

- Problems identified:
  - Incorrect conversion of the Breslow's depth documented in the path report
  - 99 cases coded to 000 (no tumor identified) when the melanoma behavior was in-situ
  - Not coding what is documented on the abstract
  - Coding Breslow's depth in CS Size and the tumor size in SSF #1
  - Not taking the deepest measurement
  - Inappropriate application of code 000 and 999

Common Coding Discrepancies: Prostate – CS Extension (N=1,333)

- 1009 (75.6%) were issues involving the use of codes 10 - 30
- 178 (13.4%) were issues involving the recode of codes 41-99 to other codes
- 146 (11%) were visual editing back-log issues in 2 regions. (These issues involved the obsolete codes 31, 32 and 33 – now corrected)

Common Coding Discrepancies: Prostate – CS Extension

- 463 (35%) were originally coded as 15
  - 243 (52%) were recoded to code 30
  - 70 (15%) were recoded to code 23
- 123 (9%) were originally coded as 23
  - 43 (35%) cases were recoded to code 15
  - 33 (27%) cases were recoded to code 30
- 102 (8%) were originally coded as 20
  - 47 (46%) cases were recoded to code 15
  - 22 (22%) cases were recoded to code 21
  - 20 (20%) cases were recoded to code 23

Note: Of the 352 discrepancies identified in codes 20-24, 140 of these were recoded to another code in the 20-24 range.

Common Coding Discrepancies: Prostate – CS Extension

- Problems identified:
  - Determining Clinically Apparent and Inapparent Terms
  - Difficulty coding cases when there IS a DRE and/or US
  - Not coding text documentation

Conclusions

- Most discrepancies were simple in nature
  - Abstractors not coding what is documented on the abstract
  - Abstractors not reading the notes in the CS Manual
  - Incorrect placement of the decimal (melanoma depth measurement)
- Additional focused training could significantly improve accuracy rates

Recommendations

- Provide feedback to registrars on these data items to increase accuracy rates
- Utilize discrepancy “comment” area during visual editing
- Encourage regional registries to use reports to review areas that need additional clarifications/training

Quality Improvement Actions Taken

- Developed Site Specific Training Modules posted on the CCR web site: http://www.ccrcal.org, under Registrar Training
- Focus on the Most Common Coding Discrepancies for the CS fields for colon, lung, melanoma and prostate, in which the 97% accuracy rate was not met

Quality Improvement Actions Taken

- Each Site Specific Training Module Includes:
  - Background Information
  - Statistics
  - Examples
  - Coding Reminders
  - Quiz
- CEU credit obtained for each Module

Quality Improvement Actions Taken

- Promote the availability of the training modules
- Leave the CS Training Modules up for 6 months
- Assess Training Module Usage

Follow Up

- Review the accuracy rates for the problematic CS fields
- Focus on discrepancies involving specific codes again
- Assess if more training and education is still required for specific sites and fields

Summary

- Conducted an in-depth review of common coding discrepancies for CS fields below 97% for the major sites
- Identified common discrepancy themes
- Developed focused, site specific training modules
- Re-evaluate the accuracy rates of these fields in the Fall of 2007

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