



# U.S. Core Data for Interoperability Task Force

Transcript  
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Virtual Meeting

## Speakers

Name	Organization	Title
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Terrence O'Malley	Massachusetts General Hospital	Co-Chair
Tina Esposito	Advocate Aurora Health	Member
Valerie Grey	New York eHealth Collaborative	Member
Ken Kawamoto	University of Utah Health	Member
Steven Lane	Sutter Health	Member
Leslie Lenert	Medical University of South Carolina	Member
Clem McDonald	National Library of Medicine	Member
Brett Oliver	Baptist Health	Member
Steve Ready	Norton Healthcare	Member
Sheryl Turney	Anthem Blue Cross Blue Shield	Member
Sasha TerMaat	Epic	Member
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Adam Wong	Office of the National Coordinator	Back up/ Support
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**Operator**

Thank you. All lines are now bridged.

**Lauren Richie – Office of the National Coordinator for Health Information Technology– Designated Federal Officer**

Hello, everyone. Welcome to the USCDI task force. Of the members with us today, we have Terry O’Malley, co-chair, Steven Lane, Brett Oliver, and Ken Kawamoto. Are there any other members on the phone? And hopefully, others will join, too. I’ll turn it over to you, Terry, to get us started.

**Terrence O’Malley - Massachusetts General Hospital - Co-Chair**

Okay. That sounds good. This will be a quick group I think. Anyway, welcome aboard. So, let’s throw the slides up. What have we got? Deck 1, just our – yeah, that’s what we’re going to do. We’re really going to go over, primarily, the work plan so what we’re proposing we do and then, the calendar to when we’re going to do it. And the job is going to be to work on the level promotion criteria. Next slide, please. This is what we’re supposed to do. And next slide. So, this is our calendar. We have three more empty rows before we get to our HITAC presentation on the 17<sup>th</sup>. So, that means we kind of know what we have to do and we’ll have to figure out how we’re going to fit it into those three sessions. But what I’d like, Ken and Brett and Steven, the questions, I guess, let me propose to you an approach that Christina and I have thought about.

And then, just take your comments and modify them as needed. But the approach we thought to really – what we wanted to do was to add the details to the ONC outline, which is pretty high level. And they’re really asking us to think about some of the more detailed parts of their proposal. And what we will do is, essentially, parse the ONC draft to take every important noun and verb and make sure we understand what it means and what it means when they’re combined. And Christina had a really nice way of thinking about it. We’d like to build really a user guide for getting data elements through the USCDI promotion process. So, what at each step would a proposer, a submitter, a steward need to make sure happens in order to keep the advancement going to really gear it to the people who are going to move the data elements through the process? And with that in mind, we will – so that’s our high-level approach. So, let me stop there.

**Steven Lane - Sutter Health - Member**

I like it. I think it’s a good way to think about it.

**Terrence O’Malley - Massachusetts General Hospital - Co-Chair**

Okay. Ken, Brett, any modifications, additions, corrects?

**Brett Oliver - Baptist Health - Member**

I agree. I like the thought of a user guide per se for folks to understand and move it forward.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

Hey, guys, I’m on. Sorry, I got stuck waiting.

**Terrence O’Malley - Massachusetts General Hospital - Co-Chair**

Welcome, Christina.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

Thank you. Hi, Terry. Hi, crew.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

I just explained the approach we were taking, which is taking your term users' guide as what we're going to aim for. So, if that's going to be our approach, it sounds good. It's wonderful just having five of us on the line. It will go along pretty quickly. So, then the schedule is that we've got three more weeks, four counting today. So, we may try to get some work done on some of these transitions. And there are really four areas, four transitions from level to level that we need to work on. And it's really going from the comment bucket for anyone who submits a suggestion. And that includes going over in detail what the application process looks like. What is the application that has to be filled out? What is the information that the proposer has got to include? Minutes going from comment to Level 1, Level 1 to Level 2, Level 2 to USCDI.

So, really four steps. So, that's what we're going to have to do. And Christina and I thought starting with the final transition from Level 3 to USCDI, this made sense to us because the issues there are really two main issues. One is has it reached the correct degree of technical maturity, which you guys can certainly contribute to. Let's define what that means. And the other piece is there is a political, not so much political, strategic piece. And it's really the ONC and HITAC review where the national coordinator determines whether this really does meet a national need, do the benefits outweigh the costs and so on. So, we probably also want to comment on things that we can only imagine and that is what is ONC thinking they need to have in order to make those determinations. So, we may push that back to ONC. Anyway, that's the proposal. Christina, do you want to straighten that out?

**Christina Caraballo - Audacious Inquiry - Co-Chair**

That was a great overview. Thank you.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Does that make sense, gang?

**Steven Lane - Sutter Health - Member**

Yeah.

**Brett Oliver - Baptist Health - Member**

Yes, sir.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Okay. So, what that in mind, can somebody run the Google Doc and put it up on the screen. And, Adam, are we drafting you as the Google doctor?

**Adam Wong - Office of the National Coordinator for Health Information Technology - Backup/Support**

Sure, can do. Give me a sec.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

So, what we can do is let's just take a look at – if we go to the Google Doc and I'll just explain to you what has been done so far. And, Steven, I haven't gotten to see your edit. So, we'll see them now.

**Steven Lane - Sutter Health - Member**

No, I didn't edit. I wrote them down so I could share them verbally.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Okay. All right. So, let me just take you through the Google Doc broad sweep. So, Columns A through D really line up, as Steven suggested on the last call, it just lines up what we did in A and B that we did in 2018 and C and D what ONC is proposing this year. And then, we just take down the levels. And then, if you go to Columns E and F and G, basically, E was just some general thoughts. F is what we're going to fill in today. And then, G was just some initial steps on what we need to do to build the users' guide. Okay? So, that's the general outline of the Google Doc. Adam, how about if you – let's go through A, B, C, and D first just quickly because, as we all suspected, it really lines up pretty well. The items in Column B that are stricken through, those all refer to the data element workgroup that we've proposed, which is kind of irrelevant.

So, those are just stricken. But the other items pretty much crosswalk from last year to this year, which is good. Do you want to go all the way down, Adam? That would be great. And then, the only slight twist was in Column D. It's kind of a header for each level. And just put in how I was thinking about the particular following section. So, go down a little bit more. So, when you get to USCDI, it's really sort of the strategic considerations because we've got the technical maturity. And then, the question is the last four rows. What's the calculation ONC is going to make regarding its readiness to actually be admitted to USCDI?

**Steven Lane - Sutter Health - Member**

I liked the way you categorized those.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Okay.

**Steven Lane - Sutter Health - Member**

Scroll up to Row 12 again. It looks like there may have been a change made since I downloaded this. Hold tight. Okay. So, in 12E, there's this little typo there. Two independent systems.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Do you mean T-W-P doesn't do it? Okay.

**Steven Lane - Sutter Health - Member**

Yeah. I told you I read it.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

I miss spell checked.

**Steven Lane - Sutter Health - Member**

And then, I had some more substantive comments on Rows 18 and 19 when you're ready.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah, go ahead because I think we're going to start in Rows 15 on.

**Steven Lane - Sutter Health - Member**

So, in Row 18D, you're talking about how it impacts healthcare costs. And it just struck me, as I read that, that not all data that warrants exchange and inclusion in the USCDI will necessarily impact healthcare costs.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right.

**Steven Lane - Sutter Health - Member**

And I noticed over in Column G, you sort of specified this idea that in order to move forward, you have to be able to demonstrate that it impacts costs. And I couldn't think of a specific example. But there is going to be stuff that people want to exchange that isn't about money.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right.

**Steven Lane - Sutter Health - Member**

So, I just wanted us to be cautious about assuming that cost was a required criterion or cost impact.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

I don't see this as criteria though. I see it as just how it impacts healthcare costs like we're noting anything. Is it going to be a cost to vendors?

**Steven Lane - Sutter Health - Member**

The phrasing in G, provide documentation of literature that demonstrates impacts on costs, there may not be impacts on costs is what I'm saying. So, there may not be –

**Ken Kawamoto - University of Utah Health - Member**

Maybe it should say if applicable.

**Steven Lane - Sutter Health - Member**

Yeah. That's all.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah. All right. I think that's a good point. Again, we're sort of trying to get inside the decision process for ONC. And I don't know how these individual items are going to be weighed. Maybe it's just an aggregate. Maybe you only need one. But I think any guidance we can give to the user to say once you get it technically matured, be prepared to defend it against these following issues.

**Steven Lane - Sutter Health - Member**

Right. So, the other one I thought of was right below that in 19D where we have an estimated number of providers. And I would just say providers/stakeholders because here again, the world is much bigger than us providers.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right.

**Steven Lane - Sutter Health - Member**

And not all data that warrants exchange will directly impact providers.

**Ken Kawamoto - University of Utah Health - Member**

Yeah. And I think when we say documentation and literature, that's also a really high bar to say it has to have gone through peer-reviewed journal publication and acceptance in publication before it would be considered because, for example, how many people have done a peer-reviewed publication and literature on the benefits of sharing a patient's name across the network. It seems silly but that's sort of what we're asking, which seems excessive.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right. So, it may include published literature or evidence. So, maybe our best guess is good enough. It's going to be 1.2 million stakeholders that are going to use this. Where did you get that information from? Well – so, again, what kind of guidance can we give? And I think it was a really good point.

**Ken Kawamoto - University of Utah Health - Member**

I think this is along the lines of the overall benefits and costs. Big picture it's please provide as much information as you can on the benefits, which may include financial benefits and anticipated costs of supporting this where, for example, I would assume if you have a variety of EHR vendors who have tested it and can say this was a relatively easy thing for us to have and we already captured it in structured form, etc., maybe just that statement or experience can speak to the cost rather than a formal study on it.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

That's a good point. So, maybe we just add that as a suggestion for the user. Solicit estimates from the testing community or whatever we want to call them.

**Ken Kawamoto - University of Utah Health - Member**

Yeah.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Something like that.

**Ken Kawamoto - University of Utah Health - Member**

And for all of these, it may be useful to just take a real example and sort of, for example, the things we think will next come through USCDI and just talk through that. For example, our free text clinical notes already in this level, Level 5 and, if not, how would we justify free-text clinical notes being shared.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right. I think they're already in or will, hopefully, be there.

**Ken Kawamoto - University of Utah Health - Member**

And maybe conversely, this always brings up the question of how many of the things that currently are required and part of ARCH, etc., actually would be able to meet these criteria? And I'd suspect a lot of them cannot.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

That's a very good point. Okay. Put that one down, Adam, because that implies we need to circle back to kind of look at what's currently in USCDI, what's currently teed up. That's a great point.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

So, on this, as we're kind of talking through this, technical maturity is more black and white. But then, the nationwide applicability we may or may not be able to answer this. A data element may meet all of the technical requirements and, obviously, has a lot of interest from industry and stakeholders if it's made it through to be in USCDI based on the technical maturity. I'm thinking back to our recommendations from last year when we had recommended ONC do kind of a check on, I'm trying to remember, but it was something with use that once it got to USCDI, we wanted to say who is actually using the data elements in there. And I'm wondering if nationwide applicability isn't something like almost a check after it gets into USCDI. I'm kind of thinking through this out loud but it does seem more abstract.

And I think the technical readiness is probably the more important because, at this stage, people want it if it's gotten this far.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

And I hear your concerns but these questions might not be able to be answered.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah. It's a tricky one because, as you point out, you're not going to know who is going to use it or how well it's going to be used until it gets into USCDI and everyone has got to implement it. So, it's sort of a chicken/egg. We think everyone is going to use this so we're going to put it there and now, you have to use it.

**Ken Kawamoto - University of Utah Health - Member**

Well, let's be clear what that means though, right?

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right.

**Ken Kawamoto - University of Utah Health - Member**

Do we mean by if it's in USCDI, everyone must exchange that data? Or are we saying if it's in there and you're already collecting that data in structured form, you must share it in the way that's consistent with that standard, which might involve mapping? And I think examples would be good. So, let's say a data element we identify should be in here is whether somebody checked a prescription drug monitoring program, the PDMP databases for things like controlled substances for opioids. There are a lot of requirements that providers check that before they prescribe. And let's say that's something that we should make something that's shared, etc. How would you, if you're not collecting it, are you now mandating – so are you saying that if it's being collected, it must be shared?

Or are you saying now every single provider in the nation regardless of their local jurisdictional requirements would have to capture it in a structured form in a new checkbox? Those are the kinds of – I think having examples is very useful to say what do we mean by require. Is it require if you're already capturing it in structured form to send it in this form? Or doctors actually need to start capturing it?

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Great point. And maybe, Adam, let's do a big question section. And that would be one of the big questions.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

Well, I think we kind of know that answer though. If it's in USCDI, that's the base that everybody must exchange. So, if it's there, it's –

**Steven Lane - Sutter Health - Member**

But as we said, they only have to exchange it if they have it.

**Ken Kawamoto - University of Utah Health - Member**

Yeah. Let me plug another thing. Let's say a patient's pack-year history of how much tobacco they've smoked in their lifetime if that makes it into USCDI, does that mean if your system is capturing it, you must share it in the standard form? Or is it saying if your system is currently not capturing it in structured form, you must now have users start entering it? Or does it mean you must give users the ability to enter it and whether they enter it is up to them and that kind of thing?

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Doesn't that get a bit to the definition of certification and what that gives you?



**Sasha TerMaat - Epic - Member**

Yeah. I don't see how certification would place any sort of documentation obligation on a provider. In the past, in the differentiation between certification and some of the CMS programs, there might be a certification requirement to support, for example, documentation of smoking status. And then, back in Stage 1 of meaningful use, there was a meaningful use objective that said for at least I think it was 50, I don't remember exactly, 50 percent of patients over 13, you have to capture smoking status. And what we're talking about with USCDI, as I understand it, is a standard that might be referenced in the certification program.

We could recommend or anticipate that USCDI might be referenced by other programs that CMS might have incentive programs that would point to components or all of USCDI as documentation expectations. But absent CMS doing that extra work, I don't see how it would imply a documentation piece. I think it would just say that this is a feature that would be in a certified EHR. And similarly, I guess, that doesn't limit the users of an EHR in what they can do. So, just like certification might say you have a structured way to enter smoking status but it doesn't prevent a user, and I don't know how you would, from just putting in their note in an unstructured way and the patient is a smoker. And so, I guess we can't prevent unstructured documentation through this compel documentation according to the USCDI standard. But we could, I guess, put a baseline out into place if we prioritize certain things to be incorporated into EHR certification by incorporating it into this standard. That's my understanding at least.

**Ken Kawamoto - University of Utah Health - Member**

That makes sense to me. I think we just need to be very clear how this might play out and what it means to get it to these levels. And I think, specifically, what is the requirement? And the base requirement seems to be you must have the capacity to allow users to enter it in a way that can allow the data to be exported in this standard form. And, potentially, if it's there in that structured form, you must be capable of transmitting in the standard form, which may have some mapping implications as well.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

So, I think Sasha, you and Ken are not quite in sync on how this stuff is –

**Ken Kawamoto - University of Utah Health - Member**

Well, I don't know. I feel like I understand what Sasha is getting at. And I feel like I'm in sync. We're not saying users must enter it. The one place where I would like clarification of how it's been done is, for example, when smoking status was included as a requirement and that you used these SnoMed codes that that implies a requirement that EHR vendor systems must take their internal codes for smoking status and convert them to SnoMed for export purposes.

**Sasha TerMaat - Epic - Member**

Past certification programs haven't done conversions in that way. So, you could. It doesn't prohibit it. If you had a structured representation of smoking and you wanted to convert it to maps of the SnoMed codes, I think probably many people did but it's not obligated. The way certification works is it would be once someone starts using a certified product, they would have the capacity to capture from that

point forward. If a product provided a conversion opportunity, I think that would be a competitive differentiator.

**Ken Kawamoto - University of Utah Health - Member**

Okay.

**Steven Lane - Sutter Health - Member**

I think we need to think through this because there are a lot of different flavors of this. There's the if you happen to have it in structured format then, you should share it. There is if you have it, you should be sure to get it into structured format and then, you should share it. There is you really need to collect this in structured format and share it. And each of those is different. And I think we're going to need – and there are probably a few more variations on that. And I think we need to think it through because I don't think everything is the same. There are some data elements where we're going to say God damn it, you need to collect this and share it. And there are others where we're going to be much more lenient.

**Ken Kawamoto - University of Utah Health - Member**

Yeah, I agree. And maybe we should think through what are the gaps that currently exist and where do we think USCDI might go in the future and start running some of those things through. And they will probably follow certain patterns like that.

**Sasha TerMaat - Epic - Member**

It's certainly worth, I think, categorizing the data elements that way or talking about the process for categorization. But I do think then, there's a broader conversation about policy because USCDI, inherently, I don't think has that additional policy lever that you mentioned, Steven, of compelling documentation.

**Steven Lane - Sutter Health - Member**

Yeah.

**Sasha TerMaat - Epic - Member**

It could be a method to identify super high priority items that are recommended for CMS to compel documentation or something along those lines but it doesn't have that inherently.

**Ken Kawamoto - University of Utah Health - Member**

And that's where the cost comes in, too. A huge cost would be having users add yet another data point that they have to capture structured. And is it worth it? And so, yeah, I agree we should take some examples and think through and just make sure, in the end, what we define as the process makes sense for getting the outcomes we want in a way that's not overly burdensome and makes clear, for example, at this point, we've defined that this is something that could be shared in a structured way but nobody is compelling these people to do that at this point where CMS may step in and say for our purposes, we need you to do this. Or there's a quality measure now that requires the data point so de factor we're asking you to enter it. But I think it would be a pretty sad day if the end result was healthcare providers have to manually collect 20 more data elements.

**Brett Oliver - Baptist Health - Member**

I think it's a really good conversation to have and important to define out. Just to give you another real-world example, we just had some new telehealth legislation that went into effect July 1. And we have pay parity with that in the state of Kentucky. And so, it was really an important step. And all we have to do is a little O2 modify for telehealth. But at the last minute, the state Medicaid office said that we had to add these two-letter codes because they wanted the data just to understand where telehealth services were originating from and where they were taking place. So, they asked us to code these ambulance codes. And I brought up to the girl, I said, "I don't know that there is every provider that has ever used these ambulance codes."

And the point being is that they mandated that and fortunately rescinded it after the backlash. But they didn't realize they were putting additional burden on the folks providing the care and didn't think through how we were going to even capture that particular code. So, I do think the discussion is really well warranted.

**Steven Lane - Sutter Health - Member**

Yeah.

**Ken Kawamoto - University of Utah Health - Member**

And I think the easiest is when people are already capturing something in structured form in a standard way but just start sharing it. And then, the next easiest is people are already capturing it in a structured form not using standard codes and let's see if we can map it although that's still a lot of work. If he said procedures that we're sharing now, it's only suggested that you map the SnoMed. And now, we're requiring mapping the SnoMed. For example, let's say we think that that's a ton of work and probably something that individual health systems are going to need to do for existing codes. So, that implies things like well, maybe we should identify the top 50 procedures or 100 procedures that we care about. And, at that point, the lever would need to be health systems probably doing those mappings. And what about if we're not collecting it at all but we think it's important?

And how does that happen? But yeah, I think the key thing, in the end, is the benefit versus cost. We should probably only be doing anything that has a pretty substantial benefit that outweighs costs with the challenge being the benefits and costs may go to different stakeholders where maybe the overall net benefit is high but the people see the benefit and the people incurring the costs are different. And how do you make things work then?

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah. And that's correct, Ken. And I think that's always going to be the case that the costs and benefits are not equally distributed. So, I think that's going to be a constant issue. So, I was thinking that if, as part of certification, I thought there was a requirement that if USCDI data elements are now part of certification that the requirement would be if you collected the data, if it was available then, it would be in the USCDI structure. It would be structured and then, sent however you wanted to send it. But is that wrong?

**Steven Lane - Sutter Health - Member**

I think that Sasha's point is really well taken. You said if you collect it. Again, people who collect stuff but they don't codify it or put it in fields that allow it to be exchanged. So, we have to think. It's the age-old problem of the ejection fraction. If it's lost in free text, yes, somebody is going to have some NLP thing that's going to pull it out. But if we really want everybody who measures ejection fraction to put it in a codified field that meets certain standards and then, exchange that, which we do, we have to say that.

**Ken Kawamoto - University of Utah Health - Member**

Yeah. I think that's a great example and maybe one we should dwell on a little bit to think through like what the current state is and what it might mean to say, for example, that share ejection fraction and improve how that's shared. Where it probably is the case that the current USCDI does allow sharing ejection fraction either as a part of echo reports or as an observation with the LOINK code for the ejection fraction, right. But the reality probably is that it's probably mostly stuck in free text. And there are relatively few health systems that if they get a LOINK, say a Fyre request, with an observation with that LOINK code for ejection fraction, that it's going to automatically start populating. And you're going to get it back.

So, if we think something like that is important and the USCDI processes the right one to encourage that to be more broadly adapted, what does that mean. How would it go through this process? How would ejection fraction reaching Level 5 mean things are going to change compared to what's being done now?

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

So, Ken, do you think we should take an example and run through it in detail of what it implies?

**Sasha TerMaat - Epic - Member**

Would it be easier to take an example that's already happened like smoking status is the one I threw out earlier?

**Ken Kawamoto - University of Utah Health - Member**

Yeah, I think so.

**Sasha TerMaat - Epic - Member**

Because I'm just wondering if instead of speculating about ejection fraction, which we have questions about in our head, if we took something that's happened in past certification, maybe that would have us wrap our mind around what it might have looked like in each step in the process.

**Ken Kawamoto - University of Utah Health - Member**

Yeah, I agree.

**Steven Lane - Sutter Health - Member**

What I think we ought to do is we should say that there are these three or four different levels of data capture and exchange that might apply depending on the item. And then, give an example of each. So,

I think ejection fraction is – smoking status might – I don't know what's in the current certification, Sasha. Do they specify a standard for capturing smoking status and what are the –

**Sasha TerMaat - Epic - Member**

Yes.

**Steven Lane - Sutter Health - Member**

Okay. Yeah. And so, maybe smoking status and ejection fraction, we propose that ejection fraction is going to be like smoking status. It has to be codified, bounded by a set of data elements, etc. But then, there are others where we're going to feel differently. And we might want to come up with an example of each.

**Sasha TerMaat - Epic - Member**

Sure.

**Ken Kawamoto - University of Utah Health - Member**

Starting with things that have gone through the process makes sense to me. Maybe if we start with these and identify those patterns and actually specify. There's nothing like being able to see an example. If we have something like this then, this is the process you can expect and the way you would expect to be able to answer these questions. So, maybe let's start with what might be one of the simplest, smoking status. And do we have the time in the upcoming calls to, basically, update the process by using examples that fit certain patterns? Does that make sense? I like that a lot.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah. That makes sense. Adam, can you add Column H and title it smoking status? And then, we'll run in parallel with –

**Ken Kawamoto - University of Utah Health - Member**

Yeah. And let's define what the pattern is. I think that's a pattern of something that I'm going to speculate historically EHR's have had a structured way to capture it? And I don't know. Was it fairly well populated before then? I don't know. But let's use that pattern. I guess the first question is maybe, Sasha, you can provide background and talk about what pattern that fits. Was it collected before in structured form before our people started pushing for this and interoperability regs? Were people actually populating it and that kind of thing?

**Sasha TerMaat - Epic - Member**

Yeah. So, my impression from my own work with our EHR and working with other developers in our trade association is that EHR's had a variety of ways to capture smoking status prior to its inclusion in any sort of certification program. And people, I think, used things like pack years or other methods to quantify or collect that data depending on the feedback they had had from their users and so forth. The use of that information – I don't have any numbers to kind of quantify how frequently it was assessed. But I do think it was included in quality measures, even pretty far back in the PQRS programs and so forth. So, there might have been data to say what was being done prior to its inclusion in certification.

And then, it was a pretty early inclusion in the ONC certification back in the 2011 edition. And also, potentially an interesting example, too, because the way in which it was included in the 2011 edition, I think, drew a lot of criticism.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Refresh my memory on that. How was it?

**Sasha TerMaat - Epic - Member**

Oh, yeah. So, the 2011 edition expected the use of I think it was six specific SnoMed codes to capture smoking status. And there was no provision, at that time, for flexibility or creativity in data capture or mapping. So, the ability to do the type of conversions that Ken talked about was a bit limited because of the way the data capture was expected. And people who might have felt like they had a more sophisticated or more granular way to capture the data felt very frustrated. Also, the specific SnoMed terms that were provided for use didn't feel very friendly or intuitive. There would be phrases like never a smoker or current some day smoker. I think people just felt like that was not the vocabulary they were accustomed to using.

And so, I think, especially if people had been contented with the method they had been using prior in documenting pack years or something of that nature, ready to quit, etc., and then, had to switch to this or supplement with this either replacement or additional documentation of current some day smoker, never smoker, etc., they felt, I think, like that was not the progression of interoperability that maybe they'd hoped for.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Thank you. Based on our experience in Partners where we had six Legacy systems that didn't talk to each other, we had six different ways of capturing smoking. And no one was happy when we –

**Sasha TerMaat - Epic - Member**

But you were capturing it, I guess. So, that, I guess, supports the idea that it was widely done but not in a consistent way, yeah.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Exactly. Everyone got it but no one got it the same way.

**Ken Kawamoto - University of Utah Health - Member**

Maybe a high-level philosophical question, too, here is if we get structured data through USCDI because USCDI itself in the standards could say – at least it doesn't say like a Fyre profile level, you must use these codes, you can use these codes, or you should use these codes. You can use whatever you want. What is, to easing this example, if this were being run through today, would we expect that USCDI at the final level would have, as it currently does, six or seven or something SnoMed codes for smoking status and you must always communicate it that way? Or would we expect it more like say labs currently are probably sent, which is you should use LOINK if it's available but if it's not, it's okay? I

guess, I'm just wondering if we have to do it over again, for example, what would smoking status look like in this process? Would we –

**Sasha TerMaat - Epic - Member**

Well, I think smoking status today is actually different. Unless I'm forgetting, I think they took out the specific value set of those six codes. First, they revised the value set in the 2014 edition to a different set of eight codes. And then, I think in the 2015 edition, there is no more value set. It's just you should express smoking status using Snomed but it's not restricted to a specific set of codes.

**Ken Kawamoto - University of Utah Health - Member**

Okay.

**Steven Lane - Sutter Health - Member**

This sounds like the swinging pendulum, right. This is the experience that we've all had in trying to do it and then, people pushing back and not trying to do it differently. But I think it's a good lesson for us to think about. And, Ken, as you were talking, I was envisioning a bit of a matrix. For a given data element or data type, does it need to be collected? Yes or no? Does it need to be codified? Yes or no? Does it need to be codified using a specific standard? Yes or no? Does it need to be codified using a specific value set? Yes or no? Because, again, there are these degrees of requirement that are going to vary. That story of the smoking status is fascinating, Sasha. You should write that up or publish that because it's a great example.

I hadn't heard that story or I don't remember hearing that story that we sort of overshot or people felt we overshot and we backed down. It's a cautionary tale about how we should go about this.

**Ken Kawamoto - University of Utah Health - Member**

Yeah, it's interesting. I was just looking at the US Core and you're right. The current version of US Core Fyre profiles for smoking status is very loose. I think it changed maybe. I don't know.

**Steven Lane - Sutter Health - Member**

Right. And of course, if things are loose they're not really interoperable many of them. It's going to be case-specific, of course. But loose is not necessarily where we want to go but the cautionary tale is we don't want to get too tight too fast.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah. And it looks like there is a process in place for finding that happy medium but it's painful and takes a long time and overshoots in both directions. So, this is probably an overshoot in the loose direction. And likely, it would be tightened up in the next version.

**Sasha TerMaat - Epic - Member**

I don't know, actually. I don't hear the feedback about the present approach of allowing any Snomed representation of smoking status that I heard about the previous approaches of having a more constrained value set. I think the other lesson – it's certainly possible depending on more swing. But I think the other lesson is simply that there is some sort of balance between introducing a limited

expression of an interoperable data element but then, not being able to replace a more sophisticated expression and ending up requiring additional documentation.

So, one of the frustrating elements of the smoking status in 2011 was that the six codes of differentiating between current everyday smoker, current some day smoker, and former smoker and whatever the other three were that I don't remember didn't really replace the type of documentation people may have been doing prior with respect to readiness to quit, pack-years, tobacco use outside of smoking. So, it didn't actually, in the effort to become interoperable, reduce any documentation or replace any documentation. It just supplemented. So, it was like you still had to do what you did before plus pick one of six interoperable terms that didn't really mean that much to people at the time.

And so, there is maybe a lesson there to say that if we're looking at new things, whether it's ejection fraction or something else, it might seem logical and I certainly am sure I would advocate for it at some points to say let's start with a small representation and grow. But if the small representation just supplements and doesn't actually express information that's already being exchanged effectively then, it actually has an aggravating factor.

**Ken Kawamoto - University of Utah Health - Member**

Yeah. Well, I'm just looking at the current version and with the concepts and yeah, interesting. Current some day smoker, everyday smoker, light smoker, heavy smoker. I don't know who gains value from distinguishing between someday, everyday, light, and heavy but that's there. Interesting.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

So, where does that leave us?

**Ken Kawamoto - University of Utah Health - Member**

I guess I think sticking to this example thinking through how should this assuming somebody comes in let's just assume smoking is nowhere in USCDI right now. Let's assume that's the case. And somebody wants to bring in smoking. Based on this experience, how should this process run, I think, is the question. So, maybe perhaps we go through these questions from the beginning and sort of walk through how does the USCDI process – how should it address this, which I think the notion here is people were collecting this information to understand it to be clinically important oftentimes in different structured forms and really having different data elements, too. And how does it get from an idea of this is important for us to collect in a standard form to something that's useful? So, maybe we should walk it through the process.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Okay. Walk it through from the bottom up or the USCDI back?

**Ken Kawamoto - University of Utah Health - Member**

I would think it's through Phase 1, Phase 2, etc. Just look through and say how would we go through this and does it make sense the way we would go through it.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**



Okay. Does that make sense to everybody?

**Ken Kawamoto - University of Utah Health - Member**

So, during the comment phase, somebody say like CMS or healthcare providers, or the American Cancer Society, or somebody would say we should probably worry about smoking. It's the No. 1 preventable cause of death in the country, right. So, let's share information on it so we can treat it better. I think somebody would make that argument. And then, Level 1, identify at least one developed use case, including its relevance to nationwide exchange.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

So, anyone can get it into comment. And then, ONC reviews are based on the application form that will be required in order to determine whether it stays in comment until the items are completed on the application form or whether it meets criteria for Level 1. In which case, it goes right to Level 1 or Level 2.

**Ken Kawamoto - University of Utah Health - Member**

And I assume if you want to have a better chance, whoever is going to propose it would propose it with information that would help it gain Level 1, Level 2 kind of thing, right? So, it probably isn't going to rely on ONC to identify at least one developed use case but the proposer is going to describe it probably, right.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah. I would hope the proposer would describe it in as much detail as available with the idea of hoping to get it into Level 2 but to get it as far along as possible.

**Ken Kawamoto - University of Utah Health - Member**

So, it seems kind of obvious but, Sasha, do you remember what the rationale people gave for why this needs to be exchanged in an interoperable format?

**Sasha TerMaat - Epic - Member**

I don't remember a specific rationale. All of the ones that you mentioned certainly make sense to me but I don't remember which ones were cited back in the 2010 era.

**Ken Kawamoto - University of Utah Health - Member**

So, maybe if we sort of think back in the CMS thing, maybe one justification is so that CMS and other payers can make sure that patients are getting appropriate smoking cessation therapy or offers for smoking cessation. Maybe that's one justification that people gave, which is by tracking whether people are smokers. And I guess you would have to track whether they got smoking cessation medications or counseling or whatnot so a quality measure purpose. Although, I assume that meant somebody would have to also track whether you did something about it if they put it in a quality measure and that was probably manual.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

So, if we're looking at the submission information, there were six questions in the draft. And I think we're discussing the why. But a proposed name, why the data element should be captured and available for exchange nationwide, and any applicable use cases. I'm giving a summary of these. But do systems currently capture this data element with details as available? Do standards exist to represent and exchange this data? And No. 5 is describe any Connectathon testing pilots or production use for the data. And No. 6 is just anything else that you'd like to add. And one of our recommendations is to put an area for a letter of support for this. So, if we go through those questions, maybe it will help with this section. I can dump them in the Google Doc with copy and paste if you want.

**Ken Kawamoto - University of Utah Health - Member**

If this were being done in the modern era, probably the approach would be yes and we use smoking data, maybe an EHR specific mechanism perhaps. I don't know whether they'd have to say yes, we did it and, in fact, we used the standard based mechanisms to use smoking. But I assume the kinds of information that could be provided are things like, yeah, in our system, we identified patients who were smokers and used this approach to refer them to our state [inaudible] [00:53:54] and we were able to reduce smoking rates by X percent. I assume that's the kind of thing, right, which if projected out probably saved this many lives. I guess, the argonaut process seems like something that fits into this approach.

I guess I don't know if there's a non-argonaut process that would bring multiple vendors together for something like this right now that's established. And what would it look like, for example, if you wanted to get to the later levels where you have two or three EHR vendors who have agreed to test things out with their clients and health systems?

**Sasha TerMaat - Epic - Member**

Ken, in my experience, that happens in a lot of different standards development activities with argonaut being one example. But HL7 work groups on standards that are not argonauts have certainly had similar types of activity. Standards development work that happens through other organizations, NCPDP, or what have you would be similar, too. So, I would, I guess, generalize into that being the type of work that often happens in the standards development community.

**Ken Kawamoto - University of Utah Health - Member**

Okay. The expectation almost is that the bar is not really ONC agreeing that this is important in the way we're talking about it here. The bar is identifying other health systems, other stakeholder groups, and employing the EHR vendors to agree that this is an important thing to test out in whatever form and to actually test it out and to show value, right.

**Sasha TerMaat - Epic - Member**

Well, it wouldn't have to only be tested by an EHR, right. Some of these things, ejection fraction being an obvious example, are going to need specialty systems as some of the primary pilot things. Some of them are going to require labs, pharmacy systems, PDMP's, patient applications. I guess, depending on the standard in question, I think there's actually a wide variety of health IT that might be involved in piloting.

**Ken Kawamoto - University of Utah Health - Member**

And I guess the question is does the USCDI – what is the USCDI process within that early phase? Is it intended to facilitate, identify priority things, and help resource it, bring people together? Or is it really intended to say hey, guys, figure out what's important and what you're able to get stakeholders together on and come back to us once you've sort of validated it and then, we can put it to the process? That's an important question. Do we anticipate the USCDI process to include once somebody's proposed it and it looks like a good idea to help facilitate groups coming together, helping to fund it, helping to coordinate it? Or is it really USCDI, at least from the ONC end starts, once a lot of that groundwork has been done and pushed in?

**Steven Lane - Sutter Health - Member**

I think it's for the latter case that you describe because, especially early on, presumably, there's going to be a pretty large group of items being brought forward. And ONC isn't going to have the resources to babysit or advocate all of them. Those that kind of apply for support as we've been discussing for advocacy from the ONC might get that. But it seems like the first couple of years, it's just going to be folks bringing stuff forward where they have an established constituency and we just have to say these are all of the boxes that you need to check.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

So, this is a great discussion and we've talked about kind of a technical advisory committee. I'd like to keep the discussion on track for today at looking at the actual promotion criteria because it's the biggest gap in our recommendations. So, let's think very – the technical process and come back to that. Let's start with how we get data elements actually pushed through with ONC's support. Sorry, guys.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Christina, amplify that a little bit, please.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

Yeah, no. I just wanted to – I think we were going to go down a rabbit hole on talking about potentially something that we're all very passionate about on how the data elements actually get pushed through kind of by a champion. And I wanted to really focus kind of if this was more on the technical part where it's like these are the steps A, B, and C that you take and that's the role of USCDI versus do we have a process in place to have champions, for lack of a better word, on the side pushing through. And I was saying for the purpose of this call, I think both are very important and we've identified that as a task force. But for this call, I wanted us to kind of stay more very laser-focused on that first piece, which is what are the checkboxes, the user guide, the very technical, black and white steps A, B, and C to get through the process.

I think as I said, those are really important. And the latter is one that I think that we definitely want to talk about more. But I just want us to keep moving through with the steps in the user guide.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Should we take the six items in the application form as being the first steps?

**Ken Kawamoto - University of Utah Health - Member**

Well, do we have an actual application form draft? Maybe we should look at that and what would those instructions look like. And I think, based on this discussion, I'm thinking there should be a checkbox on to request ONC support and helping to champion this and to identify potential stakeholder groups that can help you pilot this. Do you know what I'm saying? Or do you want to be connected with other people who are interested in this? How do you get these people together and resource things to here are these other projects and how you can get in touch with the folks who could help you potentially take this idea and deem it worthy of one of their next demonstration projects, etc. If we're talking about artifacts, let's actually look at the artifacts and how these ideas translate into the actual forms and processes people go through.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

I really like that suggestion, Ken, as part of the submission to add an interest and a follow option.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

And Adam, correct me but I don't know if there's a mockup of the application form rather than just a list of questions.

**Adam Wong - Office of the National Coordinator for Health Information Technology - Backup/Support**

No, there is not a literal mockup of the form. The submission information elements that are in the USCDI promotion model document will be built into the web platform that people will submit their data element submissions on. But we don't have a literal this is what the form is going to look like.

**Ken Kawamoto - University of Utah Health - Member**

Well, we can just use those questions to start.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah.

**Ken Kawamoto - University of Utah Health - Member**

It doesn't have to be a literal form. It can literally be the questions on a Google spreadsheet that we reviewed. But whereas right here in the spreadsheet, we have topics of questions or issues. But as we're talking about it, it doesn't actually affect the actual questions that are meant to be asked or information to be submitted, right. Literally, what is the data element? It exists somewhere else. And I guess the question is in testing out and thinking through would this process work and is it missing something, it seems like taking an example like tobacco cessation and actually walking through the questions and how you would answer them seems like it would be reasonable.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

I think that's great. So, maybe we need the six questions popped into another column or opposite comment.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

I'm doing it right now. Where should we put them? I've got the first one.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

How about in Column E?

**Christina Caraballo - Audacious Inquiry - Co-Chair**

Okay. I'm just going to drop them right here.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah, there you go. That's a good spot right there. And then, again, Ken, I think you're absolutely right. Take the very specific example and how would we answer it. What guidance should we give to the user or the submitter?

**Ken Kawamoto - University of Utah Health - Member**

Yes. Essentially, we in drafting these questions should pilot them ourselves.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Exactly, right. Maybe, Christina, do you want to put a column between E and F just so we can –

**Christina Caraballo - Audacious Inquiry - Co-Chair**

Hold on. I'm still dropping.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yes, I see.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

I had too many tabs opened.

**Ken Kawamoto - University of Utah Health - Member**

And it's possible – smoking cessation is a good one but it's possible that we may want to potentially take something that nobody disagreed with, if there is such a thing, to be included in the current USCDI and do that, too. Just a thought, right. We may want to start with the easiest most slam-dunked case where there was no controversy about it and push that through with assumption like if the process can't work with something, it's a really bad process.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right.

**Ken Kawamoto - University of Utah Health - Member**

Could we do something like I don't know, the patient's gender?

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Too complicated.

**Ken Kawamoto - University of Utah Health - Member**

Although, yeah, maybe that's not the best one. Patient's date of birth. I don't know.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Frontal occipital circumference.

**Ken Kawamoto - University of Utah Health - Member**

Yeah. And something that's currently already included. I don't know. Is problem list controversial?

**Sasha TerMaat - Epic - Member**

Some of the stuff around SnoMed was initially controversial. I would say if you're looking for something non-controversial, it would probably be like medications or allergies. Medications are complicated, of course. Maybe allergies –

**Steven Lane - Sutter Health - Member**

So are allergies.

**Ken Kawamoto - University of Utah Health - Member**

Can we do allergies?

**Sasha TerMaat - Epic - Member**

Yeah, medication allergies, I guess, to be specific from what was previously in USCDI.

**Ken Kawamoto - University of Utah Health - Member**

Is weight currently part of USCDI?

**Sasha TerMaat - Epic - Member**

Yeah, it's part of vitals.

**Ken Kawamoto - University of Utah Health - Member**

Was that controversial at all?

**Sasha TerMaat - Epic - Member**

It was at one point because, in an effort to make sure that capture was discrete, ONC indicated that there was a lot of complexity about how you would capture units. So, as a safety feature, because pounds and kilograms are so similar, our software requires you to distinguish. And ONC had this misguided sense that you couldn't put anything besides a number in one field to capture weight in an earlier version of the certification proposal.

**Ken Kawamoto - University of Utah Health - Member**

As in you couldn't put the units?

**Sasha TerMaat - Epic - Member**

Correct, yeah.

**Ken Kawamoto - University of Utah Health - Member**

That's insane. Wow.

**Sasha TerMaat - Epic - Member**

Fortunately, that was reconsidered.

**Ken Kawamoto - University of Utah Health - Member**

Okay.

**Sasha TerMaat - Epic - Member**

But it did turn out to be controversial. So, even the simplest case.

**Ken Kawamoto - University of Utah Health - Member**

Maybe medication allergies is a good one, too, because it's something that you expect people to have captured from different systems. Maybe we can run through that one.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

I think it's probably the best one. And, again, distinguish allergies from tolerance and medications from all others.

**Ken Kawamoto - University of Utah Health - Member**

This is all complicated, isn't it? It's pretty bad when we can't find a single thing that would be a slam dunk.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Well, this is why we always have to explain to people that healthcare is more complicated than dollars and cents and other kinds of domains, right. Okay. So, Christina, could you move Column F over and make Column F G and just insert a new column between E and F? Yeah. There we go.

**Christina Caraballo - Audacious Inquiry - Co-Chair**

Adam and I did it at the same time, I think.

**Ken Kawamoto - University of Utah Health - Member**

How about despite the complication, it seems like still, weight is more simple than allergies because of the things like intolerances, should we just walk through weight and see how it would work?

**Sasha TerMaat - Epic - Member**

We can just ignore the momentary confusion about units in capture.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Okay. All right.

**Ken Kawamoto - University of Utah Health - Member**

It seems like we would be able to enter data on the proposed name and description and be like patient weight and it would be – I don't know how you'd describe weight other than weight but I'm sure someone could do it. And then, why should the – should we actually do it? Yeah, let's actually do it then.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

I think there are implications for your name choice. So, what are the characteristics of the name choice? Clarify, specificity, general acceptance. So, do we have to worry about that or can someone call weight an automobile?

**Ken Kawamoto - University of Utah Health - Member**

I think it should be called weight. I don't know what else you would call weight.

**Sasha TerMaat - Epic - Member**

It does get controversial though because people probably thought the same thing about height temporarily and then, everyone pointed out for babies, you have to have lengths. And there does have to be some thought, too.

**Ken Kawamoto - University of Utah Health - Member**

Yeah. It would be the dry weight versus wet weight and that kind of thing.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right. Clothed or unclothed.

**Ken Kawamoto - University of Utah Health - Member**

Dosing weight. But, generically, weight, I guess. And then, this makes me think, too, when you type in weight in the system or whatnot, it should probably do an auto search for people who have entered weight or a synonym to weight. So, maybe you should also be asked to put any synonyms that might be used. So, you could help with finding similar. And the back end system probably should identify those synonyms and say hey, look at these other things. Did somebody else already enter this and do you just want to add more information to support it?

**Sasha TerMaat - Epic - Member**

Right. And if you think of all of the words that are used for something like an advanced directive then, having synonyms to help identify potentially duplicative concepts would be really important.

**Ken Kawamoto - University of Utah Health - Member**

Yeah.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right. That would be the name, okay. And so, again, using the generic name so that's really sort of the common name for that category. And synonym, I think that's an excellent suggestion. Okay. No. 2. Why should it be collected? So, how much of an explanation do we think is required and what should



that be? Should it be the clinical justification, the public health justification, the population health management, all of those, any of those?

**Steven Lane - Sutter Health - Member**

I think whichever ones apply.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Right. So, we should say all applicable reasons.

**Ken Kawamoto - University of Utah Health - Member**

Well, would we say here if we're – wouldn't we say something like weight is a very important health metric and combined with height in terms of body mass index? Or in the cast of children, weight percentiles has significant implications on morbidity and mortality? And in terms of medication dosing, in particular for children, impacts the appropriate medication dosage that should be given. I would assume if we were really filling out to justify why weight should be shared, things like that would be the case. And we could say in diseases like congestive heart failure, monitoring weight is very important. I think those would be the kinds of things I assume we would say. And in particular, why you need to share it in a proper form might be that often times, you want to see the trajectory of weight over time and the weight might have been captured at different places.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

So, what suggestions then do we give to the user about the why?

**Ken Kawamoto - University of Utah Health - Member**

I think this might be the kind of place where if the form had examples of what would be – and maybe it updates, right, to say these are the things that have moved forward. Or, actually, do you know what would be really useful for ONC to do would be to take everything that's currently in the USCDI and to have sample answers that would be considered reasonable for each of these things written out. That would be awesome, right, to say here are examples of everything that's currently been included in USCDI and what ONC considers to be compelling reasons why they should be all Level 5 or Level 4 or whatever. I know that would add a lot of work to ONC staff but it seems like a reasonable thing to ask.

**Steven Lane - Sutter Health - Member**

Well, it would be work to go back and assemble it for what's already there but it could certainly be collected going forward, right. This is the data that was submitted that got this through to the point that it is.

**Ken Kawamoto - University of Utah Health - Member**

Yes. Certainly, for going forward it would be helpful for going back, too.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Again, being specific about the level of detail that would help. So, the decisions that ONC is going to have to be making based on the application is where do we start this data element out in the process.

Does it stay in comments? Does it meet Level 1 criteria? Does it meet Level 2 criteria? Those are the three choices is my understanding.

**Steven Lane - Sutter Health - Member**

Yeah, but I really like that idea of maintaining a public database of all that has been submitted for past items so people can go back and reference all of them and see how it's gone.

**Ken Kawamoto - University of Utah Health - Member**

Maybe along those lines it's like assuming ONC is the deliberating body or we become one, I don't know who is actually going to deliberate these but if they could have some structured scoring of these like this was deemed to be good or bad or not meet requirements or whatever that could be attached to these answers then, it's publicly available and you can search and say I want to search for things that were rated highly for moving forward to the next step and I want to see what was written there. Do you know what I'm saying? Because then, you have very – and it's also very clear why something was promoted and why something wasn't. Because otherwise, people will have things that don't get promoted and will be pretty frustrated. And if it's clear what did get moved forward, I think that would help increase confidence in the USCDI process versus thinking something must be rigged somewhere.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

It sounds like two pieces. It's almost the taxonomy of why data elements are good to have for the various reasons and use cases. And then, the other is a waiting system.

**Ken Kawamoto - University of Utah Health - Member**

Well, it might not be that complex, right. It could be as simple as this is cleared for moving to Level 2 and this is cleared for moving to Level 1 or this is stuck in comments.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Why?

**Ken Kawamoto - University of Utah Health - Member**

Yeah, ideally, a why.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Why is it cleared? That's the issue. I guess the question is does this get back to sort of the national interest, the societal interest, the global interest? Where are those interests and how does this data element support them, the quadruple aim that may be a reasonable target?

**Ken Kawamoto - University of Utah Health - Member**

If it is a criterion, I don't know if they need to explicitly answer each one but that would be useful if you want to look for things that failed because it met three other criteria but not the fourth one kind of thing. But assuming there are ones that move to the next level, just seeing what was put in those applications should be helpful, even just that, right. Searchable list of things that made it to the next cut. And if I were putting something in, I would look for the one that made it to the furthest cut and start looking from there to see what did they put in there that was so compelling.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

I think Item 2, the why is really the critical one for even getting out of the comment box ever. If there's not a compelling why for the data element. Three, four, and five are really later. Those things kind of get you into Level 1. Systems currently capture and whether there are [inaudible] [01:18:33] that exist and whether someone is –

**Ken Kawamoto - University of Utah Health - Member**

That is true, too, but I think maybe five is also critical, right.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah. That gets you – that's sort of a Level 1 requirement.

**Ken Kawamoto - University of Utah Health - Member**

I guess, what I'm thinking is if major EHR vendors, for example, work with a variety of health systems to pilot something, there must have been a reason why it was useful, right. So, it's like – does that make sense? We're getting cued to go to public comment.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Okay. Lauren, should we go to public comment?

**Lauren Richie – Office of the National Coordinator for Health Information Technology– Designated Federal Officer**

Sure. Operator, can we open the lines?

**Operator**

If you would like to make a public comment, please press star 1 on your telephone keypad. A confirmation tone will indicate your line is in the cue. You may press star 2 if you would like to remove your comment from the cue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys.

**Lauren Richie – Office of the National Coordinator for Health Information Technology– Designated Federal Officer**

Okay. Any comments in the cue?

**Operator**

There are no comments at this time.

**Lauren Richie – Office of the National Coordinator for Health Information Technology– Designated Federal Officer**

Okay. We'll leave it open for the last 10 minutes or so. Terry.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Let's carry on. So, again, maybe we just have a short list of important whys. And if someone is not on that short list then, they can propose another compelling why.

**Ken Kawamoto - University of Utah Health - Member**

I guess, along these lines, another thing we're discussing is, especially if there are 100 or 1,000 of these things or 10,000 of these that people submit, I don't know, or it might be 3, who knows. But assuming a bunch of folks submit a variety of items, I think it gets to the point that it would be useful both for ONC's purposes and for the public to have it be searchable if that makes sense. So, maybe it's like kind of like the National [inaudible] [01:20:46] Medicine for Journal Articles does the mesh subject study mappings. Whether it's on the back end it gets tagged and classified or maybe the front end starts with some pilot testing and asking people to participate in a pilot to submit these things and get like the first 100 and to create a taxonomy or more structured data entry form with, of course, another always available.

But for No. 2 actually saying a form that says what's the clinical benefit, what's the financial benefit, whatever, what's the equity benefit. I don't know if that makes sense but having it so it's easier to be able to understand to get more structured data out of it and assays out of it I assume would be useful. I don't know.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

And I think you've also hinted at a potential additional role for ONC in managing the comments. And that's sort of is an aggregator. So, looking at elements that are similar but not exact. How do they – can they be grouped rather than split?

**Ken Kawamoto - University of Utah Health - Member**

Yeah. You can imagine adjudication could be on everyone who proposed something on weight where everyone's comments were amalgamated and said ONC is looking at these 15 comments that have been received on weight and adding it all together, we made this decision. And I assume the answer would have been yes. For No. 3, do systems currently capture this data? And I think along the lines of what we were discussing earlier, I think it needs to say are they currently capturing data element and is it free text. And so, I think there are elements of is it free text versus structured that needs to be captured for No. 3. And if it's structured, what are the – how is it being captured currently? Are people capturing it using codes that are already translatable to SnoMed, ICD, etc.? Are they capturing it, basically, in pounds and kilograms?

That kind of stuff probably should be specified. At the very least, free text versus structured and what structure.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Would it be simpler to start it –

**Ken Kawamoto - University of Utah Health - Member**

And I think the other sort of access for this is how frequently. Is this almost always capture what were relevant or is it sometimes capture? That probably is really important, right. So, for example, weight.

That's pretty much always or almost always captured data field. Most healthcare systems, you cannot enter and not have a weight and probably almost always you would get weighed, right.

**Steven Lane - Sutter Health - Member**

But this is one of those things, Ken, where the dermatologists have to collect weights. Do optometrists have to collect weights?

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

No, no, no. They don't have to fill out the form but if someone is proposing weight, it probably won't be an optometrist.

**Steven Lane - Sutter Health - Member**

But it's just on the application side.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yes, the application side.

**Ken Kawamoto - University of Utah Health - Member**

But how often is it captured? So, I guess the key question might be, if applicable, depending on if it's kids, certainly, you should probably weigh them regardless of what specialty you're on because you get dose-dependent medications. I'm sorry, weight dependent.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

So, it might be situational. But what if you said never, occasionally, frequently, always?

**Ken Kawamoto - University of Utah Health - Member**

Yeah, or almost always. That would be really useful because if it's almost always already being captured in structured form, that's pretty important.

**Sasha TerMaat - Epic - Member**

I guess the element that's missing from that list of picklist choices is there are some data elements that you would capture once per patient. You might almost always have a patient's race recorded but you're likely going to record it once and not every time they come in for a visit. Whereas weight, again, frequently recorded but often needs to be refreshed, too. It's a changing data element over time. And so, I guess there are multiple elements to this. It's sort of like how often is it applicable to capture weight at all?

**Steven Lane - Sutter Health - Member**

There is a whole category of once in a lifetime data elements, right.

**Sasha TerMaat - Epic - Member**

Yeah.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah.

**Sasha TerMaat - Epic - Member**

And so, then there's a sense of is it evolving? Does it change?

**Ken Kawamoto - University of Utah Health - Member**

So, that's like –

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Are we really interested in things that are changing rather than static?

**Ken Kawamoto - University of Utah Health - Member**

I think we're interested in both, right. We care about patients' race because it affects clinical care guidelines. And we clearly care about patients' weight because that changes. I think we care about both. Maybe what we're getting at with how frequently is if this were to be needed to be captured for relevant patients at the relevant frequency, which may be once or may be never – or sorry, may be always, how much of an additional burden would this add to users? That's what it's getting at. Are we going to have to ask people to start collecting something they're not already collecting? Maybe we just ask it that way if this were to make it into USC guided – something along those lines because I think that's what we're talking about. And I think we're almost out of time.

**Terrence O'Malley - Massachusetts General Hospital - Co-Chair**

Yeah. I was about to say I think that may be our last parting shot. Okay. I'll tell you what. As a charge to the group, go through these and please jot your thoughts down briefly. Again, this is to inform the application form. So, we may come back to this as we find we need other elements as we progress through the different levels. Anyway, we're off and running. So, in two weeks, we will pick this up here again and move it through, hopefully, another level and a half. Great suggestions, great participation. Thank you all. See you in two weeks.