Multiple Primary and Histology Site Specific Coding Rules
LUNG

Prerequisites

Completion of Multiple Primary and Histology General Coding Rules

There are many ways to view the Multiple Primary/Histology rules, or rather ways in which they are diagramed to aid in understanding how they are put together.

The rules themselves are provided in three formats to support different styles of learning and interaction with instructions:

- text
- matrix
- flowchart

Any abstraction from the rules does not replace the rules, but may provide insight into their underlying structure.

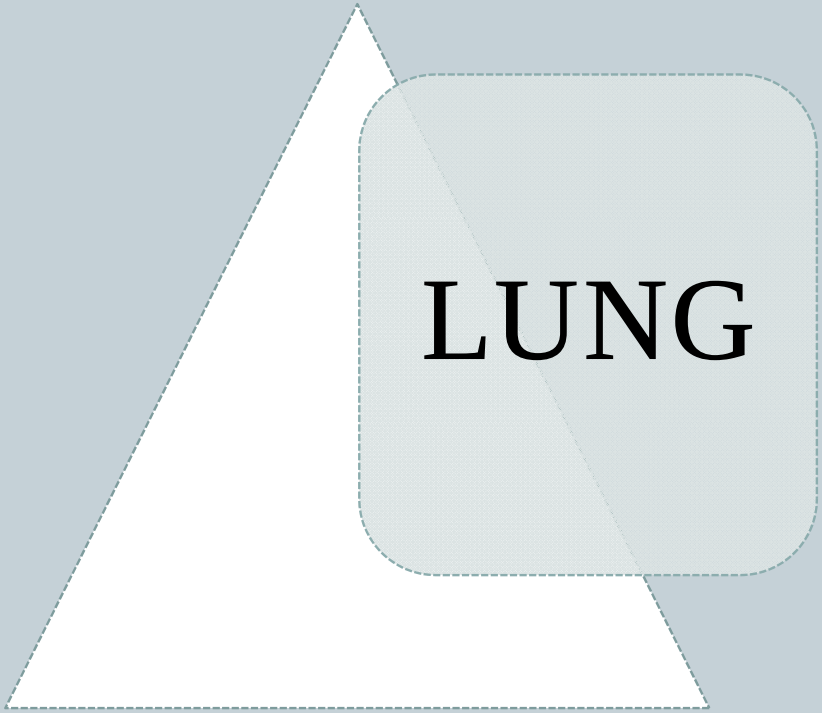
Borrowing from the three formats for the rules themselves, structure can be diagramed in a *text or outline form*, a *matrix or table form*, and a *flowchart form*.

You have previously reviewed the table format when you looked at the two color coded spreadsheets for the multiple primary and the histology rules.

The table form shows most clearly the alternating patterns of single versus multiple primary decisions across the primary sites, the commonality of rules across the primary sites, and the clustering of site-specific rules in different primary sites.

Links to illustrations and/or diagrams will be provided for each site to diagram the process of multiple-primary decision making in a sequential fashion, comparing existing and new records in a registry database. The charts included here assume the tumors have already been assigned to the appropriate anatomic site.

Multiple Primary and Histology Coding Rules



Lung

The primary question with lung cancers is the determination of multiple primary cancers when both lungs are involved with one or more tumors, and the correct selection of histology code when multiple histologic diagnoses may be rendered.

The rules and definitions section provides information about histologic terms, such as large cell neuroendocrine carcinoma, pleomorphic carcinoma, and sarcomatoid carcinoma, and a description of the anatomic designation of Pancoast tumor.

A family tree is provided for lung histology groups, similar to the tree for head and neck histologies, with again the more specific histologies located further down on the chart.

The Lung section also contains the first combination histology chart, a table which shows the appropriate combination histology code to use when specified histologies occur together in a single tumor.

The multiple primary rules for Lung contain the common M1 and M2 rules, unknown number of tumors abstracted as a single primary and a single tumor always a single primary.

The example given for one situation where the number of tumors may be unknown is the case of two or more tumors in one lung and one or more tumors in the second lung and only one tumor is biopsied.

The case of one tumor in each lung with only one tumor biopsied is covered by another rule in the Multiple Tumors module, and is not considered to fall within the jurisdiction of the M1 rule.

There are ten rules that apply in multiple tumor cases.

The first rule,

- M3, relates to topography, tumors differing within the first three characters of the ICD-O-3 code are separate primaries; the change from previous rules for lung is to separate tracheal from lung primaries.

The next two rules relate to histology:

- M4, non-small cell and small cell carcinomas are separate primaries.
- M5, adenocarcinoma with mixed subtypes and bronchioloalveolar carcinomas are separate primaries.
- These two rules are included to identify as separate primaries histology codes which happen to have the same first three characters, another break from one of the more general histology rules.

The next two rules address two situations in which both lungs are involved:

- M6, a single tumor in each lung represents multiple primaries, unless one of the tumors is stated or proven to be metastatic from the other.
- M7, multiple tumors in both lungs with ICD-O-3 histology codes differing among the first three characters are multiple primaries.

The timing rules for lung follow:

- M8, tumors diagnosed more than three years apart being multiple primaries.
- M9, the standard rule for invasive tumors more than 60 days after in situ tumors being multiple primaries.

Two more histology rules follow;

- M10, non-small and more specific non-small cell carcinomas are a single primary, with reference to the lung histology tree.
- M11, tumors with ICD-O-3 codes differing among the first three characters are multiple primaries.

Here again, note the interplay of rules, with M10 taking care of the exceptions to the more general histology code rule embodied in M11.

The final rule,

- M12, treats all case situations which have not been decided by previous rules as single primaries.

Within the group of examples for this rule fall other situations with bilateral lung involvement: solitary tumor in one lung with multiple tumors in the contralateral lung, diffuse bilateral nodules, and multiple tumors in both lungs.

Presumably all the tumors in the last example would have a histologic diagnosis and thus not be included within the example for the M1 rule.

Multiple tumors in a single lung is also given as an example for this last default rule.

Similarly to the Head and Neck histology rules, the Lung histology rules are the same for both the Single Tumor module and the Multiple Tumors Abstracted as a Single Primary module, with the exception of the addition of the combination histology rule for single lung tumors.

The histology rules in order:

- H1 and H8, code the histology documented by the physician when no pathology or cytology report is available or obtained.
- H2 and H9, code the histology or cytology from a metastatic site when no specimen is taken from the primary site.
- H3 and H10, code the histology of a single histologic type.
- H4 and H11, code the invasive histology when a single tumor has both invasive and in situ components or the most invasive histology when two or more invasive tumors.
- H5 and H12, code the most specific histologic term when non-specific and more specific histologies are stated.

The non-specific histologies for lung are listed as:

- cancer/malignant neoplasm and a more specific histology
- carcinoma and a more specific carcinoma
- adenocarcinoma and a more specific adenocarcinoma
- squamous cell carcinoma and a more specific squamous cell carcinoma
- sarcoma and a more specific sarcoma

The next rule,

- H13, in the Single Tumor module refers to selection of a combination code from the table when two or more specific histologies are identified within a single tumor.

Note the absence of this rule in the Multiple Tumors Abstracted as a Single Primary module.

Multiple tumors will follow their own path through the rules, which should not lead to an end point of combining separate adenocarcinomas and squamous cell carcinomas into adenosquamous carcinomas.

The final rule for both single and multiple tumor coding,

- H7 and H13, is to code the histology with the numerically higher ICD-O-3 code.

Investigating further the interplay between the histology tree and the combination code table, as referenced by rules H5 and H6, note that the combination codes are used for histologies which reside on different branches of the tree (small cell and adenocarcinoma), and for histologies grouped together at the same level on the same branch (acinar and papillary adenocarcinoma).

Also note the overlap between Rule H5 and Rule H6 in coding squamous cell carcinoma and squamous cell nonkeratinizing carcinoma as either a non-specific histology with a more specific histology, or as a combined histology.

You conclude that if you were presented with a single tumor with multiple histologies that were not included in the combination chart, your coding decision would be directed by Rule H7 and you would use the numerically highest ICD-O-3 code.

Applying the Lung rules to a set of case facts

- A patient presents with long smoking history and a cough.
- A mass is noted in the right upper lobe of the lung on chest x-ray, and CT-scan shows the 5cmx2cm mass in the right upper lobe and also a second smaller mass in the right lower lobe.
- The right upper lobe mass is biopsied and diagnosed as a squamous cell carcinoma.
- The patient undergoes mediastinoscopy, with negative biopsy of three mediastinal nodes.
- The patient then undergoes right upper lobectomy and wedge resection of the right lower lobe, with diagnosis of squamous cell carcinoma of the right upper lobe and peribronchial lymph nodes, and small cell carcinoma of the right lower lobe.
- Two tumors are identified.

Consulting the Multiple Tumors module to determine the number of primary cancers, Rule M3 does not apply, as the first three characters for the site codes for both tumors are the same, C34.

Rule M4 does not apply, as neither of the tumors is diagnosed as non-small cell carcinoma, though one is diagnosed as small cell carcinoma.

Rule M5 does not apply, neither of the tumors are diagnosed as adenocarcinoma with mixed subtypes or bronchioloalveolar carcinoma.

Rules M6 and M7 do not apply, only one lung is involved.

Rules M8 and M9 do not apply, both tumors are diagnosed at the same time.

Rule M10 does not apply, again neither tumor is diagnosed as non-small cell carcinoma, though one is diagnosed as a more specific type of non-small cell carcinoma.

Rule M11 does apply, the histology codes for the two tumors are different within the first three characters, “8070/3” and “8041/3.”

These are multiple primary cancers.

Histology is determined for each cancer using the same Single Tumor module in the histology rules.

Rules H1 and H2 do not apply, there is a pathology report with a diagnosis for each primary site.

Rule H3 does apply to each case, only one histologic type is identified for the right upper lobe tumor, squamous cell carcinoma, 8070/3, and only one histologic type is identified for the right lower lobe tumor, small cell carcinoma, 8041/3.