## Speakers

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<th>Name</th>
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<tr>
<td>Steven Lane</td>
<td>Sutter Health</td>
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<tr>
<td>Arien Malec</td>
<td>Change Healthcare</td>
<td>Co-Chair</td>
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<tr>
<td>Kelly Aldrich</td>
<td>Vanderbilt University School of Nursing</td>
<td>Member</td>
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<td>Hans Buitendijk</td>
<td>Cerner</td>
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<td>Thomas Cantilina</td>
<td>Department of Defense</td>
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<td>Christina Caraballo</td>
<td>HIMSS</td>
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<td>Grace Cordovano</td>
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<td>Steven Eichner</td>
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<td>Rajesh Godavarthi</td>
<td>MCG Health, part of the Hearst Health network</td>
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<td>Adi Gundlapalli</td>
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<td>Jim Jirjis</td>
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<td>Kensaku Kawamoto</td>
<td>University of Utah Health</td>
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<td>Hung S. Luu</td>
<td>Children’s Health</td>
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<td>David McCallie</td>
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<td>Clem McDonald</td>
<td>National Library of Medicine</td>
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<td>Aaron Miri</td>
<td>Baptist Health</td>
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<td>Abby Sears</td>
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<td>Carmen Smiley</td>
<td>Office of the National Coordinator for Health Information Technology</td>
<td>Presenter</td>
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Call to Order/Roll Call (00:00:00)

Mike Berry
And, good morning, everyone, and thank you for joining the Interoperability Standards Workgroup. I am Mike Berry with ONC, and we are always happy to see everyone today. We appreciate your attendance. As a reminder, your feedback is welcome, which can be typed in the chat feature to everyone throughout the meeting or can be made verbally during the public comment period that is scheduled at approximately 11:55 Eastern Time this morning. So, I will begin with roll call of workgroup members, so when I call your name, please indicate that you are present. And, I will start with our cochairs. Steven Lane?

Steven Lane
Here.

Michael Berry
Arien Malec?

Arien Malec
Good morning.

Michael Berry
Kelly Aldrich? Hans Buitendijk?

Hans Buitendijk
Present.

Michael Berry
Seth Ford?

Seth Ford
Good morning.

Michael Berry
Christina Caraballo?

Christina Caraballo
Good morning.

Michael Berry
Grace Cordovano?

Grace Cordovano
Here, good morning.

Michael Berry
Steve Eichner?
Steven Eichner
Good morning.

Michael Berry
Adi Gundlapalli? Raj Godavarthi?

Rajesh Godavarthi
Good morning, I am here.

Michael Berry
Jim Jirjis? Ken Kawamoto?

Kensaku Kawamoto
Good morning.

Michael Berry
Leslie Lenert? Hung Luu?

Hung Luu
Good morning.

Michael Berry
David McCallie?

David McCallie
Good morning.

Michael Berry
Clem McDonald? Aaron Miri? Mark Savage?

Mark Savage
Good morning.

Michael Berry
Michelle Schreiber?

Michelle Schreiber
Good morning.

Michael Berry
Abby Sears?

Abby Sears
Good morning.
Michael Berry
And, Ram Srim? All right, thank you, everyone. Now, please join me in welcoming Steven and Arien for their opening remarks.

Workgroup Work Planning (00:02:07)

Arien Malec
Good morning, everybody. We are super excited to be here on what I guess is official meeting three, but getting into the work of it, too, of our pretty massive agenda. We welcome Steven, who is status: post hip replacement, and has been doing a fabulous job live tweeting his experiences in the U.S. healthcare system, and discovers that the work that he has been doing on the ground to improve interoperability in Sutter sometimes does not get all the way to all of the edges of the U.S. healthcare system, and so, hopefully, we can all learn some lessons from the gap between what we can do in theory and what is actually deployed and working in practice. And again, I think the general stance is that both things are true, we can do a lot more than we actually have deployed, so I think it is a good lesson, and I really thank Steven for doing that work.

We have an exciting agenda today. I think the team will go through the history, but the persistent theme out of all of the multiple reviews that we have done about how we improve data quality for matching and linking has been that we need to standardize the data elements that are used for matching and linking, and last session, we had a really good conversation about the complexities of administrative sex, gender identity, and the various biological and clinical notions, and one of the conversation points was that we pretended that administrative sex is a clean, persistent, immutable, and binary, and we use that supposed fact in patient matching, so one of the conversation points was what we do about patient matching and linking.

I will go over the history here. I do not want to steal their thunder, but a little bit ago, ONC convened a pretty senior taskforce looking at how we take the work that the U.S. Postal Service has done in standardizing address information and carry that over into healthcare. Does the address normalization standardization work that has been done historically apply ipso facto to healthcare? Are there any other changes that are required? And today, we have a beautiful readout from what I am assured is pronounced “Project USA,” which has an “at” sign for that A, assured that we have a good answer for that question. So, we are going to start with the work plan, just review everybody with the work plan, roll into Project US@, and then review our overall charge for Charge 1A and some of the comments that we have gotten. Steven, anything more that you want to add in terms of overall framing or agenda?

Steven Lane
No, that was perfect, thank you, and I will just add my thanks to all of you for joining this morning, and I am letting Arien take the reins, but I will be raising my hand as needed.

Arien Malec
Thank you. All right, let’s go and remind everybody about our work plan. So, we are focusing right now, as everybody knows, on USCDI draft V.3. We have two major work plans, 1A and 1B, and 1A is about focusing on the V.3 elements and 1B is focusing on additional Level 2 elements that we might contemplate rolling forward into V.3 as part of our review of V.3 draft. And then, subsequent to our formal proposal to the HITAC on USCDI V.3, we are going to roll over into the ISA section of our program, and as you can see, we have
not that much time between the USCDI and the ISA, and not much time between it now, where it is February, and April, so we are going to try to go expeditiously through our USCDI material, and then roll forward into the ISA material, leaving plenty of time to formalize the work for the full HITAC. Go on to the next slide.

All right, and now, I am extraordinarily pleased to turn it over to Carmen, who is going to talk us through Project US@. Don’t mind that “at” sign. So, Carmen, over to you to talk to us about Project US@.

Project US@ (00:07:44)

Carmen Smiley
Excellent. Thank you so much. That was a perfect setup. My name is Carmen Smiley. I am an IT Specialist in the Standards Division, Office of Technology at ONC. I am also ONC’s subject matter expert in patient matching. I am really excited to be here to talk to you today. Next slide, please. Thank you. A little bit of background, though Arien really set this up perfectly. Way back when, whenever we sent out an RFI, or request for information, on patient matching as part of the 21st Century CURES Act, we received significant comments recommending the use of United States Postal Service Publication 28 for the standardization of patient addresses, but our analysis of Publication 28 has really led us to conclude that it was insufficient for this purpose, and that is a really important part of that.

And so, Publication 28 has been used for decades to help support the standardization of address information for mailability, but what I am here to talk to you about is patient matching, and there has been limited but really promising research in this area, and I included one reference on this slide. I encourage all of you to check that out when you have an opportunity. So, these and other efforts indicate the potential for improved patient matching through the development and implementation of standards. Next slide, please. Thank you.

So, in January 2021, we initiated the Project US@ project and brought together a really diverse workgroup with a technical specification, and then partnered with AHIMA, the American Health Information Management Association, for the development of a companion guide that will go hand in hand with the technical specification. So, for Phase 1, or 2021, we focused on U.S. domestic and military addresses primarily, or whatever was already supported by Publication 28, and I will go into that in a little bit more detail. They were released on January 7th, 2022. I encourage all of you to check that out, and I am happy to add a link to the chat later, unless one of my colleagues beat me to it.

In Phase 2, which is this year, we are focusing on Version 2 of the technical specification and companion guide, and in Phase 2, we will include work on the support of geolocation data, as well as working with the Indian Health Service to support tribal addresses or addresses for patients living on tribal lands. We are also starting work to focus on the improvement of addresses for [inaudible] [00:10:25]. We realize that there is also a need to focus on address specifications for providers as well as facilities, so we are climbing one mountain at a time, so to speak. We have tackled patient addresses, mostly. We will continue to build on that. We are going to start to work on providers. We are also going to continue to work on our Project US@ API pilot, and I will provide a little more detail on that later in the slides. Next slide, please. Ooh, thank you, Julie. Julie, my friend from AHIMA, added the link to the technical specification and the companion guide within the chat.
So, how is Project US@ different from Publication 28? This has been a very salient conversation point, and we have lots of questions about this, and understandably, there has been some concern that this effort that we initiated last year and are continuing has been redundant, but in fact, we have tried to leverage all of the benefits that come from Publication 28 by using that as a foundation, and we have really worked hard to maintain alignment as much as possible throughout, with many additional constraints and the addition of metadata.

So, this, in part, is because we acknowledge that many health IT support developers already use USPS formatting standards to improve patient address standardization for either improved mailability as well as other purposes, and many of them have retrofitted mailability standards for helping them with patient matching, and as many of us know, every little tiny things help with patient matching. It is all additive, and sometimes it is catalytic with each other, but they were doing the best they can with what they have. We wanted to provide them a little bit of a lift on meeting systems where they are. So, because many health systems are already using these formatting standards, we do not want to create additional development burden, or any burden at all, on providers to make that change, so there are only minor changes and refinements and other enhancements that are focused on patient matching to what they already do, directing their focus on improved patient matching, so, really expanding their scope, getting them to think about all the different aspects of it, enjoying together that technical aspect with that operational aspect.

So, guidance is designed to support accurate patient matching, but we want to be able to maintain mailability as much as possible. So, mailability is still really, really important, whether this mailability is for claims, billing information, correspondence with patients, perhaps you are mailing prescription medications, durable medical equipment, for a variety of reasons. It is also really important for public health research and reporting. It is even important for remote authentication purposes. The list is long for the value that accurate addresses provide to many of the processes that we work on. But, the greatest impact can really be realized by using both the technical specifications and the companion guide together. Next slide, please. Thank you.

And, regarding the AHIMA companion guide, this, I believe, is really one of the great advantages to the Project US@ approach. As I have said before and I will say until forever, as long as I am doing this, the optimal solution to accurately matching patient records is a combination of technology, processes, and people, and we all have to keep these in mind as we are doing work toward the improvement of patient matching, and the AHIMA companion guide takes that work that we did in the technical specification and adds additional operational guidance, and the ultimate goal is really that uniformity in practice, so it might be less important whether we are abbreviating “boulevard” to “blvd” and more important that we are all doing it the same way, and that uniformity of practice can really only be seen on the front lines by those health information professionals that are checking in patients, perhaps they are scheduling your next appointment, maybe they are processing your claims.

Whatever reason it is, whether they are doing data quality improvement activities, we really wanted to focus on bridging that gap between the technology and practice, and a hat tip to the operational side of healthcare, which is extraordinarily difficult, and they are often excluded from many technical efforts.

As I mentioned, the companion guide includes guidance in best practices for a variety of scenarios for collecting those patient addresses as correctly as possible and ensure that that address is also very timely
so that you have the most updated information that you are able to obtain from patients. And also, of course, we want to ensure greater conformance to the application of the technical specification and bring to the top of everybody’s mind the importance of patient matching and to get them to think about all of the different aspects and all of the different dimensions of patient matching that could help improve it.

And so, there are parts of the companion guide that cover additional considerations that are beyond the technical specification that really connect that healthcare to the real world, really depending on the patient’s situation, so more guidance and additional resources are pointed to that could support naming conventions, and so, AHIMA just released this amazing resource on naming conventions recently. I know that this is a significant challenge across healthcare, so we want to be able to support other resources that are out there so that everybody can take advantage of whatever is available for their independent application and local policies. Next slide, please.

And, to that end, we have also created some infographics, and what I am showing you now is the patient infographic because we also believe that the more you engage patients in the curation and management of their data, even demographic data, the more accurate that data will be, so we just simply outlined some of the scenarios patients may come across, and we are all patients too. Dr. Lane certainly knows this. So, under any circumstance by which you are providing your address, you are updating your address, or perhaps a health information professional is checking to ensure that the information they have is correct, it is all important. We just wanted to explain why this is important, why it is important to engage patients in this process, because we are all working towards that same goal. Next slide, please. Thank you.

And, I also wanted to cover the API pilot, and this has been accomplished through a partnership with the United States Postal Service. As many of you know, they have their own web services API that healthcare uses in some capacity, as well as many, many other industries will use for address data standardization and validation, so it is important to keep in mind that the validation that occurs at the USPS API is really a validation that that patient address is mailable. It is still incredibly valuable, but less pertinent, a little bit less influential on improving the accuracy of matching.

And, this diagram, I realize, is actually highly simplified, but I wanted to give you an idea of what it is that we have in mind, and we have recruited five participants, and it is a diverse group of participants from across the industry. Some are engaged directly in healthcare, some are research organizations, some are more involved in public health efforts, like immunization registries, and some are health IT developers, and some are, of course, HIE and also a PDMP scenario. So, we are working with them so that they are able to send their unstandardized patient addresses through the Project US@ API, and the Project US@ API is essentially a clone of the web services API at USPS, but it is conformant to the technical specification, so there is a slight change in the way that addresses are standardized. The addresses through the project API will still be validated for mailability. They are unable to validate, of course, patient address information to ensure that that address belongs to a particular patient, but they can tell me whether or not it is mailable, and there is still some value in that.

Whatever amount of information that any provider has can send whatever data you have through that API, even if it is incomplete, and it will be whatever we have got, it can be standardized. And then, once they receive that standardized information back from the API, essentially, those two will be compared together, the unstandardized versus the standardized, and will be testing the effect of that standardization on
algorithm performance. So, things like F score, precision, and recall, those key indicators of how well you are actually matching patient records based on your algorithm, whatever algorithm you have, it is sort of algorithm-agnostic in that sense, then we are able to at least test some effect. Next slide, please. Thank you.

I wanted to also outline a few known limitations of the pilot. So, one, we are only piloting the standardization of addresses. So, as you all know, names, dates of birth, and other demographic information will not be included in the pilot, but these all have often very strong by variable effects on the performance of matching. Just to acknowledge, also, that standardization will not solve all patient matching issues, but it is an excellent start.

The measured effect of the pilot will also be relevant in patient matching within an organization, but not between organizations. Simply because of limited time and resources, we are only able to improve or to help, I hope, all of the pilot participants, and we will take the lessons learned from this API pilot, publish them, and we hope to help anybody in their own address standardization efforts, but it is really only considering how well they are matching records within the organization.

The measured effect will likely be small, but still significant, especially when you consider the effect at scale and the incredible volume of data that we are exchanging every day. It is also not exactly comparable across results from pilot participants. This is important to acknowledge because each of the participants, just like every other developer across healthcare, are all using slightly different approaches and methods to meet this need, so I just want to add a little grain of salt to each of the results. It may be more meaningful internally rather than comparable across, though in the final report, we hope to outline some of those variations as much as possible, but as you know, many patient matching solutions are proprietary, so, to the extent that we are able to. Next slide, please.

And, I just wanted to show you, and I am sorry this is not the greatest screenshot, but there is a lot going on in this screen, what the Project US@ API looks like, and you can see an example request of what will be sent. You can also see, towards the top right corner of this screenshot, the number of programming languages that the API could be used with, so we try to make it also tech agnostic so that it can be flexible for future use if we are fortunate enough to get to production. Next slide, please. Thank you.

And, I just wanted out to point out within the most recent health IT standards bulletin, the January 2022, that there is a patient address section, I believe on Page 5, simply stating that we believe the specification can serve as the standard for patient address and healthcare settings, and we really, really want to hear from all of you. We seek feedback via the USCDI feedback process, which I believe is called ONDEC. My friend Al is on the line, and he can send you that link as well in case you or any of the attendees do not have it. We seek feedback on whether this specification can be used for both current and previous address in USCDI Version 3, or a future USCDI version. And of course, the comment period for draft version USCDI will be open until April 30th. I do not think I have received a high number of comments yet on addresses, so I am really looking forward to reading those when you do send them. Next slide, please.

And, I believe that is it. I would like to open the floor to whatever questions you have. Hopefully, I can answer them. I really appreciate the opportunity. Thanks.
Arien Malec
Thank you, Carmen. We have 27 comments coming through the chat, so I am just going to drain the chat comments, do a brief summary, and open it up for the commenters to add additional comments if they want. So, Ike notes “Is it in scope to standardize the matching algorithms themselves?” My understanding, Carmen, is the answer is no, that Project US@ is not standardizing matching algorithms, but standardizing data elements.

Carmen Smiley
Precisely.

Arien Malec
So, Ike and a number of other folks ask really good questions about how we turn the US@ specification to something that follows Postel's principle, not USPS, but Jon Postel, the notion that we have got data that is standardized, and then we have got regular old funky U.S. healthcare normal data floating around, and how do we contemplate upgrading the U.S. healthcare system? Is it in pieces, or are we going to go with a big bang like ICD-10?

Carmen Smiley
I cannot imagine a scenario where I would be able to have the impact that an ICD-10 would have, though if the Project US@ specification is included in USCDI V.3, I think that is a very positive step forward. So, what will likely happen is that it is a little bit of a slow move, though at least there is some movement. We are hoping eventually, down the line, there will be alignment across developers and across healthcare. As we are able to also demonstrate the great value of the standardization, I think that will inspire other developers to adopt it, perhaps those who are not adopting USCDI.

Arien Malec
Yeah, and then, I am going to summarize a couple of questions that came in through the chat. Abby, Hans, and Ike all had more or less the same questions. How do we take the pilot service that you have built and turn it into production services? How do we think about provenance and validation? How do I attest that the data elements that I have got actually have been standardized to spec? And then, are you contemplating a single U.S. federal government-supplied service for the nation, or are you contemplating a set of validated and approved service providers and a marketplace of services?

Carmen Smiley
Yes. I do not know, honestly, what the road forward looks like. I think there are a couple of limitations around the API. So, despite the discussion previously about the limitations of Publication 28 to improve patient matching, USPS also has limitations on their terms of use for the web services API. And so, what I hope is that the Project US@ API will actually get to production. However, it is not clear if the Project US@ API can be adopted by others, and the reason why we want the Project US@ API to stay at USPS is because USPS is the authority on addresses in the United States. They have more databases, I think over 40, that they query with each API hit. And then, they also receive all of the change-of-address updates. They have literal boots on the ground to determine the mailability of any address at all, not just patient addresses, but eventually also, of course, facility addresses. So, I honestly do not know what lies ahead for the adoption of the Project US@ API. I believe that is still to be determined.
On the standards front, we also hope to identify some standards champions at HL7, X-12, NCPDP, or any other standards development organization to help integrate the specification into future versions of existing standards already in use.

Arien Malec
Got it, thank you. Let me just summarize what I think I just heard, and just make sure that I got it. Your perspective is that USPS is in the best position to host and maintain the API, not because they are the ipso facto best API service provider in the country, but they actually have a significant data advantage, but right now, we do not have a clear path in terms of terms of use to go forward and turn that pilot API into production. Is that more or less right?

Carmen Smiley
That is correct. So, the reason why we entered into an interagency agreement is USPS is that we would have the opportunity to work with them on the API at all, but their congressional authority is also limited, and so, they do not have the capacity at this time, and perhaps they will in the future, to work directly with industry organizations, but if we at ONC, or perhaps HHS, CMS, CDC, or any other federal agency, anybody who is able to is welcome to adopt the API for their purposes and make that available to others.

Arien Malec
Sounds like that could be a recommendation from this taskforce. Okay, I am just going to try to drain the chat questions really quickly. So, Abby raises some really salient questions. I do not know if you are looking at IHS as a proof point, but have you contemplated or has it been out of scope how to handle people without a fixed address, and also, how do we handle multiple residents in the same address who have got similar names? I do not know if you have made any progress in either of those two areas.

Carmen Smiley
Excellent questions. So, for those patients who do not have fixed addresses, we definitely want to at least be able to begin work this year, and that is why we are partnering with the Indian Health Service, because many patients that are living on tribal lands have less standardized addresses. There is simply less infrastructure to be able to support what we think of as your average address. I would like to point out that we acknowledge that many times, patients, whether they have less formal addresses or patients who do not have an address at all, including homeless patients, we are definitely considering those, and there is already guidance within the AHIMA companion guide that addresses this, so we hope to build on that this year.

The API, as I mentioned, will accept whatever you have got and return that in a standardized fashion. While that may not be as meaningful in a relative sense, it is really important that we take whatever we have got in that is standardized. We can still be of value. Even if all we have got is a ZIP code on a patient, that is still really valuable.

Arien Malec
Fantastic, thank you for that. All right, I think I have drained the comments through the chat. We are going to go back through the folks who have got their hands raised, and if I forgot anything in the chat, please raise your hand and we will get through that. So, David, go ahead.
David McCallie
Yes, thanks for the clear presentation. I was pleased to see that you are taking a phased approach with stages of more increasing difficulty, and I just wanted to suggest that one of the stages to consider in the future would be dealing with a virtual address space, which is the ability for individuals to maintain their own identity and choose to share it in robust fashion, and in some ways, that might even take precedence over dealing with name matching because it is a more powerful, more secure tool, and we are almost all of us now carrying devices that can easily manage a secure identity for ourselves: Our phones, obviously. So, I am sure you guys discussed it, but I would suggest that a future phase could include virtual address bases, and that would be extremely useful.

Carmen Smiley
I completely agree, and I really hope to have the opportunity to better marry patient matching and digital identity efforts in the future. Thank you.

Arien Malec
Thank you, but I am hearing you say that that was out of scope for the US@ effort, but I think there is a broad agreement that it would be useful to put digital identities into scope for patient matching. Do I have that right?

Carmen Smiley
It is not in scope at this time, unfortunately.

Arien Malec
Perfect, thank you. I think I am losing the ordering, so I am going to go through and drain through the ordering that I see, and apologies if I take folks out of order. So, I see Mark.

Mark Savage
Thanks. Quick question. You mentioned a pilot within organizations. Looking at what is happening nationwide, a pilot among organizations might speed things up and actually give us data to work with at the speed that we need to improve things, which is critical, so I am wondering if you can speak to any plans for pilots among organizations, whether it might be worth being a little messier and just jumping in and trying something like that. Maybe parallel pilots, and I want to lift up Abby Sears's comment that OCHIN has an interest in helping us if it is set up the way it works, and they do a great job connecting among organizations.

Carmen Smiley
I completely agree about the need. I simply do not have the resources at this time, but it does not exclude the possibility for the future, and I also agree with OCHIN, and I am really excited to work with OCHIN on the pilot this year.

Arien Malec
Thank you.

Mark Savage
Thank you.
Arien Malec
Grace?

Grace Cordovano
Thank you for such an amazing and informative presentation. I am curious as a patient advocate from the patient perspective. How can patients and their families help in curating and standardizing this data or verifying? I know that it is a pilot phase, and it sounds like mostly between organizations, but at any point, is there a vision to, for example, whether it is at a point-of-care discussion, whether it is through the patient portal, whether it is in a conversation with a community support organizer, to verify, and maybe there would be a verified checkmark that yes, this information is correct with a date and time stamp? Anything along that thought process?

Carmen Smiley
Great question. So, we are not including [inaudible] [00:36:27] for patient-facing apps within our existing pilot, but a lot of the companion guide and even our infographics really strive to better engage patients in the process, and the examples that we have outlined for patients to help them understand the importance are exactly those that you described, like perhaps when they are scheduling something, why it is important to provide their most recent address, why it is important that they check it each time. It is really easy to just skip through those screens as you are logging into any system to get to what you want, but all of it is important. So, I think a baby first step would be just simply to explain to patients why it is important, how it affects the quality of their health data, how it could affect things downstream, like whether or not they are receiving accurate billing, or whether or not they are receiving the medications that they need. I certainly am open to future work that is more focused on patients; simply at this time, it is out of scope.

Arien Malec
All right, thank you. Steven, over to you.

Steven Lane
Thank you. I just want us to remain clear as to what is our task and opportunity here at our workgroup, and that is really to answer the question that was put in the ONC standards bulletin, which is very discrete, which is specifically whether this specification should be the required standard for current and previous address in USCDI V.3, and I would suggest personally that that makes a lot of sense. ONC and Carmen’s team did all the work to put this out there. There are all kinds of steps along the path, other supporting efforts by other agencies, by AHIMA, etc. This is not going to suddenly boil our ocean, but it is clearly a step in a direction.

So, I would just throw out while Carmen is here to the task force generally: Does anyone feel that that would be a bad idea if we were to, as a workgroup, suggest indeed that the Project US@ standard be specified for current and previous addresses in USCDI V.3? And, that is with a full awareness of Ike’s prior question, that there could be some unintended consequences, potentially, as V.3 is published this year, as it is added to SVAP next year, as health IT vendors take it up either late next year or early the following year, could there be some issues with historic addresses that we are going to have to mitigate, that the vendors are going to have to think through? So, with that in mind, I would restate the question. Does anyone feel that that would be a bad idea?
**Arien Malec**

Steven, I just want to do a little bit of process check. So, I want to drain the questions first, and if we run out of time, we definitely want to get to that conversation. And then, I am going to ask a couple of questions prior to opening conversation on that because I am not sure I understand right now what it means to adopt the US@ specification for USCDI V.3 because I am a little lost in the US@ as an API specification or a content validation specification/interoperability specification, and I sort of think USCDI sits in content space. So, is something that is a data field that is not normalized not in USCDI if we declare that Project US@ is the spec for USCDI?

But, I am getting ahead of myself. I want to have that conversation. If there are additional “What is US@, what is the scope of US@?” questions that are on the table, I see that Mark and Ike have their hands up. If you are weighing in on Steven’s framing of “Should we adopt US@ as USCDI V.3?”, maybe hold off one sec. So, Ike, I think, still has a “What is US@?” question. No, he does not. Okay, cool. So, thank you, Steven. Let us now frame the question, and Carmen, maybe I can ask you this question that has been plaguing me as we have been going through this. What does it mean to adopt US@ or the AHIMA spec as the literal spec for USCDI? Do you have a frame for what it would mean to say that the US@ specification is the accompanying specification for USCDI? Steven, maybe this is clearer in your head than it is in mine, but Carmen, let me give you the first pass.

**Carmen Smiley**

Okay, great, thank you. So, I want to first clarify. I am sorry if I was not clear earlier. Right now, for the pilot API, I simply wanted to demonstrate the value of the specification because of course, you want to be able to test every specification and standard before it is adopted, normalized, whatever it is in the future, so I wanted to test it in some way, and we should be able to release the final report of that pilot.

But, in many ways, that is separate from the specification itself, and how I see USCDI Version 3 for current and previous address, if we are going to name Project US@ specification for that purpose, it is simply a content specification so that developers would modify the systems that they develop for health information professionals to be able to accurately capture that address, and there are both operational perspectives to have in mind, and there are technical perspectives to have in mind. Perhaps there are field limitations, perhaps there are autocorrect functions, perhaps those developers themselves can build in their own validation and normalization functions behind that patient demographic screen that could further improve that address standardization. The specification simply provides guidance on how to do that.

**Arien Malec**

Okay. So, let me go straight back to that Postel’s principle question that Ike raised, which is if we name US@ as the controlling spec for the content for patient address and we have EHRs that previously collected data or have not upgraded their systems to validate to the US@ spec, what happens with respect to that data per the US@ spec?

**Carmen Smiley**

The specification does not dictate how anybody handles historical data, and in my experience and advice that I received from other experts in the field, that is not recommended because things could go wrong, or you could find misalignments. And so, from some point forward, though I do not know when that point will
be, we hope to eventually get to the point so that all newly created data will be standardized and will be conformant to the specification.

Arien Malec
Got it, okay. I have many thoughts that I will refrain from exercising. Let us go to the question that Steve called, and folks who have a perspective on the question Steve called will go through and entertain, and then we will switch over to the 1A task at hand. Mark has a perspective.

Mark Savage
Just a quick process thought to Steven’s and everybody’s question. I appreciate the narrowness of the charge. I think we say yes plus, and as we did last year, we provide this workgroup’s perspective on some of the things that really ought to be added if we can. This is perhaps a way to think of it as necessary, but not sufficient, so let us also, in answering the charge, say what we think in addition might make this sufficient. Thank you.

Arien Malec
Thank you. Abby?

Abby Sears
I want to piggyback off what Mark just said. From my perspective, I cannot actually approve this even though I know it is the right first step, and here is the reason why. I think from a policy standpoint, this is what we do. I am guilty of this even in running my own organization: “Small steps, let’s just move towards it.” But, without knowing exactly how we are going to handle the fact that this discriminates against populations and has equity issues in it, as a leader, I fundamentally no longer can approve that without some sort of a plan attached to it that is more immediate, that gets to how we are going to handle the fact that this is actually going to hurt that population before it gets better.

And so, for me, unless that comes together as a package, I cannot justify it because “we will get there” is not sufficient enough because if there is a change in administration, or there is no funding, and we never get there, then I am complicit in having agreed to actually put forward a policy that actually does not support or solve some of the equity issues related to the matching issues that we are experiencing. So, I just wanted to verbalize. I do not want you to feel like I do not support what you are doing, I actually feel like what you are doing is brilliant, and it is wonderful and needed, it is just insufficient.

Arien Malec
Thank you, Abby. So, we have Clem on the table.

Clem McDonald
Well, I will first apologize that I am a half hour late, and I have not actually had a chance to study this, but I am a little puzzled by why it is such a problem because you go to UPS, and they type in whatever, and they get the whole thing. There is some database in the world, I guess, that can convert whatever you say into what it is. So, I live on a street that has a thing crossing at the end that it comes back as “X-I-N-G” because they go to some database. So, why are we struggling when it all seems to work pretty well? Is that because hospitals do not reach out to those systems?
**Carmen Smiley**
Yes.

**Arien Malec**
Yes. Go ahead, Carmen.

**Carmen Smiley**
Sorry. So, also in the limitations of terms of use for the USPS web services API, you cannot use their API for any other purposes besides mailability, so many health IT developers have to rely on third-party applications who simply put a different interface on the web services API, and then add their own special approach to it that is proprietary to be able to standardize those addresses for health IT developers. And also, I just want to point out that even USPS struggles with this, so whenever you are doing any sort of validation services, you have to have that one-to-one match, and only approximately 15-20% of addresses that are sent through the web services API will actually identify an accurate match. So, everybody who deals with disparate and variable information faces the same challenges.

**Clem McDonald**
Thank you. I will read it. I will learn from it.

**Arien Malec**
Thank you, Clem. Christina?

**Christina Caraballo**
Well, first, thank you, Abby, for the comment. I want to take us back to where we have looked at including the standard for address in the first place. When we were going through the first rounds of getting address and phone number originally included in USCDI and looking at it, it was very much looking to help address some patient matching issues, and by standardizing the patient address, I do not want to take away from making progress on how we can address patient matching by looking at excluding people. We put current and previous address after discussions on how we address flexes in housing availability, homelessness, and other things, and so, we drilled down to at least having previous address. So, as others have stated, it is the baby steps in where we need to go. So, this is just a way to standardize something that is already captured in USCDI, and I do not want to take away from that by overthinking a piece of data that can be captured more efficiently than it currently is.

**Arien Malec**
Thank you, and Carmen, again, with respect to Abby’s perspective, I think you said that Project US@ and the accompanying AHIMA specification do not specify that address information has to be 100% provided or complete in ways that would make it impossible to add address information for people who are unhoused.

**Carmen Smiley**
 Precisely, and the companion guide specifically addresses how to collect whatever information is available by homeless patients. I want to ensure that it is clear that by no means have we charged ahead while purposely introducing any equity issues. We simply would like to do additional work on homeless patients and additional work for those patients that have less standardized or less available address information,
but with what we have now, we can still move forward, and so, there is still guidance available for the health information professionals, and the API and the specification allows for that variability.

**Arien Malec**
Thank you so much. We are seeing comments that I personally agree with that maybe we can go a little bit out of our remit as a workgroup and make some recommendations to ONC, CMS, or other portions of HHS that it actually might be a good idea to take that underlying API and make sure that it is licensed for the purpose of improving and validating address information. And then, I think where my head is going with respect to the Postel’s principle issues is that we may need some way of marking content as to whether it is or is not validated according to the content spec, and Carmen, I do not know if you had done any thought about that, and maybe your response is “Hey, a bad, un-normalized address still is US@, it just is not fully US.” I am trying to figure out what the right recommendation that we have that encompasses incomplete or unvalidated data and also supports more fully validated data. I do not know if you have a perspective on what that recommendation might be.

**Carmen Smiley**
Yes. So, in the immediate sense, what we are really discussing is the specification and not necessarily the API, and with the specification alone, it is really whether or not an address is conformant to the specification. We do not currently have a way to express digitally that anything has really been validated, but there is no reason why we could not add perhaps something to the metadata section of the specification after we get to the point where we are able to express “Yes, this address has been validated with the Project US@ API, and on this date,” and so, you can perhaps weight that address a little heavier by your algorithm or have a little bit extra trust in that information.

**Arien Malec**
I think that makes a lot of sense, and it is stuff that we do in other areas as well, have the data be accompanied by a code set descriptor that tells you what code set to look at. You could play the same trick here in interoperability land, but you would also have to do it in content land, have a marker as to whether it is US@-compliant or not, which would give a hint to downstream users. Rajesh has a question. I am going to try to limit debate at this point on the US@ spec so we can go back to our Charge 1A discussion, but Raj, why don’t you go ahead?

**Rajesh Godavarthi**
Thanks for this presentation. I am still trying to grasp the whole scope of it. Carmen, could you explain the maturity more for this spec to evolve in the next two to three years? What do you expect, as this seems to be in the very early phases? Whether it is the right thing to include or not is a different question, but what do you see as the next three or four years might look like for this?

**Carmen Smiley**
Yes, great question. And so, 2021, we finished Version 1 of the specification for U.S. domestic and military addresses, 2022, we will focus more on those patient populations that were pointed out by our colleagues on the line, as well as geolocation data because we can see great benefit from at least the possibility of expressing that. Also in 2022, we hope to begin the process of standards development. Each standards development organization has a different process that must be followed to be able to pursue the development, say, in HL7 so that it is included in a future version of FHIR. I am just throwing it out there
because I do not know if this is [inaudible] [00:55:45] yet. And so, eventually, it will, by diffusion, move itself into other standards.

**Rajesh Godavarthi**
Thanks.

**Arien Malec**
Yeah, and that is exactly right. So, why don’t we limit debate at this point on Project US@ and switch over to our Charge 1A portion? Carmen, obviously, please stay if you can, but we do not want to keep you from other things you are doing, but this was a fantastic presentation. I know I learned a ton, and I am pretty sure, just based on the discussion, that the workgroup learned a ton about the work you are doing, and again, I think there is a huge amount of support for the work that you are doing, so, thank you.

**Steven Lane**
Yes. Let me add my thanks, Carmen. That was an excellent presentation. I really appreciate your joining us.

**Clem McDonald**
Could I just ask, how can we easily get that spec? I do not think it was attached to any of the mails here.

**Steven Lane**
It was in the homework, Clem.

**Clem McDonald**
In the homework? Okay, thank you.

**Charge 1a – Draft USCDI v3 New Data Classes Elements (00:57:02)**

**Arien Malec**
All right. Let us go to the Charge 1A work. So, if we can go on the slides to the next slide, and I am working off my phone, and I apologize in advance for the poor interface. So, we have been collecting information via the Google docs, and Steven, I do not know if you are in a position where you are able to guide us through the Google docs content or not right now.

**Steven Lane**
I am laid up and on my laptop. I am not at my standing desk today, but I think if the ONC team can get us to the two Google docs, we will probably be on the first one primarily.

**Arien Malec**
Yeah, thank you. Apologies. As I said, I am working off my phone right now.

**Steven Lane**
You are even more limited than I am.

**Arien Malec**
Exactly.
Steven Lane
That is, by the way, Arien, quite impressive. Oh, Al, welcome back. Thank you, Al.

Al Taylor
I have been here the whole time, except for last week. I will share the Google doc, although I think somebody else needs to be editing it. Can you do that, Steven?

Steven Lane
Let me try. Your boss did an amazing job editing and displaying last week. She was incredible.

Al Taylor
Are you saying I should endeavor to match her standard?

Steven Lane
She set a pretty high bar.

Arien Malec
That is right, exactly. Oh, nice. Well played.

Al Taylor
All right, Steven. I will try. Hang on, let me share.

Arien Malec
I do not see content yet.

Al Taylor
That is because I have not shared yet, Arien. Here we go.

Steven Lane
Any comments from workgroup members about difficulty getting to or interacting with the documents, just while we are getting started?

Clem McDonald
I think there will be.

Steven Lane
Once you get there, right, Clem?

Clem McDonald
Yeah.

Al Taylor
I am trying to zoom beyond this, and I cannot seem to zoom past.
Arien Malec
Okay. Well, why don’t we take a little bit of time? We have 25 minutes before public comment. Grace has a question, but just given where we are with the Google documents, let’s still let folks who did their homework and provided content, which most notably does not include me, offer their suggestions on the content, or Steven, you have some alternate suggestions.

Steven Lane
Arien, specifically, we wanted to just close the loop on our discussions from last week, so I think Grace introduced the comment on Row 2, and I think we finished with that. Mark introduced the issues on Rows 3 and 4, and my recollection is that we had some open questions and wanted to get more feedback, and then, talk about doing your homework, Michelle Schreiber has been all over this document, and we are going to want to give her a chance to introduce us to what she included.

Arien Malec
Yeah, that was the thought as well. Grace, you had your hand up, you took your hand down.

Steven Lane
It is up.

Grace Cordovano
I just had a quick comment on the USCDI site. In looking at how the information is displayed as we are working towards different charges, what is appearing in draft V.3 and what is in Level 2, even if it has been moved over to draft V.3, it still appears in both, so I am just wondering if there is a way to denote that it is in consideration for V.3 or something to make it easier because the fields look exactly the same.

Steven Lane
Thank you, Grace, and I know you sent me an email on that.

Al Taylor
Can I address that, Steven?

Steven Lane
Yeah, I did not have a chance to escalate that, but Al, I agree with Grace. It would be great if there was a star, or a “3,” or something on that V.2 page that identifies which of the things in V.2 is also in draft V.3.

Al Taylor
No, that is a fair point. So, having it on Level 2 and draft V.3 was intentional because it is a draft, but I understand that it would be helpful to have something. And so, what we have had in the past, in specially the draft publications, is an indicator that something is new, and we will look at that. We are toying with a couple different graphics and display methods to see what would look best, but anticipate that to be coming soon to a theater near you.

Clem McDonald
Could I just comment on it? It is not clear to me if it is better to be high or low in the numbers. When do you win or get in?
Arien Malec
So, Clem, I do not know if you were here when we covered the overall process flow.

Clem McDonald
I know we have a process, but you think you get into 2 when you are 1 and that is pretty good, but it was not.

Arien Malec
So, generally, if you review the content, I think, from two meetings ago, it covers the overall process flow, and we are proposing for finalized USCDI V.3. V.3 will enter the SVAP, and so, Clem, in computer science, if you think about a pointer pointing at the current element in the queue, and then adding items to the back of the queue, that is where we are. Right now, we have the FHIR CORE and the consolidated CDA specs pointing at the front of the queue that are pointed to V.1. We are doing work to add V.3 to the back of the queue so it joins the SVAP, and presumably, at some point, we are going to increment our pointer so that FHIR CORE and consolidated CDA will be pointing to V.2 as it works its way through the SVAP. But again, we did cover the overall process flow. Al did a really nice job of walking through that content in a previous conversation. Michelle, I saw that you have some time limitations, and so, I thought we would give you the time to go over your comments and adds and do a brief discussion.

Steven Lane
Thank you, Arien. I could not agree more.

Michelle Schreiber
Sure, I am happy to do that, and actually, thanks for the opportunity. So, we looked across CMS, and we also have some calls with other federal partners as well, and there were just a couple of things that we in particular wanted to recommend for inclusion here. The first is around facility identifier, and I see that you have that up here, because this is really just critical when we talk about interoperability for linking billing and clinical information in the EHR, supporting data aggregation, and even getting public health information.

And so, in particular, for us, the areas that are particularly important are the CCN number, which is the Medicare number that is assigned to hospitals that identifies hospitals, as well as the PTN, which is the provider transaction number. These are unique identifiers for healthcare informations and their providers, and so, we wanted to put that in as something that was important. The other one along similar lines that I want to point out, I know Adi is not on the phone from CDC, but one that they felt was really critically important for the interoperability and ability to track information was the encounter identifier. So, before, we had a lot of information about encounters, but we did not finalize the encounter identifier. That is further down in the notes. Sorry, I am going out of order a little bit because I am trying to be fast. I have five minutes before I have to hop off, and I apologize.

The next one is really around medications because although we recognize that there are some things that are finalized and standardized for medications, things like the medications dispensed, the discharge medications, the medication administration, and the administration code, and in particular, dosage we think are important 1). For patients who want to know what this is, 2). From a patient safety point of view to make sure that we are clear about what medications have been given and what have not, and so, that is a number
of the comments that we put into the document as well. A couple of other points: So, those would be our highest priorities.

I will just pause there and say that those really are our highest priorities, and then, there are a few others around surgical operative note, orders for end-of-life care, but to raise the issue again, and I think this may be a broader discussion not for this particular timeframe, around end-of-life care and the sharing of things like advance directives, and I know that maybe there is not a standardized way to have advance directives in there, but there are ways of sharing documents that we believe are standardized and would really like to reopen the conversation about end-of-life care because we think that that information is really vital, both from a patient point of view, from a clinical point of view, and really being able to follow patient wishes.

**Arien Malec**
Thank you. So, can I ask a question about encounter identifiers? I apologize, I am having a hard time seeing the content. Is there a standard that you are pointing do?

**Michelle Schreiber**
I think there is. Adi, are you on the phone? Because I am seeing you in the chat here. This is one that I know CDC wanted.

**Clem McDonald**
I could comment a bit. So, I think all the hospitals do their own, only to get an OID or something to distinguish their codes, so I am pretty sure there is no standard way across institutions. But they have their own identifier, and then, if you are going to put it in the HL7, they have to apply for an OID or something. Maybe there is another way to do it. And then, the code comes in, the code with the source of the code, which would be an OID, usually.

**Arien Malec**
Yeah, it is the old assigning authority of clinical content.

**Michelle Schreiber**
Is there a FHIR resource for encounter?

**Clem McDonald**
There is, but the ID is not universal.

**Arien Malec**
Right. Clem, that is exactly the point that I was getting at. Do we need a two-part assigning authority and local identifier, concepts that you at least know who is the source of that local identifier, and they need to make sure that it is globally unique, at least within their context? But, if Adi knows or something…

**Michelle Schreiber**
That is a great comment, thank you.

**Arien Malec**
Thank you. And then, Michelle, I think the way we are currently handling advance directives is via notes with some type. Do we have a LOINC code or other codes that indicate that a particular document is an advance directive?

**Clem McDonald**
Yes, there are such codes.

**Arien Malec**
Okay. By the way, Adi has very nicely raised his hand, even though we were calling on him. Adi, go ahead.

**Adi Gundlapalli**
Sorry about that, and Michelle, thank you for bringing this up. We from CDC are also in active discussions with CMS, as are other partners too, and we support these highest-priority elements too. I think there is more than just a clinical and public health issue here, and we need to band together and those. The issue of the unique identifier thing, Clem, you raised a fantastic point, as have the others here. The challenge we face for public health reporting is that, for example, and we have colleagues here who are work closely with or at state and local health departments, let’s say a clinical notification of a disease or condition, like COVID or measles, comes in through the FB folks. The laboratory comes in through electronic laboratory reporting, then the vaccine data comes in separately, and so, they do not come linked from the health jurisdiction itself because they have to have what I am referring to as a master individual index because not everybody who gets a vaccine or even a test is considered a patient.

And so, there are only a few jurisdictions who are able to reliably and efficiently link those at the state level, and what we are hoping is that those linked identifiers, and they could be deidentified for us because at the CDC level, we do not need to know who they are, are then transmitted with that linker so that we can, just as Michelle was talking about, try to see if you can link an FB case report with a lab report with a vaccination, and you have seen some MMWIs come out from that. California and New York have been able to do that, and it is really powerful. And, a longer and bigger discussion about privacy-preserving record links because that is absolutely the prime directive. We cannot and will not be identifying individuals, and we have to maintain privacy. So, this is a good discussion, and I would hope to raise this again, maybe in a smaller group.

**Arien Malec**
This is fantastic. Thank you for that, and Michelle, I also have my administrative transactions hat on, and I am thinking about how useful it would be to identify an encounter ID across a claims attachment and a remit, as pretty classic examples, or even potentially prospectively for an ePA referral auth that flows into a claim, and that might be a useful thing. Okay, Ike?

**Michelle Schreiber**
I apologize, but I do have to go for another meeting, so I apologize to have spoken of this and have to hop off.

**Steven Lane**
No, thank you so much, Michelle.
Arien Malec  
Thank you so much, yeah. Fantastic data, and really appreciate all the work you have done into it. Ike, go ahead.

Steven Eichner  
Two components. One, looking at tools like syndromic surveillance, which is a tool public health has been using for the last 10 years or so in particular, we have a long history in that space of looking at encounter IDs, facility IDs, and LOINC records, so we are already doing that, not necessarily based on an OID, but looking at a facility license number or something that is generated, often at the state level, although on the laboratory side, we have a tendency to use things like CN numbers as a substitute for an organizational OID, but again, that is a unique number to the lab.

I think the other component is that having a method of coding or locating documents like an advance directive or other criterion that needs those that do not fit very well in any of our existing categories would be nice to have to share information with providers. I will take myself as an example. I have a rare disease. I have no allergies per se, but an intramuscular injection is a really bad thing for me. Currently in the EHR, there is no good place to put that where it pops up as I show up in the ER as an EHR transaction. It is not an allergy. It is stuck in a case note somewhere, but that does not pop up as a need-to-know-now kind of thing. So, I am not sure how [inaudible – crosstalk] [01:14:02] that are aligned with that.

Arien Malec  
Thank you, right. So, the general point is there are a whole bunch of things that feel like there is a note that is used for a particular purpose, and then we need an identifier for what purpose it is used for. We do have existing facilities for documents and LOINC identifiers for document types, and I am not sure where we are with USCDI at using some of that machinery, but that would be the classic way that we would solve for that particular problem. For advance directives, there is the issue of digital signatures and what they mean, but at least the ability to document that something is this thing would be a useful notion, and as you note, additional documentation for intolerances would be also useful in that context. Clem, go ahead. Clem, you might be on mute. Clem, we cannot hear you.

Clem McDonald  
Sorry. I wanted to come back to the encounter question because OIDs are not the easiest thing, and there is some shifting sometimes in what is going to be the endgame. I think we should ask HL7 to create a standard way to do it, and if CTMs and BTMs are always available, that would be much easier for the institutions to use as the special identifier for that code, and whether we could bring that up. For people on the call, are CTMs and BTMs always there? Do pediatricians have CTMs and BTMs?

Hans Buitendijk  
The question that I have is I am checking which one of the two is typically in the EHR, what is in the administrative practice management revenue cycle, how is it distributed across the HIT, and does it create a problem for USCDI that is meant for everybody to support that, and is that reasonable. So, I am doing some [inaudible – crosstalk] [01:16:15] there.

Arien Malec
Cool, and to Clem’s point, I do not know that we need to drain it right now. There are a bunch of different ways of addressing the particular point of how we uniquely identify the assigning authority or the authority for an encounter ID, and we may want to do recommendations that defer the grody details to the appropriate organization. Thank you, Clem. Are there other questions on the table?

**Steven Lane**
I would like to just put voice to what I just put in the chat, which is that I have taken the liberty to color code our spreadsheet a little bit to help us stay on task. Our Task 1A has to do with providing input and suggested modifications to the items that were put into draft V.3, so I have color coded those as green. Our Task 1B, I believe, is to make suggestions about items that are in Level 2 that we think could be added to the draft V.3, so I have color coded those as yellow. And, we have not been asked to provide comment or input on items that are at Level 1 or comment level this year. We were asked to do that last year, and I am hoping that we can ONC’s permission and the staffing to be able to do some of that work this year, perhaps after we come back from the ISA, and in time for the opening for V.4 input, but I just want to be clear that we all have tremendous insight and good intentions, but we also have a job to do here, and we need to stay focused on it so we can be successful.

**Arien Malec**
Thank you for reminding us of that, Steven. So, as a reminder, the homework is still open, and I think the norms of this group are that the people who do their homework get their voice heard disproportionately in the workgroup, as is just and fair, so we just encourage people to verify that they truly can get access to that document and go through their homework items, and then, we will drive towards robust conversation and discussion. Al, remind me. I think we are trying for one more major conversation as a workgroup around disability status, functional limitations, mental health status, or mental limitation status, etc.

So, I do not know where we are in scheduling that particular discussion point. Mark, you were trying to get us some folks there, but I think we are going to have one more session that is like this, where we split the goal of having some outside folks provide testimony of a subject of interest, and then, outside of that one, we are going to be spending most of our time going through the document comments and trying to formulate towards our final recommendations, due in April, and if you work backwards, and anybody who has been through this thing before, if we are making recommendations in April, we had better have really good drafts early next month that we then roll forward towards final recommendations for the April meeting.

**Al Taylor**
Arien, you are right, that is the schedule. One thing I would suggest is that if possible, we consider closing out the discussion on… We do not have to close out the discussion on patient address. While Carmen’s presentation is still fresh in mind, that is something to think about.

**Steven Lane**
On that point, Abby and I have been chatting on the side. Abby has promised to put together a specific proposed language for what might be the basis of our recommendation about both supporting the inclusion of the US@ standard and requesting ONC support for further work in the area of address specification so that we can link that and address some of the equity issues that have been identified.

**Al Taylor**
Okay, sounds good.

**Arien Malec**
That is right. And then, I think we also need to close out the conversation that we had about how we honor Postel’s law, how we address previous address information versus address information that has been collected in conformance with the spec, and we may need some finer-grained recommendations. I am happy to propose some comment there. That may be helpful just to close out that point.

**Steven Lane**
That would actually be really excellent, Arien. I want to keep us reminded of the fact that perfect is the enemy of good enough, and we want to keep moving forward. The last thing we would want is for our workgroup to stand in the way of progress. If anything, we want to accelerate progress.

**Arien Malec**
And, I think the simplest thing that could work in here is a simple metadata flag that says “This was collected in accordance with the US@ spec, and this was not” as a sort of hint for downstream responders who could know how to handle that data.

**Steven Lane**
Ike’s hand is up.

**Arien Malec**
Ike?

**Steven Eichner**
I would be happy to help you on that language if you would like. The other piece was looking at the disability conversation. I believe at one point, it was scheduled for next week. Is that still true?

**Steven Lane**
I think that is still true, Ike, and so far, I think you are the only one who seems to have some recommendations on tap for folks who could come and provide some subject matter expertise. We actually have our leads meeting right after this, so if you have names and contact info for any of those folks, we would love that now.

**Arien Malec**
Now is the right time to bring forward some folks.

**Steven Eichner**
We have already done that.

**Steven Lane**
Okay, great. Did you send that to all of us, or just to me, because I have been a little out of touch?

**Steven Eichner**
I will send them in the next two minutes.
Steven Lane
Yeah, send them to Al and Arien also, thanks.

Steven Eichner
Sure.

Arien Malec
Okeydokey. Given no more questions on the table and it being 8:54, I would move that we go to public comment.

Public Comment (01:23:20)

Michael Berry
All right, if we could bring up the public comment slide. Great, thank you. 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 or unmute your lines. Let's pause to see if we have any public comments. I am not seeing any public comments, so we will turn it back over to Steven and Arien.

Arien Malec
This has been a fantastic meeting. We learned a ton about Project US@. We had a really good, deep dive. The folks who have been on this workgroup have been providing comment for Task 1A, and I think we understand where we are with respect to our workgroup charge. So, with that, I would just propose that we give ourselves back a few minutes and give ourselves some transition between meetings because I think we accomplished a lot. Steven, anything else you would want to throw in?

Steven Lane
Just a huge thanks to everyone for your participation, both during and between meetings. Clem, let us know if we can do anything to help you get your input into the spreadsheet because we want to capture that. I think we really do want to move along expeditiously. Hopefully the meeting on disability, etc. next week will be fruitful, but then we really need to buckle down into developing specific recommendations, again, on our Tasks 1A and 1B, so, pay attention to that and those color codings. I think the red comments on the Level 1 and comment are wonderful. We do want to collect those, just do not expect those to be given airtime immediately, and we will ask Al and the ONC team to go back to Micky and leadership and see if we can perhaps be given another breath of life after we complete our currently assigned tasks because I think this is a wonderful group with a lot of great ideas that could be used to inform the V.4 process, though again, to use Arien's terminology, that is not yet in our remit, and we would like to see if we can get it there.

Clem McDonald
Steve, what is the deadline in terms of these comments for the next round? That always helps me.

Steven Lane
If we slide back up the slide deck, I think Slide 3 or 4 tells us what our deadlines are for Tasks 1 and 2.

Arien Malec
The April HITAC meeting is where we are reading out our final recommendations, which means we have to have recommendations that are near final by the beginning of April so we can finalize them for the April meeting, which means we have to draft recommendations in pretty solid shape midway through next month. So, if you are not getting your comments in now, it is going to be hard to turn them into the sausage for the final casing in mid-March.

Clem McDonald
I get it. I will call the deadline by the end of the week.
Arien Malec
Sounds good, thank you.

Steven Lane
And, one other thing, Al. Hans has been trying to provide the requested input on CDA and FHIR in the second spreadsheet, and he does not yet have edit access, so if you can provide that to him, he has got that info ready to contribute, but needs to be able to edit the document.

Clem McDonald
I think HL7 has to tell us something about how we best identify encounter IDs, CTM, or BTM. It should be on the table because it is always a little harder for normal humans. Not that they are hard, it is just that they will have these codes in hand at a lot of the places.

Steven Lane
All right. With that, let’s close it out a minute or so early. Thank you all again, and we will see you next week.

Arien Malec
Thank you.

Michael Berry
Thanks, everyone.

Adjourn (01:27:22)