

**NATIONAL INSTITUTES OF HEALTH
NATIONAL CANCER INSTITUTE
SURVEILLANCE, EPIDEMIOLOGY AND END RESULTS (SEER) PROGRAM
BREEZE SESSION**

**Multiple Primary and Histology Coding Rules—Renal Pelvis, Ureter,
Bladder and Other Urinary Sites Practicum**

February 20, 2007

INTRODUCTION

I appreciate everybody joining us today. We've got a strong attendance again and I know that we'll have some good questions as we go along. Some of the issues we have today will include some technical things and what I would like to have everybody hopefully have in front of you for the presentation today is a copy of the Terms and Definitions for Bladder, Ureter, Renal Pelvis and Other Urinary Sites; Equivalent Terms and Definitions; and the Tables and Illustrations. I would also like you to have a copy of the Multiple Primary Rules for these urinary sites as well as the Histology Coding Rules. And, I'm not going to be displaying them on the screen unless we want to really go into them for particular cases partly because every time I open this file it takes me to the beginning of a very large file and I have to keep scrolling through and it's going to be very distracting. So please if you would have a copy of these in front of you and if we need to we'll refer to them and maybe I'll just bring them up during the recording or during the session but I'm going to try to avoid doing that so it's not too distracting.

We're going to start with our Bladder cases and answers. I'm going to be displaying the answers but I'll be discussing through the cases as we go along. And then we will discuss the Renal Pelvis and Ureter cases and the answers.

What I would like to begin our discussion with today is by making a note about the couple questions that we had raised during the rules presentation. There was a very good question about, "How do you code the primary site when there are multiple urinary topography sites involved such as the ureter and the bladder or something like that?" And we've had some early discussions with the Multiple Primary/Histology Coding Rules Team and what we would like to do is first of all recognize that this issue does require some additional guidelines for coding of primary site. And we will be providing those guidelines and instructions partly as part of the Multiple Primary and Histology Coding Rules Frequently Asked Questions [document]. So we will address these in the Frequently Asked Questions and we will provide some supplemental information and some additional coding guidelines and instructions for coding primary site following the Frequently Asked Questions (FAQ) and as a result of our discussions today. What we have identified is, and we will discuss these as we go along, we have several issues that have been presented here and it was not originally the intent of the development of the Multiple Primary and Histology Coding Rules to rewrite the primary site rules. However, given some input by the Team, there are some modifications and some clarifications to the primary site coding rules for

topography that are likely to be made. And we'll get into these a little bit more probably as we talk about the Renal Pelvis and Ureter cases. But some of the issues that are involved include:

- Do you code primary site to:
 - the largest tumor deposit?
 - the invasive or non-invasive site?
- What if all of the tumors are the same level of invasiveness?
- Does invasiveness indicate the primary?
- Are there physician statements to be involved?

Also bearing in mind that the real question here is: When you look at the natural flow of urine through the urinary sites and you have to track and account possible retrograde spread we do have some difficult questions with regard to coding the primary site when we've determined that multiple tumors are to be abstracted as a single primary. That will become a little bit more clear as we go through some of the cases.

The second question that came up during the didactic rules presentation was a very good question about an actually rare case situation where we have transitional cell carcinoma with neuroendocrine differentiation. Now, my preliminary response to that was to go through the rules and see where the rules took us as far as a reply, as far as an answer. And, it was difficult to manage through the rules with this particular situation and we recognize that primary histology for this particular case is transitional cell carcinoma and in keeping with the Terms that are listed in Table 1 for the urothelial tumors, the urothelial or transitional cell tumors with different types of differentiation including squamous or glandular or trophoblastic all were instructed to code, assigned the code 8120 for transitional cell carcinoma. We are going to continue following that logic for coding transitional cell carcinoma with neuroendocrine differentiation and we will be providing in the FAQs an explanation for these rare tumors as well an update to Table 1 when we provide the first generally minor update to the 2007 rules. And we don't have a date yet for when that will occur but in the meantime we will have explained the situation in the Frequently Asked Questions. Those were both excellent questions that were brought to our attention during the didactic presentation and we really appreciate those comments.

Let's start out talking about our Bladder cases. I'm going to give a brief summary of the case report and then we're going to talk about whether or not this is a multiple primary or a single primary and then what the histology for each of the primary tumors should be coded as.

BLADDER CASE #1

Bladder case number one is from a transurethral resection of the bladder. There is a single bladder tumor identified on the pathology report. And the final diagnosis reads: urothelial carcinoma. If you'll remember from your Equivalent

Terms and Definitions *urothelial carcinoma* and *transitional cell carcinoma* are interchangeable with *urothelial* being the more common and more recently used terminology. We have urothelial (transitional cell) carcinoma that's high grade, non-papillary with extensive squamous differentiation and a focal mucinous component. As we talk through this particular case, once we've identified that it's a single tumor we can ask the question: Is this a multiple primary? The answer is, "No. It's a single primary because there is a single tumor." And rule M2 instructs you that a single tumor is always a single primary. Of course I'm not going to go through this explanation for a single tumor on every case.

When we go to coding histology, remember that we go to the Single Tumor Module for histology rules and we follow through the rules and rule H1 does not apply; rule H2 does not apply; rule H3 we have transitional cell with squamous differentiation. Even though this one says "extensive squamous differentiation," rule H3 still does apply. So we have instruction here to code 8120 with a behavior of /3, transitional carcinoma with a Note in the rationale that says, "A tumor must be pure squamous cell carcinoma to be coded 8070. When combined with urothelial (transitional cell) carcinoma, code 8120." There is a note that this reference to the "focal mucinous component"—"focal" or "component" is not a factor used in determining the histology. [Please don't put your phones on "hold," people. I appreciate that. Thank you]. [Are there] Any questions about Bladder Case #1?

Question 1 [Bladder Case 1]

Steve, could you please cite the rule that says that we ignore the focal component?

Response to Question 1 (Bladder Case 1)

If you'll go to your General Instructions there are instructions in the General Instructions in the use or lack of use for the term "focal." And that applies to all rule sets including this site group of rules. But that's a great question. Thank you for pointing that out.

Any other questions about case number one?

Okay.

BLADDER CASE #2

[I just heard a train. And people if you would please put your phones on "mute" if you have a "mute" feature and if not if you could cover your mouthpiece we'd sure appreciate it for the background noise for this recording. Thank you].

Bladder case number two: We have a Surgical Pathology Report from a transurethral resection of a bladder tumor. Only one tumor is noted here and the final diagnosis reads: "Invasive high-grade urothelial carcinoma with signet ring cell features." And the way we walk through these particular rules for, of course

we have a single tumor again so we know that it's a single primary. And when we walk through the histology rules, first of all we look at rule H1—it doesn't apply; rule H2 does not apply; H3 we try and find "signet ring cell features" in here and they're not there so we go to the next rule; rule H4 applies to papillary tumors of the bladder or of these sites and those do not apply because we're looking for "signet ring cell features." H5 does not apply because we don't have one single histologic type. H6 does not apply because we don't have invasive and in situ. So, finally we arrive at rule H7 which says: Code the most specific histologic term and it gives some examples here. We have an invasive tumor that has urothelial carcinoma tumor with signet ring cell features. And applying Note 2 under rule H7 we come to the conclusion that we're going to code this as signet ring cell carcinoma and the rationale is, "Code the specific histology." The specific histology may be identified by the term "features."

Questions on case two? Okay. We'll move on to case three.

Question 2 (Bladder Case 2)

Steve? For case number two, so are you guys considering the urothelial to be a NOS term?

Response to Question 2 (Bladder Case 2)

In this case, yes.

Follow-up to Question 2 (Bladder Case 2)

Should it be added to that list?

Response to Follow-up to Question 2 (Bladder Case 2)

That's a good suggestion. I will bring it to the MP/H Rules Team.

Carol Johnson: Actually, urothelial and renal cell are listed as synonyms and renal cell is specified as an NOS term.

Question 3 (Bladder Case 2)

Yes, but the terms that are listed in rule H7 are very non-specific NOS terms. They are just carcinoma, sarcoma, neoplasm NOS.

Steve Peace: And I would like to point out that those are only examples. They are not all inclusive. So perhaps it would be helpful to have an additional example and we will take that under advisement to the Team and we will bring that to the Team as perhaps adding an additional example. It becomes burdensome when people see too many examples because they think that's where the rules are and, again, these are only examples and they are not all-inclusive. Okay?

BLADDER CASE #3

Let's go on to bladder case number three where we have another transurethral

resection of the bladder with a final diagnosis that says: "high grade poorly differentiated carcinoma with squamous features, consistent with a primary bladder carcinoma." It is a single tumor again. So here our important component to this particular case is coding the histology.

In the "Comment" you will see a note that says: "No transitional cell differentiation is identified." So here we have a squamous cell carcinoma with a single tumor. So we have a single primary. And the histology is coded 8070/3, squamous cell carcinoma. "Carcinoma with squamous features" is coded when there is no urothelial (transitional) cell carcinoma documented.

Any questions on case three? Okay.

BLADDER CASE #4

Case number four: We have multiple bladder tumors that are identified. We have two pathology reports. The first pathology report is from a transurethral resection of multiple bladder tumors that showed "invasive transitional cell carcinoma with papillary and micropapillary features and squamous cell carcinoma, nuclear grade IV accompanied by extensive necrosis. The squamous cell tumor is extensively invasive and although there is extensive necrosis, invasion into [the] muscularis propria is identified." The pathology report from the radical cystectomy, the final diagnosis also shows multifocal papillary transitional cell carcinoma, grade II-III of IV, and also shows moderately differentiated keratinizing squamous cell carcinoma with a rather large tumor—4 cm x 3 cm x 1.8 cm. So in this situation in applying the multiple primary rules we have a more complex case. Here we have a situation where we have multiple papillary transitional cell carcinomas and squamous cell carcinoma. In following through in the Multiple Tumors Module of this set of rules, rule M3 does not apply; rule M4 does not apply because we don't have renal pelvis or ureter for this particular case. We don't have invasive following in situ so rule M5 does not apply. Rule M6 we have bladder tumors, papillary transitional cell and papillary....so we have multiple bladder tumors of this variety that are going to be coded as a single primary. So there's one of our primaries. And then in following down, we still haven't accounted for squamous cell carcinoma. So we continue down until we get to rule M9. And M9 will instruct us that our squamous cell carcinoma is a separate primary. In this case we are abstracting two cases. One is the papillary transitional cell carcinomas; and they are multiple but it's a single primary and they all have the same histology—8130—with a behavior of /3. And the second primary tumor is keratinizing squamous cell carcinoma—8071—and that's for the larger tumor that's four centimeters in size.

Any questions on case number four for bladder?

Question 4 (Bladder Case 4)

I have a question. In the biopsy, it has “micropapillary features” which is not part of the combination code in Table 1. Do we ignore that because it’s a biopsy and not a cystectomy specimen?

Response to Question 4 (Bladder Case 4)

Yes, because you have more representative tissue on the cystectomy specimen and that guideline/instruction applies to all of the site-specific rules and that's in the General Instructions. Yes. Thank you for pointing that out.

Okay. Let's move on to Bladder Case #5.

BLADDER CASE #5

Bladder case number five: We have again a single bladder tumor from a TUR that shows urothelial carcinoma with mixed papillary/non-papillary type, grade III/IV so we have a single tumor again. [Sorry. I lost my place for a second.] We have a single tumor so our multiple primary, “Is this a multiple primary” answer is, “No.” We have a single primary. And for histology, we have mixed papillary and non-papillary. When we follow through this--our set of rules for a Single Tumor for histology-- rule H1 does not apply; H2 does not apply; rule H3 does not apply because we don't just have the transitional cell carcinoma but we also have papillary and in rule H4 we have papillary carcinoma and transitional cell carcinoma so here's the rule that applies for this particular case—rule H5. Okay? Case number six...

BLADDER CASE #6

For case number six we have a radical cystectomy specimen. Looking in the final diagnosis Part B from the bladder resection the final diagnosis is poorly differentiated transitional cell carcinoma of the bladder involving the right and left ureter bladder junction, right and left bladder wall and there is carcinoma in situ associated with the invasive carcinoma. “The tumor invades into the perivesicular soft tissue microscopically” and we have a pathologic stage of pT3b. So we do have a single tumor here. It's rather large and extensive and it is transitional cell carcinoma. Asking the question, “Is this a multiple primary?” and following the rules we have again a single tumor so it's a single primary. Our histology is transitional cell carcinoma. We have a single histology. If you've also followed through with invasive and in situ components, if you follow further down, rule H6 applies so you code the invasive component which is transitional cell carcinoma.

Questions on case number six? Okay. I know there's going to be questions when we get to the Renal Pelvis and Ureter cases. That's kind of why we're moving through the Bladder cases as quickly as we are.

BLADDER CASE #7

Bladder case number seven: Again [it's] a single bladder tumor that shows invasive papillary urothelial tumor, high grade in the final diagnosis. And in the

“Comment” we have “scattered squamous and adenomatous differentiation” which is less than 5% and we’ve already talked quite a bit about using Table 1 to identify these particular differentiation terminologies. So we’ve identified in this case, we do have a single tumor so it is a single primary. And for coding histology we have papillary urothelial carcinoma. Do not code squamous or adenomatous glandular differentiation from the “Comment.”

Questions about case seven?

BLADDER CASE #8

Case number eight: We have two separate path reports. The first path report is from a transurethral resection of the bladder showing invasive high-grade urothelial carcinoma with squamous features. I think we’ve already talked about that situation multiple times but we have to take the full case into account before we make these determinations. The second pathology report is two weeks later and the final diagnosis shows “invasive squamous cell carcinoma” that’s extending superficially into the perivesical tissue. We also have a Note in the final diagnosis that says “site of previous resection is negative for residual urothelial carcinoma” with a Comment: “Invasive carcinoma is predominantly squamous carcinoma with a very minute poorly differentiated carcinoma component at one edge.”

Is this a multiple primary? Following through the Multiple Primary Rules we look at Multiple Tumors and rules M3 and M4 do not apply because we’re not talking about the Renal Pelvis or the Ureters. Rule M5 does not apply because we don’t have invasive and non-invasive or in situ. Rule M6: “Bladder tumors with any combination of....” We don’t have multiple papillary tumors; we have a single papillary tumor with squamous features so we continue moving down. [Oh, hang on. Oh, I’m sorry]. Rule M8 is the rule where it’s referenced to Table 1 which tells us that we have one primary—urothelial-- and then following on to rule M9 which is our [rule that says] “histologies that are different at the first, second or third number are multiple primaries.” So that tells us that the squamous cell carcinoma is a separate primary which is kind of also intuitive but you have to follow the rules and not just your intuition as you’re reading through the pathology report. So we do have multiple primaries. The urothelial carcinoma is one primary and again when you’re coding the histology you do not code “with squamous features” with the urothelial carcinoma. Squamous cell carcinoma is a separate primary with the ICD-O-3 histology code different at the second and third numbers. And, again, here’s how we’re coding the histology for these two separate primaries. [per Answers and Rationale—Bladder: primary 1 urothelial carcinoma 8120/3; primary two squamous cell carcinoma 8070/3].

Let’s move on to bladder case nine.

BLADDER CASE #9

Bladder case nine: Again, we have a single bladder tumor showing: "urothelial carcinoma, high grade, with extensive squamous component—predominantly squamous cell carcinoma." And even though it's saying "predominantly squamous cell carcinoma" we are looking again at a urothelial carcinoma and so we have a single tumor and we are instructed to code urothelial 8120 when a squamous component is present.

These were pretty simple bladder cases for the most part. We know that more frequently you're going to see multiple tumors of the bladder and we are continually developing and identifying additional cases for case studies and for use in workshops with multiple bladder tumors and multiple urinary system tumors so we expect that you will also be submitting additional questions and comments on bladder cases to your central cancer registry or to SEER and we appreciate those additional cases. But the rules for bladder, if you just have tumors in the bladder, are really pretty simple to follow through.

Question 5 (Bladder Cases 8 and 9)

Steve? I don't see the difference between 8 and 9? To me that looks like one tumor that has both urothelial and squamous features on the biopsy and then when they resected it all the urothelial had come out with the biopsy and now they just had squamous left.

Response to Question 5 (Bladder Cases 8 and 9)

For bladder case 8 it's different because of the specimen that you're using so you're using the diagnosis from the most representative specimen, which is from the cystectomy. So really you don't even take into account the histology from the first pathology report. And in the second...wait a minute. I apologize. In Bladder Case 8 you had two tumors. In Bladder Case 9 you had one tumor; that's the difference. In Bladder Case 8, the squamous cell carcinoma has no urothelial carcinoma associated with it. And in Bladder Case 9 it's a urothelial carcinoma with a squamous component. Okay?

Let's go ahead and move on to the Renal Pelvis cases. If folks could pull out those cases. You're probably more organized than I am because I'm trying to talk and organize at the same time.

RENAL PELVIS/URETER CASES

I'd like to start the discussion of these ten cases with again the orientation that it was not the intent of the Multiple Primary and Histology Coding Rules Development Team and the Histology Committee to rewrite topography rules. However, given input from the rules in applying them we've identified some modifications and really more some clarifications that are going to be required for coding primary site that will be further developed and shared with our registry community both through the Frequently Asked Questions and with some additional clarifications for coding primary site.

Let's look at Renal Pelvis and Ureter.

RENAL PELVIS/URETER CASE #1

Case number one: For case number one we have a biopsy of the left ureter. We have a radical cystohysterectomy specimen and we have a right ureter that apparently was resected. In the left ureter biopsy shows "invasive high grade urothelial carcinoma." The uterus and bladder...the bladder [no excuse me]..the left ureter shows "invasive high grade urothelial carcinoma" and there's also "extensive urothelial carcinoma in situ involving the bladder." When we follow through our Multiple Primary Rules, we are looking at the Multiple Tumors Module. We have tumor in the left ureter and we have invasive tumor in the left ureter and in situ urothelial carcinoma in the bladder. So rules M3 and M4 do not apply. Rule M5 does not apply because we're not looking at a duration of time greater than 60 days. Rule M6 applies only to bladder tumors and we have in this situation ureter and bladder. M7 does not apply; we don't have a greater than three years duration between tumors, but M8 does apply. We do have urothelial tumors in two of the following sites. And, again, looking at the definition for urothelial tumors we use Table 1 if we have any questions about that. So we know that we have a single primary using rule M8.

In our rationale we've identified the primary site as left ureter, the site of the invasive tumor and the rationale for that which, again, will be followed up with some Frequently Asked Questions and also some clarifications in the coding of primary site or topography. It's not clear if the tumor implant or intraepithelial spread along the urothelial surface is how the carcinoma in situ involving the bladder came to be; so if the registrar views the case as "Unknown if Single or Multiple Tumors" you are instructed to default to a single primary. Or, if the registrar views the case as "Multiple Tumors" you still arrive at the single primary: urothelial carcinoma in more than one urinary site using Table 1. So we've built in a couple of catches to make sure that depending on how a registrar may interpret a case you will arrive at the same cancer.

Coding histology: We know from this case that we do have urothelial carcinoma. There're also some multiple tumors if you interpret the case that way. We have multiple tumors and we are going to code the invasive, which is urothelial carcinoma or transitional cell carcinoma, 8120 with a behavior of 3 for the invasive histology.

Any questions about case number one?

RENAL PELVIS/URETER CASE #2

Case number two: There's a clinical history of a left renal pelvis mass with gross hematuria. We have a specimen that includes the left kidney with ureter and bladder cuff. And in the final diagnosis we see papillary transitional cell carcinoma in the renal pelvis and in the major calyces. The calyces are actually,

just as a side note, they are little funnel-shaped hallows that are found in the renal pelvis so they're part of the collecting duct system; they're part of the renal pelvis. So when you see that term that **is** part of the renal pelvis; it all comes together right there. The proximal ureter shows focal transitional cell carcinoma in situ. So when we are looking at our multiple primary rules, again, it's not clear if these are tumor implants or intraepithelial spread along the urothelial surface with this particular resected specimen. And following the same logic as the rationale for case number one we determine that this is a single primary. We are going to code it to left renal pelvis, the site of the invasive tumor. And when we code the histology we are coding again, the invasive histology. Following through the multiple tumors rules for coding histology, rule H9 does not apply; H10 does not apply; H11 does not apply; [rules H12, 13...] What we're eventually going to do is get to H14: "Code the histology of the most invasive tumor." And it specifically gives us a situation here: "If one tumor is *in situ* and one is invasive, code the histology from the invasive tumor." So that's how we use rule H14; if we follow the rules we eventually end up there.

Any questions about case two?

Okay.

RENAL PELVIS/URETER CASE #3

We have three path reports for this particular case. The first path report—all of them are in July so they are all in the same month—[just a little helpful information as you're thinking through]. The first pathology report is from a biopsy of the right renal pelvis with a diagnosis of papillary urothelial carcinoma, non-invasive, low grade. The second pathology report includes multiple biopsies: one from the base of the right ureter that's positive for papillary urothelial carcinoma, low grade, non-invasive; one from the intramural biopsy of the right ureter with the same diagnosis and another biopsy in the right ureter external to the bladder wall with the same diagnosis. So we have multiple non-invasive papillary urothelial carcinomas along this ureter. Remember the ureter is about several centimeters long and we could have multiple papillary tumors along the way. Continuing down as the urine flows down, we also have papillary urothelial carcinoma, non-invasive and low grade in the bladder and in the bladder neck. And, finally, when we look at our third pathology report where they did a right kidney and ureter resection and a TUR of the bladder we also see papillary urothelial carcinoma, low-grade, non-invasive in the renal pelvis. So we have multiple sites of involvement including the right renal pelvis, the right ureter, the bladder and the bladder neck. So we have multifocal, non-invasive papillary urothelial carcinoma, low-grade. So they are all non-invasive, they are all papillary TCC. Following through the Multiple Primary Rules for Multiple Tumors, rule M3 and M4 don't apply because we don't just have tumors in the renal pelvis or the ureters. We don't have, for rule M5, *in situ* and invasive tumors that are greater than 60 days apart. Rule M6 bladder tumors with combinations of papillary transitional cell are a single primary; some people may opt at this

location but they shouldn't because these are just for bladder tumors so we have to pay close attention that some of these rules are very specific to the site involved. So you have to move on past M6, it's not just a rule for those histologies; it's a rule for those histologies in bladder only. Rule M7 doesn't apply and finally we arrive at rule M8 which is the rule that applies for this particular case. We have multiple urothelial tumors in the renal pelvis, the ureter and the bladder so we know that we are going to abstract this as a single primary. The interesting part of this one comes about when we try and code the primary site. Since all of these tumors carry the same level of non-invasive, the same non-invasive stage or extension/extent and it's a typical presentation for intraepithelial spread of cancer along the urothelium, we are going to code this, again, using rule M8 to a single primary and our site in this case is going to be coded to urinary system NOS, or C68.9. So this is where we need again some additional guidelines in the coding of primary site. And we will be providing those in the Frequently Asked Questions and in some additional guidelines along the way.

Are there any questions about case three? Okay. We'll move on to case four.

RENAL PELVIS/URETER CASE #4

In case four we have a specimen from kidney and ureter where we have masses noted in multiple locations including the inferior calyx of the renal pelvis, the distal ureter. The microscopic shows additional tumors in the caliceal system of the right kidney. So in the final diagnosis we have multifocal papillary transitional cell carcinoma. This extends from low to high grade with four separate tumors of varying sizes. The largest lesion is located in the mid-right ureter and the other three lesions are located in the inferior calyx of the right kidney. So we have a big tumor that's in the ureter but smaller tumors that are higher up in the renal pelvis. So this is an interesting situation. It's not a trick case but it's a teaching point to again orient you to the anatomy and understand where the calices are and also to orient you to how to apply these rules and the fact that we may have what some people may consider intraepithelial spread; some people may consider implantation; some people may consider retrograde tumor spread where the urine backs up and the tumor ends up getting pushed up into the renal pelvis. So there are many different ways that this tumor spread can be explained but for our purposes today we are applying the Multiple Primary and Histology Coding Rules and again following through the rules for Multiple Tumors we arrive at rule M8 where we have multiple tumors in two or more of the sites because we have involvement of the renal pelvis and the ureter on the right. So we have a single primary.

And our histology is again coding the invasive histology using the "Multiple Tumors Abstracted as a Single Primary Module" of the Histology Coding Rules, rule H14: "Code the histology of the most invasive tumor. "[8130/3 papillary urothelial (transitional cell) carcinoma]

Are these following along pretty good for folks? Okay. I will use silence as, "Okay."

RENAL PELVIS/URETER CASE #5

Case number five: We have a clinical history with an ultrasound showing a mass effect in the left kidney with a clinical kind of diagnosis: "Patient most likely has a transitional cell carcinoma present in his left kidney versus a solid lesion." So they weren't quite sure what kind of tumor this was in the kidney so they resected the kidney. They did a left nephrectomy and they also did multiple biopsies of the bladder. What we have here is: on the bladder tumor-- papillary transitional cell carcinoma, grade III of IV with muscle invasion; in the kidney on the nephrectomy we show "extensive papillary transitional cell carcinoma grade III of IV involving the ureter, renal pelvis and caliceal system." And, again, we've already seen this example on multiple occasions and previous cases, we follow through again to rule M8: urothelial tumors in two or more of the following sites are a single primary. So we have involvement of the renal pelvis, the ureter and the bladder and we will abstract this case as a single primary. And all these histologies are the same so our histology coding is papillary urothelial transitional cell carcinoma.

Any questions about case five?

Question 6 [Renal Pelvis/Ureter Case 5]

I have a question. In the rationale it's presumed that the primary site would be coded to urinary system NOS. But since there is in the final diagnosis the big specimen, everything in the kidney is "no invasion," wouldn't you code the primary site to the bladder where there's the invasive cancer?

Response to Question 6 [Renal Pelvis/Ureter Case 5]

I think the rationale, and again, this will be...we are not here to provide you instructions on coding primary site but we understand and recognize that that is an issue. The rule that you are trying to cite that you code the primary site to the most invasive, does not exist. Okay? What we are going to be doing is providing you some guidelines for the urinary system, Multiple Tumors Abstracted as a Single Primary—How to Code the Primary Site. And in this case because we do have a typical presentation of intraepithelial spread which we will provide a definition for and an explanation for when we provide these guidelines, this is a situation where the urinary system is diffusely involved and it's not a situation of just looking at the most invasive. So there will be some guidelines provided on how to code the primary site for situations like this. But it is a good question; I have to keep trying to reinforce that. Okay? Unfortunately it's not cut and dried: "Code the invasive." I know we like our rules simple but in this particular case because we have a situation that involves diffuse intraepithelial spread of cancer along the urothelium, we have a special situation for these urinary system tumors and we will provide some specific guidelines for how to code primary site when multiple urinary sites are involved for the purposes of our abstracting. Okay?

Question 7 [Renal Pelvis/Ureter]

Steve? On these cases we were coding papillary transitional cell but you were just using rule H14. Wouldn't H12 kick in first?

Response to Question 7 [Renal Pelvis/Ureter]

I think so. I am sorry. I didn't follow all the way through for each case and intentionally we have not provided rule numbers with the rationale because we want people to follow through the rules but let me see. You are correct. Rule H12 does apply before you would even get to rule H14. So you are absolutely correct that rule H12 is the one that you would use before you would even get to H14 so you would never get to arrive at rule H14 to use it.

Okay. We're moving along pretty good, everybody. I'm really pleased.

RENAL PELVIS/URETER CASE #6

Case number six: We have a specimen that includes a left kidney and ureter from a nephroureterectomy. The final diagnosis reads: "papillary urothelial carcinoma involving the renal pelvis and ureter," noted to be multifocal. There is no evidence of invasion in the renal pelvis and it appears there is invasion in the ureter. So that is something that we will take into account as we're looking through this. So we have involvement of the renal pelvis and the ureter on the left. Again, we've really reinforced the application of rule M8 in our examples because we're trying to drive home a point for these particular tumors so you understand how to use that rule. So we have repeated it numerous times in our examples here. So we have a single primary: left ureter—site of the invasive tumor; again, this is not a situation where we have multiple intraepithelial spread with sites all along the urothelium; we just have a couple of sites that are identified. And that's going to be the distinguishing factor when you determine whether or not it's urinary system NOS or you code a particular primary site. So here we're going to have a primary site coded to the left ureter. And our histology is papillary urothelial or transitional cell carcinoma and again it's the invasive histology.

Any questions about case six?

RENAL PELVIS/URETER CASE #7

Case number seven: We have two pathology reports—no we only have one pathology report. I apologize. They are calling this in the clinical history: "recurrent transitional cell carcinoma with the first diagnosis in January 2007." And this pathology report that we're reading here is in the future, January of 2011. I know that that's a long way away but we had to try and provide you with an example of how to eventually get to and use our timing rule. So we have multiple tumors: the first one in 2007 and the second one in 2011. In 2007 it was called transitional cell carcinoma and in 2011 we have a high-grade papillary transitional cell carcinoma in the renal pelvis. It's invasive with a segment of the

ureter that also shows low-grade papillary transitional cell carcinoma but there's no clear evidence of invasion. Looking at our Multiple Tumors rules and trying to identify cases that are using the timing rules are a little bit difficult but as we mature in using these rules we will have better examples of these. Following through the rules, M3 and M4 do not apply; invasive and in situ greater than 60 days apart does not really apply because the first diagnosis we don't really know if it was invasive or in situ; M6 does not apply because we have more than the bladder involved; M7 does apply because the tumors are diagnosed more than 3 years apart. So this is the rule that we use in determining here that we have multiple primaries. Now we have one other situation here. How do we code the renal pelvis and ureter as a single or multiple primaries? Here we have multiple tumors, one involving the renal pelvis and the ureter and using again the rule M8 that we've had multiple examples of that primary is a single primary. So we have our first primary in 2007, which is the bladder. And our second primary in 2011 where we have two sites of tumor involvement so we are going to take the invasive tumor and code the primary site to the renal pelvis.

Per history, the first tumor was transitional cell carcinoma and again, where is that rule? When you look at this single tumor of the bladder you can apply rule H1: "Code the histology documented by the physician when there is no pathology/cytology specimen or the pathology/cytology report is not available." And the documentation, again, under the Note says that we can use that from the clinical history. And the second primary is a primary of the renal pelvis. It's where we're coding the primary site and the invasive histology is papillary urothelial or transitional cell carcinoma.

So we will have some guidelines with the distinction that provides registrars with a clear understanding and application of how to code the primary site for these particular situations in the urinary system when we have two tumors or multiple intraepithelial tumors, when we have invasive and in situ abstracted as a single primary. And those guidelines are forthcoming.

RENAL PELVIS/URETER CASE #8

Case number eight: We have a pathology report where there are three specimens. One is a biopsy of the colonic mesentery. The second is a biopsy of the retroperitoneal soft tissue and we have an internal ring soft tissue biopsy which is actually negative. From the colon and the retroperitoneum we see high-grade carcinoma consistent with urothelial carcinoma. How we are going to use the multiple primary rules: We don't know if it's a single or multiple tumors because we don't know where, we haven't identified a primary site in the urinary system but we know it's a urothelial carcinoma so we will default to a single primary and code the primary site to urinary system NOS.

The histologic type: Using the rule H2 because when we opt for a single primary we use the Single Tumor Rules Module for coding histology. We follow to rule H2 that says that we can code the histology from a metastatic site when we don't

have any pathology specimen from the primary site. And we code the behavior to /3. So our preferred answer here is 8120 with a behavior of /3: transitional cell carcinoma and again here is the rationale that I just read to you.

Any questions about case eight or how you use the rules in these types of situations? We use this rule again to highlight that these situations are clearly defined in the rules and you are supposed to use these rules especially when training new registrars at this point because many of this who have been doing this would understand that these are metastatic urinary system tumors but this tells us what to do with them when we use the rules.

Questions about case eight?

RENAL PELVIS/URETER CASE #9

Case number nine: We have a biopsy of the left ureter and a biopsy of the right ureter. One shows invasive high-grade urothelial carcinoma and the other shows non-invasive low grade. We have multiple tumors. Going to the Multiple Tumors Module and using rule M3 does not apply but rule M4 does: "When no other urinary sites are involved tumors in both the right ureter and in the left ureter are multiple primaries." And that's where you stop. We have had a couple of people ask why rule M8 doesn't apply? It's because you never get to rule M8 because rule M4 already answers your question.

Then we go to the Histology Coding Rules and we have one abstract with a single tumor in the left ureter and another abstract with a single tumor in the right ureter. So you use the Single Tumor Module to code each case because there is a single tumor for each abstract. The first primary is the left ureter and our histology is invasive urothelial or transitional cell carcinoma, 8120 with a behavior of /3. Our second primary is the right ureter and that's where we code the non-invasive urothelial transitional cell carcinoma [8120/2].

Any questions about case nine? Okay.

RENAL PELVIS/URETER CASE # 10

Case number ten takes us to the end. There is a radical cystectomy specimen which shows poorly differentiated transitional cell carcinoma of the bladder. Again, I'd like to point out that you probably are pretty tired of seeing transitional cell carcinomas right now but remember greater than 90% of all the tumors in this particular set of rules are going to be transitional cell carcinomas. So that's why you see so many. We've tried to reflect as much real world as we can here. [In this case] The bladder, involving the right and left ureter bladder junction, the right and left bladder wall, the prostatic urethra-- all show "poorly differentiated transitional cell carcinoma." This is a stage pT3b and there is carcinoma in situ associated with this invasive carcinoma and also involving the right and left ureters and the bladder dome. And

even the prostate shows some urothelial carcinoma in situ and invasive [carcinoma] involving the prostatic urethra. So here we have on the lower side of the urinary system involvement by urothelial carcinoma where we have multiple invasive and non-invasive tumors in more than one urinary site. We are again using rule M8 which we want to point out does include the urethra and the prostatic urethra which we have in our situation here. This is a typical presentation again of intraepithelial spread along the urothelium. So in this situation we are again going to be coding urinary system NOS, C68.9 as the primary site. And, again, those guidelines will be forthcoming so people will understand clearly what is being required for coding primary site for these situations. And the histology is a single histology in all these sites which is urothelial transitional cell carcinoma.

Any questions on case number ten?

Well, I am really pleased I've been able to spend some time with you today. I know that this urinary system, the lower urinary system and all the urothelial tumors present some new concepts for registrars, some new challenges. We feel that the new Multiple Primary Rules and the Histology Coding Rules are more closely aligned now with how urologists envision and treat and view these particular tumors along the urothelium and we're happy to be able to provide you with some case examples. And we'll continue to grow our case library and provide you with some additional cases in the future in our workshops as we continue to mature and use our rules.

Thank you very much for joining us today. And we'll see you next time. I believe our next presentation is with Carol Johnson and we're going to be talking about the melanoma rules. Thank you very much everybody.