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NATIONAL QUALITY FORUM

Moderator: Value Set Harmonization September 24, 2015 12:00 p.m. ET

OPERATOR: This is Conference #: 76292162

Welcome, everyone. The webcast is about to begin. Please note today's call is being recorded. Please standby.

Jason Goldwater: And good afternoon, everybody, and thank you very much for attending this afternoon. This is our latest Value Set Harmonization Committee meeting. I'm Jason Goldwater, one of the senior directors at NQF. I'm joined on the phone by Katie Streeter, our project manager and Ann Phillip, our project manager on this project.

Next slide.

So our agenda for today, we have a fairly packed agenda,. There is quite a lot we would like to discuss with you all today. So the best that we are able to, we want to keep this focused into two parts. After we get through the roll call, we want to spend the first hour of this call discussing the pilot harmonization process that we just completed with our TEP on encounters, and we want to get some input from you as well as answer any questions that you might have.

And then we'd like to spend the second part or the second hour of the discussion on another governance model that we'd like to discuss with you all as well. And then we'll conclude with next steps.

Next slide.

So, of course, we'd like to begin today with an introduction. Again, I'm Jason Goldwater, the senior director. We have Katie Streeter, our senior P.M., Ann Phillips on the call and then we have two consultants that have been working with us for the last couple of months, both Chris Millet and (Jay Lyle).

Next slide.

And now, I'm going to turn it over to Katie Streeter who will be calling a roll. Katie?

Katie Streeter: Hi, everybody. Good afternoon. This is Katie, I'll be taking a quick roll call for today's meeting. I know Zahid is not able to join us and we do have Mike Lieberman on the line, correct?

Michael Lieberman: Yes.

- Katie Streeter: OK. Howard Bregman? Chengjian Che? Christopher Chute?
- Christopher Chute: Present.
- Katie Streeter: Cynthia Cullen?
- Cynthia Cullen: Here.
- Katie Streeter: Ellen Harper?
- Ellen Harper: Here.
- Katie Streeter: Yan Heras?
- Yan Heras: Here.
- Katie Streeter: Wendy Hofner?
- Wendy Hofner: Here.
- Katie Streeter: Stan Huff? Matt Humphrey?

Matt Humphrey: Here.

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- Katie Streeter: Rute Martins?
- Rute Martins: Here.
- Katie Streeter: Rob McClure?
- Rob McClure: Present.
- Katie Streeter: Marjorie Rallins? Joseph Schneider? Ann Smith?
- Ann Smith: Here.
- Katie Streeter: James Tcheng? And Nancy Walker?
- Nancy Walker: Hi, Nancy is here.
- Katie Streeter: Thanks. Do we have any of our federal partners on the line?
- Kevin Larsen: Kevin Larsen is here.
- Katie Streeter: Hi, Kevin. Thank you.
- (Allen Taylor): This is (Allen Taylor) from ONC also.
- Katie Streeter: Great, thank you.

Jason, I'll turn it back over to you.

- Marjorie Rallins: This is excuse me, this is Marjorie Rallins. I had a problem joining, I'm here now.
- Katie Streeter: Thank you.
- Jason Goldwater: OK. So, for the part of this call, like I mentioned, we do want to talk about the pilot harmonization process we just completed with encounters. What I like to do is go through the slides and describe the process we took, the results and what the TEP included. And when I'm done with that, then I'll open it up to address any questions you might have and then we'd like to begin the

discussion on some key points that we have uncovered during this particular harmonization pilot.

Next slide.

So, we did a harmonization of clinical encounters that was specifically focused on behavioral health. We did Jaccard analysis when (there's) value sets (inaudible) with diagnosis in both behavioral and the cohort measures. We, again, use the 0.49 threshold as we have consistently used since the beginning of this project.

Pre-existing groups of value sets were identified just having the Jaccard index of over 0.49 (into) this group between three to four value sets are described as similar focus or intent.

The analysis, as similar to the medication one, was informed by a worksheet that identified the value sets that their members described measures and values of intent and provide a detail as to which value set numbers were missing or overlapping.

We asked the TEP members the same questions we asked them with the medication pilot test to determine if there was enough overlap or missing elements, (more) harmonization or not.

Next slide.

So, here are the encounter measures that we specifically use, there are quite a few of them. You can see that a lot of them dealt with depression, for bipolar disorder, there were a few that we noticed in the Jaccard that talk about median time from emergency department arrival to departure, and decision time to E.D. departure time for admitted patients, both entered into the Jaccard analysis as well.

Next slide.

Here, some other encounter measures, you'll notice some others that came up with regard to VTE, particularly VTE prophylaxis, and then some that dealt

with medication management in regard to depression, ADHD, as well as suicide risk assessment.

Next slide.

The value set pairs that we considered for harmonization, and again, this method, Jaccard analysis of 0.49 or above as you can see from the column on the left, there was a bipolar disorder that was corresponding to a behavioral health condition involving bipolar disorder in SNOMED, bipolar disorder with a bipolar diagnosis in SNOMED, a psychiatric mental health patient, they're correspondent to mental disorders in SNOMED, a psychiatric mental health patient health patients that correspondent to mental health diagnosis, diagnoses, I'm sorry.

Next slide.

Bipolar condition involving unipolar depression that correspondent with major depression, by behavioral health condition involving unipolar depression in SNOMED that correspondent with major depressive disorder active, and then the behavioral health condition involving unipolar depression in SNOMED, this was one that we saw a number of overlap with, and depression diagnosis in the SNOMED side.

Next slide.

The results of the technical expert panel discussion, unlike medications, there was general consensus amongst the members of the TEP, that they recommended harmonization. There were a number of reasons as to why, and what we did is synthesize some of these into the slides. The major reasons for harmonization overall was that they found significant overlap across value sets and inconsistent exclusion of value set numbers from value sets that have a similar purpose and intent.

For example, they found significant redundancy in the value set across the SNOMED post for bipolar disorder. There was three concepts in a bipolar disorder that were not in the bipolar diagnosis in SNOMED, such as severe

bipolar II disorder, most recent episode of major depressive, severe bipolar II disorder in remission, and severe bipolar II disorder in partial remission.

The value set psychiatric mental health patient, mental disorders and mental health diagnosis should all be harmonized as a number of TEP members believe these were very similar to each other.

Next slide.

CMS had separate value sets for mental health disorders and substance abuse. But there was a program (really) no apparent need for separate value sets because there was overlap between the two.

The TEP also pointed out that the policy value sets was the below should be harmonized behavioral health condition involving unipolar depression, major depression and depression diagnosis.

They also say that the value set major depressive disorder active to remain separate if this measure is specified major depressive disorders only.

And the value set behavioral health condition involving unipolar depression includes concepts in the value set that indicate incomplete remission and is inconsistent with the bipolar disorder value set that is used within the same measure.

Next slide.

So, this – just to the conclusion, again, whereas last time, there was general consensus that there was no harmonization needed amongst the medication value set, and that most people agree that these were distinct and not ambiguous at all. Here are the encounter sets as they specifically related to behavioral and mental health, there was generally overwhelming consensus by the TEP that this needed harmonization.

So we have the following, I'm happy to answer any questions in a second, but what we need help with in the next hour is, is there a concurrence amongst you all, knowing the value sets as you do. That there is a need for harmonization just based on the results that I just listed.

We discussed the proposed methodology for harmonization with RxNorm and we were prepared to follow that if there wasn't be the need for harmonization which was there was not. But we have not developed a proposed methodology for harmonizing SNOMED CT encounter value sets.

So, if we proceed with harmonization, we'd like to get some ideas from you all in how we would go about doing this. Not completely, but just with the measures that indicated some degree of overlap. How we would measure the results of that process and then later, how do you think we would incorporate that into the VSAC which leads into our discussion of governance.

So, let me start by saying, are there any questions of what I just went over, or are there any questions about the process (we have heard, so far)?

- Nancy Walker: This is Nancy. When it on the group that actually looked at the data and the value sets and recommended harmonization, did it did the group include a psychiatrist or E.D. physicians?
- Jason Goldwater: There were a couple of E.D. physicians, I do not believe that anybody on the TEP is a psychiatrist. I will double if they were, there's a couple of E.D. physicians and then there were a lot of informaticists, the people that have created value set.

Nancy Walker: OK, thanks.

- Jason Goldwater: You're welcome. Any other questions?
- Female: Jason, this is ...
- Rob McClure: This is Rob McClure.

Female: Sorry.

Rob McClure: Oh, go ahead, then I'll go. Go ahead.

- Female: You mentioned the value sets, do you have a cross walk between these value sets and what measures they're in? What's that on the slide.
- Jason Goldwater: Right, that was on the slides in the beginning when we showed the chart indicating the pair value sets and then what measures they relate to, yes.
- Female: Can you show that again, please?
- Jason Goldwater: Sure. Ann, do you want to go back to that slide at the tables?

The first one. Right, so, no, go down back to the table of the pair value set.

Right, stop here. So, there is a - there are value set pairs that out of the Jaccard of above 0.49. The value set name and then the measures that they applied to.

Female: OK, thank you.

Jason Goldwater: You're welcome. Rob?

- Rob McClure: Yes, so, first off, confirming all of these were looking at the use of these diagnoses as a way of identifying an encounter, right?
- Jason Goldwater: That's correct.
- Rob McClure: And, was there any discussion on the TEP with regards to the use of that approach for identifying an encounter, i.e., look at – you know, presumably, looking for the recording of a diagnosis during a period of time and having that as a way of identifying that there was an encounter for that diagnosis, presumably. I mean, that's my understanding how the process works, I just want to confirm one that TEP talked about that. And two, was there any discussion about any other ways of determining encounters?
- Jason Goldwater: To answer the first part of the question, yes, that was discussed in (expense). Secondly, no, there was no discussion of other options.

They – we basically presented the worksheet in the same manner we presented the one on medication, and they went down and filled out the worksheet in exactly the same mechanism, the manner that they did the first one.

They've included the comments that were fairly extensive comments as you can see, because they believe the harmonization was needed, and when we have a follow-up discussion with them, they explained why and they explained some of their comments as well as why they felt the way they did. But there was no discussion of (alternate).

Rob McClure: OK. And I'm not suggesting that we go off into that (trip) either, but just to make sure we're all in the same page. Were there – in the context of just giving us feedback on this harmonization activity, was there a discussion about other types of concepts, by that, I mean, like evidence of a procedure as opposed to just a diagnosis?

Jason Goldwater: No, there was not. We only ...

- Rob McClure: OK.
- Jason Goldwater: ... use the value sets that fall out of the Jaccard analysis. We did not go into that much ...
- Rob McClure: OK.

(Off-mike)

Jason Goldwater: Any other questions?

- Male: Yes, Jason, you mentioned just briefly that substance abuse, diagnoses and depression diagnosis are mental health diagnoses should be combined, I didn't quite understand what you meant by that. Can you go back to that?
- Jason Goldwater: Yes. Ann, can you just go back to the results. I think it's the right, this one. The discussion was that CMS had separate value sets for mental health disorders and substance abuse. But there was no apparent need for those separations because they said there was overlap between the two.

And this came from somebody that's well versed in both of these value sets.

So she pointed out at ...

Male:Yes, so in terms of value set harmonization, I'm not sure what that means.Are they then suggesting that you have – that the mental health disorder valueset includes all the substance abuse ones so that you don't need a separateone? Or ...

Jason Goldwater: That's right. That's correct.

Ann Smith: Right, and that would work in this set of measures, but I'm not sure that this is the universe of measures and that that is going to work in all cases because ...

Male: OK.

- Ann Smith: ... I mean, those are our value sets this is Ann from NCQA. Those are our value sets and we actually have measures where we need those concepts separately. So I agree, we can do some work to clean up those value sets, but I would not combine them because then I'm just going to have to go off and create separate ones for other measures.
- Jason Goldwater: Right. Again, so let me Ann, that's a good point. Let me, again, sort of qualify the results of the analysis which were where we were simply asking as if they believe their harmonization was necessary based on their analysis. It does not ...

Ann Smith: Right.

- Jason Goldwater: ... in any way, shape or form imply the quality of the value set, more than harmonization is absolutely needed. They are presenting one point of view that's really up to the Value Set Committee to ultimately determine what level of harmonization is needed and why.
- Rob McClure: Oh, so let me jump in because I think, you know, the point just to be clear about what Ann is saying and the sort of things that I think anyone who looks at this has to consider. And that is, the use of this value sets across the

spectrum right now of the measures that use them, right? So, you know, what Ann just said was, is that they build some of the sub-elements of these value sets to meet the needs of other measures.

And so, while there's overlap use, that overlap is beneficial in other place. And, what I'm wondering is, do you have – I'm sensing no and then therefore, what could we create that would give us some clarity about that. You know, some kind of table that shows where the various value sets are used so that we know that a change in one place – we have to consider an impact in another spot if we were to change it.

Jason Goldwater: So, Rob, we don't have that table. We can certainly look, but there is – the first thing that comes to mind and I know that Ann is probably vigorously nodding her head, which is some of these value sets have a large number of data elements. These are not things that have just a few, these are fairly significant.

So, that where it would take.

- Rob McClure: And just to be clear, by data elements, you mean content concepts and the values type.
- Jason Goldwater: Correct, yes. So these would so, some of these are fairly extensive. So that ...

Female: Rob.

Jason Goldwater: ... would be ...

Female: Yes, Rob, some of them has a second different members.

Jason Goldwater: Right.

Rob McClure: Yes, no, I'm not surprised.

Ann Smith: And to be clear, that's hardly extensive steps, actually not a lot and I did look at these two, but, I mean, we have some value sets that have 10,000 members. So ...

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Jason Goldwater: Right.

Ann Smith: ... not that much.

Jason Goldwater: Right. Right, and I think there's clearly nothing wrong with that level of detail, I thought that's probably preferred, but. To sort of go through all of the concepts within each of the value sets and find out where there's a cascading effect across measures is ...

Rob McClure: No, no, you misunderstood what I was saying. And I think – I hope it – we were both – both Ann and I were saying the same thing. So …

Ann Smith: Yes, we were ...

Rob McClure:this. This has nothing to do with the individual concepts. And that's important. But, that's not what I was talking about. I was talking about reuse of value sets when grouping value sets, right?

Jason Goldwater: Right.

Rob McClure: We're both grouping value sets and also when you have a measure that looks at more than one value set which is the case we were talking about here, or one place that's saying, "I'm looking at mental health disorders." Another place, it's saying, "And I'm also looking for patients who has substance abuse." And if I'm following, you're saying, "Hey, the concepts in those two value sets, there's a lot of overlap, in fact, maybe even one is completely consumed by another, therefore, let's just get rid of that value set." Well, the obvious other thing is to say, "Well, wait a minute, that value set is being used some other place. You can't get rid of it because it's being used in this other place."

Jason Goldwater: OK ...

Rob McClure: And that's the analysis that we need to see. We need to see where are these values sets that we're considering harmonization around being used all of them because any change in them is going to affect that she's everywhere not just in one spot.

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Jason Goldwater: OK.

Male: Well I ...

Marjorie Rallins: This is Marjorie, I had a question, or a comment.

Jason Goldwater: Sure.

Marjorie Rallins: Building on Rob's comments about where the values sets are used in looking at the second bullet point that says, "How do we develop a proposed methodology for harmonizing the value sets?" Do we look at the intended purpose for the value – the original intended purpose initially as the starting point? Rob, is that where you were going?

Rob McClure: No, actually, I was just talking about reuse, but what you just said is absolutely true. And, you know, we need to know that there's a – you know, these are all (inaudible) but that's a part of the discussion about how well formed is the value set which we aren't doing a lot of analysis up. But, it's always a part of this. And so, if you look at a value set and you know what its intended scope is, its purpose ...

Marjorie Rallins: Yes. Well, that's ...

Rob McClure: ... and you say, "Well, that really is consumed by this other one." Then as long as that value set that's consumed is not used in any other places, that's a really good place for harmonization. But if it is used some other place, then what you're talking about is not so much harmonization but remove that value set from its use in that one measure because it's really not adding any benefit, right?

Jason Goldwater: Right.

Christopher Chute: Well, this is Chris Chute. I think it really begs the question of how systemic we want to make this harmonization process. We've talked about value sets being subsumed, we've talked about, you know, secondary use of value sets and more explicit semantics around them. Right now, I'm getting the sense that most of these value sets are kind of run on list that satisfy a specific used case, and therefore, our kind of collection, I won't go so far as to say a random collection, but there are collection of many constituents, parts and components.

The obvious question is whether we want to engineer a solution that would make explicit the elements or components of giving used case. And by that, I mean, really an ontology of value sets, I hate to use that word, but let's just stay away from the (L) word. A hierarchy of value sets.

So we can talk about major depressive disorders. We can talk about substance abuse. And then we can make another value set that would actually explicitly subsume those two, because as I understand it, value sets can contain concepts and/or other value sets.

So, leveraging a machinery that would allow us to package small bite size value sets together to address a specific more complex used case, I think, would be a very substantive way of looking at this harmonization problem because it would allow us to deconstruct what the heck we're talking about and make these more coherent value sets that are focused on specific concepts that can be aggregated together for measure specific used cases.

Female: So, that's exactly what – sorry, go ahead.

Female: Sorry, I was just trying to get this word in. I was – I absolutely agree with Chris's comments in that that's exactly what we need to do that with kind of the discussion that we had when we looked at the results of the harmonization analysis for their RxNorm value sets.

What I think is really, really interesting is that in the case of the RxNorm value sets, the TEP's decision was that the values didn't need to be harmonized because they – overall, they serve different purposes even though they overlapped. And, it seems to me that this is exactly the same scenario, only the proposed solution was to harmonize.

So, I think - I would be really interested to hear about what were the differences in processes and what were the triggers to make a different decision in these different contexts.

And to Chris's point just in terms of the hierarchy values, I think that makes complete sense. I think the real challenge that we're going to have in the world that we live in is that we are not afforded the time or the space to build that data dictionary, if you will, outside of individual measures that are being developed or sets of measures that are being developed.

And so it's kind of a puzzle that we are building but not – we're not really building a comprehensive data dictionary, that's perhaps something that we need to think about outside of the context of developing value sets for specific used cases within each measure that is being developed.

Ann Smith: Right. And what I was going to say was that I had developed – when this meaningful use started, I actually was working on the Minnesota measures and the NCQA measures. And one of the things that I was working on was major depression.

So, what happened was I could see kind of across Minnesota and NCQA what we both wanted and I built small building blocks.

So, for instance, we, NCQA, wanted to include partial remission and active depressive disorders.

So, our value set had those codes in it. But, Minnesota also wanted to include full remission which we did not feel was appropriate for our measure. So I built two building blocks. I built our values, our – the values that we're going to use in our measure with active and partial remission. And then, I built a full remission value set, so that I could put those together when I use them in the Minnesota measure but not in our measure.

And I see the same type of thing going on now with the value set they brought forward here, when I compared AMA's now to ours, AMA is, which is titled Active Depression, they have the word active in it. They don't include any of the remission codes. So it's almost like we could have three sets. We could have the active codes, the partial remission and the full remission. And they could be combined across the measures in any way to meet the intent of the measure.

Male: OK.

Male: I wanted to go back to Chris's comment about a hierarchy of value sets in that – and I'm reluctant to suggest that we add yet another kind of hierarchy system to our – to the existing list that we have. And, you know, we have SNOMED and we – at this point, I think with some of these value sets, we choose all the SNOMED codes that might needed when we don't really need to do that. What we really need to do is describe what the value set should include based on the hierarchies already in SNOMED and kind of the trimming and pruning of those branches is necessary.

But then you have a, you know, somewhat concise description of what the concept is really trying to get at as kind of your base definition for that value set.

And if you have one that only includes part of that or slightly different, you know, major depression versus none, you know, other types of depression, you – I would suggest that we kind of use the SNOMED system to define that explicitly. And then move on from that – using that definition then to kind of come up with what I would call the instantiations of it. And that we don't – in our current medical record system, don't routinely use SNOMED to code all these things so that you then would need to figure out what the ICD-9 or ICD-10 codes associated with this are.

But that's been just more of an exercise in translation, which we all know is not easy, but at least you have kind of that original SNOMED definition at least for problems and for diagnosis that allows you to kind of explicitly define what you're trying to get at.

Male:Well, that works when SNOMED happens to – the SNOMED hierarchies
happened to match the used cases you encounter. I think you can probably
count the number of times that really happens.

- Male: Well, just looking, you I mean, we have so the depression or mental health disorders and substance abuse disorders are actually separate notes in SNOMED. So, that might be a case where you would need to use each, but you can so it doesn't have to be just one branch. But it could be, you know, this and or that or so on. But at least, you know, (as I give this a) framework to start the discussion from.
- Marjorie Rallins: I think it's this is Marjorie speaking, and I think it's certainly a different way of thinking in building on Chris's comments.

The only concern that I have with that is that the hierarchies in SNOMED themselves are not always, you know, the auto-classification isn't always complete. And so, if that's what you were, you know, you were suggesting.

Male: Right, but then instead of having a, you know, a value set with thousands of entries, you could have it with maybe tens of entries with, you know, the appropriate logic associated with it.

Marjorie Rallins: Yes, but you can add some additional logic that helps ...

Male: Yes.

Marjorie Rallins: ... restrict the – you know, and that's – that isn't typically how measure developers build value set and certainly something that we could consider.

Rob McClure: Right. Yes. So let's – we need to separate a little bit about our analysis process from the building process. And, I – and because of some of our current tooling issues. You know, all of the measures that were focused on here our meaningful use measures. They are all built using the VSAC toolset.

The VSAC toolset requires that you input an enumerated list of concepts and dependent of how you determine what belongs inside that list, which I would suspect for the vast majority of measures, are based on some initial queries but then you look at the structure of the code system and SNOMED, that means you're looking at the hierarchy and you're saying, "OK, yes, all of these that

are (inaudible) to this, I want", and you just go and grab them and then you put them into that list.

Hopefully, next year, SNOMED – sorry, VSAC will support crafting the definition of that value set using that kind of logic. And once it does, then the kind of conversation that we're talking about now, you know, would be simpler in a sense that, presumably, many measure developers will use that or value set developers will use that.

And so, when we look at the value set, they're also, hopefully, have purposes or scope statement so we'll know what they're trying to capture and then we'll see logic that's based on, you know, whatever the code system is, again, let's say, SNOMED, so it's looking at SNOMED and saying, "Oh, SNOMED actually is doing pretty well here, I'll just say these three things and anything that's below them, I want except for these two, which are oddballs or something like that.

And those – that is actually really useful because it changes the kind of comparisons that you're doing if all of your value sets are described that way. And I would suggest that we don't spend a lot of time talking about that scenario until we really have that scenario available to us to encourage the developers to use.

So maybe next year, you know, if we keep going, we would have a conversation like that. But for now, it's really about what Marjorie has said, which is, we have to encourage pretty clear statements of the purpose because that's, you know, other than just looking at straight codes, we have to know what the intent is and try and capture a sense of, are the intents overlapping.

And then it's just a simple and then you're back to Jaccards, you know, then you're saying – because I think, you know, we only have certain number of things. Are the intents seemed to be overlapping, then yes, the overlaps, you know, appear to be intended based on the (peer) Jaccard, or some similar analysis.

And then the question is, but does that value set get used in some other place, and therefore, it needs to exist. And in that case, it's a not a complete overlap, then yes, the overlap makes sense in that measure because there is a, you know, it's not a complete overlap with these other value sets so that value set does need to be in the measure for those few that aren't in the first (size), right?

So, there's a pretty straightforward, I think, kind of decision tree that one could imagine constructing that, you know, has elements that are computerized, but have elements that are based on a human doing some assessments.

Jason Goldwater: Rob, this ...

Rute Martins: So, Rob, this is – go ahead.

Jason Goldwater: Go ahead. No, no, no, go ahead, it's fine. Go ahead.

Rute Martins: This is Rute. And I think that makes sense, and I think that what we had discussed for RxNorm was really going back to intentional definitions, and I don't think that's possible in the world that we live in today either.

I think we need to really think through a tiered process and that we're not only looking at what's right in front of us and what we have available today, but just from a roadmap perspective have that vision of what it should look and what value set harmonization should look like in a world where the tooling really supports that.

But in the interim, I think there may be a happy medium that the tooling may be easily support. I am assuming that in order to produce the Jaccard indexes, that the – actually, the composition of the value sets is compared.

So, for instance, the comment that you made before, what are the differences in terms of codes, for instance, between the two value sets, maybe something that will be very helpful in addition to the definitions and the purpose statements for the value sets to be able to point out right away, well, these codes are in value set A and not in value set B and these codes are in value set B and not in value set A from a ...

- Rob McClure: Yes, that you're exactly right. That every time I've done a, you know, kind of prep for a harmonization, that's literally what I've done, you know, the Jaccard is really intended to take a haystack and find a set of needles. But once you've got the needles, you got to look at the specifics for each needle to see how they differ and ...
- Rute Martins: Yes.
- Rob McClure: ... right.
- Rute Martins: So that would be my first recommendation for tooling in the short term, is really to support some of that work instead of having to do with either, you know, importing all of these value sets to an access database or something like that, or write some script to produce this automatically, or God forbid, doing it manually. And the second recommendation that I would have in the context of what tooling can do in the shorter term, and I forgot about it as I spoke – as I was speaking. Well, it'll come back to me.
- Rob McClure: No, I absolutely agree with what you just said. And, you know, let me just ask, I assume, you know, because the comments seem to indicate this, that there was that kind of side-by-side comparison of the various identified value sets and, you know, based on Jaccard but then you look and you say, "OK, these three codes don't, you know, are in one and not the other." They must have looked at that and that would be a requirement, I agree.

Male: That's correct, that ...

(Crosstalk)

Female: Yes, Rob, it was pretty detailed what the TEP had to look at.

- Rob McClure: Right.
- Rute Martins: I remember what my second recommendation was.

Sorry. And that was ...

Male: That's OK, but ...

Rute Martins: ... the idea of the hierarchy, and going back to Chris's and Michael's comments. I absolutely agree that we shouldn't be trying to replicate another – what may be within a terminology already, we know that there are some limitations as Marjorie pointed out.

But, again, as part of the calculating this Jaccard index, I don't know that the Jaccard index will tell you when a value set is completely contained into another, but I can see how a warning could be produced if that's the case, because that will be a signal of a situation where we can perhaps build those building block value sets and use groupings for more complex context.

And again, I think these are just two very practical recommendations for tooling that would help in the interim, where we're living in a world of extensional value sets.

Rob McClure: You know, just quickly – one other – just comment about what Chris had said in this idea of – I forget now, Chris, what word you use other than ontology. Hierarchy, I guess.

> But, there's another word that's like that too that I think is in the same ballpark in terms of value and, that's categorization. And I didn't use the word classification, so, i.e., keywords.

> This – you know, and really what that's doing is it's trying to get some kind of distill some pieces that should also be in a purpose that a human reads and figures out, but computers can actually use more effectively. These are, presumably, encoded words that say something about the intent of the scope of the value set. It can be used for some other things. But that's, I think, also something that we could encourage that you saw now, I mean, the value set developers have to put them in or I don't think it would be inappropriate to expect the, you know, or the TEP or us, go and assign them necessarily.

But, that is a functionality actually VSAC is going to be providing very quickly. And, it is the sort of thing that I think we could plan to use in terms of this harmonization to find value sets that seemed to be focused in the same area.

Is that the sort of thing you were – you were also trying to get at, Chris?

Christopher Chute: Yes, pretty much.

Jason Goldwater: Yes. All right. So let me interject here because we have about 60 minutes left for those discussions and then we do need to turn it to governance.

You know, we – I recognize that NQF just has the next steps that we need to follow with respect to what was recommended by the TEP. It seems from the tenure of this discussion, that undergoing sort of a full on how harmonization process manually probably is not the best thing to do at this moment. But certainly, the first thing to do that we'll all define, if I wrote this down correctly, which is to take the value sets that were identified in our analysis, take the intent of that value set and describe where those value sets are, what measures those value sets are part of.

And also, define the measures themselves so that there's some understanding between the intent of the value set and the intent of the measure.

The second part of that, and I'll discuss this with the team on the best way of doing this, is to see where there might be elements that are in one value set that are not in another, and what measure those appeared in. So that it could be seen by the – by all of you, perhaps, at the in-person meeting. If we go over those that in the measures where these value sets are contained, you would then be able to see what value sets are distinct and then what value sets are overlapped, and determining whether or not that distinction is OK or whether there's additional harmonization that's (given).

(Per my notes), those are two tasks that we have ahead of us for NQF, is that correct, is there anything else that we need to be doing, or, am I sort overreaching with what we think we can reasonably get done between now and November time.

Rob McClure: So, you said my name first, so I'll respond first.

So, yes, simple answer is, I think that there's either things that are in the scope. A nuance, the last thing and say that you also need to kind of - we need to be able to look at value sets that are, you know, how they're used across different measures and keep in mind, those value sets may be grouped.

So, there's component of that analysis that I can't really even verbalize very effectively right now, but that where you have to take into account not only that value set, but that value set in the context of the fact that it's a part of a group.

So that's the only other thing. Other than – there is the possibility, you know, timing and all that stuff, but I'll just say it. So, as I mentioned, so this – that come perhaps even as early as next month, there – this capability of assigning key words to value sets will occur now whether that means that we'll get key words assigned to these value sets and that interim is certainly up for grabs, but there's the possibility, you know, with – even with the time crunch that you could utilize that, too.

Jason Goldwater: OK.

Well, I think what – at least just from a project management standpoint, you know, I think mapping the value sets with the measures that the value sets are part of, you know, that analysis, some of that we've already undertaken. So, I don't think that that is a big push for us to do, going through the concepts and finding which ones are distinct and which ones are overlapping. And then, of course, finding that to the measures will take some time, just because some of these concepts that we've discussed are fairly lengthy.

So what I would probably state is that, this is something we should go over when we are all in-person together. I think that would also just generally be more effective to see all of you and put the slides up and have us go through them.

I think what we will try to do is to get you some of the analysis a couple of days before the meeting so that you have it to review so we're not starting from ground, you know, step one at the time of the in-person meeting. That also will ultimately save a little bit of time because we do have a lot to discuss during that day.

But, what we'll aim to do is by - or in mid November to have that analysis done to you. And then we'll go over it and then decide sort of - and operationalize it from there.

Rob McClure: Can I also just suggest the very first thing that I said which was this, I think it is possible, again, this is focused on near term but, you know, I understand – I think a lot of it will carry over to whatever we can do once we get more robust definitions that are "intentionally" defined expression base.

Jason Goldwater: Yes.

Rob McClure: And that is, think about what kind of a, you know, decision tree one could operate on, because I think there is a relatively simple decision tree that were functioning that's functional here. And the context of first do this comparison and if you find this code, do lab analysis and if there's something there, then question this, that sort of thing.

I'm sensing – I would – let me just say, I have that, I think, in my head probably when I do this, but I've never written it down. And I think we need to have that written down so that we can talk about it.

Jason Goldwater: OK. Then we can certainly come up with the conceptual model.

And Mike, I know that you're online, if he is not, that's something we'll coordinate with the chair leader before we present it to the committee.

Michael Lieberman: OK.

Jason Goldwater: OK.

Are there any other discussions with – well, let me back up again and thank all of you, as I always do, for this very robust discussion. We greatly appreciate this, and greatly respect your input and happy to undergo this analysis so that moves us closer to the end result.

And, again, this is certainly not an easy task which a lot of you said many, many times and we're glad that you say that because it certainly does not. But, I think we can certainly accommodate this analysis by the time we (inaudible).

And, if that's inevitably will help at least move this along to an endpoint and whatever that endpoint may be, and I think we're more than willing to.

So that being said, are there any final thoughts or conclusions or comments that people would like to make sort of before we move onto the governance part of the afternoon?

Rute Martins: This is Rute. This is sort of a bridging comment but, you know, one of the value sets that was proposed for harmonization is a Joint Commission value set and something that we had discussed early in the process was the need for engaging the value set stewards in this process.

And I understand this is a pilot so this is not necessarily following that process, but just in terms of roles, I think that part of the process needs to definitely include discussions among stewards. They're the final decision makers on the value sets changes that need to occur. So, I just wanted to make sure that you were keeping in mind.

Jason Goldwater: Of course. Of course, so – Rute, what we're doing is, you know, piloting and just getting some observers and their comments about what they think is overlapping (and all based on) their expertise.

Again, processing that it's not a comment on the quality of the value set nor is it a comment on how the value set should be uses, it's just an opinion whether they think it's distinct or whether it is not, and we simplify this to the point that that was really all they were addressing. And if they didn't feel like it's distinct, that they would offer so much now as to why, which they all did, and we were grateful for that.

Because I think as we move forward to discuss sort of what to do with based on those recommendations, if those recommendations are even accepted, which they don't have to be, it would clearly include how the value sets steward would really be leading this. And that's why, you know, we have lots of value sets stewards on the committee.

Rute Martins: Right. Aside from the fact, let's put aside the fact that the – an objective opinion is an oxymoron, but ...

Jason Goldwater: So ...

Rute Martins: ... what I would say ...

Jason Goldwater: ... because I represent NQF which is sort of representing ...

Rute Martins: No, I understand. I'm just messing with you, really.

(Crosstalk)

Rute Martins: What I was going to say that, really, the – this would be a much more productive exercise, I feel, if the stewards of the value sets were involved because it's sort of – and perhaps, it is indicative of what's a third party – a third steward, if you will, who was considered re-using some of these value sets, for instance. And does not really understand what the purpose or intent is. That could highlight some gaps in what needs to be included along with the value set content to make sure that people are perceiving the content of the value set and the definition of the value set as it is intended.

But I would just think that the exercise would be much more productive if those people who created the value sets are at the table. And I realized that this is a pilot, so just from a process perspective as we think about this moving forward and who would be doing this analysis, I wouldn't anticipate that we would have a TEP who wasn't involved in the initial value set development to provide that harmonization set of recommendations, if that makes sense.

Jason Goldwater: OK. Duly noted.

Any other comments?

OK, let's move onto governance. Next slide, please, Ann.

So, I think last time, we discussed one of our straw man governance proposals and had a fairly in-depth discussion about the advantage and disadvantages of that. So, we went to look at another possible governance model and look at a sample proposal of how that would be incorporated.

Next slide.

So here, the ground rules for how we would be evaluating this, and this is based on discussions we have all had over the last couple of months as well as discussions that we've had with ONC.

So, some of the ground rules are how to define and use high-quality value set, the methodology for development of the value sets, principles to maintain high-quality value set. A way of maintaining values of harmonization to encourage the use of high quality and harmonized value set, and that relationship to measure development, recommendations for NQF endorsement, and the relationship to programs sponsored and directed by CMS.

Next slide.

So, the way we have been comparing our proposals, and this is just for as an example only. We looked at one proposal already, we looked to doing yet another one today and the way that we're evaluating this is how you define high-quality value set, how you maintain values of harmonization, how the governance model supports measure development, its recommendations for endorsement and its use in CMS programs.

Next slide.

So the second proposal that we're talking about now is what we call the starter set proposal, that we look at the clean-up proposal last time around, this time, we're going to focus on what's known as starter set.

Next slide.

So, the starter set, we look at objective criteria. The value set is automatically checked by the VSAC, it looks at this proper technical use of code systems nationally recognized code sets. And that the value set purpose is both present and complete.

Next slide.

The subjective criteria. We look at code system set, does the value set use code systems consistent with the latest ONC Standards Advisory Board, is the code system being used properly for the value set purpose, for example, are they using drug class versus brand name and are excellent for medication. Is the value set purpose clearly described, or the value set number is consistent with the value set, and does the value set conflict with other high-quality value set.

Next slide.

Again, focusing on high-quality value set, it's evaluated by a technical expert panel, that technical expert panel meets monthly to review the value sets, it looks at newly submitted value sets and expire high-quality value sets for use in the future, and provides ample opportunity to support new value set and electronic clinical quality measure development.

Next slide.

Ellen Harper: I have a question.

Jason Goldwater: Yes.

Ellen Harper: This is Ellen Harper.

One of the things that we struggled with on the medications was the granularity of the drug, the drug, the dose, the dosed, (I thought) was a pill or an injection and even how it was dispensed.

Jason Goldwater: Right.

- Ellen Harper: Is that part of what we could have with the subjective criteria as granularity of the components?
- Jason Goldwater: Well, I think that's a discussion for all of you. I think the way we were looking at it is from the very high level, when we're evaluating the quality, you know, what factors do we have to consider, do we have to get to that level of granularity, or can we look at it from a more, I guess, higher level view to determine whether or not it meets a particular quality threshold.

So, before we move on, I'll post that question to all of you, what are your opinions about how we examine quality value sets, do we look at the level of granularity, or do we focus more on concept, use of code systems and so forth, or also all of the above.

- Marjorie Rallins: Well, this is Marjorie, I'll start. I think it depends, and I think it depends on whether we're going to enumerate value sets or define value sets.
- Jason Goldwater: OK.
- Marjorie Rallins: You know what I mean? So, are we going to try to specify each member, and if it is, then you'll need to use more, you know, more precise criteria to evaluate that value set. If we're going to define value set, you know, sort of like what we discussed in our previous conversation, we won't get into methodology anymore. I think that will then take a different process.

Jason Goldwater: Right.

Male: I think it comes to really kind of the relationship between value sets and the quality data model. You know, you don't want to overuse the value set in terms of describing the method of the medication the way that it's given if that's something that should be done as part of the quality data model instead of the value set. But really – I mean, a bi question about how to, you know, how to define, it gets much more into this issue of how to define quality measures and how to do that well as opposed to just define the value set.

Robert McClure: Well, so this is Rob. I mean, I think that is an important piece of this, that looking at value sets – I was about to say kind of completely independent way of the model that they're being used in.

But even – we never really can do that. So, it just highlights the fact that doing – thinking that you can do that in some way, I think, is problematic.

And so, maybe part of what we have to do is embrace that, you know, and incorporate that into the entire process as opposed to just kind of have a sideline glance to it.

I'm not saying that that's necessarily the way I fully feel because of – and this a complex thing. And, you know, just saying that doesn't make it so, you know. But, I do think that almost everything that we've talked about and certainly in my experience, it's – I mean, you do have – if you're looking at the measure, you're looking at the measure and you kind of sidelong glance at the value sets. If you're looking at the value sets, you'd look primarily at the value sets and sidelong glance at the measure.

And, I think there's a rule particularly for this group to think about that process and be kind of definitive with regards to our expectations about the best way to do this.

I bet Chris has some thoughts on this, too. But, you know, I'll finish by saying, this has been a real question in this, you know, in health I.T. for a long time. And, I would – it's my perception that the outgrowth of groups that are focused on detailed clinical model type things, which are our small elements of combined model and content, is a reflection of the fact that as we really kind of wrestle with this problem, we've, at this point, decided you can't separate them.

Jason Goldwater: Right.

Nancy Walker: This is Nancy. I actually definitely agree with that. And, remember that our first focus is to try to match the value sets with the definition or the intent of the measure. And so, if you have to get to a detailed level because you're using medications in the RxNorm level needs to be correct for the intent – you

- then you have to do that. You don't have to do it 100 percent of the time, but there may be times when you do.

Jason Goldwater: OK.

Jason Goldwater: Yes. And I'll make one other kind of comment here, and that is, that there's another, I think, role that we have as to give clear guidance about that level of detail that seems reasonable, right? There was a time when this was initially kind of being – when we're beginning these processes years ago in the context of meaningful use. And the intent, the goal there was to create general usable value sets that was thought to be a valuable thing, acknowledging that you occasionally have to have specific.

Again, I think it's this group's responsibility to think about, is that really a reasonable goal. It's possible, in my opinion, that you could end up with some general real, you know, reusable ones. But, having that as your primary goal, in my opinion, now may not be – may be misleading. And the bottom line for me then, for example, again, I really hesitate to say I'm defining my exact feelings on this stuff because I really think the group should decide its own decision. And I don't even know what mine is yet.

But I'm tending more towards – there's a highlight that said you'll need lots of nuance value sets, and that that's OK as opposed to trying to get everybody to kind of make small value sets.

Now, there's consequences to this, and you got to think about the global thing. If you do that, and this is one of the reasons why harmonization has to be an important thing, you're putting all kinds of difficulties on implementers because they've got to keep track of all these slightly different value sets for every single situation, and there's a cause there that just may not bear out the benefit.

And particularly, when you think about, this is all about in the context of quality assessment coming up with numbers that, you know, new – you know, slight variations and differences between one organization or another or one individual on another based on nuance differences in value sets.

I mean, things get lost at that level and, you know, so trying to get to the Nth degree of specificity and creating a value set when the thing you're using that for to do analysis really doesn't care. There's a, you know, you're on the tail. And we – again, this group's, I think role, is to think about all of that stuff.

Christopher Chute: On that point, this is Chris, I think that, you know, putting all the eggs in the value set basket – and this is something we've talked about earlier. The goal is to identify a cohort of patients who are in the numerator and another cohort of patients who are in the denominator effectively. And you're getting into, you know, clinical phenotyping algorithms.

It's a pretty blunt instrument to just use a pile of value sets to get there. It's instrument we happen to have. But if we're going to instill nuance, it's not clear to me that the nuance should be instilled, you know, strategically as we move forward with just value sets. I mean, I think there are, you know, medication results. There are – sorry, laboratory results. There are details of medication orders that go beyond in terms of dose, range and so on and so forth.

There are lots of ways of doing nuance. But trying to squeeze all of that subtlety out of evermore, one might almost characterize it as ridiculous, value sets specification, is probably not a scalable way forward.

Female: And that's exactly my point. Next, it's very complex and ...

(Crosstalk)

Rute Martins: Oh, sorry, go ahead.

Female: ... the cost-benefit analysis on that, was my point.

Thank you for the consideration.

Rute Martins: This is Rute. I would say, and going back to your original question that this may be an issue that is RxNorm specific.

And – because I think that the way granularity is defined and the access of granularity for other terminologies and that is obvious, and so it becomes

really hard to say, well, there's this level of detail that we're going to leave out from the SNOMED value set.

Having said that, I think that's – what does apply to all of the terminologies is that we – and going back to what do we think a high-quality value set is, in my opinion, a high-quality value set is one that minimizes the need for mapping. And that may mean that the value set is more complex, but that doesn't mean necessarily that it would cause implementation problems.

I think the burden of mapping is a very significant one. And. because of that, I think we should be as inclusive as possible in value sets. And I think that's also aligned with the notion that if we want to move to intentional value sets in the future, we would get large value sets, or at least if the definitions – if we're using the intentional definitions, we would get a large amount of codes to start with.

As far as specific clear RxNorm goes, I would completely concur with the comments that the value sets may not be the end-all to define some of these things.

And I'd certainly agree that this group has something to say about what should and shouldn't be included, and I think about that specifically in terms of the consistency. That would be another area that I would think a high-quality value set is consistent with other value sets in terms of granularity. And we just need to establish what that standard would be. And it may be very well be that good value set as one that allows for multiple granularities in this period of minimizing mapping.

Rob McClure: Can I jump in there? There's another piece of this.

Again, Rute's right. There is a big difference in terms of identifying the kind of granularity when you look at something like RxNorm where it's definitive and SNOMED where it's totally not.

And that is - so again, another place where this group, I think, needs to kind of define governance, define an approach as opposed to anything specific about any value set. And that is - and expectations with regards to the way of value set is created (if that's right, what you're saying that), the content that's in the value set, the levels of granularity in that value set. And how – in the context of how you would expect it to be used, let me be clear about what I'm talking about.

When – you know, and the encounter value sets are good example of this. Now, the encounter value sets, the kind of entry point to that process is to identify diagnoses that, again, are supposed to be recorded and about the patients that would then identify an encounter that's germane.

Those value sets, I think, are typically have all kinds of granularity in them, have a wide range and in fact are, I think, intended to be all encompassing, because there's an assumption that patients have, you know, patient data may be recorded with very detailed pieces of information. And therefore, the value set exists because it's a direct query, right?

So, if you have the ability to record something about the patient with great detail, the value set has to have that great detail in it so you don't miss those patients because they are kind of the patient that you want because the value set, remember, is a general idea that all – here are all the instances, the very detailed ways it could be describes.

A very different approach to this, and I'm not suggesting in anyway that this is what we want to do. But you could imagine situations where if it really did matter, all the nuances were in unimportant, then you could just put one code into the value sets and anything that gets mapped to this works. Well, clearly, that's a pretty unacceptable way of doing things from most folks because then you put all of the onus about good mapping onto the implementers.

And so, I think one of the areas that we also need to be really clear is an essence to the kinds of value sets that are being created, and this links to the sort of thing that where it goes into the quality data model, the sort of detailed clinical model you're describing, and the expectation about when you're doing one of these kind of things, when you're doing like an encounter, a value set should have all of the detailed concepts in it because the expectation is, is that's the sort of stuff you're actually going to see in a patient record and

there's no mapping, no – mapping is a wrong word to say here, but there's no expectation that implementers are going to have to figure out what you meant. You're just going to go and look with – you look for what you gave them.

Jason Goldwater: All right. Why don't we move onto the next slide, Ann? To talk about the next one.

So, the approval process for new value set is just using the model that we're discussing, the starter set model. Value set stewards would submit value sets for high-quality value set approval on the VSAC. The value set stewards can be CMS, measure stewards, special societies, et cetera, not limited to any one or two or three organizations, more than likely as this is generally the case. And they would also be the stewards of electronic clinical quality measures as well as the – and/or the developers.

Next slide.

Maintenance of high-quality value sets. High-quality approval expires automatically when underlying code system updates impacts value set numbers, or manually, when a challenge is submitted to the VSAC.

With respect to the first point, when underlying code system updates impact the values of members that should not matter if the value set is either intentional or exception.

(Crosstalk)

Jason Goldwater: Yes.

- Female: I'm not quite sure that's true, because if you have an extensional value set and new codes are added to the code system, how would something automatically determine those codes should go into the value set.
- Jason Goldwater: Oh, presumably, with this particular proposal, we would be asking for changes to the infrastructure on the VSAC to be done, so that it automatically understands when the code system updates have been made and what impact that has on the value set, and that those changes have been made

automatically. Then those changes are then discovered and brought to the technical expert panel each month for a review, but they're done automatically.

Christopher Chute: And this is Chris. I – you know, on that point, I think for an intentional value set, the whole point is you're trying to avoid this continuous review. I mean, they had to (darn) these drugs every year. And if there are, you know, a beta-lactam antibiotics and they're a beta-lactam antibiotic, I wonder if – this is in a bad place to start, but I wonder if you might want to relax the automatic cessation of approval for intent of value sets.

Jason Goldwater: OK.

(Crosstalk)

- Male: The issue there if you at some point, if you bifurcate beta-lactams to, you know, two subtypes of it or something like that, then you would then you would need to review your value sets.
- Christopher Chute: Right, but not adding another, you know, a me-too kind of drug in the list is shouldn't prompt that.
- Male: Yes, yes, but (inaudible) is how do you know without looking at what the changes are as to whether it impacts the value set.
- Female: Especially if you have an extensional values that would just the lists of codes and not an intentional definition.

Male: Well, I ...

Rob McClure: Yes, Chris, so this is Rob. This – I think, honestly, you know, it's just we're a little bit ahead of where we should be in terms of this "automatic" approval issues.

The – you know, I would suggest and, you know, I acknowledge we have to keep an eye on the future, but we had to really focus on what's going on now in the VSAC and not imagine, well, how this might work out in the future. I can have a different opinion about some of this stuff, but, you know, the –
Ann is right. Right now, everything is, you know, an enumerated list of concepts.

The only thing that can happen automatically is that codes disappear out of the value set. The expansion set of the value set, there's still definitions as far as that code, but now, when that definition is applied against the current code system version, the codes that are retired aren't in that expansion. Therefore, they're not in what you download.

And that's the thing that, you know, if you have this automatic approval kind of thing, I'm still struggling to really understand the valuable that I'd rather just know what happened, was this reviewed by the value set author or not.

But, you know, and if forced to kind of do that, then I would say that, you know, in our current world, automatic updates, which you do see in VSAC, in essence, should be automatically approved, because the only codes that are in the expansion set now were codes that were in the expansion set before. It's just you may not have as many of them.

Now, when we get intentional, you know, i.e., expression-based definition, we're going to have a different situation. Chris is exactly right, the intent of that process is to presumably have changes in the expansion set, the new codes when you run it against the new version of the code system, should all still be valid members of the value set.

And in my opinion, that's not a approval question, that is a, did you review yet or not question, and then users can decide whether they want to take value set expansions that have not been reviewed, or whether they'll wait until they're reviewed.

That process, to me, is a quality-based process. I don't like, personally, the idea of saying that there is some kind of automated approval, approval on my opinion is a result of review.

Rute Martins: This is Rute. I absolutely agree with that.

I am confused about if the stewards, who are actually the ultimate responsible for various value set content, submit the value set for approval in VSAC, who's going to approve it?

- Jason Goldwater: I think, in this case, the whatever the technical expert panel would review and approve for this proposal.
- Male: Jason, do you mean approve for as a high-quality value set, or approve as a value set?
- Jason Goldwater: It would be approved as a high-quality value set. It'd be very similar to the process that's used for measure endorsement through a standing committee.

So, this is the way that it's conceptualized when we, again, say this is conceptual. So, we're not pretending that this doesn't have possible flaws or may just be one that we - it is not to be considered in the future.

But, the way this was conceptualized initially was, there would be a standing committee which would be a technical expert panel which would review the value sets as they're submitted, to determine whether they need the high-quality threshold, whatever that we determined that threshold to be, and they would pass them on to the VSAC. Because this is what happen ...

- Male: That you one could have a value set not a high quality value set that could be then used in a measure, or is there a suggestion that – or a proposed requirement that it has to use a high-quality value set in order for that measure to be used for some purpose?
- Jason Goldwater: For the governance models that we have been discussing, it would be the requirement is that it meets the high-quality criteria.

Male: Yes.

Male: For it's use or it's going to be used for a specific purpose?

Jason Goldwater: I would believe it'd be used for specific purpose. I mean, unless that's going to be a value set that would be applicable to a variety of measure. In which

case, we would still hold it to the high-quality threshold, then that becomes even more (imperative) to do that.

Rob McClure: Yes, so - so, this is Rob.

I really think that the content of the value set while important is the wrong focus for quality assessment. If we're involved in that process, right? You know, what you're sensing from (Huten) and you would also sense that from Ann, and I'm sure any other measure – or measure developers involved in creating value sets, that they don't approach this lightly.

And so, they - and I know you know this, but - so they're confident of the quality of the definition of the value set when it's proposed for use.

What I think our role here in the context of governance is process, not content. And, you know, I'm not saying that's necessarily easy, but what we're – what our – in my opinion, our job is to say, and that's why I was talking about, here are the steps, you know, what's our decision tree, how do you do this. That there are certain criteria by which a value set is crafted that indicates quality, quality of process.

The results of that, it would be, I think, very difficult for a TEP to have the right mix of people on an ongoing basis to be able to evaluate details of expansion set or even a definition of a value set, and particularly when you're talking about expression or (intentionally).

To know the code system involved and everything else and then the list of concepts that come out and to know how they're used and all of the systems, and there's going to be pieces of that that they know, but that's the job of a value set developer, really, a measure developer to gather the right resources that do have all of that and to generate those things based on that, that's their job.

And they'll, you know, that – so I would say, you know, we should be focusing on, in essence, that decision tree, here are the set of activities that a value set developer must follow in order to be qualified as a high-quality value set. You know, you have done an analysis in terms of the comparisons either related value sets. And you can – and perhaps, even you've documented in the context of the purpose why there are certain codes in your value set that need to be there even though the majority of the codes overlap with another one, i.e., you've really got a different value set based on just a few additional codes.

That you've engaged clinical experts and you can document that they reviewed it and approved it. I mean, those are the sorts of things that I would say represent a quality assessment that this group could take on.

Jason Goldwater: OK.

Male: I think that's a good question Rob as to, you know, but we know that when people can fill out, can do that sort of analysis, but if they're – there is the potential for doing it less well. You know, there's – so – and I think that's what it comes out of this. But who can say that, "OK, yes, you really do need another value set, this one is not close enough", because I think in looking at what's – I mean – no, I'm not a measure developer, but isn't part of that in the current process for creating value sets, aren't you supposed to look and see if there are other ones, yet still we've come to this situation where, you know, we know that there are multiple value sets around mood disorder and they're probably don't need to be.

So, there does come apart, you know, subjective issue where you look at what's there and say, "Do we really need another one, or is the current one good enough." And that's – if we don't have kind of somebody or somebody looking at that and asking that question, I think we're going to – we're not going to significantly improve upon where we are now.

Rute Martins: This is Rute. I actually disagree with that statement. And, the reason why I disagree is just a matter of history. The reason why there are values that still require harmonization is a circumstantial one.

And that is because the VSAC didn't exist two years ago, or a year ago. The VSAC was launched – or maybe it was two years ago, 2013 maybe.

So, it didn't exist. The communication channels weren't there, the tooling wasn't there.

The Jaccard index was added to the VSAC, I don't know, three months ago, four months ago. So, a lot of the tooling just wasn't in place for this harmonization to happen.

I really think that measure developers are willing to work together to harmonize these value sets, and we've seen actually the number of value sets that require harmonization decreased sharply, even without the tooling in place.

So, I think what we're seeing is really an artifact of the number of value sets that were developed in silos because there was no way to really coordinate that development.

And I absolutely agree when you say that someone should be asking these questions. I don't know that we are at a place yet where we can have the group that is asking the questions also making the decisions on what needs to be a separate value set, and what doesn't.

And that takes me to the comment of the manual – when a challenge is submitted to a value set. It doesn't mean that it's a valid one. So, there shouldn't be a decision made about the quality of the value set just because someone out there doesn't like it. That should be a voice that is heard, and it should assessed whether it's a valid concern or not, that sort of thing.

But I absolutely agree with Rob, this is a process question, not a content question. And it – I really feel strongly about this because I seriously doubt that technical panel that is an overarching broad set of people that is the standing panel will have the ability to determine the quality of the content, because we're really talking about, let's say, a measure has 20 value sets, how is this going to happen at the individual value set level. I think it's really a non-manageable process, and a lot of red tape for value set quality.

Female: And just to add on to what Rute said, we did 400 value sets just in the last three months for the meaningful use measures. So that should give you an idea of scope.

But, the other issue with the tools is that I, as a measure developer, can't see other measure developer's value sets that they are drafting. . So, we will continue to have this problem because I may be doing a measure for mood disorder and Rute may be doing a measure from mood disorder, and I can't see her draft value set and she can't see mine.

So, we both end up putting them out there because we have no idea the other person is even working on them.

Jason Goldwater: OK, let's move onto the next slide, Ann, if we could. I greatly appreciate this discussion, we all do. And I think your points are very well noted of. Not just for this proposal but just for governance models overall.

How does this model support measure development for starter set model? High – this, again, was just how it was proposed. High-quality value sets are distinguished well in the VSAC for measure developers. Measure value set developers can submit a value set for high-quality approval. And then measure developers can challenge high-quality approval based on a criterion that was not met when the (set) was submitted.

Next slide, please.

Recommendations for endorsement, electronical clinical – eCQMs evaluator for NQF endorsement for the trial approval program must use high-quality value sets. Just as a brief reminder, our process as it stands now is to examine the value sets within the VSAC to make sure that they're published, that would change with this governance model. It will probably change with any governance model, but these are – all value set is supposed to have either submitted, expired, or challenged status. Value sets remained and expired or challenged status during measure review. Measure developments present to the NQF Standing Committees with respect to a measure on the status impacts of the feasibility. Next slide.

And then promoted by CMS programs are the used of these eCQMs and CMS programs would rely on NQF endorsements, check for use of high-quality value set and value set harmonization issues. Programs reevaluated and acceptability of value sets instead of whether or not an eCQM is a good fit for a program.

Next slide.

OK. So, based on those, we're doing fairly well on time. Any other comments with respect to the starter set proposal, particularly as it affects measure development, or CMS programs based on what we just went over?

Male: So, Jason, can you again – I guess, I missed there – who defines that it's a high-value standard?

Jason Goldwater: So I would – this group, at the conclusion of this project or an extension if one does happen, would more than likely come up with the criteria for how a high-quality value set would be defined.

And then that would be the criteria that would be used by this expert panel which would resemble, I would just presume something very close to the standing committee. That was going to apply this to determine whether our value set meets these criteria.

Now, that having been said, that was initially thought of as the content of the value set would be assessed.

Currently, on the basis of this discussion, it seems that that may not be the correct direction to go to, and it should be a process-based evaluation other than a content base.

But, regardless of how that evaluation would take place, the criterion would be set by this committee and then there would be standing committee that would review value sets on a monthly basis, and apply that to those that are being submitted, or challenged or those that are expired. Male: All right, so it sounds like there would be a huge amount of work to authorize, or to - in all the current - all the current value sets would need to be evaluated as to whether they're high quality or not.

Jason Goldwater: That would be one – that would be something for consideration, yes.

There's two ways of 1:28:27.0 on that. The first is that, yes, they all go through a evaluation process. We would determine whether they need to be harmonized or not with whatever process.

Inevitably, we come to you with respect to how some of this should be harmonized.

And then whether or not they meet high quality, the high-quality thresholds that would be established.

The second train of thought, which has also been discussed, is that they would apply from all value sets being submitted from a particular point on. And, you know, again, we're just presenting the options, not obviously what would be preferred. It's not – it's just simply what you all simply – if you think this is an approach, what approach you would recommend going with.

(Because as I've stated) now, the only thing we look at currently is whether or not they're published in the VSAC. And that they're not proprietary value sets, which we have not encountered today.

Any comments?

- Rute Martins: Jason, could you go back? I don't know if it was the prior slide or two slides before, but explain a little bit more what the statuses would mean, specifically as I think about a published value set that is published without being reviewed for high quality, what would the status be.
- Jason Goldwater: That will be submitted when there would be a value set that would be an expired value set is the processes have changed or the concepts has changed so the value set would be expiring, or that there's a challenge through the

value set as to whether it's high quality or not. And that status would be reflected in the VSAC. When a value set is under review, which would, you know, when a value set would be reviewed and a measure is being reviewed and when the value set status will ought to be expired or challenged. **Rute Martins:** OK. I'm just not seeing how this would work in the real world where code systems are updated multiple times and value sets may only be updated once a year, for instance. Jason Goldwater: OK. **Rute Martins:** All value sets would expire in terms of high quality before the next version of the value sets would be created just in terms of the CMS programs out there right now. Rob McClure: Yes. So this is Rob. Thinking downstream, the general idea, I think, has merit. I think we're ahead of where, you know, kind of we can accomplish things right now.

So, the idea that there's – again, I'm really backed processing and I think that if we define certain kinds of processes that can be documented in some way, so that there's – it's easy to kind of run a report, then you can say, yes, they've met all of this process requirements, and therefore, this one seems ready to go, you know, be careful about approval.

But, you know, if we could identify – that I have this idea of this, you know, these steps and processes that literally there's a workflow that you're looking at. I think we could – once we look at that workflow, it's possible that we could say, if you're – you know, endpoints in that workflow that indicate – I got – I'm not saying I like this phrase but that it's right that it is ready for a recommendation for endorsement. But just having these things alone, I think it makes that analysis really hard. I would say no, I don't agree with this, because what I'd rather see is that there is a series of processes that have been followed.

And it is possible that overtime, we would enhance those, add some processes, you know, in our ability to capture what's going on in that process so that an endorsement could occur based on more nuance analysis.

But right now, no, I mean, you know, who does exactly write the fact that value sets in VSAC, and this is the way it should be because it's just the standard, right?

Value sets in VSAC, when the definition, now, here's the set of codes I want but it's a numerated list, or someday will be an expression. That is applied, you know, against every new code system.

When we use them in the context of the meaningful use, we basically create a downloadable view and say, "OK, everybody, we're doing a, you know, in essence, CMS is saying, "Here's a release and you are expected to adhere to this release."

But VSAC is not deeply inside of that, it's another tool outside of that, that the process of doing a release to utilize this. And so, VSAC continues to kind of chug along, and those value sets that are in there will be that when a new code system comes in, that value set will be applied and there would be new versions of the expansion set. There'll be new version, is really I don't like that word but there'll be potentially new concepts that if someone just blindly goes to VSAC and grabs, they might get a value set that has a different set of numbers than the ones that were targeted to be used for a particular release associated with meaningful use.

And so, if we're looking at this in a context of how value sets in VSAC exist, we have more moving parts. Then if we only look at this in the context of those value sets that are part of a CMS identified release, so, is it possible for us to sort all of that stuff out? Yes, it is because there's some pretty definitive things around that.

Do we need to do that right now? I'm not sure that we do because I think this is too detailed right now.

And, once we get, you know, our hands wet, or kind of experience about how the process works well and where quality is really identifiable, we can then, overtime, improve upon what really characterizes something that should be endorsed whether it's associated only with what CMS is doing or potentially what's going on in the world which VSAC reflects which is, lots more changes. So, I think we can get there, but this is not the place to start, in my opinion. Rute Martins: I absolutely agree with that. This is Rute. And what I would say is that, we wouldn't want to bring any sort of rigidity or a very rigid process into the VSAC as far as what high quality is. Again, I think there could be, from an NQF perspective, when an eCQM endorsement a set of a checklist, if you will, for the process to develop the value sets. But I think going beyond that at this point is premature. We're still trying to figure out what high quality is. We aren't able to build intentional value sets, so I think it puts undue burden and to really not produce a lot of value in the end. Male: No, I would – you know, I think those are great comments and I would agree with both of you. I do think that the fact that the tooling doesn't allow you to build an intentional value set doesn't mean that you can't express the logic that you use and put that somewhere in the documentation for the value set. So, you know, Rob, you described the process that you go through or that, you know, that you think people go through around looking at the SNOMED tree and using that as the basis for your value set. And I think that a lot of people do that. And then, what happens is that we get a list – enumerated list and we don't know what that process was and that makes it more difficult to kind of understand what that list is. So, even though – even if VSAC doesn't get support doing that and then, you know, generally in the list from the expression as we discussed, that doesn't

mean you can't put the expression in the documentation somewhere that would help with it.

And then the other part of that is I think, you know, I like the idea of the process measures and seeing, you know, making sure that people went through the process and perhaps using that as kind of the initial basis for whether you declare something high quality or not. But then what that requires is to develop that challenge program because then – I mean, I could see kind of grandfathering a lot of things in, but then you do need a process for evaluating areas or your value sets where you – where somebody looks at it and says, "You know, I think that that's actually really close to this and I don't quite understand why it's different." And so let's look at that instead of trying to, you know, go through this in depth on thousands and thousands of value sets. Let's come up with a process that we can use when we think there is an issue.

(Allen Taylor): This is (Allen) from ONC. As a novice measure developer, I think it would be very helpful to be constrained in my development of the new value set in a way as I open up a new value set to create, I have almost limitless flexibility in how much information I put in right now. But if I were forced to require fields in the creation of the value set to say, A, did I consider existing value sets. If so, which ones? Did I – do I have some professional guidance of practice guideline of regulation that says I need to use something outside of an existing value set in the example of depression and remission, depression and partial emission or just depression is a good example where there is a regulatory guidance that would vary the value set.

> And then, you know, citing some requirements, or some suggested requirements that guidance, that variance guidance be included in a metadata field in the value set creation process.

> And then, sort of another step that would be helpful, it actually be helpful to the developer themselves, the value set developer themselves is, did you consider parent concepts within the code system that's using a SNOMED parent. An encounter, which is a, you know, a CPT code, parents or parent concept, and did you include that parent concept in your value set, and if not,

why. That would be – those are my suggestions from the developer standpoint.

Jason Goldwater: All right.

Any other comments or questions? Thank you all again for all of those.

Ann Smith: This is Anna. I agree with Rute and Rob from a process perspective. But just from a timing perspective, if I, as a measure developer, submit my value sets, I'm going to need to be approved before I can use them. That means, I can't put my measure in the math. I cannot do test cases and by that, I can do nothing until that happens.

So, if I am working on and submitting 400 value sets and it's going to take your TEP six months to get through them, that could be problematic in terms of timing. So, I see a whole host of - besides I don't even think it's the right way to go. There's a whole timing thing that needs to be worked out.

Jason Goldwater: Understood.

Rute Martins: This is Rute. I didn't understand from this that this would actually preclude the publication of a value set or anything like that. That it would just be a value set is submitted along with the eCQMs, let's say, and that's when it would be evaluated rather than a show stopper step in the process, because I don't think that every single measure that is out there needs to go through to NQF, or every single value set that is out there needs to go through NQF.

If we think about providers who may be wanting to share eCQMs that they're usually using internally for their quality improvement efforts, why wouldn't those value sets live in the VSAC.

Jason Goldwater: I think I'm – what I was focusing at least from the honest discussion was the issue of timing. And that if – whatever governance model or governance strategy, you know, we end up discussing that we have to be cognizant of the timing issue that we would now want it to be a show stopper, nor would we want it to be something that would delay the submission of the measure because that's problematic on the number of levels, that's not just problematic

to the developer, but if there's a call for measures that, you know, Mathematica is under a contract to be submitting measures that they have to submit new value sets as a result, and they're not meeting their contractual obligations which is significant to them and significant to CMS, so.

What I was taking from that from honest discussion, and I think it's a point well noted is, any governance discussion has to really be cognizant of timing and how measures are submitted if and when value sets are under review, and whatever methodology is (involved).

Rute Martins: Right. And I guess what I was stating was just my understanding that that would be a process that wouldn't necessarily be in trenched in the measure development and value set development process, but then something that comes afterwards, sort of like NQF endorsement.

Jason Goldwater: Correct.

(Off-mike)

- Jason Goldwater: OK. That concludes the discussion. Ann, why don't you move onto next steps and review those with the committee?
- Ann Phillips: Absolutely. We have our next Value Set Harmonization Committee webinar on October 19th, 2015. You should be hearing from our meetings department shortly. We have an in-person meeting on November 10th, 2015.

The public comment for our draft report begins on December 1st, 2015, and we will review those comments on January 21st, 2016.

Does anybody have any questions about any of the upcoming activities? OK.

Jason and I will be at April 17 in Atlanta. Hopefully, some of you will be there and we'll get a chance to meet you all face to face. Please find us, we'll be at the Sheraton.

Jason Goldwater: Right. OK, next slide.

Ann Phillips: And just our project contact info, and then, thank you.

Jason Goldwater: ... public comment.

- Ann Phillips: Yes. Operator, is there anyone on the line for public comment? Can you check please, (Bridgette)?
- Operator: And if you would like to make a public comment at this time, please press star one.

And there are no public comments at this time.

Jason Goldwater: OK. Thank you all very much for your time, energy and discussion this afternoon. We are very thankful and appreciative of all of the comments were. We will continue to move forward and we'll keep you abreast of any developments. And we look forward to talking to you all in the 19th, if we don't see you in Atlanta beforehand.

Thanks so much everybody. Have a great rest of the day.

Female: Thanks.

Male: All right, bye-bye. Thanks.

END