

**Centers for Medicare & Medicaid Services
CMS ICD-10 Conversion Activities National Provider Teleconference,
Including a Lab Case Study
Moderator: Leah Nguyen
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Part 2 of 4 Audio Recordings

Case Study on Translating the Lab NCDs

Translating Lab NCDs: Slides 20-43

Lisa Eggleston: Thank you, Leah, and good afternoon, everyone. My name is Lisa Eggleston, and I work in the Coverage and Analysis Group within the Office of Clinical Standards and Quality here at CMS.

Dr. Jeff Roche and I have been working with Pat Brooks and her team, as well as a host of other individuals along with our contractors, in order to accomplish just one part of CMS' preparation for ICD-10-CM, specifically the part that involves coverage for clinical laboratory testing.

Jeff and I would like to tell you about what we've learned during this project. I would like to emphasize that Jeff and I are simply sharing how we handle the translation of the diagnosis code from ICD-9 to ICD-10 in the Laboratory National Coverage Determinations, or as we call them, Lab NCDs. And this is merely an example done by one area within CMS, and is not meant to be interpreted as direction from CMS on how to do your own translations.

On slide 21, you will see a sample of the listing of our 23 Lab NCDs. As you may be aware, CMS covers clinical laboratory diagnostic services under Part B, based on 23 individual coverage policies. We call these collectively the Lab NCDs.

On slide 22, it's showing one particular example of a Lab NCD, 190.25 Alpha-fetoprotein. As you can see on this slide, the Lab NCD indicates the ICD-9 diagnosis codes for which the Medicare program on the Part B side will reimburse the laboratory provider.

Our task in this project was to take these ICD-9-CM codes and translate them into their ICD-10-CM equivalents.

Slide 23 kind of asks you a few questions. What are we doing? For each Lab NCD, we needed to translate those ICD-9 codes, as well as their description, to the ICD-10-CM version, and then update any changes with ICD-9 or ICD-10-CM codes and their descriptions adopted prior to implementation.

We have prepared preliminary versions of the ICD-10-CM translation of the Lab NCDs by the end of January, which is already done, for use in testing systems functions. And we will prepare ICD-10-CM versions for full ICD-10-CM implementation in 2013.

Slide 24 talks about our objectives and goals. And of course, we needed to translate all ICD-9-CM codes and their descriptors in each of the Lab NCD tables of covered codes to the ICD-10-CM equivalents, and translate any other ICD-9-CM codes that might appear in other areas of the Lab NCD Manual.

We provide these translated tables to our contractors, so that the tables can be incorporated into the appropriate document, as well as the shared system files. The goal is to allow consistent and seamless transition of claims for the providers of laboratory test services.

Now, Jeff will continue with the upcoming slide in taking you through a very specific example using 190.25 Alpha-fetoprotein.

Jeff Roche: Thanks, Lisa.

Slide 25 shows an example of the unit of work in the translation process, translating one ICD-9 code from a Lab NCD, like 190.25, into its equivalent ICD-10 code.

Our example is highlighted on this slide by that oval marking. It is the single ICD-9 code 121.3, which represents the parasitic liver disease called Fascioliasis.

Slide 26 illustrates one of the major challenges of this project, how to accomplish a clear and correct translation of this ICD-9 code, 121.3, to its ICD-10 equivalent. Learning how to accomplish this was a key accomplishment in our project.

Slide 27 shows a small part of the GEM file related to our example. Here, in the row marked by an oval, our example code, 121.3, appears in a slightly reformatted version with no decimal points, and with an added final zero.

In the second column of that same row, we see the ICD-10 code, B66.3, again formatted without a decimal point. This ICD-10 code is linked by this row of the GEM table to the ICD-9 code, 121.3.

Finally, in the flags column for that same row, we see a string of five zeros. We'll see what this means in just a second.

Slide 28 highlights the information in this one row, which provides a direct link from the ICD-9 code, 121.3, to its equivalent ICD-10 code, B66.3.

In addition, the flags field tells us the nature of that mapping relationship. Here, the five zeros indicate that the one ICD-9 code, 121.3, maps to one ICD-10 code, B66.3. In other words, this is a one-to-one mapping in our example.

On slide 29, we see a small section from another useful file provided by CMS, which we used to verify that the ICD-9 and ICD-10 definitions are consistent. As shown in the oval, code B66.3 is assigned by ICD-10 to the disease fascioliasis.

Now, why was this an important step for our translation project?

In our project, as we try to explain on slide 30, we believed it was important to have not only a numerically accurate translation for each ICD-9 code to ICD-

10 based on the GEM file, but we also believed it was important to assure that the translation was consistent on the disease or condition level.

Slide 30 essentially summarizes this and shows us that the translated code in ICD-10 version is consistent with the disease represented by the ICD-9 code. In fact, in this example, they match exactly.

While we mentioned the flags field only briefly before, it really deserves a closer look, because of what it tells us about the translation process.

Slide 31 depicts three alternative mapping relationships between ICD-9 and ICD-10 code. These three are called one-to-one, many-to-one, and one-to-many.

Now, we've already seen an example of a one-to-one mapping relationship in the example we just talked about. The flags field indicated five zeros to indicate this kind of mapping relationship.

For the other two kinds, many-to-one and one-to-many, the flags field in the GEM table is different in that a one appears in the first position rather than the zero of the flags field.

Slide 32 shows an example of a one-to-many mapping relationship. Here one ICD-9 code, 017.30 for Tuberculosis of the eye, maps to multiple ICD-10 codes. Each of these ICD-10 codes, as Pat Brooks mentioned earlier, provides greater detail about which part of the eye is involved with this disease.

For such cases, the flags field contains a one in the first position (appearing as a 10000) rather than its five zeros in a row.

In contrast, slide 33 shows an example of the other kind of mapping relationship. Here, ICD-9 defines 21 codes related to TB of the lung. One of them is actually shown on the slide, code 011.20, TB of lung with cavitation unspecified. It turns out that these 21 ICD-9 codes map to one ICD-10 code, A15.0, TB of the lung.

Slide 34 mentions that in the case of the one-to-many mapping relationship, our team had to make a decision. For a given ICD-9 code that maps too many potentially different ICD-10 codes, should we use all of the I-10 codes that it maps to or just the one or perhaps a few I-10 codes that we decided were more consistent?

Based on what we've done so far for the Lab NCDs project, which I should add Lisa and I are still involved with on an ongoing basis, we think at this point, we will recommend that CMS should include all of the potential ICD-10 translated versions for each ICD-9 code. However, we recognize, although this was our decision at least at the moment for this project, this is a choice that should be considered for appropriateness based on the individual project involved.

Slide 35 shows the steps our team used to scale up from translating and verifying a single code, as we talked about in the former slides, to translating and verifying the next step up in complexity, that is translating and verifying all of the codes for each of the 23 Lab NCDs. Note that although we won't discuss this further today, as pointed out in bullet point two on slide 35, we used both forward and back translations, each of which has its own GEM table, in addition to the basic steps of number one and number three, and then compiled everything together in an appropriate format in step four.

As examples of this, starting on slide 36, we see an example based on the actual list of ICD-9 codes and descriptions from a particular Lab NCD, in this case, lab NCD 190.13.

Slide 37 illustrates a key step before we do any translating or verifying, and that was to check that we were using an accurate and complete list of ICD-9 codes by comparing our list with the lists that are in the published coverage policy materials provided by CMS for that NCD.

Slide 38 shows another step in translating an entire Lab NCD. What we called this was our working translation table. This is a part of a translation table which shows us, in a single line, not only the input, the ICD-9 code and its descriptor on the left side in two columns, but also the output, that is, the

translated version of the ICD-10 code and its description on the right. These were derived both from the GEM files and from the CMS ICD-10 description files that we've mentioned before.

Having this table allowed our team to check in a row-by-row method each translation to make sure it was consistent.

On slide 39, we show a small diagram which illustrates that translation of Lab NCDs can be facilitated using commercially-available database programs. We knew going into this project that we would be involved with more than 10,000 different codes relating to the Laboratory NCDs, and so our team had one particular program available for this project. I don't want to indicate that other database programs could not have also been used. And I should mention that, as Pat Brooks already has noted, depending on the extent of the translation project, it may be much more efficient to do this manually using an ICD-10 reference material, rather than to try to learn a computer program to do it as we did. Believe me, we're not experts at this.

Slide 40 shows essentially, our output. This is a table in which the covered codes, which we've already seen in an ICD-9 version, are now arranged as in ICD-10 version, including the ICD-10 descriptors, for each of the covered codes in the Lab NCD that we've talked about. As you may have noticed, there are now 16 ICD-10 codes in place of the nine ICD-9 codes we started with. This effect of code proliferation turns out to be true for the ICD-10 versions of other Lab NCDs as well.

Slide 41 shows a possible view of how an ICD-10 version of one of our published Lab NCDs might look, including, if you'll notice, in very small print, the ICD-10 code and descriptors for our first example, fascioliasis. However, please be aware that this and other examples that we've just talked about are not yet final; they're not yet approved for use by CMS, but they were only examples used to illustrate how we have approached this project.

Lisa Eggleston: Thank you, Jeff. As we proceed with our usual processes, one of our CMS contractors, they will take the list of the covered ICD-10-CM codes for each of the Lab NCDs, and they prepare a codelist spreadsheet, as we call it. And

that can be processed for use by our shared systems for claims processing, and that particular codelist spreadsheet is available online at our Lab NCD website.

This phase of the translation process is going to test the new ICD-10 version of the codelist spreadsheet to see if it works as part of the claims processing mechanism. Just by way of clarification, what is available on our Lab NCD website now is still the ICD-9 version of the code.

Finally, on slide 43, we just want to take a little time out to thank all of the individuals that were involved. This particular project was supported in a variety of ways by a number of individuals. First, we would definitely like to thank all of our colleagues here at CMS, as well as all the expert staff here at CMS, and our contractors, as well. And you'll see 3M and Fu Associates, that we're working very closely with for our particular process. And then, as Jeff pointed out earlier, the Microsoft tools that he used were Access, as it relates to the database, and Excel as our spreadsheets.

But again, any of the particular tables- does not have to be a Microsoft project- can be used.

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