REGISTRAR PIP

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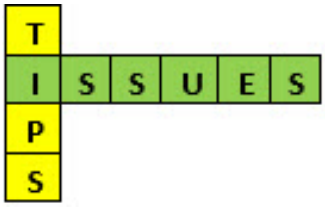
Coding Tips for Extent of Disease (EOD) and Summary Stage Third Installment: Urinary System

This is the third installment in our quality control series involving the issues observed in staging cases. This month we examined urinary system (i.e., kidney parenchyma, renal pelvis and bladder) cases. As we've indicated previously, we recognize coding stage can be an involved process not only because of the need to correctly interpret the detailed anatomic descriptions of tumor involvement indicated by clinicians and pathologists, but the need to correctly interpret the EOD and Summary Staging coding guidelines for each primary site. Particularly challenging is remembering the situations in which clinical and pathological findings can and cannot be used to code these fields and how the use of neoadjuvant treatment can impact the coding.

One thing on which we can probably all agree, evaluating performance is a necessary first step toward improving performance. Sharing what we learned is actually the most critical aspect of the quality improvement process required to enhance the usefulness of the data. Once we are made aware of the coding error trends observed, we can work to reduce or eliminate our mistakes. Doing so, improves the quality and utility of the data we all collect. Useful data allows researchers, clinicians and administrators to rely on it to gain a better insight regarding the disease process and the impact of treatment on improving cancer patient survival.

This month, we identified areas of training needed for the urinary system's major sites. We hope this format of sharing quality control findings proves helpful in improving our personal understanding of these disease processes and in promoting a discussion among our coworkers about the need to continuously evaluate the quality of the data we collect.



Kidney Parenchyma

✦ **EOD Primary Tumor**

- The most common error is **overusing code 500 [Tumor extends into major veins (excluding ipsilateral adrenal gland)]** when a lower code is more appropriate to assign. Keep in mind that code 500 is an NOS code used to derive a T3, NOS category only when no better information is available. However, if the tumor extension described involves the invasion of the tissues listed under code 100 (e.g., renal capsule, renal pelvis, etc.), the blood vessels under code 200 (e.g., renal vein, renal artery, etc.) or the inferior vena cava (IVC) below the diaphragm (code 300) or above the diaphragm or the wall of the IVC (code 400), then those more specific codes should be assigned so a lower and more specific T category can be assigned.

- While clinical findings, such as those documented in radiology and operative reports, can be considered along with findings reported in pathology reports when coding the EOD Primary Tumor field, **pathologic**

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findings have priority over the clinical findings if there is a discrepancy between the two. For example, if a CT scan indicates the kidney tumor extends beyond the Gerota's fascia but the pathology report indicates the Gerota's fascia was uninvolved, the pathologic findings have priority over the clinical findings.

- Keep in mind that very large tumors in the kidney can **displace adjacent structures** such as the bowel or inferior vena cava from their normal positions, but that does not imply involvement of those structures unless stated to be involved by the clinician or pathologist. Displacement is not a term of involvement per the EOD General Instructions. Even if a patient has known metastasis to a discontiguous site such as the brain or lung (which is coded in the EOD Mets field) it does not mean the displaced adjacent structure should be coded as involved in the EOD Primary Tumor field.

✦ EOD Regional Nodes

- The **000 vs. 999** coding quandary rears its ugly head again! This time, it involves assessing the status of regional lymph nodes for kidney primaries. In which situations can we boldly indicate we know enough to code 000 [No regional lymph node involvement] as opposed to indicating the status of the regional lymph nodes should be coded to unknown by assigning code 999 [Unknown; regional lymph node(s) not stated; Regional lymph node(s) cannot be assessed; Not documented in patient record]? This truly is one of those "tale as old as time" things.

- The regional lymph nodes for kidney cannot be assessed by physical exam because they are too deep to be palpated. Therefore, we need to look for an assessment by scan, by the surgeon in the operative report or the pathologist following a biopsy or resection of the nodes. Many times, such reports or assessment of the lymph nodes are not indicated. What do we do then?

- EOD Regional Nodes should be coded as 000 (negative) instead of 999 (unknown) when three conditions are met:
  - √ There's no mention of regional lymph node involvement in the physical exam, diagnostic testing, or surgical exploration.
  - √ The patient has localized disease.
  - √ The patient receives the usual treatment appropriate to the primary site/stage of disease.

- The **300 vs. 800** coding issue is also important. Code the specified positive regional lymph node chain, if known, rather than using the regional lymph nodes, NOS code. **Remember to check the gross description of the pathology report** to see whether the removed lymph node chains are named in that section if the final diagnosis and/or the Cancer Data Summary sections only indicate "positive regional lymph nodes." If we know the name of the regional lymph nodes removed, we can assign code 300 [Aortic, NOS (Lateral (lumbar), Para-aortic, Periaortic, Preaortic, Retroaortic), Caval, NOS (Interaortocaval, Paracaval, Pericaval, Precaval, Retrocaval), Renal hilar, Retroperitoneal, NOS]. However, if the regional lymph nodes removed are not specified, we need to assign code 800 [Regional lymph node(s), NOS; Lymph node(s), NOS] to the case.

✦ Summary Stage 2018

- The most common Summary Stage coding error is not assigning the correct regional stage code. We need to embrace **2 + 3 = 4 when it comes to regional Summary Stage coding**! Granted, the math is wonky but we need to remember for regionally staged cases, we have three options:

  - √ Code 2 = Regional by direct extension only
  - √ Code 3 = Regional lymph node(s) involved only
  - √ Code 4 = Regional by BOTH direct extension AND regional lymph node(s) involved

  Most of our errors indicated we overlooked the type of regional involvement that should be assigned to the case. Sometimes we captured the regional direct extension and omitted the regional node

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involvement and other times we captured the regional node involvement but missed the regional direct extension documented on the abstract.

Renal Pelvis

✦ EOD Primary Tumor

- The **kidney parenchyma** is not part of the kidney pelvis nor is it considered subepithelial tissue to the renal pelvis. Although the kidney parenchyma surrounds the renal pelvis, it is considered a separate and adjacent organ/site to the renal pelvis. When we don't understand this aspect of the anatomy, we incorrectly downstage these cases. For renal pelvis primaries demonstrating involvement of the kidney parenchyma, assign code 500 [Invasion beyond muscularis into: Peripelvic fat (renal pelvis), Periureteric fat (ureter), Retroperitoneal soft/connective tissue; For renal pelvis only: Ipsilateral kidney parenchyma and kidney, NOS] and not 100 [Confined to the renal pelvis, NOS] or 200 [Subepithelial connective tissue].

- We know we are supposed to consider clinical and pathology findings when assigning the EOD Primary Tumor code. However, sometimes we have incorrectly ignored **pathology findings for patients who received neoadjuvant treatment** when we shouldn't have. The tricky cases are those for which there was only imaging of the primary site prior to the initiation of systemic therapy. With imaging it can be difficult to accurately assess the depth of tumor invasion for a tumor that appears limited to the renal pelvis. For this reason, we need to decide whether the subsequent surgical pathology findings can be used when coding this field. We must determine if there was disease progression to then determine whether or not the information from the surgical resection pathology report can be used.

  Should the post-op surgical removal of the renal pelvis pathology report describe greater tumor extension than was described clinically before neoadjuvant therapy **and** there was no disease progression, pathologic findings are to be used to code the EOD Primary Tumor field when they are greater than the pre-treatment clinical findings.

- There are two options when it comes to coding noninvasive renal pelvis tumors. The choice boils down to whether the tumor is described as **papillary or flat (sessile)**, which is based on how the tumor grows. Papillary urothelial carcinomas look like small fingers that tend to grow toward the center of the renal pelvis. Flat urothelial carcinomas are tumors that grow along the lining of the renal pelvis. For noninvasive papillary tumors, assign code 000 [Noninvasive papillary carcinoma] and for the nonpapillary tumors, assign code 050 [In situ, intraepithelial, noninvasive (flat, sessile)].

✦ EOD Regional Nodes

- Just as we need to recognize when we can use resection pathology findings following neoadjuvant treatment, we also need to recognize when we should not use those findings. Avoid coding post-neoadjuvant pathologic evidence demonstrating no evidence of regional node involvement when prior to neoadjuvant treatment, the patient had involved regional lymph nodes described. As mentioned above, the EOD combines clinical and pathologic findings and **may** consider pathologic findings after neoadjuvant treatment, provided there has not been disease progression. However, when the **post-neoadjuvant pathologic findings are not as extensive as the pre-treatment clinical findings**, we need to code the clinical findings.

✦ Summary Stage 2018

- As with the kidney parenchyma primary, the most common Summary Stage coding error for renal pelvis is not assigning the correct regional stage code. Regional Summary Stage coding forces us to evaluate whether we have only regional direct extension of the tumor or only regional lymph node involvement or both. The regional Summary Stage code assigned differs based on the findings observed. As indicated above, it all comes down to embracing **2 + 3 = 4 when it comes to regional Summary Stage coding.**

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Urinary Bladder

✦ **EOD Primary Tumor**

- Pathologists can get creative when it comes to describing non-invasion for bladder tumors. For **non-invasive papillary tumors**, see Table 1 for the ***inferred descriptions from the microscopic details*** and the ***definite statements*** of non-invasion we need to be aware of so we don't inadvertently upstage bladder tumors. SEER updates this list under Note 2 in the EOD Primary Tumor field. When we don't know whether the description of the tumor is non-invasive, it is best to check the list to confirm whether it is or not before assigning a code to this field.

Table 1
Bladder Tumors
Terms of Non-Invasion

Definite Statements of non-invasion for papillary transitional cell carcinomas (Ta)	**Inferred Descriptions** of non-invasion for papillary transitional cell carcinomas
Noninfiltrating	No involvement of muscularis propria and no mention of subepithelium/submucosa
Noninvasive	No statement of invasion (microscopic description present)
No evidence of invasion	(Underlying) Tissue insufficient to judge depth of invasion
No extension into lamina propria	No invasion of bladder wall
No stromal invasion	No involvement of muscularis propria
No extension into underlying supporting tissue	Benign deeper tissue
Negative lamina propria and superficial muscle	Frond surfaced by transitional cell
Negative muscle and (subepithelial) connective tissue	Microscopic description problematic (non-invasion versus superficial invasion)
No infiltrative behavior/component	No mural infiltration
	No evidence of invasion (no sampled stroma)
	Confined to mucosa

- The stumbling block for **non-invasive sessile (flat) transitional cell carcinomas** is the term ***confined to mucosa***. It doesn't help the situation any when, historically, these tumors were coded as localized. Today, we have to figure out whether the pathologist is using the term to represent a non-invasive or an invasive tumor. If the tumor is confined to the epithelium, then it is non-invasive code 050 [Nonpapillary: Carcinoma in situ, NOS; Sessile (flat) (solid) carcinoma in situ; Transitional cell carcinoma in situ].

⚠ Heads up! There is currently an error in Note 3 of the EOD Primary Tumor that incorrectly states we are to code this field to 000 for these cases. The code 000 is used for the ***papillary*** non-infiltrating carcinomas and code 050 is for the ***nonpapillary*** non-invasive carcinomas. Seeing this note certainly makes us wonder whether some of the errors were due to registrars following this note!

Table 2 indicates the expressions used to indicate an invasive tumor.

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Table 2 Bladder Tumors Mucosal Involvement - Invasive Terms
If the distinction between involvement of the epithelium and lamina propria cannot be made, then the tumor should be coded as "confined to mucosa, NOS" (100).
Statements meaning confined to mucosa, NOS for flat transitional cell carcinomas include:
* Confined to mucosal surface
* Limited to mucosa, no invasion of submucosa and muscularis
* No infiltration/invasion of fibromuscular and muscular stroma
* Superficial, NOS

- When a diagnostic TURBT results in a diagnosis of an invasive tumor, it does not necessarily assess the tumor's true depth of invasion. So, when the clinical findings observed on scans indicate a more advanced tumor, we need to code the clinical findings in this field rather than the TURBT findings.

  The more advanced (higher stage) clinical findings are also to be coded when neoadjuvant chemo results in a less advanced (lower stage) tumor remaining in the bladder following a cystectomy. As we've stated previously, when there is no disease progression, the post-neoadjuvant pathologic findings may be taken into consideration. However, in the situation where there is an extensive treatment effect due to the neoadjuvant chemo ***and*** the cystectomy pathologic findings are not as extensive as the pre-treatment clinical findings, we need to recognize this does not disprove the initial greater clinical tumor extension. This is another situation in which we code the more extensive clinical extension for the EOD Primary Tumor field.

Conclusion

While this article identifies several areas in which we can improve the coding of urinary tract primaries, if we all focus on the two following issues, we would greatly improve our staging of urinary system cases.

EOD Fields - We need to remember the EOD fields reflect a combination of clinical and pathologic findings. We need to be particularly careful when considering the information we are allowed to use when neoadjuvant therapy is part of the treatment protocol. First, it is important to evaluate whether there is disease progression identified in the post-neoadjuvant pathology. Second, after confirming there is no disease progression, we need to assign codes that reflect the highest stage observed, regardless of whether the findings are clinical or pathologically based.

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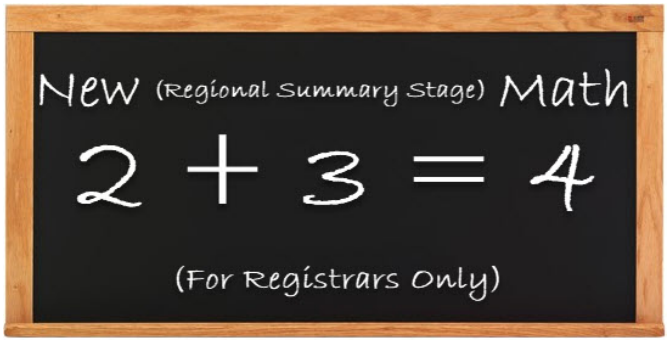
Summary Stage 2018 – As with all sites we've reviewed over the last six months, for the urinary primary sites we also noticed when we make a coding error in assigning one of the EOD field values, there is a direct and negative impact of the accuracy of Summary Stage coding. We opted not to go over the issue again in this edition because we assume if we improve our EOD coding, there will be an improvement in our Summary Stage coding.

The second most common Summary Stage coding issue involved assigning the correct regional stage code. We did not consistently and accurately apply the Regional Summary Stage coding value. We need to remember regional stage is categorized as only regional by direct extension of the tumor (Code 2) or only regional lymph node involvement (Code 3) or both (Code 4). We have been under assigning code 4 when regional lymph nodes are involved because we tend to quickly identify the regional lymph node involvement and forget to check on the status of the tumor's involvement by direct extension.



We want to continue to encourage everyone to use these summaries to identify potential quality control efforts to assess the accuracy and consistency of the coding performed in each registry and as a training document for those of us who need a gentle reminder regarding how to handle selected coding issues by primary site.

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