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Reader's Digest Version - - Grade for 2018+ Cases

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Now that we have all started to code the new 2018 Grade fields, we have had a chance to perform quality control on incoming abstracts from the hospital registrars and the CSS staff. We have identified some inconsistencies in applying the new rules when coding these fields. Given that this is new material for all of us, it's important to provide a few reminders regarding the rules, required reference materials and examples to clarify issues so that we can all code these new fields with greater consistency.

First, to correctly code Grade for different primary sites we need to reference the following two manuals:

- Grade Coding Instructions and Tables
- AJCC Cancer Staging Manual, Eighth Edition (referred to as the AJCC 8th Edition)

Second, one of the most important concepts we need to embrace for cases diagnosed 2018 and later is **coding Grade follows AJCC staging timeframe rules**. There are definitions and rules for clinical, pathological and post-therapy timeframes we need to keep in mind while coding. The following is a summary of the high points by timeframe.

Clinical Timeframe = Work-up prior to the surgical resection.

- Clinical Grade MUST be taken from a histologic assessment of the primary tumor.
- Use any of the following primary tumor specimens:
  - ✓ Diagnostic biopsies
  - ✓ FNAs
  - ✓ Non-definitive excisional biopsies

NOTE: The only exception is selected tumors of the brain and CNS listed in Table 72.2 of the AJCC 8th Edition. If a clinical diagnosis of any of these selected tumors is made during the clinical timeframe, the WHO Grade provided in the table may be coded in the Clinical Grade field.

Pathological Timeframe = All Clinical Timeframe findings PLUS the surgical resection findings.

- In order to have a Pathological Grade, the patient **MUST** meet the pathological staging criteria per the AJCC in order to code a Pathological Grade.
- Pathological staging criterion generally refers to a complete resection of the primary tumor. The following represent exception to this definition:
  - ✓ TURBT is a clinical staging procedure for bladder
  - ✓ TURP is a clinical procedure for prostate

NOTE: Use the AJCC Manual to determine what the pathological staging criterion for a given site is.

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Post-Therapy Timeframe = Surgical resection findings AFTER neoadjuvant treatment ONLY.

- Clinical Timeframe findings may **NOT** be included in the Post-Therapy Grade.
- In order to have a Post-Therapy Grade, the patient **MUST** meet ***both*** of the following**:**
  - ✓ Have undergone neoadjuvant treatment that meets the AJCC criteria.
  - ✓ Meet the pathological staging criteria per the AJCC.

NOTE: A short course of hormone therapy prior to surgery for a breast or prostate primary does not meet the AJCC requirement for neoadjuvant treatment.

Next, I thought I'd cover a few tricky situations in the form of a mini Q&A session to highlight problematic issues and how to resolve them.

Question: How to determine whether a **local tumor excision** (e.g., polypectomy or endoscopic mucosal resection (EMR)) is used to code the clinical or pathological grade?
Answer: Determine the managing physician's intent.

Question: How do we determine **managing physician intent**?
Answer: If an additional resection follows the local tumor excision, then the local tumor excision is a clinical assessment.

If an additional resection is deemed unnecessary, then this is a pathological assessment.

- Generally, this will happen when the margins are negative. However, negative margins alone do NOT mean a pathological assessment per the AJCC.

Question: Can we **record Clinical Grade** be in more than one field?
Answer: The Clinical Grade may be recorded in:

- Clinical Grade field

  OR

- Pathological Grade field when the patient meets the pathological staging requirements AND:
  - The Clinical Grade is higher.
  - No grade is given on the resection pathology report.
  - There is no residual tumor on the resection (e.g., the biopsy incidentally removed the entire tumor).

  NOTE: There are times the Clinical Grade can be recorded in the Pathological Grade field because the AJCC defines the pathological timeframe as including all the clinical work-up plus the surgical findings.
- Clinical Grade is **NEVER** recorded in the Post-Therapy Grade field.
  - Per the AJCC, the post-therapy timeframe only includes the findings following neoadjuvant treatment.
  - Clinical grade is always ignored when coding this field to a non-BLANK value.

Question: How do you know which sites/groups allow additional **terminology to be considered** when coding grade?
Answer: Review the instructions (Notes) for the applicable Grade Table first!

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- The Notes will indicate:
  - Site/groups with a preferred grading system
  - Name of the grading system(s)
  - Priority of codes

Knowing when and how to code the grade fields when terminology and/or numeric values are mentioned by the pathologist to describe how abnormal the cancer cells appear cannot be done accurately without understanding how to use the Grade Table.

If the applicable Grade Table includes **only** numeric grades (1-3, or 1-4, or 1-5, and 9), this means:

- ✓ There is a preferred grading system and you **must** use the preferred grades.
- ✓ If the use of additional terminology is not described in the Notes, it **cannot** be used.

The colon and rectal sites Grade Table (Table 1) is an example that includes only numeric codes. If a pathologist does not use the **preferred grading system**'s terminology listed under the Grade Description to describe the tumor, then it must be coded to 9, Grade cannot be assessed (GX); Unknown.

Table 1 - Preferred Grading System Example

Code	Grade Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated
4	G4: Undifferentiated
9	Grade cannot be assessed (GX); Unknown

For example, how would you code the grade for the following ascending colon biopsies?

Ascending colon biopsy describes as a well differentiated adenocarcinoma?

- ✓ **Answer:** 1 (G1 – Well differentiated)

Ascending colon biopsy described as high grade adenocarcinoma?

- ✓ **Answer:** 9 (GX – Cannot be assessed) because "high grade" is not listed in the preferred grading system's description, the term is also not included in any of the coding notes and the table does not include the Generic Grade Codes A-D.

Even though we can't use terminology such as "high grade" to code grade for colon and rectal cases, we can use it for other sites in the following situations:

- ✓ The applicable Grade Table includes codes A-D.

  OR
- ✓ The Notes instruct us how to code additional terminology.
- ✓ Some grade tables include additional codes or additional instructions for "low grade" or "high grade." (**BEWARE** this varies by table so be sure to read the instructions!)

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The **Generic Grade Codes** are the lowest priority grades when a table includes both numeric grades (the preferred grading system) and codes A-D (Table 2). For cases diagnosed 2018 and later, we will be able to identify how often the expected AJCC preferred grading system is used for a primary site.

Table 2 - Combined Preferred and Generic Grade Table Example

Code	Grade Description	
1	GI: Mitotic count (per 10 HPF) less than 2 AND	Preferred Grades
	Ki-67 index (%) less than 3	
2	G2: Mitotic count (per 10 HPF) equal 2-20 OR	
	Ki-67 index (%) equal 3-20	
3	G3: Mitotic count (per 10 HPF) greater than 20 OR	
	Ki-67 index (%) greater than 20	
A	Well differentiated	Generic Grades
B	Moderately differentiated	
C	Poorly differentiated	
D	Undifferentiated	
9	Grade cannot be assessed (GX); Unknown	

Other Grade Tables only include codes A-D because there is **NO** preferred grading system for that site/group. The terminology listed for the Generic Grade codes (e.g., well differentiated, moderately differentiated, etc.) is **NOT** an exhaustive list (Table 3).

Table 3 – Generic Grade Table Example

Code	Grade Description
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated
9	Grade cannot be assessed (GX); Unknown

There are many generic grade terminologies that are encompassed by codes A-D. When codes A-D are applicable to the site/group, but the pathologist has used terminology that is not listed in the table, one must use the Generic Grade Categories Table (Table 4) to determine which code (A-D) applies to that terminology.

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Table 4 - Generic Grade Categories Table

Description	Grade	Assigned Grade Code
Differentiated, NOS	I	A
Well differentiated	I	A
Only stated as 'Grade I'	I	A
Fairly well differentiated	II	B
Intermediate differentiation	II	B
Low grade	I-II	B
Mid differentiated	II	B
Moderately differentiated	II	B
Moderately well differentiated	II	B
Partially differentiated	II	B
Partially well differentiated	I-II	B
Relatively or generally well differentiated	II	B
Only stated as 'Grade II'	II	B
Medium grade, intermediate grade	II-III	C
Moderately poorly differentiated	III	C
Moderately undifferentiated	III	C
Poorly differentiated	III	C
Relatively poorly differentiated	III	C
Relatively undifferentiated	III	C
Slightly differentiated	III	C
Dedifferentiated	III	C
Only stated as 'Grade III'	III	C
High grade	III-IV	D
Undifferentiated, anaplastic, not differentiated	IV	D
Only stated as 'Grade IV'	IV	D
Non-high grade		9

NOTE: When codes A-D are listed, it is a cue that one may have to use multiple grade coding tables to arrive at the correct answer.

Learning the rules associated with coding the new grade fields might seem more than a bit overwhelming if we think about it in the context of all the new things we are expected to learn for cases diagnosed 2018 and later. It's often said that the best way to learn new material is to break it down into simple, understandable chunks for ourselves because it will force us to study a subject more critically and thoroughly, which helps promote understanding. We can consider this article one of our "chunks" toward learning what we need to know about applying Grade rules correctly!

To quickly test the accuracy of your understanding of the concepts presented in this article, check out the very brief PowerPoint presentation link also listed under the **Current Issue** section of the **Registrar PIP Newsletters** section of the **Cancer Surveillance System Homepage**.