NCI-SEER BREEZE SESSION –Lung
November 9, 2006

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Slide 1
We will be working with lung multiple primary and histology coding rules today. You were asked to print out the sections from the Multiple Primary and Histology Coding Rules manual for lung.

Slide 2
You should have the Lung Equivalent Terms and Definitions, the multiple primary rules and histology rules in your choice of format. We will start first with the Equivalent Terms and Definitions.

Slide 3
If you have your Equivalent Terms and Definitions ready: The first thing that I want you to notice is at the top of the page we talk about a default rule you are going to find in the multiple primary rules. One of the biggest problems with lung cancer was that the patient frequently presented with multiple tumors, the physician only biopsied one tumor and the abstractor would have a big problem trying to decide if this should be a single primary or multiple primary. One of the questions, of course, is we don't know what the histology would be for all of those tumors that were not biopsied so we give a default rule in this set of multiple primary rules that specifically takes care of all of these cases. This turned out not to be an extremely difficult rule. When we spoke to the physician advisors and to the AJCC Lung Team they were all very definite in saying when we only biopsy one tumor this should be treated as a single primary. I want to call your attention to this now and as we come to the rules we will again talk about these cases.

Second, if you look under Equivalent Terms and Definitions you will see that neuroendocrine carcinoma and carcinoid are equivalent terms. In other words, we're telling you that they mean the same thing. A carcinoid tumor is a neuroendocrine cancer; that is an important thing to know when working with lung primary cases.

Slide 4
Now if you will switch down in your paperwork you will see Chart 1. Chart 1 is titled: "Lung Histology Groups and Specific Types." This is the first of the histology charts. The charts were created to do several things for you. First of all, they will identify the specific and non-specific terms that are related to each other. Secondly, they will show you a lineage. In other words, if you look at a very specific term and you see a biopsy that was done way back, you will know whether or not this is exactly the same histology or the same lineage. How this works is that for these cancers for these charts, the less specific terms are on the

top. As you descend down the chart you will see that you will get a more specific term, yet a more specific term and as you get to the very bottom you see the most specific term. So, the charts work from top down, from the most general term available to the most specific term as you get to the terminal or bottom part of the chart. All of the histology charts will work in exactly the same way.

When you start reading the rules you are going to see references to a branch on the histology chart. When we talk about a branch, for example, the non-small cell branch would be all of the tumors that are located from non-small cell all the way down to the bottom of this branch. We also speak of branches in a more specific term. In other words, we may talk to you about the squamous cell carcinoma and all of the squamous cell more specific histologies on the same branch of the tree. When we talk about that type of branch we are down in a terminal end of a specific branch on the tree. So, as you can see, when we talk about squamous cell carcinoma, then we talk about a more specific squamous cell carcinoma, you are looking at the squamous cell carcinoma branch and then, for example, a very specific type of squamous cell; a papillary or a squamous cell or a large cell carcinoma. That is how the tree works. When we start getting into the rules we will go over and over the different branches.

Let me explain to you, when we talk about lineage, I just told you that this type of tree would also show you a lineage. Let's start with non-small cell carcinoma. The term non-small cell carcinoma is really used in two different ways: First, as a group term that describes all cancers that are a generic or not a small cell carcinoma. Then, the second way it is used is as a default diagnosis because the pathologist says there is not enough tissue to classify this tumor; however, I can tell you definitely that it is not a small cell. So, that is what the actual term, non-small cell, means.

Next, let's go to the first term listed under non-small cell--*sarcomatoid*. That is a group of tumors that are certainly non-small cell as you see when you follow the lineage. But they contain spindle cells or giant cells. Take a look at your chart. You can certainly see the spindle cells and giant cells underneath this category. So we are saying again that this is a non-specific diagnosis. When the pathologists look at the slide they can see it is non-small cell but they can see a bit more information: they can see that there are spindle or small cells, but they can't classify it as one or the other. So, again, this is a non-specific. When they start to be able to see more they say depending on the histologic nature, that tumor can end up being pleomorphic, spindle cell, giant cell, carcinosarcoma or pulmonary blastoma. So, as you see, the term "sarcomatoid" is a very generic term.

Now, let's go down one more to the term *pleomorphic*. I am bringing you down the page. Pleomorphic carcinoma is a poorly differentiated non-small cell. It can be squamous cell, adenocarcinoma or large cell. They know that it contains spindle cells or giant cells. Do you see the lineage? It can be a carcinoma

containing only the spindle cells or giant cells. They fall under a general category of sarcomatoid. Now, again, you see path reports that may talk about sarcomatoid, pleomorphic--here are all in the same lineage. The only difference is that in that particular biopsy the pathologist was not able to get more definite information. So, as we descend down this tree-- we started with the sarcomatoid, we went down to the pleomorphic which we know is poorly differentiated--when a better resection or a better biopsy or a better slide is obtained they can now see the glandular features and say it is adenocarcinoma. They can see the squamous cell and can say that this is squamous cell carcinoma. They can tell more information about the tumor.

When you look down the lineage you know that all of these are related. If you have a biopsy or several biopsies or you have a lot of words on a pathology report you will immediately know that sarcomatoid is a very generic term and if also have the term, for example, squamous cell, you would immediately choose the squamous cell.

One of the other things I do want you to notice about this chart is the fact that pleomorphic cancer (8022), does not exactly match large cell carcinoma (8012) even though they are in a direct line with each other. It is one of the problems we had with the ICD-O-3 and you will see more of those problems as we continue, where the first three digits do not always match even when the histology is related. So, we have created these types of charts for you.

Now in the rules you will refer back to these charts. You look at the charts to see whether or not you have a more specific and a more generic term. So you are able to classify and code these tumors a little easier.

Slide 5

Now, Chart 2 is like an “out-take” of Chart 1. It is much easier to read, to say the least. When we look at the thirty years of SEER data, over 95% of the histologies in the SEER database are included in this simplistic chart. Now, we are not sure if that is because recently we have been able to get better information so probably we are overwhelmed with the old information that was less specific; we are not sure if that is because people were not sure how to code these cases. But we wanted to give you one look at the lung histologies that was very clear, very succinct and you could follow the non-small cell lineage directly from the non-small cell, NOS (8046) through the sarcomatoid which you notice is 8033, to the more specific pleomorphic which is 8022 and then to the more specific large cell (8012) down to the adenocarcinoma (8140) and the squamous cell (8070). So, Chart 2 is, first of all, a very clear roadmap showing you how lung cancers are divided into the non-small cell and the small cell branches. You can see here, neuroendocrine cancer is actually a less specific term than is small cell carcinoma. If you had your choice you would certainly code small cell over neuroendocrine. Carcinoid is the second descendent from the neuroendocrine branch.

Slide 6
There are instructions for Table 1. We are going to talk next about Table 1. Notice that the instructions tell you: “Use this table to select combination/mixed histology codes.” It is very important that you do use this table. We found that a lot of the combination codes or mixed codes were used not in a standard manner. So the combination tables were created. They were created, actually, working with the ICD-O-3 Editors so we could tell you these are the exact terms that would equal the combination codes. The “**Note**” is a very important part of the instructions: “This table is not a complete listing of histologies that may occur in the lung.” However, again, when we went through the SEER database, for example, this table had over 99 percent of all the cases in the database. So you probably won’t ever, as a registrar, come across a case of combination histologies that is not included in this table.

Slide 7
I want to call your attention to column 1 on this table. Column 1 says, “Required Terms.” That means that we must have this term in the diagnosis in order to use this code. So, for example, in the first one: “Giant cell carcinoma AND spindle cell carcinoma,” you have to have both of those terms or you do not use code 8030. That one seems relatively simple.

I want you to notice the next one. It says, “Small cell carcinoma AND one of the histologies in column 2.” So you look at column 2 and it is saying you must have small cell carcinoma and then one of the following three: adenocarcinoma, large cell carcinoma or squamous cell carcinoma. You would have small cell and adeno or small cell and squamous, for example, and that would give you code 8045. There is a warning here that says we are not talking about any subtypes of small cell. It has to say, “Small cell.”

Let’s get down to the one that has caused registrars the most questions and the most problems:that is infamous code 8255. To be able to code 8255 you must have a combination of at least two of the histologies in column 2. So if you look in column 2 you are going to see a number of histologies: acinar, bronchioloalveolar carcinoma, bronchioloalveolar carcinoma non mucinous, etc. You must have at least two of those; if they are not in this column you do not use code 8255. You notice there is an asterisk over beside the code and we are going to get into that on the next slide. There are some exclusions for code 8255. The important thing for you to remember is if that particular histology—papillary adenocarcinoma or solid adenocarcinoma, etc.--- (terms in column 2) is not mentioned you may not use the code. It really was not meant for any form of cancer or any combinations.

Slide 8
Let’s take a look where it says adenocarcinoma AND squamous cell carcinoma. There is a note there that says: “Diagnosis must be adenocarcinoma (NOS), not

a subtype of adenocarcinoma." So, if you had, for example, papillary adenocarcinoma and squamous, you would not use this code.

Now, if you recall I mentioned that there are a couple of asterisks for 8255. Look at the very bottom of the table. It says: "**DO NOT USE** code **8255** for adenocarcinoma combined with mucinous subtypes such as mucinous 'colloid' adenocarcinoma (8480), mucinous cystadenocarcinoma (8470), or signet ring adenocarcinoma (8490)." So, for lung, the code 8255 is never used if you have any one of those histologies. In other words, any mucinous histology cannot be coded using the combination code 8255.

Slide 9
Now, we are going to go into the multiple primary rules. So I will ask you to please take out the multiple primary rules in the format of your choice.

Slide 10
The first module in the multiple primary rules is, "Unknown if Single or Multiple Tumors." This is the module that is used when a hospital reports a resection, for example, and a central registry also has (from another facility) the report of a biopsy. They are saying, "I am not sure if this is the same tumor." The wedge resection and the biopsy may have been two tumors or may have been one.

Slide 11
You go to rule **M1**. This is your default rule. A hospital registry may have seen a patient who had a biopsy in a physician's office and a wedge resection at the hospital and it is unknown whether this is the same tumor. Use rule M1.

Slide 12
There are two notes: "**Note 1:** Use this rule only after all information sources have been exhausted. **Note 2:** [This is what we were talking about earlier] Use this rule when only one tumor is biopsied but the patient has two or more tumors in one lung and may have one or more tumors in the contralateral lung." At this point I want to remind you that when we talk about tumors we are talking about a tumor, a lesion that is not defined as metastatic. It may be unknown if it is metastatic. In other words, the physician may not say, "This lesion is metastatic." The physician may also not say, "This lesion is primary." You don't know. The fact is it has not been defined as metastatic. If you have multiple tumors in one lung and they (the patient) may have a tumor in the other lung—this will be a single primary every time. You will use this rule.

Slide 13
The next module is the single tumor module. It starts with rule M2.

Slide 14
Rule **M2** says: "A **single tumor** is always a single primary." The Note is what you are used to. It says: "The tumor may overlap onto or extend into

adjacent/contiguous site or subsite." So it may extend into the visceral pleura, the parietal pleura; it may even extend into a rib. But if it is a single tumor it is still a single primary.

Slide 15
The next module: "Multiple Tumors."

Slide 16
The first rule says: "Tumors in sites with ICD-O-3 **topography** codes that are **different** at the second (C**x**xx) and/or third character (Cx**x**x) are multiple primaries." [**M3**] That takes care of a patient that has a primary tumor in the lung and another primary tumor in, say, the colon. I want you to notice that this is a change in rules. In the prior rules we had a site table and told you that tumors in the trachea and tumors in the lung were a single primary. Under the new rules they would be coded as a multiple primary. These cases can be put back together for analyses. So it will not change incidence. It was quite difficult for people to keep referring back to the site table. So we decided we would handle these cases as multiple primaries.

Slide 17
Rule **M4**: "At least one tumor that is **non-small cell** carcinoma (8046) **and** another tumor that is **small cell** carcinoma (8041-8045) are multiple primaries." I want you to notice that the non-small code, 8046, and the whole small cell series, 8041-8045, have identical first three digits. Under the previous rules, if the first three digits were the same it was the same histology. This is another case where the three-digit rule just does not work.

Slide 18
This is the next case where we have a problem with the three-digit rule. [**M5**] "A tumor that is **adenocarcinoma** with **mixed subtypes** (8255) **and** another that is **bronchioloalveolar** (8250-8254) are multiple primaries," even though the first three digits match.

Slide 19
M6: "A **single** tumor in **each lung** is multiple primaries." Now, this is a rule that tells you if you have a tumor in the right lung and a tumor in the left lung, this is distinctly different from having multiple tumors in one lung and a single tumor in another lung. Single tumor in each lung is multiple primaries. This is always. And we tell you to always code them this way, even if the doctor says it's bilateral. The word "bilateral" really is not used to determine multiple primaries. They talk about bilateral involvement, i.e. both lungs are involved. These are coded as multiple primaries: one primary in the right lung, another primary in the left lung.

Slide 20
There is a "**Note**" in M6, which says: "When there is a single tumor in each lung abstract as multiple primaries unless stated or proven to be metastatic." The

burden of proof is not on the registrar to search through the chart and to try to prove that this is definitely a tumor that is a primary tumor. We are saying, unless it is proven to be metastatic, you code these as individual primaries. Again, I want to tell you that the AJCC physicians on the Lung Team were very adamant that this is the way these cases should be handled; they should always be coded as multiple primaries unless someone proves that the tumor in one lung is metastatic from the other. Both tumors would **not** have to be biopsied to code it that way; your default is multiple primaries. Unless you prove it is metastatic, you code it as multiple primaries. The burden of proof is the other way: it would have to be biopsied and proven to be metastatic to code it as a single primary. I want to back up and make sure you understand this is **only** in the cases where you have one tumor in one lung and one tumor in the contralateral lung. I want to make one more point to you. What we are telling you is when you have a single tumor in each lung they are multiple primaries. If they resect both of them and they are both adenocarcinoma, they are multiple primaries. If they are different histologies they are multiple primaries unless you prove that one is metastatic.

Slide 21

Now that we have made that statement we can go on to say: "**Multiple** tumors in **both lungs** with ICD-O-3 histology codes that are different at the first (**x**xxx), second (x**x**xx), or third (xx**x**x) number are multiple primaries." [**M7**] In the rare case that you would have a wedge biopsy in one lung and a lobectomy in the other lung and you did have multiple tumors in both lungs or at least two in one lung, and they had different histologies, they would be multiple primaries. I am making this point because we told you multiple tumors that were not proven to be mets would be treated as a single primary and they would unless the histology codes were different. We said in our note, "This means when only one tumor is biopsied." So the only time you would have used that first rule is when only one tumor is biopsied. If you actually biopsied more then one tumor you would have continued on through the multiple primary rules and you would have come to this rule that says: "**Multiple** tumors in **both lungs** with ICD-O-3 histology codes that are different at the first (**x**xxx), second (x**x**xx), or third (xx**x**x) number are multiple primaries."

Slide 22

The next statement is [**M8**]: "Tumors diagnosed **more than three (3) years** apart are multiple primaries." I told you that the AJCC physicians were very active in working with these defaults for multiple primaries because we are no longer using the physician's statement of recurrence. We used the physician's statement and we looked at data and in the SEER database which has 393,911 cases of lung cancer and of those 393,911 only 162 cases had a recurrence between two months and three years with the same histology in the same lung and would have been a new primary using the old rules. Using the new rules we already said if it was a different histology it would be a multiple primary. If it were in the right lung and the first one was in the left lung it would be a different

primary. So the only thing we are left with when we get to this rule would be a cancer that occurred in the same lung and was the same histology. Only .04 of 1% of those 393,911 cases had a recurrence in the same lung with the same histology between two months and three years, so the physicians were very confident with this default for saying, "Tumors diagnosed **more than three (3) years** apart are multiple primaries."

Slide 23
Rule **M9** is a rule that you may never use for lung cancer because you seldom see an in situ lung cancer. However, it is here, again, as a default so if this happens you would handle it in the same way that you do every other type of cancer and every other site. It says, "An **invasive** tumor **following** an **in situ** tumor more than 60 days after diagnosis is a multiple primary."

Slide 24
Note 1 says: "The purpose of this rule is to ensure that the case is counted as an incident (invasive) case when incidence data are analyzed." One of the problems we have with only picking up an in situ case and not picking up an invasive is that the case isn't counted in incidence. Note number two says: "Abstract as multiple primaries even if the medical record/physician states it is recurrence or progression of disease." The reason we are doing this is because we want to make sure that the invasive cancer is recorded as an incident case. We also want to be sure that when we do survival that it starts with the date of the invasive cancer so that the survival is correct. It is very important to make sure that everyone knows that the Commission on Cancer physicians were very supportive of this rule. We did talk to them about this rule as we went through each of the site specific rules. They absolutely agreed with it.

Slide 25
Now **M10** says: "Tumors with **non-small cell** carcinoma, **NOS** (8046) **and** a more **specific** non-small cell carcinoma **type** (Chart 1) are a single primary." It tells you to go to Chart 1.

Slide 26
So when you use **Chart 1** you want to go to the non-small cell grouping because they are saying any tumor with non-small cell carcinoma and then a more specific non-small cell type. So if you turn to Chart 1 and you go to the non-small cell branch what this rule says is if that if you have one tumor that is non-small cell, NOS and then you have a tumor that is any one of the following histologies this would be the same primary. So again you go to Chart 1 and you can actually use Chart 1, look up the histology from your pathology report and determine whether this is a single primary or a multiple primary.

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M11 is a rule that all of you are very, very used to. It says, "Tumors with ICD-O-3 **histology** codes that are **different** at the first (**x**xxx), second (x**x**xx), or third

(xx**x**x) number are multiple primaries." Remember these rules are hierarchical. You start with the first rule and if you find a rule that matches the case you are abstracting, you stop. That means if you had a non-small cell and any of the small cell or if you had a tumor that was coded to the combination code 8255 and another that was bronchioloalveolar, you would have stopped long ago because you would have stopped with that rule. If you get to rule M11 all of the cases that do not fit the three-digit histology codes rule have already been eliminated so this is sort of taking the last cases out. It is a default rule. It says if you are still going through these rules, if you have not found one that fits the case you are abstracting now you can use the three-digit rule and it will work and you won't make any mistakes. So, "Tumors with ICD-O-3 **histology** codes that are **different** at the first (**x**xxx), second (x**x**xx), or third (xx**x**x) number are multiple primaries."

Slide 28

If you have adenocarcinoma in one tumor and squamous cell carcinoma in another tumor they are multiple primaries. [**M11, Note**]. We put this note in because we found during our beta testing that we had some people who really thought that combination codes such as adeno squamous-- that you could code an adenocarcinoma tumor--but a tumor that was purely squamous cell, i.e. separate tumors, code them as a single primary using the combination code. This note is a warning saying, "No. If you have the adenocarcinoma in one tumor and squamous cell in another they **are** multiple primaries."

Slide 29

At the very end you have a default rule. It says we have gone through one by one and if you have not found a rule that fits your case, everything that is left would be a single primary. So, "Tumors that **do not meet any** of the above **criteria** are a single primary." [**M12**]

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Note 1 says—we gave you some reassurances because it is quite difficult to go from rules that give you every possibility to rules that say, "Everything that is left over is a single primary." We thought people would probably feel unsure so we gave them notes and some examples. **Note 1** says: "When an invasive tumor follows an in situ tumor within 60 days, abstract as a single primary." **Note 2** says, "All cases covered by this rule are the same histology." That is because as you went through rules 1 through 11 you would have already eliminated all cases where they were a different histology.

Slide 31

This is kind of a warning that says, "We are giving you examples of cases that you would use rule M12 but an example is not exhaustive." It not does contain every case that would fall through to rule M12. So don't think that this is all of your cases. This is just an example so you will feel better; you will know that these have fallen through and should be coded as a single primary.

Slide 32
But we are giving you a warning and saying, “Using only these case examples to determine the number of primaries can result in major errors.” So, don’t do that!

Slide 33
Example 1 says if you have a solitary tumor in one lung and multiple tumors in the contralateral lung, you will fall through here and you will use that first rule. This is to catch you. The reason we gave you this example is because registrars think very differently. One registrar would look at a solitary tumor in one lung, multiple tumors in the contralateral lung and say, “ I don’t know how many there are because I don’t know what I should count as tumors. Some might be metastases, I just can’t give you a number.” They will end up going to rule M1 and they will code it as a single primary. Another registrar will say, “I have one tumor in the left lung and there are four tumors in the right lung so that is a total of five.” They will go to the multiple tumor module and they will end up in rule M12 and they will also code it as a single primary. So, it is a safety net so no matter how you look at it or how you count those tumors, you code it as a single primary. **Example 2**: “Diffuse bilateral nodules (this is the only condition when laterality = 4).” **Example 3**: “An in situ and an invasive tumor diagnosed within 60 days.” **Example 4**: “Multiple tumors in the left lung [that] are metastatic from the right lung” will fall through here because you won’t count the metastases. **Example 5**: “Multiple tumors in one lung.” **Example 6**: “Multiple tumors in both lungs.” If you have any of those situations, if you fall through to rule M12, you are fine. You code it as a single primary and you are correct. This is meant to be a reassurance for people so they will feel more comfortable. As they use the rules and become more comfortable with them, they really won’t need the examples.

Slide 34
If you would turn to the histology rules, please.

Slide 35
In the histology rules the first module is for single tumors.

Slide 36
In the “Single Tumor” module the first rule is **H1**: “Code the histology documented by the physician when there is **no pathology/cytology specimen** or the **pathology/cytology** report is **not available.**” Either of those situations can happen. If there were no pathology or cytology you would still need to code the histology documented. If you were unable to get the actual pathology or cytology report you would use rule H1.

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It gives you a priority for using the documents to code the histology. If there is a discrepancy in the chart and you find discrepancies in the histology documented, you use this priority list. It says [**Note 1**]: “Priority for using documents to code the histology: ●Documentation in the medical record that refers to pathologic or

cytologic findings." This would be, for example, an H&P where the physician would say: "Patient had a lung biopsy that was positive for adenocarcinoma." That is documentation that refers to a pathology finding. The second priority would be: " ●Physician's reference to type of cancer (histology) in the medical record," but they do not refer to the actual pathology or cytology. So say, for example, in an H&P the physician merely said, "The patient has a known history of adenocarcinoma of the lung." There is no reference to the actual path report. If neither of these is available your next priority would be to code to histology mentioned on a: " ●CT, PET, or MRI scans." Again, if these are not available, the last priority would be: "●Chest x-rays." You would code the histology based on this priority.

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Note 2 says: "Code the specific histology when documented." This means that if you have documentation that says that the patient had a squamous cell carcinoma (post squamous cell), long ago there was a rule that said unless the patient had a biopsy you would always code carcinoma, NOS. This is telling you, "No. You code the specific histology when it is documented." **Note 3** talks about when you do not have a specific histology documented then you, "Code the histology to 8000, cancer/malignant neoplasm, NOS, or to 8010 (carcinoma, NOS) as stated by the physician when nothing more specific is documented." In other words, if they call it, "Cancer," code cancer. If they call it, "Carcinoma," code carcinoma.

Slide 39

Now rule **H2** says: "Code the histology from metastatic site when there is **no pathology/cytology specimen from the primary site.**" For example, if the patient had a biopsy of a cervical lymph node, it was a prominent node, the scan showed widely metastatic disease and the only actual biopsy came from the cervical lymph node, you code the histology from the metastatic site—from the lymph node. And, of course, you code the behavior to a /3.

Slide 40

H3 is kind of the, "Yes, of course, rule." It says: "Code the histology when only **one histologic type** is identified." It is necessary to put this rule in for the hierarchy to work. It is also necessary if we are ever going to computerize these rules. We have to have this very obvious rule stated.

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So the obvious rule is that if you only have a statement that says, "Squamous cell carcinoma," you code squamous cell carcinoma. Here is a note [i.e. **H3 Examples**] and the note is a warning that says: *Do not code terms that do not appear in the histology description*. What we are getting at here is that if you have a histology description that says, "Squamous cell carcinoma," don't code *squamous cell non-keratinizing*. We did find a lot of that during our beta testing. The actual histologic term, squamous cell non-keratinizing, is a histologic type. It

is not just the absence of mentioning keratinization. So when only the term "squamous cell" appears, you only code "squamous cell." The same thing with bronchioloalveolar: Don't code non-mucinous unless the diagnosis actually says non-mucinous.

Slide 42
H4 is a change for everyone. It says: "Code the invasive histologic type when a single tumor has **invasive and in situ** components." In the past you would code the invasive, the /3, but you would code the most specific type. We are now telling you, "No. You code the invasive type, even if it is less specific." The reason we did that is because the invasive part of the tumor is what determines the prognosis. The physicians said actually even if the invasive is less specific we need to put it in that analysis group because that is how the disease will progress; that is the type of prognosis the patient will have, not the in situ component. So this is new and you will see it in each of the different site rules. Code the invasive histologic type.

Slide 43
Now **H5** says: "Code the **most specific** term using Chart 1 **when** there are multiple histologies within the same branch."

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Then we talk about which branch we are talking about. We do that because we had some problems before. If you notice when we looked at Chart 1 sarcomatoid was a very general term but it did not have an NOS behind it in the ICD-O-3; adenocarcinoma did. But it is a much more specific diagnosis than is sarcomatoid. Our old rule said, "When you have a NOS and a more specific, code the more specific." So trying to tackle that type of terminology, we gave examples for you in how to code by saying if you had a non-specific such as cancer or malignant neoplasm and any of the more specific—that branch—you would code the more specific. If you had a carcinoma, NOS any of the more specific on that branch, code the more specific. If you have an adenocarcinoma, NOS and a more specific adenocarcinoma, code the more specific. If you have squamous cell carcinoma and a more specific squamous cell carcinoma, code the more specific. If you have a sarcoma and a more specific sarcoma, code the more specific. We are telling you to go to Chart 1. Go to the branch with the most generic word and look down that branch. So, if the most generic word is adenocarcinoma, go down that adenocarcinoma branch. If you see a more specific adenocarcinoma, code the more specific. Use Chart 1.

Slide 45
Now there is a **note** that says: "The specific histology may be identified as type, subtype, predominantly, with features of, major, or with _____differentiation." Those are words you are very used to seeing. So we are saying it could say: "adenocarcinoma, papillary type;" "adenocarcinoma with features of." So any of these words can be used to identify the more specific histology.

Slide 46
So we give you some examples and show you how to look that up on the chart. For example if it said: “Adenocarcinoma, predominantly mucinous. Code 8480 (mucinous adenocarcinoma).” If it said: “Non-small cell carcinoma, papillary squamous cell. Code 8052 (papillary squamous cell carcinoma).” A quick look at the chart would tell you that the squamous cell carcinoma is definitely on the same branch as non-small cell carcinoma.

Slide 47
Now rule **H6**: This is where we get into the combination and mixed codes. It says: ”Code the appropriate combination/mixed code (Table 1) when there are **multiple specific histologies** or when there is a non-specific **with multiple specific histologies.**” So, when you have a number of words in a histology diagnosis and they don’t all fall in the same branch as more specific and less specific, you are going to go on to rule H6. You are going to say, “Now how do I handle these?”

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The **note** says: “The specific histologies may be identified as type, subtype, predominantly, with features of, major, or with _____differentiation.” But we give you some examples to show you how to use this table. The first example is: **Example 1: (multiple specific histologies):** Solid and papillary adenocarcinoma. Code 8255 (adenocarcinoma with mixed subtypes).” You know you have solid adenocarcinoma and you have papillary adenocarcinoma.

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When you go to the Table (**Table 1—Combination/Mixed Codes for Lung Histologies)**, what you are going to look at, down this row, you will say solid and papillary are two very specific types of adenocarcinoma. You have solid adenocarcinoma and papillary adenocarcinoma. You do not see any of those in column 1. Looking in column 2 you will see solid adenocarcinoma and papillary adenocarcinoma and looking to the right it instructs you that when you have solid and papillary adenocarcinoma you would use code 8255. That’s how you would look that up.

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The next **example** is combined small cell and squamous cell carcinoma. Let’s look at the Table.

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First check lung column 1 and you are going to look for squamous cell and small cell. You see small cell with squamous cell. And you look over to the far right column and you see it gives you the instructions to code to combined small cell carcinoma, 8045. Let’s go to the next example. **Example 3 (non-specific with multiple specific histologies)**: Adenocarcinoma with papillary and clear cell features. Code 8255 (adenocarcinoma with mixed subtypes).” One of the biggest

things you are going to have to remember when you use this table is that you are going to have to use it the same way you use the ICD-O-3. You have to see that the example we have here is papillary adenocarcinoma and clear cell carcinoma. So when you go to look it up, that is what you have to look for: papillary adenocarcinoma and clear cell adenocarcinoma. Going to the table again, you know you have two specific types of adenocarcinoma. So, you have to go to column 2; you don't have a choice but to go to column 2 because everything in column 1 is a more general category. So when you went back you decided you had two very specific types of adenocarcinoma; you know you don't have two general terms, you have two specific terms. So you are going to look for papillary and clear cell. Again, when you come down into this mixed adenocarcinoma, you are going to see both papillary and clear cell and you know you would use 8255, the combined code, for those two histologies. So the biggest thing you need to remember is that just as in using the ICD-O-3, you have to stop and break these up into their actual categories. Even though it says adenocarcinoma with papillary and clear cell features you look for papillary adenocarcinoma and clear cell adenocarcinoma.

Slide 52
Now **H7** is the default rule. It says: "Code the histology with the **numerically higher** ICD-O-3 code." If none of the above rules actually fit the case you can code the histology with the numerically higher ICD-O-3 code and you won't make any errors because we have already taken out all of the cases that need specific coding.

Slide 53
Next, we go to "Multiple Tumors Abstracted as a Single Primary." The first thing you will notice is that you are not going to have quite so many rules. That is true because you are not going to have quite as many cases that qualify for the rules for, "Multiple tumors abstracted as a single primary."

Slide 54
Remember each module is its own specific module. If you had a single tumor, you would never go to these rules. You would only use the single tumor module. For multiple tumors you do not start with rule H1. You start with the first rule in the multiple tumors module. So if it was a single tumor you would have already stopped coding. If you had multiple tumors abstracted as a single primary you would start with rule H8. Rule **H8** says again: "Code the histology documented by the physician when there is **no pathology/cytology specimen** or the **pathology/cytology** report is **not available**."

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Again, here, in rule **H8 Note 1**, you have the priority for using documents to code histology starting with the documentation that refers to the pathology or cytology findings, then secondly the physician's reference to the type of cancer in the medical record; then the CT, PET or MRI scans and finally, the chest x-rays.

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The notes tell you to "**Note 2:** Code the specific histology when documented. **Note 3**: Code the histology to 8000 (cancer/malignant neoplasm), or 8010 (carcinoma) as stated by the physician when nothing more specific is documented."

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Rule **H9** says: "Code the histology from a metastatic site when there is **no pathology/cytology specimen from the primary site.**" That would be the case where you would biopsy a cervical node, for example, and there would be no actual lung biopsy. You would code the histology from the cervical node biopsy. **Note**: "Code the behavior /3."

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Rule **H10** says: "Code the histology when only **one histologic type** is identified." We are repeating these rules because even though you heard them in Single Tumor, if you had multiple tumors you would never have gone to that module so the rules start over. "**Note**: Do not code terms that do not appear in the histology description."

Slide 59
The examples again: "**Example 1**: Do not code squamous cell carcinoma non-keratinizing unless the words 'non-keratinizing' actually appear in the diagnosis." **Example 2**: Do not code bronchioloalveolar non-mucinous unless the words 'non-mucinous' actually appear in the diagnosis."

Slide 60
Rule **H11** says: "Code the histology of the **most invasive** tumor."

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The notes say: "**Note 1**: This rule should only be used when the first three numbers of the histology codes are identical (This is a single primary)." And, "**Note 2**: See the Lung Equivalent Terms, Definitions, Charts, Tables and Illustrations for the definition of most invasive." As we go through each of the site-specific rules, when you see the rule that says, "Code the most invasive," there will be a note that says you can go to the Equivalent Terms and Definitions and we will always have defined the most invasive tumor.

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Again, the **Note 2** says: "●If one tumor is in situ and one is invasive, code the histology from the invasive tumor. ●If both/all of the histologies are invasive, code the histology of the most invasive tumor." We will back up just a little to make sure that we are not confusing anyone. On rule **H11,** I am going to remind you that we are talking about multiple tumors. So, if you have two tumors, you would code the histology of the most invasive; that is, of course, only if the two tumors had a different histology. Then everything follows saying you only use this when

the first three numbers of the histology codes are identical. We are telling you that because this has to be a single primary. If you got to this point and you are saying, “Oh, gee, no. These numbers are not identical.” This rule is telling you that you may want to go back and look at the multiple primary rules. You may have gotten here by error. So this is just a warning. It is saying this rule should only be used when the first three numbers of the histology [codes] are identical. And, again, you can go to the Equivalent Terms and Definitions and we will tell you how to identify the most invasive when you see two or more multiple tumors. And, again, if one tumor is in situ and the other is invasive, code from the invasive only. If all of the tumors or both of them are invasive, code from the most invasive.

Slide 63
Rule **H12**: “Code the **most specific** term using Chart 1 **when** there are multiple histologies within the same branch.”

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So if you have a non-small cell, for example, and a more specific non-small cell or a squamous cell and another more specific squamous cell, you would code the more specific diagnosis. This is just a reminder that when we looked at the pathology charts, as you went down toward the bottom of the chart, the histologies were more specific. This is telling you that you should look at Chart 1 and you should see. If those histologies are on the same branch, code the most specific.

Slide 65
“**Note**: The specific histology may be identified as type, subtype, predominantly, with features of, major, or with _____differentiation. **Example 1**: Adenocarcinoma, predominantly mucinous. Code 8480 (mucinous adenocarcinoma). **Example 2**: Non-small cell carcinoma, papillary squamous cell. Code 8052 (papillary squamous cell).”

Slide 66
Rule **H13** is the default rule. It says: “Code the histology with the **numerically higher** ICD-O-3 code.” It is saying if you if you have not come out to any rule so far that shows you how to code the histology for this case, you now code the numerically higher ICD-O-3 code.

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Now, I would like to open up for any questions that you may have.

QUESTIONS

Question # 1:
I would like to refer back to rules H5 and H12. You say on the chart that it is not a complete listing of the histologies. For rules H5 and H12, for sarcoma, NOS and

a more specific sarcoma and you are directed to Chart 1. I understand if it is a more specific sarcoma we would code it, but we are being directed to Chart 1 and sarcoma is not listed on that chart.

Response to #1:

We did not put sarcoma on Chart 1 because we found zero incidence in the thirty years of SEER data. It is quite a busy chart as it is. The chart was put there to help the registrars code, so they could look at it and go down the lines and do the coding. So, we did eliminate histologies that did not appear at all in the database so that we could give you a little more useful tool. We did a lot of talking about it and the ending decision was that we are not trying to replicate ICD-O-3. What we are really trying to do is give registrars a tool that they can use while they abstract and code; that would be useful for them and would give information for them that was, perhaps, more specific or more helpful when abstracting. The ICD-O-3 is meant as a classification tool and this is really written as an abstracting tool.

Questioner's Response:

I understand. Thank you very much.

Question # 2:

Can you clarify what "most invasive tumor" would mean?

Response to #2:

When we talk about "most invasive tumor" it will vary by site. But probably, the most descriptive way of saying it would be to say the greatest stage. For a lung cancer, for example, it would start with invading through the pleura and go on to invading into the mediastinum or invading a rib. So it is in essence, the tumor that is the highest stage or the most invasive. We chose not to use the words "most invasive" because people equate that very well in talking about sites like colon and you can talk about invading through the layers of the colon and into regional tissues or organs. But when you talk about a lung, for example, it does not work as well. So we chose to use the words "most invasive" and we just define that for each one [each site]. If you look under your Equivalent Terms and Definitions for each site there will be a definition of "most invasive" for that site. It will go from the least to the most invasive.

Question # 3:

Going back to the multiple primary rules, when it comes to M9, what if we have an in situ tumor following an invasive tumor more than 60 days after diagnosis of the invasive one? Are we going to consider that as a multiple or as a recurrence?

Response to #3:

You are saying if you have an in situ following an invasive more than 60 days after the diagnosis of the invasive tumor, how do we handle it? For lung, you would end up—we are saying the **same histology**, right? "Yes." If you had an invasive adenocarcinoma followed by an in situ adenocarcinoma using these rules it would actually be treated as a recurrence if it occurred within 60 days or after 60 days—either way. So it would be a single primary. This would end up

falling to rule M12. None of the exact rules would fit it and it would end up defaulting to rule M12 and it would be a single primary.

Question # 4:
Can we add an in situ and invasive tumor diagnosed more than 60 days (i.e. the example in question # 3) as an example to the rules?
Response to # 4:
You can certainly add that to your notes. We are not going to be doing any revisions to the rules, unless we find a big error, until these have been out long enough for people to really be comfortable with them and we can then identify what really needs to be rewritten. It is so hard for people if you put things out and then start to revise them right away. It just makes it real difficult for people. But you are more than welcome to add that type of note to your own book, absolutely.

Question # 5:
Where column one states "small cell and one of the histologies in column 2" where small cell cannot be a subtype, can column 2 be a subtype such as small cell and papillary adeno carcinoma?
Response to # 5:
You are talking about Table 1. Yes and the question again is, "Can column 2 be a subtype such as adeno ca papillary?" The answer is, "No; not unless it is specifically stated." There will be times in this table as you come to sites that they will say, for example, adenocarcinoma (or any adenocarcinoma subtype), but unless it is stated you cannot put a subtype in there. You are talking about the combination code table.

Question # 6:
How would you code a small cell and papillary adenocarcinoma?
Response to # 6:
You have no code for that because as you look through the combination code table, you will find that there is nothing for that code. I am going to tell you that as we went through these codes and the ways we could use the codes with the ICD-O-3 Editors there were several times we said to them, "Are you sure we can't code this?" And they said, "No. Absolutely not; that is not what the code was designed to do." So, we were very surprised, too. Everyone had mostly used these codes and used terms such as small cell carcinoma and we would think that applied to any small cell carcinoma. Or, if it said adenocarcinoma, we thought we could mix any kind of adenocarcinoma when it said adenocarcinoma with mixed subtypes. We were told that was **not** how these were intended to be used. Again, that is why we created this table because someone told us that when the codes came out in the ICD-O-3, no one actually gave us those explanations or told us we were to use them only for certain types of histologies. This was the first chance we had had, too, to sit down with those Editors and they actually gave us the blueprint of exactly what would be included in the codes. Thus, we gave the warning saying, "Unless you see it in here exactly,

don’t use it,” meaning, when you look at these terms and it says, for example, squamous cell carcinoma, that is the only thing you can use. You cannot use any specific squamous cell type; not unless it is mentioned in the table. That was really a good question.

Question # 7:
Would the result then be use the highest for that example?
Response to # 7:
Yes; that is correct. You would end up going through the codes and nothing would fit and you would end up using the higher code. As we go through these tables you will see times where it says, as it does here, squamous cell carcinoma. Then, other times there will actually be a note, an asterisk, in different primary sites. You may see an asterisk as you do here or there may be a notation in the box and it will tell you that you may use subtypes. Unless you see that specific permission that you may use subtypes, you use only the term exactly as listed.