Objectives

By the end of this training, you should be able to discuss:
- Sections of ICD-O-3 Book
- Meaning of NOS/OBS
- Format of Index
- Rules
- Morphology
- Topography
- Resources
ICD-O-3 Manual

- Separated into 2 sections
  - Numerical and Alphabetical
  - Introduction & Instructions: 1-42
  - Topography (Site): 45-65
  - Behavior & Grade: 66-67
  - Morphology (Type): 69-104
  - Alphabetical Index: 105-218
Important Terms

• NOS:
  • Not otherwise specified
  • Not elsewhere classified
  • Indicates a general term

• OBS:
  • Obsolete Term
  • More specific Terms & Codes preferred
Topography

- In cancer registry, topography is the anatomical description of any part of the body. Specifically, it refers to the primary site of the cancer.

- Topographic anatomy is the branch of anatomy dealing with regions of the body especially with reference to diagnosis and treatment of disease or injury.
Structure of ICD-O-3 Topography Codes

• Topography codes always begin with ‘C’.
• The first two numerals indicate the primary site.
• The last number indicates the sub site.

Example: C 50.2
Breast, upper inner quadrant
(Site) (Subsite)
Order of ICD-O-3
Topography Codes

Topography refers to site of origin (the primary site). It tells us where the neoplasm started.

- C00 – C14 -- Lip, Oral Cavity & Pharynx
- C15 – C26 -- Digestive Organs
- C30 – C39 -- Respiratory System & Intrathoracic Organs
- C40 – C41 -- Bones, Joints & Articular Cartilage
- C42 -- Hematopoietic & Reticuloendothelial Systems
- C44 -- Skin
- C47 -- Peripheral Nerves & Autonomic Nervous System
- C48 -- Retroperitoneum & Peritoneum
ICD-O-3 Topography Codes in Web Plus
Morphology

- Morphology code records the type of cell that has become neoplastic and how it behaves.
Morphology, or histology, is the type of cancer.
- Morphology codes always begin with ‘M’.
- The first four digits indicate the cell type.
- The fifth digit indicates the behavior code.
- The sixth digit is the grade of the tumor.

Web Plus collects these three characteristics in separate fields without the ‘M’ or dash.

Example: well-differentiated adenocarcinoma

M-8140 / 3 1

Tumor / cell type [adeno-] Behavior [carcinoma] Differentiation [well-differentiated]
Morphology/Histology in Web Plus

[Screen shot of Web Plus interface with histology codes and search function]

2/8/2019 Texas Cancer Registry | Coding with ICD-O-3
Words to Watch Out For

- Cystic
- Multilocular - bubbly configuration
- Pleomorphic - abnormal size and shape of cells
- Encapsulated - confined within a capsule
- Metaplastic/metaplasia - changing from one cell type to another
- Exophytic - projecting into lumen
- Polypoid – polyp-shaped (but does not mean arising in a polyp)
Malignancies in Benign Lesions

You’ll also want to watch out for a [malignancy] in a [benign lesion].

Examples:
• DCIS involving a pre-existing papilloma (8500/2)
• Adenocarcinoma in a polyp (8140/3)
Review: Topography

Structure of Topography Code

C___ ___ ___

site subsite

Example: C72.3 optic nerve

C72 stands for spinal cord, cranial nerves, and other parts of the CNS

C72._ indicates the specific subsite of the above
Review: Morphology

Structure of Morphology Code

M_______/______
Histology behavior grade

Example: hepatocellular carcinoma, NOS
Poorly diff.

M-8170/3 3

8170 is the histology code (in this case, hepatocellular carcinoma)
3 is the behavior code (in this case, malignant)
3 is the grade code (in this case, poorly differentiated)

The M and the dash (-) are not coded in the Web Plus data fields.
Coding Guidelines

Summary of the rules for using ICD-O 3:
• Rules range from A thru K
• Rules A-E relate to Topography
• Rules F-K are for Morphology
Rule A: Topographic Regional & Ill-Defined Sites

If the diagnosis does not specify the tissue of origin, code the appropriate tissues suggested in the alphabetic index for each ill-defined site in preference to the "NOS" category.

Example: The diagnosis was metastatic squamous cell carcinoma diagnosed from a cervical lymph node biopsy. The primary site is defined as head and neck but no specific site is identified.

Resolution: Code to C76.0: Ill-defined sites of head, face or neck
Rule B: Prefixes

If a topographic site is modified by a prefix such as peri-, para- or the like, and is not specifically listed in ICD-O-3, code to the appropriate ill-defined subcategory C76 (ill-defined site), unless the type of tumor indicates origin from a particular tissue.

Common prefixes include

- Peri = around
- Para = alongside
- Pre = before
- Supra = above
- Infra = below

Example: Report uses the term perirenal.
Resolution: This means around the kidney, so use code C480.
Rule C: Overlapping Sites

Use subcategory ".8" when a tumor overlaps the boundaries of two or more categories or subcategories and its point of origin cannot be determined.

The site must be contiguous, and the histology must be the same.

Example: The record states a 5 cm tumor involves the descending and sigmoid colon indicating adenocarcinoma. Where did this tumor start?
Rules D and E: Lymphomas and Leukemias

• The coding guidelines for these diseases are very detailed and covered in a separate module.
• Make sure to refer to the Hematopoietic and Lymphoid Neoplasm Coding Manual for leukemias:
  http://seer.cancer.gov/seertools/hemelymph
Rule F: Behavior Code

Use the appropriate 5th digit behavior code even if the exact term is not listed in ICD-O.

0 = Benign
1 = Uncertain whether benign or malignant (borderline)
2 = Carcinoma in situ
3 = Malignant
Behavior Code in Web Plus

ICD-O 3 Morph After 2001
ICD-O 3 Behavior After 2001

Primary Site *
Grade of Tumor *
Grade Path Value
Grade Path System
Laterality *
Final Diagnosis (Morph, Behavior, Grade) *
Final Diagnosis (Primary Site, Laterality) *
Lymph-vascular Invasion *
**Rule G: Assign Highest Grade**

Assign the highest grade or differentiation code described in the diagnostic statement.

<table>
<thead>
<tr>
<th>Code</th>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grade I</td>
<td>Well differentiated; differentiated, NOS</td>
</tr>
<tr>
<td>2</td>
<td>Grade II</td>
<td>Moderately differentiated, moderately well differentiated, low grade NOS</td>
</tr>
<tr>
<td>3</td>
<td>Grade III</td>
<td>Poorly differentiated, dedifferentiated, medium grade NOS</td>
</tr>
<tr>
<td>4</td>
<td>Grade IV</td>
<td>Undifferentiated; anaplastic, high grade NOS</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Grade/differentiation not determined, not stated</td>
</tr>
</tbody>
</table>

For Use in All Histologies
Grade Flowchart
(diagnosis on 1/1/14 or later)

Does the specific histology imply a grade?
See histologies listed under #3 of General Rules for solid tumors.

Yes

No

Code the grade implied in the histology
If grade is unknown code to 9 unknown

Code Grade System? Breast, Prostate, Heart/Mediastinum, Peritoneum, Retropertitoneum, Soft Tissue or Kidney?

Yes

No

Code Grade Differentiation 5-8 or 9 using path and home manual

Is the grade a two, three or four grade system?

Yes

No

Is the grade a two, three or four grade system?

Yes

No

Use the description on the SEER website: http://seer.cancer.gov/techs/grade Use number 8 for grade terminology.

2 Grade System:
Code 2 for low grade, code 4 for high grade

3 Grade System:
Code 2 for low grade, Code 3 for Intermediate grade, Code 4 for high grade

4 Grade System:
Code 1 for well Diff, Code 2 for Mod Diff, Code 3 for Poorly Diff, Code 4 for undiff

General Rules for solid tumors: 1. Please see the website for all detailed rules.
http://seer.cancer.gov/techs/grade

1. Code Grade based on tissue prior to neoadjuvant therapy.
2. Code grade from primary tumor only.
   a. Code grade to 9 if primary site is unknown (C309).
3. Code grade for specific histologic terms that imply a grade.
4. Code grade from invasive tumor if both in situ and invasive components are present.
5. Code the highest grade listed within the applicable system following priority order in the detailed rules.
Grade Coding in Web Plus

<table>
<thead>
<tr>
<th>Grade Coding Options</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICDO 3 Morph After 2001</td>
<td>8140</td>
</tr>
<tr>
<td>ICDO 3 Behavior After 2001</td>
<td>3</td>
</tr>
<tr>
<td>Primary Site *</td>
<td>C183</td>
</tr>
<tr>
<td>Grade of Tumor *</td>
<td>1</td>
</tr>
<tr>
<td>Grade Path Value</td>
<td></td>
</tr>
<tr>
<td>Grade Path System</td>
<td></td>
</tr>
<tr>
<td>Laterality *</td>
<td></td>
</tr>
<tr>
<td>Final Diagnosis (Morph, Behavior, Grade) *</td>
<td></td>
</tr>
<tr>
<td>Final Diagnosis (Primary Site, Laterality) *</td>
<td></td>
</tr>
<tr>
<td>Lymph-vascular Invasion</td>
<td></td>
</tr>
<tr>
<td>Diagnostic Confirmation</td>
<td></td>
</tr>
<tr>
<td>STAGE/PROGNOSTIC FACTORS</td>
<td></td>
</tr>
<tr>
<td>Tumor Size</td>
<td></td>
</tr>
<tr>
<td>SEER Sum Stage 1977</td>
<td></td>
</tr>
<tr>
<td>SEER Sum Stage 2000</td>
<td></td>
</tr>
<tr>
<td>CS Tumor Size</td>
<td></td>
</tr>
<tr>
<td>CS Extension</td>
<td></td>
</tr>
<tr>
<td>CS Tumor Size/Ext Eval</td>
<td></td>
</tr>
</tbody>
</table>

Grade:
1. Grade I; well differentiated
2. Grade II; moderately differentiated
3. Grade III; poorly differentiated
4. Grade IV; undifferentiated; anaplastic
5. T-cell (for lymphomas and leukemias)
6. B-cell (for lymphomas and leukemias)
7. Null cell, Non T-non B (for leukemias only)
8. NK (natural killer) cell (for lymphomas and leukemias)
9. Grade or cell type not determined, not stated, or not applicable

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Rule H: Site-Associated Morphology Terms

Use the topography code provided when a topographic site is not stated in the diagnosis. This topography code should be disregarded if the tumor is known to arise at another site.

<table>
<thead>
<tr>
<th>Morphology</th>
<th>Term</th>
<th>ICD-O Topography (usual primary site)</th>
<th>Other primary sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-9510/3</td>
<td>Retinoblastoma</td>
<td>C89.2 Retina</td>
<td>---</td>
</tr>
<tr>
<td>M-8170/3</td>
<td>Hepatocellular carcinoma</td>
<td>C22.0 Liver</td>
<td>---</td>
</tr>
<tr>
<td>M-8090/3</td>
<td>Basal cell carcinoma</td>
<td>C44._ Skin</td>
<td>C51._ Vulva</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C60._Penis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C63.2 Scrotum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C61.9 Prostate</td>
</tr>
<tr>
<td>M-9530/0</td>
<td>Meningioma</td>
<td>C70._ Meninges</td>
<td>---</td>
</tr>
<tr>
<td>M-938—M-948</td>
<td>Gliomas</td>
<td>C71._ Brain</td>
<td>C72.0 Spinal cord</td>
</tr>
</tbody>
</table>
Rule J: Compound Morphology Diagnosis

Change the order of root words in a compound term if the term is not listed in ICD-O.

Example: Myxo/fibro/sarcoma is not listed in ICD-O coding manual, but Fibro/myxo/scarcoma is listed as = M8811/3
Rule K: Coding Multiple Morphology Terms

When no single code includes all diagnostic terms, use the numerically higher code number if the diagnosis of a single tumor includes two modifying adjectives with different code numbers.

However, Rule K is superseded by Multiple primary Rules!
ICD-0-3 Update Guidelines

Please visit NAACCR’s website for the 2018 Guidelines for ICD-0-3 Histology Code and Behavior Update Implementation.

https://www.naaccr.org/2018-implementation/#Histology
You should now be able to discuss:

• Sections of ICD-O-3 Book
• Meaning of NOS/OBS
• Format of Index
• Rules
• Morphology
• Topography
• Resources
• Practice Exercises
Thank you