## **Transcript for Afternoon – ICD-10-PCS Procedure topic**

## ICD-9-CM Coordination and Maintenance Committee Meeting September 19, 2012

**Amy Gruber:** Hi, if you could turn back to your procedure handouts, we're going to be discussing the issue on page 10. And the issue is, should the ICD-10-PCS body part for Thoracic Aorta under the Heart and Great Vessels system be expanded to identify both the ascending/aortic arch and descending segments of the thoracic aorta? There is no new technology application so therefore; this proposal is being considered for a regular update with an implementation date of October 1, 2015. Dr. Sean Roddy, representing the Society for Vascular Surgery, will provide us now with the clinical background.

**Dr. Sean Roddy:** Good morning. Sorry for being a little late. Thank you for accommodating me with my travel. My name is Sean Roddy and I'm with the Society for Vascular Surgery and I practice in Albany, New York. Slides- (technical issue) – can you see that now?

So what we're requesting as a society is that the current body part value for thoracic aorta which is listed as "W" down here that there be two different designations. One is for the descending thoracic aorta and have that separate from the ascending thoracic aorta and aortic arch. And the reason for that is because we see significant clinical differences in procedural complexity and the risk to the patient is significantly different when we work in those areas. So when we look at the anatomy of the aorta, the aorta is the main artery that leaves the heart. It begins at the aortic valve and then it extends through the diaphragm down into the belly or behind the belly button. It slips into the iliac arteries that go down to both legs. And in the chest, in terms of thoracic aorta and in the belly it's termed the abdominal aorta. The diaphragm is the line between the two. So when we look specifically at the thoracic aorta, we clinically divide it into three segments: there's the ascending aorta as it comes out through the heart and then there's the transverse aortic arch as it comes across and gives off to the great vessels, and then there's the descending thoracic aorta which goes down to pierce the diaphragm and enter the abdomen. Although it's one vessel in continuity there's a lot of differences in manipulation of these areas. And so that's the big issue that we're discussing here today.

Let's take them individually. The ascending aorta begins at the aortic valve. So remember he coronary vessels come off that, the left main and right coronary. It extends up to the innominate artery and it lies within the pericardium. So if you were doing open surgery to get to it you would actually incise the pericardium to get to that. So when we work on the ascending aorta we

have to be careful to prevent thromboembolism. We have to maintain perfusion of the coronary vessels. We have to preserve the aortic valve so that it continues to function. Or when we have to replace it- an aortic root replacement would include a mechanical aortic valve. We have to enter the pericardium and then post-procedure there's that risk of tamponade – compression of the heart from bleeding. If we look at the aortic arch, that's the area that comes in a transverse fashion where the great vessels come off. The great vessels are typically three. You see them listed here with one, two and three. One is the brachiocephalic artery, it's also called the innominate artery, that soon after its origin splits into the right common carotid artery going up to the brain and the right subclavian artery going out to the arm. Number two is the left common carotid artery which goes up to the brain. Number three is the left subclavian artery which goes out to the left arm. The vertebral arteries which also go up to the brain come off the subclavian arteries on each side so there's a pair of that as well.

As people get older, the aorta doesn't have this nice candy cane conformation. It tends to angulate, twist, it gets full of calcification and atherosclerotic plaque. And there are variations, not everyone has three vessels. The most common anatomic variation is a bovine arch. Where the common carotid artery number two, instead of attaching to the aorta, actually attaches over her onto the innominate artery. So we have to keep that in mind with manipulation. So when we work on the aortic arch we have to preserve blood flow to the brain. There has to be constant supply of oxygen and nutrients. We also have to try to prevent thromboembolism, - clot, plaque, air – from going up and causing a stroke.

With open procedures when we do bypass it's called "debranching" – you may see that term "debranching". If we do endovascular procedures and we have to put grafts across the aortic arch there's a lot more manipulation - we put catheters into the great vessels, we put wires that are "cheese-cutting" as we call it, back and forth across plaque in the aortic arch, etc. The risk of stroke, the morbidity from that procedure is higher than if we stay in the descending thoracic aorta. And as I showed you the anatomic variations, some of them are listed here. This would be a bovine arch see the left common carotid attached to the innominate. So we have to keep that in mind when we're working. And lastly is the descending thoracic aorta. And it runs from the left subclavian down to the diaphragm. It's not continuous with any heart vessels or heart structures, not continuous with the heart – it's outside the pericardium. And its branches are all thoracic, esophageal, bronchial, intercostal. I don't want you to think that I'm saying that working on the descending thoracic aorta is a walk in the park - we're talking about a relative scale of morbidity and mortality here. And on the relative scale this is fairly straight and fairly easy – again on a relative scale to work on – compared to the aortic arch in the ascending aorta. We have left wires going back and forth, left manipulation because we're staying away from those vessels and the direction of blood flow is forcing any debris downward as opposed to upward. So if we compare procedures, from an open standpoint when you do the first two, when you work on the aortic root, and you reimplant the coronary vessels, or when you debranch and

do what we call an elephant trunk, there's a lot more risk here than when you're putting a tube in below the great vessels.

Now in the beginning of endovascular techniques when we started doing endografts, we only worked with the descending thoracic aorta so everything seemed fairly straightforward, but now, as devices are getting better, taking the curve better, smaller, slicker, etc. Now we are starting to impinge upon the aortic arch and hopefully we're going to end up working in the ascending aorta. But with that comes added risk.

Since we don't have that technology yet, we often do hybrid procedures. Hybrid procedures – if you have an aneurysm that extends from the aortic valve all the way down into the diaphragm, now we can do open surgery with debranching to create an area where we could put an endograft. And then either on the same session or a separate session, we take this portion – is an endograft which is sitting inside here to here. So this has been repaired operatively and this has been repaired by an endograft. We're slowly advancing here.

And there are times when we have to cross segments. In the beginning we only worked down in here. But if you see aneurysms don't listen to the anatomy text. We need a seal zone above and below. An endograft works because in essence it's like taking a toilet paper roll and putting another toilet paper roll inside. Okay? You're putting something inside and you want it to expand above the aneurysm into normal artery and you want to expand a normal artery below. So this way blood will flow through the endograft it can't leak around the side. So, therefore the aneurysm is not cut out like open surgery, it's just depressurized.

So if it's sealed here and here, then no blood leaks around- it seals here, so this stays in place and we don't want blood to get to it. Now if the landing zone is down in here, we're good – we don't have to manipulate. But unfortunately, as we treat more and more pathology, we're trying to extend up, and in this case – the landing zone as we call it- is up here. For us to do this we have to stop blood flow in the left common carotid and the left subclavian artery. So now we have to be plumbers and we have to do plumbing where we – now we want blood to go up the innominate and up the right carotid artery to the brain. But we also want to do a bypass, from carotid to carotid so it goes up the brain that way and then goes carotid to subclavian so it goes down to the arm and then goes retrograde here and goes up the vertebral artery. And we have to tie these off so blood doesn't leak back into the sack. So you can see if we just deploy the graft down here compared to if we did all this, there is a big difference. So what we're saying is we would like to designate that difference in the coding.

So from a documentation standpoint, how can you tell what we're doing? Well, with open surgery we tell you where we clamp the graft – where we transect or cut in half the aorta. How we sew them together; so we tell you with open surgery at what level we are doing the anastomosis and what we're clamping. With endovascular grafts we have to tell you our landing

zone. The landing zone is where? Is it between the left common carotid and the left subclavian? Is it below the left subclavian? So there's the anatomic landmarks that we're telling you where we're putting the graft.

Again, when these first came out, it was just the descending thoracic aorta – this wasn't an issue. But now, the clinical environment is changing, we have better technology, better techniques for treating more and more people – seeing less risk than open surgery and we're pushing the envelope. Therefore we want to be able to review the encoded data, to look at these variables for the different segments. We want to look at the utilization and we want to look at outcome measures and do treatment analysis based on that. This is our ask to you. Thank you.

Amy Gruber: Are there any clinical questions for Dr. Roddy? If not, we will move on.

CMS has a question for the attendees. At your facilities, is there adequate documentation in the medical record that clearly identifies the segment of the thoracic aorta – being the ascending/aortic arch or descending that is being addressed? If you could raise your hand, if you don't have to really search through the record to find the appropriate segment that he's performing surgery on. Can you do that for me - show of hands- adequate documentation? No? Linda's gonna do it.

Linda Holtzman: I just came up here to encourage Darlene.

**Amy Gruber:** Or we could just raise your hands – adequate documentation- show of hands -No? Uh-oh.

**Linda Holtzman:** I'm Linda Holtzman from Clarity Coding. In the interest of full disclosure I should note that I worked with Dr. Roddy on this presentation. I just want to mention that as far as there being adequate documentation in the medical record, I think we can say that the answer is no for every single case that we work on. However, for this particular issue, I've coded many of these, and I can say that if you understand the landmarks that are being addressed you know where the physician says I transected here, I anastomosed here... I passed the subclavian, the left subclavian -you know, just above the aortic root, if you understand the landmarks then you'll understand very clearly whether they are in the ascending/aortic arch or the descending. And there are plenty of times when the physician actually does say and then crossing the arch. So, to me, it's been pretty clear in the cases that I've reviewed.

**Amy Gruber:** Thank you. Any other comments? If not, we'll move on to the coding options. There are two options there before you beginning on page 11 for those on the phone. Option one is to continue to code thoracic aorta as Dr. Roddy's slide showed as the body part under the Heart and Great Vessels systems for the procedures to the ascending/aortic arch and descending segments of the thoracic aorta. An example of a graft replacement is illustrated in

this table with the operation being Replacement. And there you see the body part, Thoracic Aorta. Option two would be to uniquely identify the ascending/aortic arch and descending segments of the thoracic aorta. CMS would revise the current body part "W", Thoracic aorta to Thoracic Aorta, Ascending/Arch and create a new body part "X" for Thoracic Aorta, Descending, as illustrated in this table under, once again under the operation Replacement where you can see the revised "W" body part and the new "X". Want to point out with this option, this would create 122 new codes under the Heart and Great Vessels body system for the following twelve root operations: Bypass, Destruction, Dilation, Excision, Extirpation, Insertion, Release, Repair, Replacement, Reposition, Supplement and Restriction. CMS' recommendation at this time is option 2 and I'll open up the floor for any comments. Yes, Nelly.

**Nelly Leon-Chisen**: Nelly Leon-Chisen, American Hospital Association. This is actually a question because it sounds like today, the majority of procedures are done on the descending thoracic aorta and if that's the case then the "W" that exists today if you were to expand it, wouldn't you consider the "W" to be the more common one, at least for the time being and maybe make that the Descending Thoracic Aorta and then the new value would be for the Ascending/Arch?

**Dr. Sean Roddy**: I can say from a clinical standpoint the overwhelming majority are done in the descending thoracic aorta. So you are correct that that is the majority. It is shifting and with each year I think it is probably shifting but I think the overwhelming pathology is in the descending thoracic aorta.

**Nelly Leon-Chisen**: And the other question is more of a coding issue and I realize with PCS we try to be much more specific, we've got a lot more codes and a lot more values but I worry if we don't have an option, which we normally have not done, to say thoracic aorta where there's no specification or you have no idea. I don't code these all the time so I don't know whether the documentation would show what part of the aorta the procedure is being done on and I worry that when the question was asked if this was clearly documented I didn't see anybody raise their hand. So I don't know Dr. Roddy if you think this is something that is important to the thoracic surgeons – do you think that they would be more likely to start documenting more carefully? Because when you talk about specific landmarks that are important for you as a surgeon, the coders don't necessarily understand where we're at and especially when you are talking about situations where there are different anomalies or different normal situations where like the examples you showed us with the bovine arch and you know we may not understand that kind of documentation.

**Dr. Sean Roddy**: We have to document where we are with relation to the left subclavian artery because the CPT codes are based on that. So we literally can't get paid if we don't. So if we don't do that we're not gonna to be able to submit a CPT code. So we have to talk about the arch vessels in our dictation. Everything is based – when we deploy an endograft – on whether

we cover or we don't cover vessels. So, if we cover vessels, in the aortic arch we typically have to begin to do those bypasses to reperfuse the area that we've just deprived the blood from. So I don't know how better to answer your question in that we have to document if we cover, there are bypasses if we cover as a general rule, and the arch is defined as the innominate to the left subclavian. So by definition if you know the anatomy of the innominate, carotid, subclavian, and we say that we covered one of those vessels you know we're now working in the aortic arch. So, I don't know if that helps answer your question.

**Nelly Leon-Chisen:** Yes. I think it just supports what we've known all along that for PCS we're going to have to learn a lot more anatomy than we needed to.

Dr. Sean Roddy: Sorry.

Amy Gruber: Thanks Nelly. Excellent point. We will take under advisement.

**Christi Sarasin:** Sarasin Consulting. When you asked about specific documentation relative to where you were to the vessel itself, I had to agree that we don't see that type of documentation – yet. When Linda started speaking, it made perfect sense. It's been a while since I've coded this type of procedure but recalling what I used to see in the documentation, it was there as far as the landmark. And I think it does need the recognition (inaudible) it's going to be more work, but I think we needed to get there anyways.

Amy Gruber: So you're in favor of expanding?

Christi Sarasin: I am.

**Darlene Hyman:** Hello, Darlene Hyman, from Upper Chesapeake Health. Got the nerve to come up. Just a comment and then I have a question. The challenge that we face at our organization with our physicians, our surgeons is that they'll describe what they're doing in the title of the operation but then when we get to the body of the operation, they don't because they're using templates. So, that's our problem. And my question is, are these slides available because I really like them. Can I get a copy? Or, how do I get a copy – do they get published on the website or anything? Because I think this would be really good to share with some others in the organization.

Amy Gruber: Okay, you want the whole or just his portion of it?

Darlene Hyman: The whole thing is good.

**Amy Gruber:** Okay, we'll have to check. Sometimes that's a challenge getting slides up on our website but we'll look into that. I'll need to get his approval.

**Dr. Sean Roddy:** I'll give approval. I'm at the Society for Vascular Surgery. If you contact the Society for Vascular Surgery office, and don't ask me for that number, but if you do, and you can easily find it on the Web, I will make sure this presentation is available by the staff there so that they will send you a PDF of the slides and everything. Okay?

**Jim Nagel:** Jim Nagel, Upper Chesapeake. I just wanted to say that I support Linda's comment. Because I think while it may not be mentioned I think it's inferable from the other documentation that you can figure out which area. One question I had that I'd like to ask though among some of the book carriers is are these divisions also reflected in the CM portion because certainly I see these various imaging tests and things, you see these different areas specified – it seems like they should be comparable on both sides.

**Amy Gruber:** Anyone else? Thank you for the comments and we look forward to receiving your e-mail comments as well.

Going to turn the meeting back over to Donna, back over to the diagnosis side of the house and appreciate her letting us jump into her time. Thank you.