Transcript

HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE (HITAC) INTEROPERABILITY STANDARDS WORKGROUP MEETING

February 22, 2023 10:30 AM – 12 PM ET

VIRTUAL

Speakers

Name	Organization	Role
Sarah DeSilvey	**Gravity Project** **Larner College of Medicine at the University of Vermont**	**Co-Chair**
Naresh Sundar Rajan	**CyncHealth**	**Co-Chair**
Pooja Babbrah	Point-of-Care Partners	Member
Shila Blend	North Dakota Health Information Network	Member
Ricky Bloomfield	Apple	Member
Hans Buitendijk	Oracle Health	Member
Christina Caraballo	HIMSS	Member
Grace Cordovano	Enlightening Results	Member
Raj Dash	College of American Pathologists	Member
Steven Eichner	Texas Department of State Health Services	Member
Nedra Garrett	Centers for Disease Control and Prevention	Member
Rajesh Godavarthi	MCG Health, part of the Hearst Health network	Member
Bryant Thomas Karras	Washington State Department of Health	Member
Steven Lane	Health Gorilla	Member
Hung Luu	Children's Health	Member
Meg Marshall	Department of Veterans Affairs	Member
Anna McCollister	Individual	Member
Clem McDonald	National Library of Medicine	Member
Deven McGraw	Invitae Corporation	Member
Aaron Miri	Baptist Health	Member
Aaron Neinstein	UCSF Health	Member
Kikelomo Oshunkentan	Pegasystems	Member
Mark Savage	Savage & Savage LLC	Member
Michelle Schreiber	Centers for Medicare and Medicaid Services	Member
Shelly Spiro	Pharmacy HIT Collaborative	Member
Ram Sriram	National Institute of Standards and Technology	Member
Michael Berry	Office of the National Coordinator for Health Information Technology	Designated Federal Officer
Al Taylor	Office of the National Coordinator for Health Information Technology	ONC Staff Lead

Call to Order/Roll Call (00:00:00)

Michael Berry
Good morning, everyone, and welcome to the Interoperability Standards Workgroup. I am Mike Berry with ONC, and we are always glad when you can join us. All workgroup meetings are open to the public, and your feedback is welcomed, which can be typed in the Zoom chat feature throughout the meeting or can be made verbally during the public comment period that is scheduled at approximately 11:55 Eastern Time this morning. I will begin rollcall of our workgroup members, so when I call your name, please indicate that you are here. I will start with our cochairs. Sarah DeSilvey?

Sarah DeSilvey
Here.

Michael Berry
Naresh Sundar Rajan?

Naresh Sundar Rajan
Here.

Michael Berry
I believe Pooja Babbrah is joining us a little bit later today. Shila Blend? Ricky Bloomfield?

Ricky Bloomfield
Good morning.

Michael Berry
Hans Buitendijk? Christina Caraballo?

Christina Caraballo
Good morning.

Michael Berry
Grace Cordovano?

Grace Cordovano
Good morning.

Michael Berry
Raj Dash? Steve Eichner?

Steven Eichner
Good morning.

Michael Berry
Nedra Garrett?

Nedra Garrett
Good morning.

Michael Berry
Raj Godavarthi?

Rajesh Godavarthi
Good morning.

Michael Berry
I do not believe Bryant Thomas Karras will be with us today. Steven Lane?

Steven Lane
Good morning.

Michael Berry
Hung Luu?

Hung Luu
Good morning.

Michael Berry
Meg Marshall? Anna McCollister? Clem McDonald? Deven McGraw?

Deven McGraw
Present, good morning.

Michael Berry
Aaron Miri? Aaron Neinstein? Kikelomo Oshunkentan?

Kikelomo Oshunkentan
Good morning.

Michael Berry
Mark Savage is not able to be with us today. Michelle Schreiber? Shelly Spiro?

Shelly Spiro
Good morning.

Michael Berry
Ram Sriram? All right, good morning, everyone, and thank you, and now, please join me in welcoming Sarah and Naresh for their opening remarks.

Sarah DeSilvey

Greetings, everybody. It is my honor to kick off, with my colleague Naresh, our fifth ISWG meeting. Our charge remains the same. We are going to keep on working on the Google doc. I appreciate everybody working asynchronously, as you have before. Passing off to Naresh, any further comments before we commence our work today?

Naresh Sundar Rajan
No, Sarah.

IS WG Charge (00:02:24)

Sarah DeSilvey
All right. The agenda is very similar to past meetings. Again, as we move through the first element of the charge, reviewing the new draft USCDI V.4 elements, we do hope to be able to have time to invite guest speakers, and we will talk more about that as we go forward, but today, again, we are just reviewing the charge, going into the work in the Google doc, reviewing the timeline very briefly, which has not changed, and then entering into public comment. Next slide, please. We are level setting on the charge, which we should be very accustomed to, again. We are really moving quite well through our USCDI V.4 elements. We hope to focus on the Level 2 elements very shortly. Again, our two elements of the charge are to review new data classes and elements from draft USCDI V.4 and discuss and center in on any Level 2 data classes and elements not included in draft USCDI V.4, and some of those are past ISWG recommendations, so we will lean into those again in the weeks ahead. Next slide, please.

We are trying to communicate clearly to the ISWG the elements that we have discussed and really come to consensus on and elements that are still works in progress, and this is on the slides as public-facing in the work that we do, and the Google doc is internal to the ISWG when it is not in the meeting. We have moved through and clearly gained consensus on a few core elements. Some of the elements are works in progress, such as alcohol use, substance use, and physical activity, and we are looping back around on those. We will continue to add other elements as we go forward, and we are grateful for everybody's work.

I do want to note an update on the "time of procedure" element. I am very, very grateful for Hung taking leadership on that to gather some of the definitions we talked about at our last meeting. Given the short timeframe, that little subgroup has not had time to meet yet, even though they have a time to meet in the future, and we look forward to hearing their recommendations on those definitions in the future. Again, we are very thankful for leaning into that work, so when we come back the next week or the week after, we hope to hear back from that group on the consensus they have gathered in their subgroup. Any questions on this slide? Hans?

Hans Buitendijk
Just a brief question, Sarah. Good morning. For the ones that are in green, based on further review, reflecting on it, and having additional comments, do we just put them into the same column, extend it where we already had some comments, and then they will go into recommendations if they are fine-tuning? Just from a procedural perspective, how do we address those additional thoughts for consideration? They would not really change the intent overall, but they would just give some more backdrop or clarification.

Sarah DeSilvey

I am going to attempt to answer that question, and I look to my friends at ONC and Naresh to fill in any gaps there. Based on precedent, my thought would be we would include any comments that we want to include in our recommendation in that workgroup discussion if it is not changing the status of the recommendation because that is where the nuances and all of our different perspectives or areas of expertise will come to bear, but if it changes the recommendation anyway and if it is moving from consensus to some kind of concern, I would ask that you just elevate that by emailing me, Naresh, Mike, and Al so that we focus on that in future meetings, if that makes sense.

Hans Buitendijk
Yes, thank you.

Sarah DeSilvey
Great. Any addendum to that, Mike, Al, or Naresh?

Naresh Sundar Rajan
Nothing from my end.

Sarah DeSilvey
No? Okay. Any further questions on this slide before we dive into the work? Okay, it looks like we have a comment in the chat. Oh, okay, moving on. Next slide, please. I believe we are going into the Google doc, and I believe Al is the designated chair, and I thank him for that.

Al Taylor
That is correct. Hang on a second and let me get the screen going. Remind me where we are starting.

Sarah DeSilvey
We are getting there.

Al Taylor
Hang on a second. Remind me again where we are starting, if you could.

Comments and Recommendations – New Draft USCDI v4 data elements (00:07:29)

Sarah DeSilvey
Take us to “time of procedure,” and then we can start from there. Even though we are starting after that, that is a good grounding for where we ended up.

Al Taylor
All right. So, where are we? Is “time of procedure” already up here?

Sarah DeSilvey
We want to sort by entry number now, unfortunately, because otherwise, we are going to be all discombobulated. Okay, great. We can go down through “laboratory” and “time of procedure,” then go to Entry No. 17. I believe that is where we were, if I am correct. So, if you go past “time of procedure,” again, Hung and the subgroup are working on that. I do believe that we left off here, if I am not incorrect. Actually, Row 17. Go down one more row, Al.

Al Taylor
You mean entry?

Sarah DeSilvey
Sorry, Entry 17, Row 18. There we go. I believe we left off on "medication instructions," if I am not incorrect. Naresh and Al, am I correct?

Al Taylor
I know we did not discuss this yet.

Sarah DeSilvey
I believe that is where we are because we had a really thorough conversation regarding the subtleties within "time of procedure" and considerations for different types of statuses that needed to be defined, and that is how the subgroup was created that Hung is so graciously leading. Here we are with Entry No. 17, "medications." At this point, I will just open up the floor to discussion on this element. Again, I am looking to lean heavily on some of our pharmacy friends that are here to make sure we are in alignment with their concerns. Any thoughts, besides what is conveyed currently? It looks like there is enough conversation in the workgroup discussion section of the Google doc that it is not a clear go-forward. Hans?

Hans Buitendijk
Sorry, I thought I saw Shelly pop up first, but either way… I think there are a couple of questions and clarifications because "medication instructions" could be interpreted a couple of different ways. They could be the patient-focused instructions, they could be the SIG, they could be as far as the Pharmacist eCare Plan, and depending on that, the scope and the complexity changes. If it is the medication instructions for the patient, a simple set of text to clarify the information that is otherwise already available around those, frequency, etc., there is already a wider use of that. It is not necessarily called out as a must-support in FHIR US CORE today, but those are fairly straightforward to consider.

If, on the other hand, and I am going to go flip to the other side, if the intent is actually generally is referenced in the submission to implement the Pharmacist eCare Plan, then we are looking at something more complex and less adopted, if at all, for a typical HIT that we would likely be looking at here, so that becomes a different perspective on if it is viable for USCDI Version 4 or it should be considered in the future when there is more maturity, uptake, and experience with it, and then consider that level of instruction. So, that is where I am asking what is really the intent and where on that scale we are trying to land.

Sarah DeSilvey
Hans, thank you. That is very important. We are back to definitions here. Shelly, thank you for coming to bear with your wisdom here.

Shelly Spiro
You are welcome. So, if we are going to codify medication instructions, many years ago, over a decade, we had been working through NCPDP for what we call instruction-codified SIG, or the instructions, or the directions for use, and it is codified in LOINC. We have not had adoption of that. It has implications for

electronic prescribing and for the medication administration record as it hits an EHR, both in the hospital and in the long-term, post-acute care setting.

When we talk about instructions, we are talking about the directions for use, which have regulatory requirements also. It is also a place where there is inconsistency when we are using text-based or proprietary coding, such as one-tab VID, which has to be then interpreted on the receiving side from the prescriber to the pharmacy, who is putting it onto the label, so there are many implications, and that is one of the reasons why NCPDP moved to a structured and codified SIG using LOINC codes to help standardize the directions for use. In terms of the Pharmacist Electronic Care Plan, as Hans has brought up, we do not use structured codified SIG, but we do add the instructions for use in the Pharmacist Electronic Care Plan because it is important, when you are providing medication management services and evaluating the medications that the patient is taking, the directions for use are a critical point in what we are looking for. It is also linked to the indication, which has been previously identified and is needed to be codified moving forward, and so, the best point of codifying the directions for use would be to use LOINC.

Sarah DeSilvey
Shelly, thank you. Steven?

Steven Lane
Thank you. I just want to add from a clinical perspective, which, of course, many of us have, that this is incredibly valuable data, and frankly, to have medication data without the SIG or instructions, depending on which term we are using, really makes it very difficult. As I noted in the document, having codified SIG elements is really ideal because it allows for decision support and analysis to be done to quantify daily dose to lifetime dose, all sorts of important issues, but I think we need to clarify if this is the medication SIG or something else. I hope it is the SIG; that was my understanding in reading through what was on the website, and if so, is it going to simply be a free-text field that would be analyzable, and/or are we going to support some free-text elements within that?

I know a lot of these standards exist, I know I have personally been using discrete SIGs for well on a decade now in my EHR, but there are real challenges with getting that degree of specific data to transmit between different data holders back and forth to the pharmacy, the PBMs, etc., so I would hope that as we include this, or hopefully include this, in V.4, that we are very specific as to what it is that we are expecting.

Sarah DeSilvey
Steven, thank you very much. Al?

Al Taylor
So, what we wanted to make clear was a couple of things. One is that we recognize that codified structured SIG is an existing standard. It is not currently required, even for e-prescribing, through our certification program. It is available, and it should be used according to that standard, but I just wanted to be clear that it is ONC's intent to capture other forms or other instances of instructions, including patient-reported, amongst other things, for medication reconciliation. So, a patient comes in saying, "I am taking over-the-counter pills, I am taking herbal supplemental, and I am doing some other things on my own, and here is the way that I am taking that substance/medication." It can be used for that as well, but where there is structured SIG, that would also satisfy the ability to capture and exchange medication instructions. I think

the subtext of that is because there are multiple different ways of doing it, some of them standardized and some of them not, we would want a broader, more general capability to communicate medication instruction, not according to any one specific standpoint, because there is more than one.

Sarah DeSilvey
Thank you, Al. I am thinking on that. Ricky?

Ricky Bloomfield
Just to echo a number of things that have been said here, I agree how important this is. The way the definition is written in the spreadsheet right now includes two parts. One is the directions or SIG, but then, it also mentions the package instructions for over-the-counter medications, which I think might even be a different field, and it raises the question of whether that would include things like medication warnings and contraindications. So, I think it would be helpful for us to provide a little more specificity on what the scope of this request is. It is clear that one of the questions is whether this means a structured SIG, and I think we can certainly discuss that.

If that is something that we decide to move forward with as a structured SIG, that is going to require a lot of conversation around how we would actually implement that. It might require either an HL7 workgroup, Argonaut, or something to really dig into that, along with the support of those that have already done work with structured SIGs, but the free-text SIG is already supported. It is not a must-support element, but it is there, and we could also make a recommendation to make that must-support in addition to the other items. I think no matter what we do with the structured SIG, having a free-text SIG is always going to be necessary for some of the nonstandard prescriptions, like sometimes a very specific steroid taper or something that you just have to write out freehand that is not going to fit well into a structured SIG. So, I think there are a number of questions here, and I think it is up to us to decide how we want to constrain this and what we want to recommend for the next action item.

Sarah DeSilvey
Ricky, yes, I hear you, and I note Hans's comment in the chat as well. Al, do you have a comment?

Al Taylor
I just wanted to respond to Ricky's noting about package instructions. I think one possibility would be a recommendation to change the definition or change the examples or wording of the examples. It is a fair point because sometimes, the package instructions include warnings, but maybe something along the lines of dosing instructions as opposed to package instructions, which sounds like a reasonable alternative to the definition, just as a suggestion.

Sarah DeSilvey
Thank you. It looks like we are moving on to Hans now.

Hans Buitendijk
Thank you for that clarification. I just wanted to make sure I heard correctly, then, that the intent of the proposal is that it is more the free text and possibly the structured SIG, and in that context, I would agree with the comments that Ricky made. We can then sort out where within the dosage instructions that would live, but we can look at that, but it is then not necessarily the patient instructions around it that are in play,

it is the SIG-structured or unstructured. Am I hearing that correctly? Because that level of precision in a definition is critical to set the direction of how we are going to look at which standards are there, either a designated field already there or, as Ricky indicated, something that requires more work, given the standards that we need to use. Even though it might be used in other places, we need agreement on how that is then fully expressed in the other areas.

Sarah DeSilvey
Agreed, Hans. Al?

Al Taylor
To answer your question, Hans, the intent of it is to convey how a medication should be taken, including how much, by what route, and things along those lines. It is not patient instructions per se, but the manner in which the medication should be taken or is taken. It could be patient self-reporting, "I doubled my dose on that days" or "I have been doubling my dose for two years," things like that. That is different than the structured SIG, which is going to be one a day, and the patient may say, "I am taking it differently," and so, that is the information that needs to be conveyed. Again, I support medication reconciliation and other ways of communicating what is actually being taken.

Hans Buitendijk
Just one clarification, there, Al, if I may. Wouldn't the second part of "patient-reported" be more under the next topic of medication adherence, what they actually do, versus medication instructions or what the provider wants the patient to do?

Al Taylor
Yes. These two data elements can be thought of as paired data elements. It is difficult to use one without the other for the intent. Now, you can use medication instruction as just what is prescribed, what is structured or unstructured prescription, but yes, you could pair those. So, you could say adherence is what the patient is doing relative to the instructions, if that makes sense, and so, a patient could report, "I am prescribed one a day, but I am taking two a day," and that is some combination of instructions and adherence, if that makes sense. So, you are right, you could say the instructions are one a day and the adherence is twice a day. That is another way to do it. It depends on how the patient is reporting it. If you do not already have a prescription in the computer to compare it to, you may not know that the patient is prescribed one a day when they tell you they take two a day, but if you do have the existing prescription in your system, and then the patients have been taking two a day, then you document that in adherence, I suppose.

Sarah DeSilvey
Thank you, Al. I am sensing a similar thing to time of procedure, where working with definitions for these elements… We all agree these elements are critical, but working with definitions to clearly detail what type of element we are speaking of, whether it be prescribed, reported, or adherence may be an important subgroup, and just as we did with "time of procedure," because it sounds like we can all agree that these elements are important, but we have to maybe work on our definitions. Shelly?

Shelly Spiro

Well, I have been a pharmacist for over 47 years, and the directions for use are very clear, also linked to regulatory requirements by state boards of pharmacy across the United States, and are also part of what a prescriber does and a pharmacist has to interpret, which can lead to all sorts of adverse drug events that take place if it is not clearly read or understood by the pharmacist, who then does instruct the patients. It is also linked to structured product labeling when you get into over-the-counter types of items, and so, maybe a SME from National Library of Medicine's structured product labeling and daily med clearly gives indication of what is required within the package insert, so your information that you are interested in in relationship to nonprescription types of medications are also clearly identified, and one of the reasons why, at NCPDP, we worked for so many years on a structured and codified SIG where, using LOINC, we were able to build 99% of all the directions that could fit into both prescription and nonprescription use.

Again, we are talking about a computer interpreting the directions for use, which would then go into common language, so all of that has been identified by the FDA under structured product labeling. I think this is doable, but we have to start with the coding first. Right now, we have free text and we have proprietary coding systems that interpret what is being communicated between care providers and their patients in their technology that they are using. I believe this is doable. We have had structured and codified SIG for an awfully long time as part of the suite of e-prescribing standards that come out of NCPDP, and this is just one that we have not had the push for adoption because it does take a lift to actually put it into use. We still are using proprietary text-based codes in things like the FHIR resources, such as the care plan.

Also, under the pharmacy workgroup, and I would recommend hearing from the pharmacy workgroup, there are the directions that fit into the electronic medication administration record, or the MAR. There are several ways that we can move forward with this. Directions are instructions. I think what we are talking about is codifying the data. The data can be codified. We have proved that within NCPDP. It is just a matter of putting some regulatory requirements to adopt it for patient safety purposes.

Sarah DeSilvey
Thank you, Shelly. Understanding the regulatory drivers is always very important, so, thank you. Grace?

Grace Cordovano
I guess I am trying to get a better understanding currently on these medication instructions using this form and format. Do the patients see it anywhere? For example, if you go to the pharmacy, there is a little printout that accompanies a prescription that may have been filled. Is that part of the information that we are talking about here, or is that different from a pharmacy standpoint?

Shelly Spiro
I would be glad to answer that if you would like me to.

Sarah DeSilvey
Shelly, you just seem suited to. That would be wonderful, thank you.

Shelly Spiro
Okay. So, there are regulatory requirements for pharmacists to provide natural language or common language to the patient's takeaway type of documents. Some of them are structured in a way that follow structured product labeling and also companies' proprietary use, but they are pretty standard as to the

instructions, including the warnings, but it is all interpreted in common language. What we are talking about in terms of codifying this information is allowing the technology to move data from one entity to the other, Point A to Point B, and assuring that that text-based information is not going to be interfered with or misinterpreted by another machine on the receiving end, and that is one of the reasons why we want to codify the data and make sure that we are using a code.

We determined that LOINC was the best way to do that, and most of the work over the last decade plus has been in terms of codifying using LOINC. SNOMED also does have a similar type of coding that is available, but for U.S.-centric, I would recommend the use of LOINC. What you are talking about, Grace, is more in terms of what the common language is that the machine has interpreted as what has been codified, and there are many intrasystem ways to do that of what you are receiving **[inaudible – crosstalk] [00:31:29]**.

Grace Cordovano
Thank you. So, I guess the misunderstanding on my end is medication instructions from a patient perspective is very different from what is being codified. I do not know if there is a way to clarify that data element or even the way that we are describing it as a definition here.

Sarah DeSilvey
Grace, you seem to be picking up on some of the general comments. What I hear from us right now, and again, I am going to make an attempt to synthesize, given no one's hands are up, is that there is general support for focusing in on the element of the signature within this data element, there is general support for free text as a common method of documenting this, with support for exploring codified documentation in the signature. So, this would involve a simplification of the definition and an initial statement of support for free text elements, and I see a lot of conversation regarding exploring what it would look like to include the codified elements, but that is just something I see that is a work in progress, akin to other elements. Does that seem like a fair summary of where we are with this data element?

Hans Buitendijk
This is Hans. I think so, and I think there are still a couple of open questions because I think the range in which this could be described is narrowing down a bit. I clearly understand it is not the Pharmacist e-Care Plan full IG, it is a number of data elements, but it is not clear what exactly that is, that there is a clear understanding that if we say yes, move forward with this, is it one field, five fields, or what, exactly? It might be helpful to still get a little bit of understanding. Because I notice that Scott Robertson is on the line, which is great, I am putting in the chat to have a sense of what that delta is that we are talking about. Is it a couple fields, or is it a substantial amount that will be a much bigger lift? I do not think we have to have insights in this group yet to understand that, so it would be great to get a little bit of insight before we finalize.

Sarah DeSilvey
All right. One of the options is to ensure that we have people invited to come and help us talk through all the implications of this. That is one of the things we could do. We also could do a similar pathway that we did at the time of procedure, which is have a subgroup go out and do a deep dive into some of these elements and return, but I feel like maybe both might be helpful. There definitely seems to be a sense to work on the definition, so I see a note that inviting Scott as a guest speaker to the next meeting would be helpful, if he is willing. Pooja?

Pooja Babbrah
Yes, thanks, Sarah, and I apologize that I am late to the call. I know we were looking for community folks, so I am okay either taking this offline and helping lead a small group on this, or we could invite Scott to one of the upcoming meetings. I am okay either way.

Sarah DeSilvey
Because we do have a fair number of meetings, let's let Shelly, the pharmacist, speak first, but I hear an action to invite Scott to the next meeting. Shelly?

Shelly Spiro
Yes, I totally agree with inviting Scott. As the cochair of the pharmacy workgroup at HL7, Scott has been involved in structured SIG for a long time and has followed it a lot longer than I have. He would be a great asset to solving this problem and identifying where we need to go forward.

Sarah DeSilvey
All right. We really have done a good job fleshing out the considerations for this data element. We have an action item to invite Scott to come to a future meeting, and we will reach out to him after the meeting to make that happen. Any other final comments?

Steven Lane
This is Steven. I will just say that I think anything we can do to assure that at least the free-text SIG and ideally some components of the structured SIG moving forward into V.4 would be very helpful for patients and clinicians.

Sarah DeSilvey
Yes. I do hear that emerging consensus as well. I think I hear desire to simply explore some of the implications of doing that, but as I mentioned a bit earlier, I think I feel the consensus in the group that it will be more clarified when we invite Scott back. So, a work in progress, inviting Scott as a guest speaker to a future meeting for further discussion and to hear his expert perspective on the structured element. That means we move on, and again, please, everyone, document as much as possible of your thoughts that you have on this matter in the workgroup discussion so that we can ensure they are captured for posterity's sake and then included in the recommendations that we send back to HITAC. This is the best way to ensure all the things that we bring to the table are included in our final report. On to adherence. So, I am opening up the conversation for medication adherence. Shelly?

Shelly Spiro
Thank you. Well, you brought up medications today, so you are going to get me. For medication adherence, just a little bit of background, this is a huge issue in terms of pharmacy, and it is related to a lot of the quality measures by the payer's side to assure that the patient is adhering to their medication. Most adherence quality measures today are based off of the dispensing claim as to when the patient picked up the medications.

As a pharmacist and as a clinician, we look at medication adherence to assure that the patient not only understands the medication, but draws out whether they are actually taking the medications. There is a

good example of a patient that was seen by the VA, and the VA preceptor brought students to the patient's home so that he was a good example of how to administer an inhaler, and he did really well, and everybody was fine, and then the patient asked the preceptor to go to a drawer to pull out something, and found all the inhalers there. He said, "You were such a good patient, we thought you were taking it." He said, "Well, I did not like the way I felt, but I wanted you to come back so you can talk to me." And so, adherence is not just a matter of whether a medication was dispensed, but if the patient really understands and actually adheres to the regimen, and that is a primary role of the pharmacist in this process.

So, what we have done in terms of adherence with the Pharmacist Electronic Care Plan as we are doing the consultations with our patient and doing the clinical documentation is we have identified several SNOMED codes and value sets that are kept within the National Library of Medicine's VSAC and are documenting adherence using SNOMED. So, again, this goes back to the definition. Are we really talking about adherence to the medications, or are we talking about a quick way to check that a medication was dispensed? And so, in terms of being a pharmacist, I am going to say adherence is more in assuring that the patient understands their medication and there is feedback into assuring that they are taking their medications, not just filling a medication, giving it to their friend, selling it, or whatever else they would do, or just not taking the medication.

Sarah DeSilvey
Thank you, Shelly. Pooja?

Pooja Babbrah
Shelly, that was a helpful explanation because I think this ties into the conversation we were having at the last meeting about provenance and understanding who is actually reporting the adherence. I had noted in the comments that I am a little concerned about bringing this one forward for that very reason, but I think if we are clear in our definition that it is more around the education to the patient, which, when you talk about medication adherence, there are actual measures you can do, but again, based on claims of did the patient pick it up, have they been picking it up every month, versus did the pharmacist have the conversation with the patient. So, I think that is where my concerns come in about recommending this one. I think if we do recommend moving it forward, we have to be very clear about what this means and who is actually reporting it.

Sarah DeSilvey
Thank you so much. Hans?

Hans Buitendijk
I would like to echo what Pooja just indicated, that we need to have that clarity on what is really the scope and the focus on this because if we are looking at what it would take to move that forward, and I will just use FHIR as the context, there are three different concepts that can be used to do that, and depending on the setting that you are in, the inpatient setting, outpatient, if it is prescribed, the patient picks it up at the pharmacy. So, there are three different places, the administration dispense, or a statement by the patient that can be involved, and the last aspect of that is if this is meant to be as recorded and understood by the commission on what they understand the adherence to be or if it is meant to be recorded by the patient and then conveyed into the record as the patient sees it. If you go to the latter part, we also then get when we are talking about data for interoperability, we are starting to very quickly move in the direction, or if we are

starting to talk about patients writing from their apps or otherwise into the system in some fashion, which then addresses the topic beyond querying information that is there.

So, like the prior one, I think the specificity of the definition is critically important to ensure that it is translated correctly in the next step of the process, and I do not think that is quite there yet. Depending on where that lands or where it is intended to land, the complexities of what that takes from a development of the necessary profile standards that may not be totally there. Yes, there is vocabulary there, but that being there versus understanding where that fits, how that all ties together, that may require more or less work depending on where we land. So, I think this is another one that needs a bit more work to understand that before we can make a clear recommendation, other than maybe it is immature or needs more work before this can move forward, so perhaps USCDI Version 5 might be better, but it depends on what really is the intent behind this.

Sarah DeSilvey
Hans, thank you so much. Anna, welcome. Your thoughts?

Anna McCollister
Thanks. I have been here for a while, just sitting in the background. I guess I would concur with Hans and Pooja in the sense that it is not clear to me what the intent and the use of this might be. Again, putting my patient hat on and speaking very much from there, the word "adherence" is a bit of an emotional trigger because I am extremely adherent with each of the 16 medications I take if I can get them, even though I have very good insurance, for which I pay $1,400.00-a-month premiums. The amount of effort and the completely arbitrary changing of the formulary each quarter makes it impossible to actually be adherent with very… These are diabetes meds, not an aspirin.

I think if we are going to talk about adherence, we need to provide the context for adherence and be very clear that we are not codifying something that condemns patients for which patients have no responsibility. There are other factors involved. So, is the goal here to say… I just do not understand what the goal is. Obviously, adherence, understanding whether or not a patient actually does take the medication as intended, is important, but I do not think that fact in isolation tells you much about what is actually happening with the patient and the factors that contribute to whether or not a patient could actually be adherent.

Sarah DeSilvey
Very important thoughts, Anna. Thank you. Ricky?

Ricky Bloomfield
I do not know if I will have that much new to add, other than just to emphasize the points that have already been made, like Hans's point about the different ways this can be modeled, using FHIR as an example, with medication administration, dispense, and statement. The way I read the request, at least in the spreadsheet, says medication is consumed according to instructions. It does leave quite a bit of ambiguity, and so, we need to determine that. I think the other important point here in terms of how the data would be modeled would be whether we are talking about adherence in the home setting with self-administration or adherence in the clinical setting where dispense is a key part of that, but to Anna's point as well, whether you can access the medication is also important, and the medication administration resource, which is not

included in US CORE right now, has a lot of detailed modeling that those points can be expressed, but it is not something that has been considered as deeply because it is not yet included in US CORE.

So, I think if we move forward with this one, we should put together a set of general recommendations and guidelines for the specific scenarios that we wish to see so that we can make the guidance clear in terms of what would need to happen as the next steps here because there are so many ways this can be sliced that we really need to be specific.

Sarah DeSilvey
Thank you, Ricky. Al?

Al Taylor
So, again, we wanted to be clear that the intent of this, really at the heart of this data element, is conveying information about whether or not the patient is taking something, as understood by the electronic record. So, you have a prescription, and you even have a fill, and in Anna's case, she may not have one of her prescriptions in her fill status, which is one of the USCDI Version 3 elements already. It may or may not be dispensed, and so, if it is not dispensed, obviously, it is not going to be taken according to directions, but if it is dispensed and the patient says, "I am not taking this according to directions" or "I am taking it according to directions," that is really the core.

At its core, this is a patient-reported piece of data because unless you are talking about the inpatient setting of medication administration, which is a very specific form of medication-taking, the information is whether or not the patient is taking, and so, that is going to come from the patient, especially in the outpatient setting. How we structure it, how we define it, and the applicable standards that we use or do not use are really important. We tried to convey just that simple part of "Is the patient taking medication?", and going back to medication reconciliation, there is a list that is typically provided to a patient, and you make an indication. As a patient who has done medication reconciliation from both sides of the desk, a patient is given a list, and then you say, "Are you taking, not taking, or what else are you taking?"

That is the kind of data captured during medication reconciliation, and that is the intent, to take that step from medication dispensed, which is "pharmacy handed medication to the patient." Got it. That is closer to the patient taking it than the patient being prescribed the medication, but it does not say what is being taken right now, so that everybody has a clear understanding of what the pharmacologic mix is the patient is dealing with right now. So, it is a patient-reported data element that is captured by whomever captures it, and not dispensed, and not prescribed, but it is about actually taking it.

Sarah DeSilvey
Thank you, Al. I just want to note there is, again, helpful conversation in the chat. Grace?

Grace Cordovano
I just want to point out that my concern is that the intent of medication adherence should not lead to further opportunities to really blame or potentially stigmatize a patient for not taking their medications as prescribed, especially when they may be facing barriers, whether they be social determinants of health, struggling with treatment-related side effects, or disease progression that requires other quality-of-life adjustments. I feel that this is not capturing enough, so I just want to understand if there is an opportunity to focus on what

happens with that "no," because it is the "no" response that really leads to a **[inaudible] [00:51:17]** answer, whether it is connecting with community support, with a financial assistance program, or with palliative care. I am very well aware of the importance of medication adherence, but what is the intent, and do we have an opportunity to shape something more powerful and more actionable by the way that we define what is important in this data element?

Al Taylor
Grace, it is a good point, and we were super sensitive to this idea. There is no reason to gather information just to shame a patient. It is about providing more information to the providers about what the patient is taking. It is like a full medication history. Answering "no" to medication adherence only starts another conversation. It changes the clinical approach. If I assume you are taking a medication and treat you as if you are, I could be doing something that could be harmful because I assume that you are taking medication because you went to the pharmacy and you picked it up two weeks ago, but adherence provides more information. "Oh, you are not taking it, so we do not need to adjust your dose, we just need to somehow support you taking it."

So, the answer to that question just opens up a new approach, but it may not be enough to say why not if you are not taking it, and that reason for not taking is a different concept, and is actually a concept that some people would be interested in seeing as an additional data element, particularly in the quality measurements, where quality is measured based on whether a patient takes the medication, for example, and what the clinical response is to taking a medication, but the reason not is a separate data element that could follow from getting the medication adherence information.

Sarah DeSilvey
I am going to **[inaudible] [00:53:36]** again, just to attempt to summarize. I hear differentiation between medication adherence status and medication adherence reason, or why, and I hear some conversation regarding whether we go forward with this until we have added the why, given the possible downstream effect on patients of documenting adherence in the absence of the cause, especially if the cause is outside of the patient's control. Shelly?

Shelly Spiro
Well, I will address a couple of comments that have been made. First off, to Al, the Pharmacy HIT Collaborative did an extensive evaluation of what we call reasons for discontinued medications, which include safety indications. All of those are codified in a few value sets within the National Library of Medicine's Value Set Authority Center. Within SNOMED, we added some clinical terminology, so we have already built the framework for reasons for discontinued medication, which would be the second part of what both Grace and you had brought up, so we do have codification. It is being used within the Pharmacist Electronic Care Plan as part of the medication reconciliation process and part of the consultation and encounters that pharmacists are clinically documenting within the Pharmacist Electronic Care Plan. It is highly adopted in the independent community pharmacy setting, where millions of care plans have been generated and are being captured over, actually, about two and a half years of time. So, we do have that ability.

I will address some of the comments that are in the chat. In terms of adherence, you get into some smart pills that are out there to assure that a patient is adhering to their medication, so when you do not have a

clinician, like a nurse or medication assistant, reporting that a patient actually took their medications that we see that are documented in medication administration records, in assisted living, in long-term care, in hospitals, in methadone clinics, in jails, so there are different aspects of how we assure that the medication was not just dispensed and handed to the patient, but there are tools that are out there to assure that the patient is actually consuming the medication, and that is where we get into adherence. As I said before, we have SNOMED codes and value sets for adherence, both on the education side and on the aspects of helping us educate and assure that the patient, through consultation, is adhering to their medications and understands their medications. So, we use these tools.

Of course, we will use the fill status as an indicator, just like we do for other indications that the prescription was actually filled. We do look at if it is continually being filled, but there is an aspect of even though you are filling a medication, it does not necessarily mean that the patient is adhering to their medications. There are several apps that are out there. I use an app myself for the medications that I take to record when I took those medications, very similarly to an electronic medication administration record that can be reviewed by clinicians, and we have to think about those aspects of some of those apps that are out there today to assure that the patient is actually consuming their medications.

Sarah DeSilvey
Shelly, thank you. Pooja?

Pooja Babbrah
I think this may be more of a procedural question. We are calling this medication adherence, but when I heard Al explain, if this is patient-reported that you are taking it or not, is that truly medication adherence? Are we causing more confusion by calling it adherence? Is it possible to change the name on this data element? I guess I am unsure how this came about as its actual adherence, because again, this is where I am struggling because there are so many aspects to adherence, and what we are defining this as is not necessarily adherence. So, is it possible maybe change the name of the data element to what we are actually talking about?

Al Taylor
I will say that we went through several iteration of what name to use, what name to give this, and we felt like the best combination was “instructions and adherence to instructions,” for example. In being sensitive to the misuse of data, misuse of the term “adherence” or “lack of adherence,” it is not really the scope of USCDI or certified health IT to address misuse of data that is collected and exchanged. That is more of a practice for me, but I am totally open to a different word than “adherence” because we started with “compliance,” and there were many at ONC that thought that “compliance” was potentially aggressive.

There was a little sensitivity to the use of the word “compliance,” but we thought of “adherence” because we thought it was a better term, but if there is a better suggestion for a better term, we are all ears. I will just note that even though, as Hans pointed out, it is not currently supported in FHIR 4 or 4.5, there is modeling around medication usage and adherence in FHIR 5, so at least the modeling is getting laid down now, and adherence is the term that is used in that model, at least at this stage. For any other suggestion, we are wide open to it in the form of a different or better word.

Sarah DeSilvey

I am going to let Steven speak, but I also want to note that we have a couple conversations about elements that are rolling into the next meeting, and Scott just piped in as well, and I was already wondering whether if noting some of these elements and some of the definitional conversations we are having, both in instructions and adherence, whether we can pick up this when we come back next week with, again, inviting Scott to come to the table. Steven?

Steven Lane
Thank you. I think that we need to keep in mind that perfect is going to be the enemy of good here, and I am so excited to see that ONC has proposed bringing those two key medication data elements forward, and I think that while there is so much depth and so many different sub-elements and pieces of this that could be included, I hope that we can move something forward in these areas. As a clinician, I can tell you that when you are doing med rec, it is so important to know if the patient is taking this medication or not, and are they taking it the way it was prescribed most of the time or taking it some other way?

Those are really the top-level questions that go into med rec and can contribute to patient safety and appropriate prescribing, etc. So, again, I do not think we are going to be able to swallow the whole elephant here, but if we can at least move forward these fairly open new data elements, as they have been defined in the document, it would move us in a good direction, and then, as we are able to use these basic elements, learn more, and add additional standards over time, it will just get better and better.

Sarah DeSilvey
Thank you for that perspective, Steven. Shelly?

Shelly Spiro
I just wanted to let you know that I added to the chat a paper that was written by a group of folks for the Pharmacy HIT Collaborative about why standardized codes to capture discontinued medication reasons are needed. We did an entire framework and identified missing codes and have gone through the process with SNOMED International getting them added in. We have not updated this, but it is on our roadmap to actually update the document with the newer codes that we have put into the National Library of Medicine through our core value sets that are in there now. As I said before, this is being captured in the FHIR version of the Pharmacist Electronic Care Plan.

Sarah DeSilvey
Thank you, Shelly. Grace?

Grace Cordovano
I just want to say I appreciate Steven's explanation and rationale to move something forward, but I think we also have a great opportunity here to push the envelope on what would be the best intent and bring the most value, and from the patient and care partner perspective, compliance and adherence often lead to patient-blaming, patient stigma, and we have a great opportunity here to connect more dots so, in the recommendations somewhere, we can say we would like to acknowledge how we get value from an answer that is a "no," how we pull in other aspects such as social determinants of health, treatment-related side effects, and quality of life to really make this a more robust exchange of information that will really help the clinician and patient, ultimately.

Sarah DeSilvey
Grace, that is a really good point, and I wonder, again… I see some of these comments going into the workgroup discussion, noting the patient-centeredness and noting the conversations regarding social determinants of health, which, of course, I care personally very deeply about in my role at Gravity. It is very important, regardless of the outcome of our recommendation, to ensure that those critical patient-centered elements are in that box so we can work them into the final recommendation. Any other thoughts on this right now? Again, we know we are going to come back to instructions. Hopefully, our friend Scott can come next week and further the conversation. What our conversation has led us to is that medication adherence is clearly discussed here, which is the taking/not taking as a first step that needs further exploration about the reason for not taking. Whether it happens now in USCDI V.4, we recommend it for next year in USCDI V.5. We have some options there. Thank you, Scott! Does our conversation on this matter right now come to a natural conclusion so we can move on? Any further thoughts on adherence at this time?

Hans Buitendijk
Will we have done a smaller group, or are we indeed first having a conversation that I believe you indicated Scott might be able to do? What is the next step in that regard to help refine this further?

Sarah DeSilvey
Even though we have time, we do need some help with a definition revision for instructions, so maybe that can happen in a small subgroup prior to the next meeting, but we also can just wait and see what happens when Scott comes back. Al, thank you. I do want to note that there already seems to be indication of rationale in Level 2 that we could recommend elevating, so maybe we can explore that at this time, or explore that at the next meeting as well. I hear maybe a quick huddle prior to the next meeting to ensure at least the definition regarding instructions is clear because we did recommend winnowing that, having Scott come back next meeting and picking up the conversation. Hans, does that sound good?

Hans Buitendijk
That sounds fine, yes.

Sarah DeSilvey
Okay. Pooja?

Pooja Babbrah
I was going to say I am happy to help coordinate the small group if we wanted to co that, but it sounds like if we want to get that small group and then bring it to the next meeting, that makes sense.

Sarah DeSilvey
Yes, that does make sense. Thank you so much, Pooja. That is very helpful. So, those are our action items for both the previous medication instructions and medication adherence topics. Again, please do try to include any of your really thoughtful comments in the workgroup discussion so we can eventually include them in our final recommendation. I believe we are ready to move on, and I am just noting that if we go on to… Here we are in “treatment intervention preferences.” So, we were going to hold some of the conversation on preferences for when we could have members of the ecosystem come and join us, but I think it might be appropriate, given we have about 15 minutes left, if we initially open up this conversation.

I am just going to note that these are some of the final USCDI V.4 new draft elements that were part of our charge, so we have a lot of action items and further conversations on some of the elements we have covered prior, but we are close to working through the initial part of our charge, which was at least reviewing all of the USCDI V.4 elements for the first time, on which we have done good work over the course of the last five meetings.

So, what I would like to see, knowing that these treatment intervention and preference conversations may need community stakeholders, is a brief conversation regarding these two elements, and really, action items on who we might need to have come and talk to us regarding the two new preference elements that would be housed under "goals." Does that seem like a good use of our time for the last 15 minutes? Because we do know that there are community members that have thoughts regarding this, that there are experts on preferences that we can bring to bear on the conversation, but we just need to know who to invite. Does that sound like a good use of our time?

Hans Buitendijk
That sounds great. And then, I thought you had already identified some people to talk about "facility."

Sarah DeSilvey
Yes, we did. So, facilities and preferences… Sorry, I hopped over that one. A nod to Nedra and the conversation from the CDC, and I know that CMS also has thoughts on that. And so, we were looking to really lean into those conversations in the middle of next month, when we could ensure we had adequate representation from those after talking briefly about facilities and the public health linkages last meeting or the meeting prior. So, initial thoughts on treatment intervention preferences, Entry Nos. 19 and 20? So, we have treatment intervention preference, Entry No. 19, and care experience preference, Entry No. 20. I am going to let Shila speak.

Shila Blend
Yes, I just had a question for clarification. So, as I read the side, it is lumping in a lot of different things. Is this complicating it, that these should possibly be separated out, or is there a reason that they are all in one? Because I see things such as resuscitation status, priorities, advance directives, and a lot of different things mixed together, so I am just curious about that.

Sarah DeSilvey
Shila, you hit upon concerns that are really robustly represented in the workgroup discussion element on the share drive right now, not about the importance of the elements themselves, but about their placement, and so, I am going to nod to Steven here.

Steven Lane
Again, I am going to keep reminding us that we could go so deep with many of these data elements and add a level of complexity that will end up not being acceptable to the ONC or manageable by our community, and I think it is so important that we move these things forward. I think ONC has really attempted to thread a needle here with allowing important things to move forward, kind of like we did with Version 2 and some of the SDOH data elements. We did not get everything, but we got a lot, and the industry has really responded and embraced that. So, I agree, there is a lot here. We may want to refine it or narrow it, and we may want to extend it with additional Level 2 data elements. I had one question that I put at the top of

the comments, which I would love ONC to respond to, which is that it seemed like there were two different Level 2 data elements, and you brought one of them forward here in this suggested element in draft V.4, but not the other, and I was trying to understand that logic and how we got there.

Sarah DeSilvey
Before we go to Hans, Al, can you answer that question?

Al Taylor
Sure, thank you. Steven, I appreciate your support for ONC's attempts to advance this kind of data. To your question about advance directive observation, this is sort of a procedural thing that happens as we develop data elements for USCDI. New data elements are based on submissions by the general public, not out-of-the-blue ideas that ONC comes up with in the middle of the night, and so, when we look at advance directive observation, there are two parts to this. One is advance directive observation is a component of the overall advance care planning process, and the observation is sort of a particular snapshot about a particular type of advance directive, and advance directives are generally thought of as those things involving critical care and life-sustaining care, things like DNR, DNI, tube feeds, etc.

Those two data elements are modeled after both... As communicated in the C-CDA templates, the observation is a component, and within that component is a preference that informs the decision about these interventions, like CPR. And so, the original submission is called advance directive observation, and we recognize that it is a component to an advance directive, but we felt like it helps convey the differences between the goals for preferences and priorities related to those interventions versus related to general care experiences, and that is why the two data elements are in there separately. And so, treatment intervention preference better conveys the component of advance directives that addresses what a patient wants related to that as opposed to an order for DNR, which is separate, or medical power of attorney, which does contain the wishes, but it is separate, almost like a document-level expression.

That is the reason that we elevated advance directive observation, because it was a component of those treatment interventions that are addressed, and then, the separate issues around care experience preference, which are not specifically around those potentially life-sustaining interventions, but more just general things like religious preferences and who you want in the room with you when something happens. That is why we split them up into two different data elements. There are two different categories of goals/preferences/priorities. So, that is the answer to one question, and then, I just wanted to address the "goals/preferences/priorities" phrase. That is a phrase that is used in some advance care planning models, and they are sort of synonymous. I would say that goals, preferences, and priorities are all synonyms of each other. They sometimes convey slightly different information, but are really synonyms. It is a well-used phrase in the advance care planning process, and some of the models that are currently in development use that phrase.

Sarah DeSilvey
Thank you, Al. Again, I just want to note that when it comes to things like definitional elements, there are so many experts in the ecosystem, such as in NCQA, so if we have ideas regarding who can help us dive deeply into these two final elements in addition to facilities, and I know we are also inviting the folks from physical activity IG, please just like Mike, Al, Naresh, and I know, and we can make sure we invite them to future meetings. Hans?

Hans Buitendijk
Thank you. I have a couple observations and considerations on these two overall combined. Like some of the other discussions, they are presented initially as data elements, but in the submissions and in some of the discussion, they point to larger implementation guides that are much more comprehensive than singular data elements, which yields that same question that has been raised already. What exactly is the area of focus? Is it, indeed, a couple of specific elements, or is it the larger concept within a time, like, for example, a treatment intervention preference?

It is effectively becoming its own data class, with a variety of elements of interest over time or immediately, so I think it is tremendously important to have that clarity because between the definition that is stated and then going to the submission, in these two cases as well, it is unclear what is the scope that is really being proposed for V.4 specifically. In this particular case, some of the suggestions might be that treatment intervention… Seemingly, depending on which part you read, it is not really about goals, but it is more about activities that you prefer or do not prefer to occur, and that may be limited to advance directives in end-of-life situations, but it may include other activities during the delivery of care if we take that statement into submission more generally, as it is written. That might encompass a variety of other activities or procedures that you may or may not have a preference to be performed, even though it may not be an end-of-life situation.

So, the spectrum gets either very wide or very specific. It is not clear what that is, but also by considering some of these separate data classes, of which we might want to address one or two initial elements that can grow over time, it would be very helpful in understanding how this has progressed. To take a very specific aspect of why some of the challenges then can occur when it goes from USCDI to standards and support, it is of interest to note that in the CDA-based guide that is already published and in the corresponding FHIR guide that is not yet published, in one guide, they are being managed as observations, and in another one, they are managed as goals. So, are we aligned?

The other discussion is that they are really not either one, they are something else. They are statements about things you want to happen or not, and in that vernacular, they become service requests. So, there is a variety of different aspects here that, in the initial scope and focus, is not clear. The understanding of what needs to happen in particularly C-CDA and FHIR US CORE as the supporting standards becomes very challenging because we need to look at other implementation guides that have greater or lesser extents of maturity, but they need to blend in with the C-CDA and FHIR US CORE in the current certification regimen. So, those are the challenges, particularly with these two as well, that come up that really would be helpful to be very focused on specific data elements or classes on what you want to do as step one, because the submission right now makes it wide open and very large, which it sounds like is not necessarily the initial intent.

Sarah DeSilvey
Thank you. We have two minutes until public comment. Shelly?

Shelly Spiro
I will try to be quick. I have 35 years of experience in the long-term post-acute care setting, and this is an area that we deal with in terms of transitions of care, and maybe that is a suggestion that we bring forward,

that we have a data class in relationship to transitions of care. The treatment and intervention preferences are very important to exchange during the transitions-of-care process, especially into the post-acute care setting. I would recommend Dr. Terry O'Malley and Dr. Holly Miller, who have tried to streamline the preferences portion, especially on interventions and treatments that are important to exchange during transitions of care that also lead into the care planning process. So, that would be my recommendation.

Sarah DeSilvey
Thank you so much, Shelly. Any other final comments before we go to public comment? Again, this is a conversation that we will continue to have over the course of the next month. And then, just a note, Pooja, to the work done at PACIO as critically important. All right, it seems we are ready to transition to the public comment.

Public Comment (01:23:23)

Michael Berry
Great. Thanks, Sarah. We are going to open up our meeting for public comment. If you are on Zoom and would like to make a comment, please use the hand raise function, which is located on the Zoom toolbar at the bottom of your screen. If you are on the phone only, press *9 to raise your hand, and once called upon, press *6 to mute and unmute your line. So, let's pause for a moment to see if anyone raises their hand. All right, I am not seeing any hands raised, but we will keep an eye on it, and in the meantime, I will turn it back to Sarah and Naresh to close us out.

IS WG Workplan and Timeline (01:24:00)

Sarah DeSilvey
Thank you so much. Next slide, please. Can we go back to the slide deck? All right. We have a fair bit of work ahead of us, but we did accomplish a lot today, and I am very grateful. So, we have an assortment of different experts we will be inviting into future calls, looking, again, to go deeply into facilities in the middle of next month, and also bringing in colleagues from the care preferences ecosystem. Shelly, I got the names Terry O'Malley and Holly Miller. I am looking forward to making sure that I have that correct. I do know Holly Miller from the VA, but I want to make sure that is the correct expert that you mentioned. I am looking forward to bringing in elements from the PACIO project.

We have two different subgroups. We have the group working on definitions for time of procedure, which is led by Hung, and we also have Pooja nominating herself to lead a small huddle on the two different elements regarding medication instruction definitions and medication adherence thoughts. You can reach out to Pooja directly or, again, to the ONC if you want to be part of either of those groups. And then, just a note that we are going to try to make sure we finish our recommendations in not too long a time. Hans?

Hans Buitendijk
Just a quick question on potential candidates. Last year, we also had a view from the team in HL7 that takes the USCDI and moves it forward into the next version of C-CDA, and FHIR US CORE in particular. I just have a suggestion that it may be helpful as well to get a sense of how big, small, or sideways the suggestions might end up being to have that context as well, if it is of interest, but I just want to indicate that is something we have done before.

Sarah DeSilvey
Hans, that seems like a very good idea, and it is noted, and I will bring that into the discussion with the cochairs. I also just want to note that we do still have to focus on Level 2 elements of consideration, including ones recommended by the ISWG in past years, so, hopefully, we are going to dive into that work in future meetings very shortly. Steven?

Steven Lane
I just wanted to give a plus one to Hans's suggestion about inviting the HL7 team that needs make our aspirations a reality in the implementation guides and standards, and in fact, I think we may want to plan ahead every year to include that in our planning for this workgroup because it really is enlightening to understand that we are partners with them in terms of moving things forward, and if we do not understand the challenges they face, it makes it hard for us to make useful suggestions.

Sarah DeSilvey
Steven, that sounds wise, and a nod to my friends over at HL7. All right, I think we are ready to adjourn. There are a fair number of action items for the cochairs and ONC to work on. Again, no new clear absolutes today, but there is a lot of really good discussion, and the good thing is we do have a fair bit of time before we have to submit our final recommendations, so I am grateful to the team for actually going through all of those new data elements, at least briefly, and touching on them over the course of the last five meetings, so I am looking forward to seeing you again. Naresh, any final thoughts?

Naresh Sundar Rajan
I do not have any thoughts right now, but great conversations right now, and we have captured pretty much all the discussions for our homework.

Sarah DeSilvey
Thank you so much. See you next week, friends.

Adjourn (01:28:08)