Health IT for the Care Continuum Task Force (HITCC)

Transcript
March 8, 2019
Virtual Meeting

Members/Speakers

Name	Organization	Role
Carolyn Petersen	Individual	Chair
Chris Lehmann	Vanderbilt University Medical Center	Chair
Aaron Miri	University of Texas Austin	Member
Steve Waldren	American Academy of Family Physicians	Member
Susan Kressly	Kressly Pediatrics	Member
Chip Hart	PCC	Member
Lauren Richie	Office of the National Coordinator for Health Information Technology	Designated Federal Officer
Cassandra Hadley	Office of the National Coordinator for Health Information Technology	HITAC Back Up/Support
Stephanie Lee	Office of the National Coordinator for Health Information Technology	Staff Lead
Samantha Meklir	Office of the National Coordinator for Health Information Technology	SME
Zoe Barber	Office of the National Coordinator for Health Information Technology	Back Up/ Support
Al Taylor	Office of the National Coordinator for Health Information Technology	SME

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Thank you. Good morning, everyone. Welcome to the OIT for the Care Continuum Task Force. This is now our second meeting this week, so moving right along, we'll jump right into the agenda for today, but first we'll start with roll call. Carolyn Petersen?

Carolyn Petersen - Individual - Co-Chair
I'm here. Good morning.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Chris Lehmann?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Good morning.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Aaron Miri – he did indicate he's gonna be a few minutes late. Steve Waldren?

Steve Waldren - American Academy of Family Physicians - Public Member
I'm here.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Chip Hart? Is Chip on yet? Not yet? Okay. Sue Kressly?

Susan Kressly - Kressly Pediatrics - Public Member
Here.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
All right. I will turn it over to our co-chairs for a few opening remarks before we dive into our pediatric recommendations.

Carolyn Petersen - Individual - Co-Chair
Thanks, Lauren. This is Carolyn. I just wanted to wish everyone a good morning. I hope you've had a good week. I'm really excited that we're able to start diving into the recommendations and forming our comments for submission to ONC, and I'm happy to hand the mic over to Chris. Are you on mute, Chris?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Thank you, Carolyn. You were absolutely right. Good morning, everybody. Thank you, Carolyn. I am excited to actually go to work. Last Wednesday, we talked about the recommendation as it currently exists, and we had a chance to get some walkthrough in regard to existing regulations and standards by AI, and today, we will actually have the opportunity to talk about these recommendations, look at their feasibility and implementability, and talk about modifications or limitations of these recommendations. So, I'm excited about the ONC staff to get us working.

Carolyn Petersen - Individual - Co-Chair
Great, okay. Should we move on?

Samantha Meklir - Office of the National Coordinator - SME
Sure. This is Samantha Meklir, and Laverne and I are also listed at this part of the agenda just to welcome you all and thank you in advance for the hard work that we are about to roll up our sleeves and get started with. A little bit in terms of process: As we start to do this, I want to thank Stephanie Lee in advance for making the ambitious effort to try to capture some of the discussion in real time. That's always a challenge. Just to let workgroup members know, there will obviously be some time to modify and revise. There may be some parentheses for placeholders, but it's more of a prompt and aid for our discussion.

We're also going to start to apply and utilize the content in the technical worksheets that we walked through the other day and focus on the scope of the questions for the recommendations. So, I want to thank everyone in advance for their commitment and their input, and again, we have an ambitious agenda. I think our aim today, staff, is to work through the first five recommendations. Is that correct?

Carolyn Petersen - Individual - Co-Chair
Yes, that's correct.

Samantha Meklir - Office of the National Coordinator - SME
Okay. So, that provides roughly 12 minutes per recommendation, so you may see us try to facilitate or move it along as we see fit. There's obviously always an opportunity to think through this and give input on some of the notes, and we can share that as part of the subsequent discussion as well. Laverne, did you want to offer some remarks?

LaVerne Perlie - Office of the National Coordinator - HITAC Back Up/Support
Good morning, everyone. I'm thankful that you are all with us as we embark on this new effort, and I'm glad to work with you.

Samantha Meklir - Office of the National Coordinator - SME
Okay. So, we will turn this over to our chair and our co-chair to guide and facilitate this discussion. We are available here to help provide clarifying information and subject matter expertise as is needed or useful, and again, we thank you in advance for your focused effort and time today.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Okay. So, is Stephanie going to start screen sharing now? Do you want to just move over to that screen?

Carolyn Petersen - Individual - Co-Chair
Sure. Do I click a prompt to share it, or…? Okay, I see it.

Samantha Meklir - Office of the National Coordinator - SME

I want to thank everyone as you bear with us. We're virtual, and we're very much in a working session, so we want to get some of the typing screens up here, and as Steph is doing that, again, we're really working through those technical worksheets, so hopefully, that document is handy for folks, and what we have is a template where we'll be capturing some of the discussion today. Again, there are four overarching questions for each of the recommendations, and we'll be starting with the first question of focus, which is listed as Question 3 in the worksheet, and that is, "Should any of the recommendation not be included as part of the voluntary certification of pediatric health IT?" And then, we'll be looking at the following question, which really looks at the functional criteria that were listed for the existing and proposed, new, or updated criteria to support that recommendation if any of that was not felt to be a correlated item.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
So, Stephanie, the two Word documents are a little small.

Stephanie Lee - Office of the National Coordinator for Health Information Technology - Staff Lead
Yeah, I was worried that would happen with the split screen. Maybe we should switch back and forth.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Let's do one screen then, Steph, and people can refer to the hard copy.

Stephanie Lee - Office of the National Coordinator for Health Information Technology - Staff Lead
Yes. Has this gotten big enough?

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Maybe you could zoom in at 150% or 125%.

Stephanie Lee - Office of the National Coordinator for Health Information Technology - Staff Lead
Sure. Does that look better?

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
That's a little bit better.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I apologize. My phone line just dropped. This is Chris. I'm back online.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Thank you, Chris. We were really just trying to get oriented here to figure out the best way to view some of this in real time, and I just did a refresh to have the technical worksheets handy for folks, as well as a recap of the four overarching questions. It looks good now, Steph.

Stephanie Lee - Office of the National Coordinator for Health Information Technology - Staff Lead
Okay, thanks.

Carolyn Petersen - Individual - Co-Chair

I guess we can get started on the discussion, Chris, if you want to lead us through this.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Absolutely. So, if you recall – and, of course, in losing the connection, I also lost my Outlook and other things – if you recall, the first item on the topic is to use biometric-specific norms for growth curves, so that included the ability to record the patient's weight according to the age, which is calculated automatically, the ability to display the weight, body mass index, and height, and growth curves from the CDC and World Health Organization that reflect age-specific norms, and with it, the ability to also display percentiles. That was the recommendation, if I recall it correctly.

And, when we were talking about this on Wednesday, one of the things that occurred to me – I'm a neonatologist by training, and it's not unusual for children who are premature to have their age corrected for the first two years. One of the things that occurred to me that is missing from this recommendation is the ability to correct for adjusted gestational age, and the other thing that occurred to me that wasn't included in our recommendation is the ability to have growth charts that are disease-specific, and I'm throwing this out to see how the committee feels about that, but especially when it comes to things like Down syndrome – data exists for growth charts for children with Down syndrome – the ability to include that in the EHR seems to be something that might have value to pediatricians. I'm going to stop here and see what others think about this particular recommendation.

Susan Kressly - Kressly Pediatrics - Public Member
I have a lot of questions. We're going to jump on you, Chris. This is Sue, and I will just tell you that the problem with all of those things that you just mentioned – while they have incredible value – is that the normative datasets are not in the public domain, and so, there is no ability for the EHR to be able to relicense, and some of the disease specifications – so, part of what we have to figure out is that there are multiple ways of displaying this information and calculating it with the EHR. For example, we actually draw our own growth curves based on the CDC's normative and WHO – because they have huge datasets.

So, you can actually draw beautiful curves with their datasets. You can't do that with some of the others that don't have as many points of data because if you look at what's written in the literature for, say, Down syndrome, Turner's, or whatever, those are actually hand-smoothed curves that were sort of extrapolated by the people who did the research. There's not a big enough dataset to actually draw the curve within the EHR.

Now, there are other EHRs who basically scan a picture of the underlying growth curve and plot a point on it, and I don't think that we can be specific enough to tell the EHR companies how to do it. I think that we have to start with datasets that are big enough and in the public domain, which are the ones from WHO and CDC, and they have to be smart enough to know that we can't use the WHO curve after age 2 because there aren't datasets there, and there should be validation checking of not only whether you can do it, but whether the number is actually right. I've seen people who have done this poorly, and when it's done correctly, the percentile comes out as 29, and in another one, it comes out as 12. So, it's not enough to draw the curve. You have to be giving – physicians are using this for clinical

decision support, so we have to make sure they're getting the right information, not just a display of the information. That's my two cents.

Chip Hart - PCC - Public Member

I've got a little bit to add if that's okay. I concur with Sue because boy, our two companies have had to deal with this in spades. I know from some research that the only other dataset that I'm aware of that exists that has enough data to do this properly is the licensable AAP – oh, I'm sorry, there's also a preemie dataset. There are other licensable ones, but I just don't know what the reach or appetite is for ONC to require vendors to license stuff. However, I think the most important thing we can do here in terms of there alternative datasets is to require vendors to cite their data.

I have seen – I should also add the AAP has already written a position paper – and, I can get you the reference – where they say, "Do not use these other disease-specific charts because the datasets are so bad." The old Cronk Down syndrome growth charts are based on two dozen kids, and as Sue pointed out, are totally hand-smoothed, and from a data perspective, it's not an appropriate result. Like Sue said, if a vendor wants to overlay some data on top of someone else's visualization, that's fine, but I think it really needs to be cited. Where is this data from and what is the source? I think that's important.

Also, in the worksheet, there's a reference to the Model Child EHR format where the request is for an alert for when a child is more than two norms outside the expected range, and although that's a valuable alert, I don't think that's a particularly important one, the reason being I don't know any pediatricians who wouldn't spot that right away. What's more important to me and to my clients according to my clients is that they get alerted when a child changes more than a deviation or some other value because by the definition of the alert in the Model Child EHR format, a kid could literally go from 175% BMI to 75% BMI and no alert would happen, when in fact, a swing from 110% to 90% should set one off, or even smaller. So, from an alert perspective, I think it needs to focus more on the change than a data error because those tend to get fixed. So, those are two points I'd like to add to this one.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair

Thank you so much, Chip and Sue. I think these are valuable comments, and they show that we're probably far away at this stage from disease-specific norms, and if you don't have adequate data, then you can't really implement that. However, that leaves two remaining edits that I think we touched upon briefly. I mentioned adjusting the gestational age for preemies to reflect the appropriate place in the chart, and the other one, which Chip just brought up – a recommendation for a significant change, which, by the way, could be a measurement error that then could lead to dosing errors downstream, but it also could be a change in the child's condition – so, an alert to significant changes in the weight or height of a child. Are there any other thoughts and opinions on this?

Susan Kressly - Kressly Pediatrics - Public Member

Yeah, I'm just going to push back here again. That's what you get for inviting me to the party, Chris. So, let me just tell you that you can't correct if you don't have preemie curves, so if a kid is at 24 weeks' gestation and they're now at 30 weeks' gestation, where do they go on the curve, unless you

incorporate preemie curves, which, again, are not in the public domain in a way that can be easily consumed by EHRs. I can tell you our product does it, but we've done it with a relicensing and some other stuff. I don't think you can stick that – as much as I think it's incredibly valuable, I don't think we're there yet.

Chip Hart - PCC - Public Member
I'm with Sue. We're in the same boat.

Susan Kressly - Kressly Pediatrics - Public Member
And, there is no agreement of the subject matter experts about when to stop correcting. So, without good subject matter agreement on when and how to use preemie curves, I don't think this is prime to ask vendors to incorporate. I also want to go back to the alert for change.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Before we go there, Sue, let me push back. The recommendation there is that you should adjust once a preemie reaches term age for its adjusted weight, so you could use the regular curves. Would that be something you would consider feasible and doable, and would it have value?

Susan Kressly - Kressly Pediatrics - Public Member
I don't think it has value without the context of the first. At what point do you – to me, we really should be using WHO until age 2, and then CDC afterward. It's like asking us to adjust, but then, what do you do before that kid reaches that age? It's solving half the problem – I know where you're going, and we can do it, but I'm trying not to make the perfect the enemy of the good here.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I think we all agree, and I do appreciate the pushback. And, you wanted to go to the alerts for significant changes.

Susan Kressly - Kressly Pediatrics - Public Member
Yeah. So, what's an alert? Now, you're starting to – we don't even have a consensus in the industry of what an alert means. To me, being able to visualize the curve should be the medical decision-making tool that people use because unless you say to an EHR company – and, I say to my developers – if there's a delta of *x*, that delta of *x* is different based on the clinical scenario. If I have a kid in the first six months of life whose delta is *x* percent, that matters more – in the first two weeks of life, everybody drops 10%, right? So, what's the threshold, and is it higher or lower? What if it's a kid who is actually getting better, and it's a failure-to-thrive kid who is at the fifth percentile, and now they're finally doing better at the 25th? Do I want an alert?

I think this is hard to tell programmers how to develop, but there should be a visual display where they can see it on the underlying growth curve in a way that then, people should look at it, and we have to decide what alerting is. To me, alerting is not a pop-up, but that's what it is to a lot of other people. It's a visual display that makes it obvious that I should do something, and if you have a growth curve and you see a scatter point going up, down, or sideways, that's alerting to me, because otherwise, you're

going to have to get so granular about how from zero to six months of age, it's this percent, from this – what if you have an obese kid who's losing weight? I think the rules there go down that rabbit hole.

Chip Hart - PCC - Public Member
I agree with Sue, and the only thing – and, Chris, we're going to run into this a lot. One of the things the EHR developers need is computable, evidence-based guidelines for this stuff. So, when I sit and talk to a pediatrician directly, they can give me a very reasonable explanation for what they want out of their alerts, and I'm like, "Okay, we can do that," but the next pediatrician does something different, and then the next pediatrician does something different, and what we really need is – we're going to be pushing back for some consensus about what the actual evidence-based guidelines should be, and as soon as Bright Futures or the academy says, "Ten percent swing at this age group," or "Kids with these diagnoses should trigger something," we can work on that, but it has to be something that we're driving the pediatricians to, not something that is so flexible that it's useless. I hope that makes sense.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Yeah. Let's sum up this discussion. The one thing that I heard loud and clear is that this recommendation must include a visual display because it will serve for pediatricians and family practitioners who are used to taking care of children as a visual alert that there might be something wrong in either the measurement or the child that needs to be addressed, and that is sufficient at this current stage. The other thing that I hear loud and clear is we need to make sure that we limit this to data that are in the public domain, are evidence-based, and can be used to create this visual display.

Steve Waldren - American Academy of Family Physicians - Public Member
Chris, this is Steve Waldren. Just a couple other comments. First, I think we should be very clear about separating out the data and the access to the data needed to generate these biometric norms from the display, the alerts, and all that kind of stuff because based on the conversation today, it sounds like we need to have access to that data and to be able to aggregate that such that we can create these large datasets of what are accurate norms with thousands and thousands of kids based on disease specificity. So, that notion about things down below on the worksheet that talks about the core dataset and expanding that – I would encourage us to make sure that we expand that to everything – that we need to be able to do everything Sue talked about relative to this particular recommendation.

The next thing is I think we can separate out the capability of an EHR to leverage rules and execute rules from actually embedding the rules inside the EHR. So, in a lot of the conversations, I go, "Well, when do you adjust for the gestational age?" I think there's an opportunity there to be able to have the products that would be able to set rules to say each pediatrician is able to say, "This is when you would want to do that adjustment, and this is when it would end."

But, that piece now gets to my last question, which is a little bit different, and it's about all these recommendations. One thing that I'm not crystal clear on is what is the signal to the market for a product that has undergone the voluntary certification in pediatrics? Is it that this is safe to use for kids? Is it that it will support all the functionality that you need as a pediatrician? Is it that these are the core safety issues and quality issues that need to be part of a core piece? That would help me better

understand in regard to which ones of these should and shouldn't be here, and these expansions that we're talking about – should or should they not be part of the recommendation?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Okay. That's a great question. I was just trying to pull up the original legislative attempt in 21st Century Cures. But, if I recall it correctly, we are to provide a set of recommendations that are considered part of the minimally viable EHR product in order to take care of children. Would that definition work for you?

Steve Waldren - American Academy of Family Physicians - Public Member
Yeah, that's fine, and I guess I'm not as concerned about what is or is not the definition, just that we're in agreement with what the definition is, and I think that's a very good definition. Again, that helps me say, "Well, I think having the access to the data and to the visual is probably where we need to be," and these notions of the alerts and this decision support piece, while very helpful, are probably not part of that "minimally viable."

Chip Hart - PCC - Public Member
If I can add to that – Sue, go first.

Susan Kressly - Kressly Pediatrics - Public Member
Go, Chip.

Chip Hart - PCC - Public Member
Sue and I both participated in the Model Child EHR format, and one of the struggles that I know we had was not simply the distinction between whether this was a pediatric function or not, because that's very much an interesting conversation. The other big one was whether this is an inpatient function or ambulatory patient function, because those are sometimes very different things, and the Model Child EHR format is filled with inpatient needs and neonatal needs, all of which are totally valid, but it's also a very different and specific segment of the market. To create a certification that says, "This is the minimally – you need these functions minimally to be a supportive pediatric EHR – I think we might want to bifurcate that a little bit more because clearly, what we and Sue might do to support pediatrics is very different from what a children's hospital is going to do.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Thank you, Chip. That was a really important comment, and I think that is actually a point that we need to clarify with ONC. When we embarked on this, my perception and impression were that we were focusing on EHRs that are mainly used in outpatient settings. The assumption is that inpatient EHRs will reflect these functionalities as well, but the targets for this certification are EHRs that are used in family practitioners' offices. I'll turn this over to ONC and see if that's the perception on your end as well.

Samantha Meklir - Office of the National Coordinator - SME
This is Sam. I appreciate all the discussion and comments. To be clear, ONC is not establishing a separate certification program for pediatrics. Rather, we are focusing on pediatric health IT voluntary

certification criteria. These recommendations are some of the top clinical priorities that stakeholders have worked through over the years, many of which clearly align with the EHR format, which has been focused on the ambulatory setting.

Chip Hart - PCC - Public Member
We are going to need to come back to this, and the only reason is – for example, one of the 10 items on our list, to associate the maternal clinical and demographic information with the child – that is purely a hospital-driven thing. That's not something… Sue and PCC – we've done that forever because of the way our systems work, but that's a problem that exists at a hospital level, not at an ambulatory level.

Samantha Meklir - Office of the National Coordinator - SME
And, when it comes to implementing these in different pediatric practice settings, these considerations are important and should be noted, particularly as we think of having resources or implementation-type tools for informing – having adopted these in different pediatric practice settings along the lines of this discussion, so thank you for your input.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Just to do a quick time check, it is 9:30. Based on this discussion, my understanding is that there seems to be a consensus to retain Recommendation 1 for pediatric health IT, a voluntary certification criteria, and I just wanted to get the pulse of the group that that understanding is correct and that aligns with the first question, "Should any of the recommendations not be included?" I didn't hear anyone indicate that this should not be included. And then, next, in looking over the bulleted criteria as it aligns with existing certification criteria or with proposed, new, or updated certification criteria, is there anything that has been identified that should be removed?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Thank you for not only keeping us closer to time. As it's the first recommendation, I figured we would discuss some issues that are more on a global scale, but that's a nice summary. I think that's the consensus I also heard – that that recommendation remains in, and that as discussed, it needs some clarification for the visual display and limiting it to publicly available datasets. Are there diverging opinions or other opinions?

Susan Kressly - Kressly Pediatrics - Public Member
Nope.

Chip Hart - PCC - Public Member
No.

Samantha Meklir - Office of the National Coordinator - SME
Thank you very much.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer

Unless someone identifies existing or proposed criteria that they believe does not correlate or support this recommendation, we will presume that they should all be retained as listed.

Steve Waldren - American Academy of Family Physicians - Public Member
Fair enough.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Thank you.

Aaron Miri - The University of Texas at Austin - Member
This is Aaron. I agree.

Susan Kressly - Kressly Pediatrics - Public Member
You get bonus points. I can never type when people are watching.

Samantha Meklir - Office of the National Coordinator - SME
Steph is pretty amazing, and I want to thank her again. This is not an easy task to do in real time. Thank you, Steph.

Stephanie Lee - Office of the National Coordinator for Health Information Technology - Staff Lead
No problem.

Chip Hart - PCC - Public Member
I think I swear too much on my computer because everything autocorrects to something inappropriate, so, good for you.

Susan Kressly - Kressly Pediatrics - Public Member
Now, if we had artificial intelligence, all of our thoughts would just automatically get to the right answer, and we wouldn't have to do this. We're just not there yet.

Aaron Miri - The University of Texas at Austin - Member
If I had a dollar for every physician who said that to me.

Susan Kressly - Kressly Pediatrics - Public Member
Yeah, we'd all be visiting you in some awesome house somewhere in the Caribbean, probably.

Samantha Meklir - Office of the National Coordinator - SME
So, are we able to proceed to Recommendation 2?

Chip Hart - PCC - Public Member
Thank you. I have one issue relating to a safety concern, and I just want to tie back to one of my previous comments. I have unequivocally seen EHRs that reference bad datasets, and the AAP's position on using bad datasets is not to, so that a citation issue that I think is important. I understand if you have a patient with a particular disease whose growth chart might be different, you take what you

can get, but I've heard and seen pediatricians trust that what's displayed on their screen is from a peer-reviewed dataset, and it isn't. So, that's the safety concern I have with what I'll call the "uncited" growth charts.

Susan Kressly - Kressly Pediatrics - Public Member
And, to piggyback on that, if we're going to do this as part of the certification, it's not just the ability to display it so they get the right number. We need to make sure what they do display is valid.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Yeah, to validate the algorithm that displays the percentile and the place in the growth chart. That's correct. That is an absolutely important criterion to be certified, I would say. Very good. I think we will move on to the next item. Recommendation 2 was to compute weight-based direct dosage, and it was about computing direct dosage based on the appropriate dose ranges using the patient's body weight and body surface area, and to display the dosing weight and the weight-based dosing strategy on the prescription – of course, when applicable. If you provide an 80 kg teenage adolescent with an adult dose, you don't have to provide that dosing strategy. So, that's the recommendation. Are there any thoughts about keeping it, and if we keep it, are there any modifications that are needed?

Susan Kressly - Kressly Pediatrics - Public Member
I think we should keep it, but we have to be very careful about the scope. So, for example, are we only talking about liquid medications?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
If I may jump into that question right away, I think there's an extension to that that might actually be needed. So, I think we're talking tablets, capsules, and stuff like that as well –

Susan Kressly - Kressly Pediatrics - Public Member
But then, we need validated rounding rules. Do I round up the 400 mg tablets because I can't cut them? Do I round the 200? The EHR doesn't know which ones are cuttable and scored. And, the other issue is that Vigamox ophthalmic drops are a liquid medication. The weight is totally irrelevant for some of those things.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
And, it's the same story with ADHD drugs, but I think the rounding is an important issue. I think from an AHRQ grant, there is a tool that is being revised that has rounding data that are in the public domain. It comes from Kevin Johnson's work. So, I think we might potentially look into that, but that's just the opinion of one single person. Let's see what the group thinks about dosing based on weight and whether there should be a limitation to that.

Chip Hart - PCC - Public Member
I'm in agreement with Sue. The concept here is a good one and an important one. We participated in Kevin Johnson's work, and pediatric dosing errors occur at a shockingly high rate. Anything we can do to improve them is great work, but we need clinical, evidence-based guidance about what to do, and to depend on EHRs, as Sue was pointing out, to know the appropriate dose rounding rules for every

single medication is really difficult. It needs to be a reference to an understood clinical resource. You don't want EHRs making this stuff up.

Susan Kressly - Kressly Pediatrics - Public Member
The other problem is it's diagnosis-related, so it gets really complex, because the dosing for amoxicillin for Lyme disease is totally different than it is for otitis media. So, I think we should – this is important, but we should limit the scope to the use case that people expect it to do every day. If I have an orally administered liquid medication, it has the ability to calculate per kilogram for dose, day, or however you want it to do it, it shows the math – or at least, you know where it came from, whether it's a tagged favorite and you apply the rules or whatever – and the weight goes with the prescription.

Now, I know that in the – so, I'm going to need someone from the ONC – the NBCPD whatever – I can't ever say those letters, so you're all going to have to ignore me when I can't say – the e-prescribing standard has some written standards about sending weight with the prescription, but I haven't looked at it recently and I have no idea what the details are about how old that weight has to be and what prescriptions it has to go with. I treat pinkeye and ear infections over the phone all the time, and the patient's not even in front of me to give me a weight, so we've got to figure out some of that nuanced stuff. Maybe the answer is that you have the weight displayed on the prescription and the date the weight was taken, or somebody's going to have to give a standard to EHR vendors and say, "If the kid is between 0 and 3 years of age, it has to be a weight within three months; if it's between 14 and 15, it can't be more than a year old." We have to get granular here.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I think those are good points. Thank you both, Sue, and Chip. What I heard is that we should limit this to liquid medications. What I also heard is that we need to make sure the standard is actually used to transmit weight with prescriptions, and unfortunately, the reality in this day and age is that these prescriptions – the standard is not implemented in many pharmacies, even though the AAP already lobbied for that change two or three years ago. So, we need to check what is really, truly feasible in this regard.

That said, I think the ability to – Sue brought up the issue about indication-specific dosing. I always think about the example for erythromycin, which can be used as an antibiotic or as a motility drug with very different dosing. I think the ability for the physician to enter the dose manually per weight needs to be something that needs to be maintained – that way, we don't have to worry about indication-specific dosing – and the ability to modify the dosing weight. If the dosing weight is something that's pulled in from the EHR as the latest weight, the ability to modify the dosing weight at the time of prescription is an important feature that will prevent you from using outdated weight. Even if you treat somebody over the weight, you can tell the mom to put the kid on the scale, right?

Susan Kressly - Kressly Pediatrics - Public Member
Except a lot of people don't have scales at home, and if it's an infant… Again, let's not make the perfect the enemy of the good, but we should outline here the EHR ability to support what we think is best practice.

Steve Waldren - American Academy of Family Physicians - Public Member
Chris, this is Steve. From the "minimally viable" piece, is that the case where – I understand the workflow's not the best, but you would just enter a new weight into the system and then go back and do the prescription. That's what you're doing. You're saying, "As of right now, there's a new weight."

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
That's right. That's how you would do it. My assumption is that for the vendor, that's implementable, and it allows you to modify the weight if your weight in the system is completely outdated, and it would be a workaround for this particular challenge.

Susan Kressly - Kressly Pediatrics - Public Member
So, it seems to me in the 2015 certification spec, there is already something that touches on this, but again, it's been a long time since I read that. So, it's important for us to know exactly what is there as far as medication dosing when writing prescriptions because I remember seeing a product that brought up a calculator in the corner, and you could just do your math and then copy and paste it. Does that count? So, we've got to figure out – we've got to be granular. EHR vendors will build what we say, but we've got to be specific about our ask.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Other thoughts?

Chip Hart - PCC - Public Member
Just as an aside, this is a very mild point, but the relationship of weight and/or height to today's visit when you haven't been able to record that – that did come up during the – what is that program? Keep Kids Healthy – the Michelle Obama weight program that's still around, where they wanted to calculate BMI at every visit. Kids' heights are not taken at sick visits as a rule, and so, the AAP did give some guidance about how far apart height and weight can be based on age, and I have that document somewhere. If this comes up, it could be a little bit helpful with our thinking, but I know that information exists.

Susan Kressly - Kressly Pediatrics - Public Member
And then, the other question I have is do we really want to go with BSA, or if this is an ambulatory spec, do we just say it's weight-based? How many drugs given to kids on a regular basis in the ambulatory setting are calculated on body surface area versus the basis of weight?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I think both of those are very good points. I think the majority of body-surface-based drugs that I have seen prescribed in the past include oncology drugs, and for a minimally viable recommendation, that seems far-fetched.

Chip Hart - PCC - Public Member
Right.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair

Other thoughts?

Chip Hart - PCC - Public Member
Just to expand on that one point, I think patient safety versus accuracy, speed, and being pediatric-supportive in the ambulatory setting – this is another example of where the inpatient and outpatient needs differ, even though they are very similar. On the oncology end of things, having a tool that can help make some of these very complex calculations and avoid an error that can kill a child in a hospital – that's vital. But, in the world that Sue and I live in, even when a physician makes a substantial mistake, the way the process works is those mistakes are almost always mitigated by the pharmacy.

And so, on the ambulatory end, even though the mistakes can be dangerous and are plentiful, it's really more about how we make sure the pediatricians are using an EHR that isn't slowing them down or really tricky for them, and I presume that's part of the goal here. If we're supporting this pediatric initiative, it's to be a better pediatric EHR, and those needs subtly different to me. They both overlap – there's a huge Venn diagram there – but it colors or flavors a little bit for me.

Susan Kressly - Kressly Pediatrics - Public Member
I agree, and some of this is usability, and that's a hard place for certification to go, but again, if you say you support weight-based dosing because there's a field for weight, and it gives you a calculator, and you can do all that, does that count?

Chip Hart - PCC - Public Member
Exactly. We see that all the time.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
What I think I'm hearing is that we are looking at the recommendation that allows a pediatrician to pull in a weight or enter a new weight, define the dosage per weight that he or she wants to use, have the system automatically calculate the dose for this patient, and transmit not only the prescription with the final dose, but also transmit – in one form or another, whether it's in a metadata format that contains the weight or just additional information that might be free text – transmits the information about how this dose was derived that also includes the original weight that was used for the calculation. That allows the pharmacist downstream to replicate the decision-making process, it allows the pharmacist to double-check it, mitigates any errors that have occurred in the process, and results in significant safety improvements. That would exclude surface-based dosing and complicated rounding and dispensing information at this point and would focus mainly on liquid medications.

Susan Kressly - Kressly Pediatrics - Public Member
Liquid oral medications. I have a question, though. Do we have the purview to do that? If you're talking transmission to the pharmacy, that's the NCPDP standard that we don't have any way to play with, do we?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair

Well, what I was hoping you would agree with is that there's always the other comments that go on a prescription – dispensing information and any additional instruction you want to do. You could at least use that to show your work and how you arrived at the dose.

Susan Kressly - Kressly Pediatrics - Public Member
I agree, but I want to look at – there is a character limitation in that field, and I don't know – maybe the pharmacy people could tell us, but it would be interesting to find out how often people come up against that character limitation, what it is, and if it's reasonable to also include… The other thing that gets really weird is sometimes, when you put free text in that comment field with weird characters like a times sign or an equal sign, it breaks stuff. So, whenever we're transmitting data, we've got to make sure we're playing within the realm of the script. Shelly…what's her name? She was at the ONC meeting for the pharmacy association. Parnell? I can't remember her last name. She would probably be able to help us there, but if we're even going to wander down there, we at least need that information about what's possible.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
So, what I hear is we need to do more research and we need to get an expert from the pharmacy side to help us with the transmission process.

Chip Hart - PCC - Public Member
Yeah. I'd love to hear more about how much is on the pharmacy/receiving end and how much is on the EHR/vending end. I think we can put leverage on the EHRs to at least send, and we can then focus on the pharmacies receiving properly.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I'm looking at the comments that Al had put together with the recommendation, and he refers to the NCPDP script version 10.6. It limits the ability to describe all oral liquid medication – only metric standard units, millimeters, not CC, and it has the structured, codified sig format that can exchange weight-based calculations. So, the format exists in great detail and could support this. The question is how we get it used on the receiving end, and I think that's a critical piece there. I would defer this for the time being because we need to do a little more research, and we probably need Al's input on that as well.

So, a question for Sam or any of the other ONC staffers: Are there any other things that – oh, we need to go and sum this up. So, I hear that the recommendation is to keep this. Is that the consensus on the call?

Chip Hart - PCC - Public Member
Yes.

Susan Kressly - Kressly Pediatrics - Public Member
Yes.

Steve Waldren - American Academy of Family Physicians - Public Member

Yes.

Aaron Miri - The University of Texas at Austin - Member
Yup.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
And, we defined it with its limitations. We have some more work to do on the transmission aspect. The other question is are there any safety concerns or issues that we need to think or talk about before we move on?

Chip Hart - PCC - Public Member
I think there are still some significant safety concerns when it comes to usability, and we're all familiar with them, especially if we define this in such a way that someone could just have a calculator over in the corner and there's some sort of human transcription potential. That's one of the primary holes in the safety net for EHRs, but I don't think there's anything we haven't discussed or considered when it comes to safety concerns.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
So, I would say that we add the term that it needs to be integrated into the prescribing process, and it can't be a standalone that requires transcription. Would that eliminate your concerns?

Susan Kressly - Kressly Pediatrics - Public Member
Yes.

Chip Hart - PCC - Public Member
It would certainly alleviate a lot of them.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Okay, good.

Susan Kressly - Kressly Pediatrics - Public Member
So, I have one other comment, and I don't know if we want to go there, but what do we do about the calculators that calculate to five decimal points? No one can give a patient 4.7326 ml of a drug.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Sue, I solved this problem many years ago for a bunch of hospitals that were on Eclipsys. Their rounding tool was godawful, and we came up with an algorithm that made sure that we would never round more than 10% and that we would give decimal points within a reasonable range. So, my take on this is that decimal points that are more than two numbers from the leading numeral usually tend not to be useful. I can see if I can dig out that algorithm again, but I think there needs to be a warning against useless precision rounding, right?

Susan Kressly - Kressly Pediatrics - Public Member
Yes. You should not be able to round to some amount that's not humanly possible to measure.

Chip Hart - PCC - Public Member
Yeah, Kevin Johnson's study really hammered this home, especially when you look at the average deviation of a tablespoon in a family's household. It's actually about 100% deviation in volume.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Well, we should never dose anything in tablespoons, right? We should include that everything should be measured in milliliters.

Chip Hart - PCC - Public Member
Yes, but the reality is, unfortunately, too many parents say –

Susan Kressly - Kressly Pediatrics - Public Member
Can we make sure it says it's measured in small "m" and capital "L," and displayed that way, which is the standard? I've also seen that be ugly.

Chip Hart - PCC - Public Member
That's a good point.

Susan Kressly - Kressly Pediatrics - Public Member
That's the standard nomenclature, right?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
That's correct.

Chip Hart - PCC - Public Member
I think that's actually one of the add-ons down below for this one, as I recall. They want to force metric–

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Yeah, I think I saw that somewhere too. Small "m" and large "L" should be part of the recommendation, and we should not allow any other units of measure for liquid doses. If there are no other comments – is there anything else on the ONC side that we need to address here that we haven't, or is it time to move on?

Chip Hart - PCC - Public Member
I have one quick one. On this entry – this is for Recommendation 2 – it links to the child EHR format. It specifically links to "the systems shall provide the ability to present alerts for lab results outside of the pediatric-specific normal values for this item," and we haven't discussed anything related to that, and that's one of the questions we're being asked to consider here. Sue, do you see the need for out-of-range lab values to be displayed during the prescription process?

Susan Kressly - Kressly Pediatrics - Public Member
I think that is a huge chew that doesn't belong here.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Yeah, that seems out of place to me, too.

Susan Kressly - Kressly Pediatrics - Public Member
I think it came initially from people – renal-clearance-adjusted dosing –

Chip Hart - PCC - Public Member
That was exactly my thought.

Susan Kressly - Kressly Pediatrics - Public Member
– but now, you're going into pulling in data from problem lists, and is it active or – I think this is a foolish area to go into at this point.

Chip Hart - PCC - Public Member
Yeah, it's a Pandora's box on this one.

Susan Kressly - Kressly Pediatrics - Public Member
I have one other thing, and I don't remember if this was a criterion in the '15 CERT. Somewhere along the line, to get around that sort of clearance and what the right pick per kilo per day was, having that at the point of prescribing, the ability to have clinical decision support for best guidance – so, having a hyperlink to the NLM or Lexicomp for one of those tools that helps the prescriber who's writing a prescription for something for which they're not used to the dosing to look it up, or who had a patient who had a renal clearance issue… Something tells me that was in the CERT spec, but we should probably look at that because to me, that's more helpful if a user, with a click over the prescription name, Rx norm, or whatever, can go somewhere else to get education and information to make smart decisions.

Chip Hart - PCC - Public Member
What that links into with CERT is the requirement on any alert to provide your hyperlinked citation. I don't remember the item there, but Sue's recommendation is really great, and I think it lines up as well.

Susan Kressly - Kressly Pediatrics - Public Member
And, that information is in the NLM in a public domain and other places, and it's coded data so you can get hyperlinks more easily integrated into those sources for prescribing assistance.

Steve Waldren - American Academy of Family Physicians - Public Member
For this particular item, there are two standards: CDS Hooks, which is where everyone is moving toward, and the older one is HL7's info button.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
All right. I see the screen changing. It looks like we're going to Recommendation 3.

Samantha Meklir - Office of the National Coordinator - SME
Chris, can I just interject for a quick moment process-wise? So, as we work through these, it occurs to me – and, thank you, Chip, for calling our attention to Item 2 for the supplemental for Recommendation 2, where the group indicated that this did not belong there, for the question where we ask about the relevance of it. We did not visit the supplementals for Priority 1. If there are any of the three that are listed for the supplementals for Recommendation 1, we can circle back to this on the next call so we can keep moving, but if there is a recommendation to remove any of 1, 2, or 3 as a supplemental for Recommendation 1, we would note that as well.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Thank you, Sam.

Samantha Meklir - Office of the National Coordinator - SME
Thank you. So, I think as we work through these, we will concur and get the consensus of the group to retain the recommendation should everyone consent, and then, if any of the identified alignment or proposed criteria that is bulleted out should be removed, we can note that. If there is a supplemental that the group feels is not relevant and should not be listed, we will note that as well. Thank you.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Okay. Recommendation 3 is the ability to document parental and guardian notification permission. The description is that "the system shall provide the ability to document parental or guardian notification permission for consenting minors to receive treatments as required by institutional policy jurisdiction law." So, really, the requirement is to identify information about parents and guardians and their family relationship data.

Susan Kressly - Kressly Pediatrics - Public Member
I didn't read it that way. To me, this is two things, one of which is that kids have complex families. Instead of just having one guardian, one parent, or two parents, I see this as a many-to-many match. You want to be able to say, "This kid has a father and a stepfather, this kid has a mother –"

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Sorry, Sue. I just realized I was caught up in the supplement, and you are absolutely right. That's why I sounded a little confused. This is about the ability to record information about all the people that are in the life of this child and have a role in their healthcare and their upbringing. You are absolutely correct. Sorry. I stand corrected there.

Susan Kressly - Kressly Pediatrics - Public Member
The other piece of that – and, I don't know if we can go here because there's no standard nomenclature in EHR technology – is what right they have for medical decision-making for the kid. I would love to see us go there, but I don't think there's an industry standard to say emergency consent privilege, or routine, or it has to be shared for divorced parents – it's a mess, so I don't know that we can go there. I think the first low-hanging fruit is a lot of systems right now only allow you to put "mother" and "father," and they even have them written that way. Sometimes it's "mother" and "mother," and sometimes it's "father" and "father," and sometimes… So, to me, it's expanding the

ability to include all guardians and caregivers that have relevance for the child's care, including foster parents or wards of the state.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I think that's included in that original description. It includes foster parents, adoptive parents, guardians, surrogates, custodians, siblings, and caseworkers, so there's a whole list of items. I think you're right to point out that there is no standard nomenclature – at least, not that I'm aware of. I'm looking in the supplement now, and I don't see anything there that looks like it addresses –

Susan Kressly - Kressly Pediatrics - Public Member
Is there a healthcare proxy nomenclature in an adult? I'm living in the pediatric world.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Actually, I was just working on code status work, and it is just as confusing and just as disorganized as it is in our work.

Susan Kressly - Kressly Pediatrics - Public Member
This is an issue ripe for fixing because then, everybody wins, right?

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Yup, I think that's a good point. The question is whether that's within our purview, and I have my doubts about that.

Susan Kressly - Kressly Pediatrics - Public Member
As my husband would say, "scope creep."

Chip Hart - PCC - Public Member
The academy or someone related to the academy – one of the "children with special healthcare needs" committees did a bunch of work a couple of years ago to define a care plan guideline and template, and I believe some of what they designed – again, I believe some of this was with the AAP money – spoke to a little bit of this. It was a really great start. I don't know how far it's gone since then, but if we are going to open this can of worms even outside of this discussion here, it might be a good resource, and I can track that down as well.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
So, my question is this lack of standard – is it possible that we can solve this in a quick and pragmatic way? As long as you can record demographics on a person, how to contact them, and what their preferred mode of contact is, the relationship to the child could be something that might not be based on the standard, but is entered on the fly. So, the pediatrician can enter "mother," "guardian," or whatever relationships he or she deems useful in the context of recording something on a child. Would that be feasible on the vendor end?

Chip Hart - PCC - Public Member

Yes, but the problem – we still have the problem that I mentioned when we met in October 2017. The way this is written, the entire feature can be resolved by giving every patient a free text box because none of this data is being tied to something that's in a format, or transmittable, or part of any kind of understood protocol. We just say, "Here's my caregiver box, and you can type in whatever you want there" because, by definition, we will fulfill the requirement, which is to record all the caregivers and their information.

I think the spirit of this request is to list and record those caregivers and those sources – in particular, not just the three-parent situation we run into, but also any other caregivers, whether it's a counselor or even another physician. I think the spirit is that we're gathering more detailed information so that we can create understandings of those networks. "How many kids are being referred to this local source?" "Oh, I realized this parent here is also the parent of this child here, so we've got an HPI that needs to be shared." That does not come across in this requirement.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I think your point is an important one. We want this information documented in a structured way, and I think that should be part of the recommendation –

Susan Kressly - Kressly Pediatrics - Public Member
Including role.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Well, the problem is it should go into a structured field, but my recommendation at this point would be that because, to our knowledge, a standard does not exist for the roles, we do not refer to it, but we allow the entry of the role into a standard field, and we will allow free text. Does that make sense?

Susan Kressly - Kressly Pediatrics - Public Member
So, here's what you can do if it's in a structured way. Anybody can write an SQL and say, "Show me all my patients who are covered by" – and, there may be EHR vendors like us that have all those roles as a pick list and you can write a query, but there may be others that just let people free text, but the practice decides to call them all something else, and you can still do a query that says in quotes "looks like 'father,'" so it still allows you to do analysis of the data that's not reading a Word document, which is the right answer to the question. And, at some point, we push for a standard of what that nomenclature is, and then we push people to actually use them.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Well, that's the work on the next extension of the pediatric certification in three or four years. ONC is already looking forward to working with us on that – I'm just kidding – but yes, I think that makes a lot of sense. Other comments?

Susan Kressly - Kressly Pediatrics - Public Member
I want to apologize to the ONC people in advance. You probably didn't have a clue what you were getting into when you invited us to the party, but we appreciate it because you can tell we're passionate about this.

Samantha Meklir - Office of the National Coordinator - SME
We value your passion and expertise, and it is absolutely critical to the process, so thank you.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I want to echo that. I am excited about the level of granularity that we've gone into, and in order for us to have recommendations that are ultimately implementable and useful to ONC and to children nationwide, we need to go into those issues at some level of detail to get something that's actually usable, so, thanks, guys.

Chip Hart - PCC - Public Member
I don't know if I'm jumping ahead, and you can tell me to stop it if I am, but the initial discussion of this topic – especially way back when – seemed pretty straightforward and easy, especially for people like Sue and me, for whom this is something you just do when you're in ambulatory peds. You just record all this stuff. The much trickier parts to this request are what's implied by the section with the supplemental part.

When we're relating this stuff to tracking parental and guardian notification or permission, recording parental notification of newborn screening diagnosis, authorizing non-clinician viewers of EHR data, and documenting decision-making authority to patient representatives, that's the deep end of the pool right now because it's so difficult to do. It's not even technically hard, it's hard in terms of usability and practicality, and that merges into our next item, which is the segment "Access of Information." There's some overlap there. And so, when you're about to ask what things we want to remove, I think all of those four supplemental items are things that are really vital for pediatricians, but they're really hard to do, especially with all the different state rules. I think they're worth considering, but each one of them – I'll pick one at random, No. 3, "Authorized non-clinician viewers of EHR data" – we could talk about that for an hour. I don't know what you want to do about that.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
No, absolutely. This is an important point. Let's be honest: We want a social worker who's taking care of a child to be able to access the child's lab values if that's important to the care they're providing or that the foster family is providing. The access to the portal might be critical to get medication refills or to make appointments. But, they are extremely challenging, and I agree with Chip that out of the box – and, this is really the first foray into pediatric functionalities – out of the box, I don't think we can solve all the problems in the world.

I think all these supplements are important challenges – notification of the newborn screening, for example, is currently a nightmare. We're doing all these newborn screenings, and people move, people change states, people drop their cell phones. The ability do to these things is logistically a workflow nightmare that cannot be solved in an EHR, but what we can do is provide optimal information that we can add to the EHR about ways of reaching people that touch this child's life and are important to the child's welfare. So, your points are really important. We don't want to kill this by making it too complicated.

Susan Kressly - Kressly Pediatrics - Public Member
So, I will tell you that having seen a bunch of other systems, this is going to be an ask of some systems that have never considered this, and they have two contact fields, period, and they're going to have to extend their database to do it. I think that's where we want to start. You have to at least make this – and so, the other question that goes to the front – I think that the requirement should state that there is an infinite ability – you can't have contacts 1 through 10, and then you're not allowed an 11th.

This has to be an infinitely extensible list to allow all the relevant contacts for the family, which is going to be the ask for EHRs that are not built that way now, but it is a worthwhile gap, and again, I'm going to push us that there is relevance to the adult world here too. So, at some point, you can have a healthcare proxy that is three children who live in three different states. I think we have to be explicit – and, if you don't say that to a vendor, "My developers are going to put eight" – who would ever have more than eight contacts? So, let's just say that's got to be an infinitely extensible list.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I agree, and honestly, it never crossed my mind that somebody might make this limited by a fixed number, but yes, we should be explicit about that.

Susan Kressly - Kressly Pediatrics - Public Member
Now, one other thing I'd like to add is I think there should be the ability to manage that list over time so you can either remove, archive, or have start and end dates, because sometimes kids go from one foster family to another, and that list is not static. You want to make sure there's the ability to manage the list and display all currently relevant people for the user, and to –

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I would phrase it, though, that there are those who are active participants on this list and there are those who are historical participants. So, if you go from Foster Family A to Foster Family B, Foster Family A becomes historical, and that's important because they might have signed for immunization consent back then, and it's important that you keep that information, but you're absolutely right – we need to differentiate between those that are active and those that are non-active on this list.

Chip Hart - PCC - Public Member
Yup. And, just to be clear, we are bumping again into those four supplemental items down below, all of which are important, all of which are vital, but when we are using a foster family, for example – and, it doesn't have to be a foster family. It could be divorced parents. It doesn't matter. As soon as Foster Family A is no longer hosting Child A, the moment you say they're historical, their portal access to that patient should be shut off, and that's not part of our directive here. We know this intuitively based on the work that we have, but at some point, we're going to need a collective understanding that these are the things that trigger data access and data exchange to different parties.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
I think that's a valid point, Chip. I think it goes beyond the scope. But, if we have this information recorded, it allows for that to happen downstream, right? And, I would refer again to our future work in three or four years. That might be something we want to do then.

Chip Hart - PCC - Public Member
If we can truly tackle patient privacy and data segregation in three or four years, I will be delighted.

Susan Kressly - Kressly Pediatrics - Public Member
The other thing to keep in mind, though, that sets the stage – because not every EHR writes their own portal. A lot of people use third-party vendors and their certification is based on the CERT criteria and the ONC of portals. So, this has a bigger reach, if you will, but I think it sets the stage for doing it correctly.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
This is probably a good time to pause for public comment. If we don't have any comments, we can come back to the conversation for the last 10 minutes or so, but with that, I'd like to ask the operator to open the public line.

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

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Thank you so much. While we're waiting for folks to dial in, Sam, did you have any last-minute or closing items that you wanted the group to address before we wrap up today?

Samantha Meklir - Office of the National Coordinator - SME
Thank you. I appreciate that. My phone is telling me that it may die, so I apologize if I get disconnected. I will call right back in. In terms of process, we now understand and can anticipate the flow for the next call, so I want to thank everyone in advance. Steph, in terms of this document, is this going to be made available via Google Docs for people to review or edit? Was that the intent here, or do we do that and send that back out?

Stephanie Lee - Office of the National Coordinator for Health Information Technology - Staff Lead
Yes. Everyone should have access to this. I'm planning to clean up the notes a little bit, but if any members or chairs want to add any comments or questions or answers in the document, it will be available to everyone.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Thanks, Steph. Operator, do we have –

Samantha Meklir - Office of the National Coordinator - SME
I would just note – sorry, I apologize. In terms of more process, we'll be presenting the draft recommendations to the HITAC on March 19th and 20th. Clearly, there's extensive discussion and considerations for each of these recommendations. We may want to begin the next call by having a

general consensus, with the understanding that without robust discussion, people may change, but as part of the preliminary draft recommendations for the HITAC since we have one more call before March 19th, we should get a general sense that all the recommendations should be included, or if anyone has thoughts of why any one of them should be removed, we can focus on that.

That way, we can at least say to the HITAC on that day that the preliminary recommendation is to retain these nine recommendations, 10 recommendations, or what have you, and then share some of the considerations that have been discussed, with the understanding that we may not get through all 10 by March 19th or 20th. Does that sound reasonable to folks? I have not been able to talk to Chris or Carolyn in advance, so feel free to dissent.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Sam, let me pause that for one second. I want to go back to the public comment to see if we have any. Operator, do we have any comments in the queue?

Operator
Not at this time.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Okay. I will return that question to the co-chairs.

Carolyn Petersen - Individual - Co-Chair
This is Carolyn. I would say I think if that is something that everyone else on the task force is comfortable with, I can move with that. I would also suggest that folks consider perhaps scheduling an additional meeting or two so that we can continue to have these very valuable discussions about the nuances. I haven't really shared a whole lot of feedback because I'm not as much of an expert in the use of these tools as you are, or a trained pediatrician – although, certainly, as a pediatric cancer survivor, a lot of these things, like measuring body surface area for dosing, are not foreign to me.

But, as I'm listening to you, I'm putting together a list of actions that this group – or, perhaps with others – can take outside of the ONC task force framework to start addressing some of these considerations. There's been mention for a consensus evidence-based guideline on which to base your alerts, so perhaps that's an action item that a group can try to work on with AAP or another organization. Perhaps there are things here – algorithm development and validation – that can be parts of fellowships or post-docs for people who are already practicing in pediatrics. One really beautiful thing that's coming out of this is that there's a whole pathway forward that is lining itself up in front of us, and we can continue that work to further develop the pediatric EHR outside of this task force structure if we know what all those issues are, if we have the discussions where they pop up. So, it's something to consider. I'm certainly open to more meetings if all of you are.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Thank you, Carolyn. That was very thoughtful. As to the original question, I just wanted to – I think we have seven recommendations that we haven't touched on this call, and I think if people do their homework, look at them, and consider them, I think we can take the temperature of the room at the

beginning of the next call and see if there are any of them that would cause disagreement or controversy, or where there is uniform agreement to get rid of it, and we could discuss this early so that we could ultimately come up with a summary anticipated outcome for the HITAC meeting. Does that sound like a solid approach to that?

Chip Hart - PCC - Public Member
Yeah, I think so.

Susan Kressly - Kressly Pediatrics - Public Member
I think so.

Chris Lehmann - Vanderbilt University Medical Center - Co-Chair
Good. Then, I think we have our marching orders. Everybody will have to do some homework, look at the remaining seven recommendations, and make up his or her mind whether this is valuable and should remain, even if it requires modifications or edits, and then we can identify things that might not be considered valuable by the group, and we'll come up with at least a predicted or anticipated outcome. Back to the folks at ONC to close us off.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Thanks, everyone, for your time today. Let's see. I think we have our next meeting next week. We'll make sure everyone has the invitation for our next meeting, as well as having access to the Google Doc. So, thanks again for your time today, and we'll adjourn.

Susan Kressly - Kressly Pediatrics - Public Member
I have one quick question. I've had some other people interested, and I see there's a public ability to do this. Is this an open forum that anyone can join to listen to the conversation, or is it limited to certain stakeholders?

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Anyone can join from the public. They can find the dial-in information on our website on healthit.gov.

Susan Kressly - Kressly Pediatrics - Public Member
Okay. I just wanted to clarify that.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
They can listen, and if they want to comment, of course, they can do so at the end of the call.

Susan Kressly - Kressly Pediatrics - Public Member
Great. I appreciate it.

Lauren Richie - Office of the National Coordinator - Designated Federal Officer
Thanks, everyone. Have a great day.

Samantha Meklir - Office of the National Coordinator - SME

Thank you.

Chip Hart - PCC - Public Member
Thank you.