The Office of the National Coordinator for Health Information Technology

Transcript

HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE (HITAC) INTERSECTION OF CLINICAL AND ADMINISTRATIVE DATA TASK FORCE MEETING

June 9, 2020, 3:00 p.m. – 4:30 p.m. ET

VIRTUAL

Speakers

Name	Organization	Role
Alix Goss	Imprado Consulting, a division of DynaVet Solutions	Co-Chair
Sheryl Turney	Anthem, Inc.	Co-Chair
Steven Brown	United States Department of Veterans Affairs	Member
Gaspere C. Geraci	Individual	Member
Mary Greene	Centers for Medicare & Medicaid Services	Member
Alex Mugge	Centers for Medicare & Medicaid Services	Member
Jim Jirjis	Clinical Services Group of Hospital Corporation of America	Member
Anil K. Jain	IBM Watson Health	Member
Jocelyn Keegan	Point-of-Care Partners	Member
Rich Landen	Individual/NCVHS	Member
Leslie Lenert	Medical University of South Carolina	Member
Arien Malec	Change Healthcare	Member
Thomas Mason	Office of the National Coordinator	Member
Aaron Miri	The University of Texas at Austin, Dell Medical School and UT Health Austin	Member
Jacki Monson	Sutter Health/NCVHS	Member
Abby Sears	OCHIN	Member
Alexis Snyder	Individual	Member
Ram Sriram	National Institute of Standards and Technology	Member
Debra Strickland	Conduent/NCVHS	Member
Sasha TerMaat	Epic	Member
Andrew Truscott	Accenture	Member
Denise Webb	Individual	Member
Lauren Richie	Office of the National Coordinator	Designated Federal Officer
Michael Wittie	Office of the National Coordinator	Staff Lead
Kate Berry	America's Health Insurance Plans	Presenter
Meryl Bloomrosen	Premier, Inc.	Presenter
Scott Weingarten	Stanson Health	Presenter

Alex Tatiyants	Stanson Health	Presenter

Operator
All lines are now bridged.

Lauren Richie
Good afternoon, everyone. Welcome to the ICAD task force. We have a full agenda so I'm just going to go ahead and officially open and do a quick roll call. Of the members, we have Sheryl Turney, Alix Goss, Alexis Snyder, Anil Jain, Denise Webb, Jim Jirjis, Jocelyn Keegan, Ram Sriram, Sasha TerMaat, and Steve Brown. Are there any other members who are on the phone that I may have missed?

Thomas Mason
Tom Mason.

Laruen Richie
Hey, Tom. Okay. With that I'd like to welcome our guest from Premier and AHIP, who will be walking through a couple of presentations today. But before we get into that, I'm going to turn it over to our co-chairs to walk us through our update on our summary and action plan.

Sheryl Turney
Thank you so much, Lauren. This is Sheryl Turney. Thank you all for attending today. I just want to recap our discussion from last time where we had CMS come and present the DRLS, which is the Document Requirement Lookup Service. CMS presented highlights from their collaboration with ongoing industry efforts to streamline workflow access to coverage requirements. So, it started with the developing of a prototype for Medicare fee for service. The DRLS system prototype allows the accessible pilot participants to view a list of items and services for which prior authorization is required. And then there are documentation requirements for these services. They started out with the CPAP and then they've moved on to home oxygen therapy, ventilators, home health services, and a number of other services that are now involved in the pilot. It was very exciting to see an excellent presentation for a knowledge base for this group.

In addition, last week I provided updates to the definitions of the data classes tab from the Google document workbook, and then a few changes were noted which are in the process of being made to the workbook. Also, we heard briefly about the progress of the workgroup that's focused on the ideal state and guiding principles, who we're going to hear from today, with their focus area on privacy and security, and that will come after we have a couple of presentations today.

Also, on the agenda for today we have Kate Berry, senior vice president clinical affairs and strategic partnerships for AHIP, who's going to be presenting updates from AHIP's efforts to reduce burden around prior authorizations. Then we also have representing Premier, three individuals, Meryl Bloomrosen, senior director and federal affairs for Premier, Inc.; then also for Stanson Health, which I guess is a wholly-owned subsidiary now, Scott Weingarten, who is a medical doctor and CEO; Alex Tatiyants, I hope I pronounced that right, vice president and CTO for Stanson Health. They're going to be sharing their experience with providing automated solutions for prior authorization. So, any questions about our recap and what's going

to happen for today? All right. I would like to turn it over now to Kate Berry, if we could move over to her presentation.

Kate Berry
Thank you. Thanks so very much. This is Kate Berry, and I'm a senior VP with America's Health Insurance Plan. Thanks for having me. Thanks for the opportunity to talk with you today. If you could just go to the next slide, please. Just very briefly, in case anyone's not familiar with AHIP, we are a national trade association representing all types of health insurers that provide healthcare coverage for millions of Americans every day. Next slide, please.

We actually have a multi-pronged approach to addressing prior authorization, and we see prior authorization really as an important tool to promote patient safety and evidence-based care. We know the process, of course, is burdensome for everyone that it touches: patients, providers, even health plans, believe it or not. We don't like prior authorization either. We do have lots of strategies that we're working on here, but the two things I'm going to focus on discussing with you today are an update on our demonstration project on prior authorization, which we call Fast Path, and I'm also going to share results of the industry-wide prior authorization survey that we conducted late last year.

Starting first with the prior authorization survey results, and I did send a package of materials to share with the task force that includes a PowerPoint summarizing the survey results, as well as two infographics. I'm not going to use slides on this. I'm just going to talk about the survey so you have those materials you can digest later.

So, we surveyed commercial health insurance plans between September and December of 2019. Forty-four plans responded to the survey and that represented 109 million commercial enrollees. The report found that health plans use multiple sources of evidence-based studies, guidelines, and federal standards in designing their prior authorization programs. Specifically, 98 percent of insurance providers used peer-reviewed evidence-based studies, and 89 percent use federal studies or guidelines.

Prior authorization is actually used quite sparingly. For prescription medications, the vast majority of commercial enrollees, about 85 percent, are in health plans that limit prior authorization to less than 10 percent of prescription medication. On the medical services side, over 90 percent of commercial enrollees are in plans that limit prior authorizations to less than 25 percent of medical services. The vast majority of commercial insurers use input from doctors in developing their prior authorization programs as well. So, 82 percent consult with specialists, and 70 percent use provider-developed clinical guidelines.

The primary goals of insurance provider's prior authorization programs are to improve quality and promote evidence-based care. That's 98 percent. Protect patient safety, that's 91 percent. Address areas prone to misuse, which came in at 84 percent. The vast majority also report that their programs have led to an overall positive impact on quality, 91 percent, affordability, also 91 percent, and patient safety, 84 percent.

Prior authorization is usually part of a broader strategy to improve outcomes. The vast majority of commercial insurance providers, 86 percent, use value-based contracts to incentivize doctors to reduce unnecessary tests, treatments, and procedures. The majority of health insurers are taking steps to streamline prior authorization both for prescription medication, 91 percent, and for medical services. That

came in at 89 percent. And 84 percent of the plans reported that automation of the prior authorization process is the biggest opportunity for improvement.

To that end, and I would ask you to go to the next slide, please, we at AHIP have been leading a project. We call it the Fast Prior Authorization Technology Highway, or the Fast Path Project, which is a demonstration project to automate aspects of the prior authorization process, and to evaluate the impact. So, if you would just go to the last slide. This is good. Sorry about that.

Reflecting the health insurance industry support for automation is a key opportunity here. We launched the Fast Path Project early this year, but we've already been working on it for quite some time. It's a very complex project with many moving parts. This is actually a Board of Directors priority for AHIP. We're coordinating this demonstration project on electronic prior authorization with two technology companies, eight health plans, and their provider partners, as well as a couple of consultants to advise us on the project. The goals of the project are to demonstrate health insurers' leadership and commitment to improving the process in a way that is standards-based, scalable, payer neutral, and as integrated as possible with provider workflow.

After an RFP process, we selected two vendors, Availity and Surescripts, and we're addressing two very distinct use cases: prescription medications and medical surgical procedures. Both Availity and Surescripts are what I would describe as neutral gateways that connect health plans with providers to enable that two-way electronic communication.

On the prescription side, using the Surescripts technology, basically, critical information to inform the prescribing process is available to the doctor through their electronic health record. They can easily find out whether the medication they're prescribing requires prior authorization, and they have information to choose an alternative that may be clinically equivalent but does not require prior authorization, and may actually even be cheaper for the patient because they have access to the patient's out-of-pocket costs for the prescription. So, it kind of reduces the surprises all around for everyone.

On the medical surgical side using the Availity technology, essentially the doctors or surgeons or staff supporting them can access a multi-payer portal to basically figure out if what they're ordering, the surgery or procedure, requires prior authorization or not. If it does require prior authorization, they can submit the information to support that through the portal as well. Then the health plan can review the information and respond through the portal. That helps to really reduce all those burdensome phone calls and faxes that go back and forth between the plan and the provider organization.

That's essentially what the project is all about. If you could go to the next slide, please. We are working with RTI, which is a global non-profit research organization. You may know them. RTI is performing an independent evaluation of the impact of automating aspects of prior authorization on both providers and patients. We also have point-of-care partners assisting with us and serving as an expert advisor, given their deep expertise and prior authorization and the use of technology. Essentially, the research evaluation is going to look at two big research questions. One is focused on the provider experience, and the other is focused on the patient experience.

Essentially, the first one is how does automating aspects of prior authorization change the experience and burden on providers? The data to support that major research question will include looking at the trends in the overall prior authorization transaction volume, the volume of phone calls and faxes associated with prior authorizations, the transparency of the information and the process, whether the provider changes their order based on the information that's available, and the percentage of prior authorizations that are approved.

The other one is really focused on how does automating prior authorization change the patient experience. Here, we will be looking at timeliness to care, whether there's a change in the prescription, for example, that is less expensive potentially for the patient, since that information is available. Also, does it impact quality, such as the person filling a new prescription that they are receiving for the first time?

RTI is going to receive data from lots of different sources to support this evaluation. They're going to receive data from the technology companies, from the health plans, and from the providers. They're going to be conducting a provider survey. All of that data will support the evaluation and the analysis plan.

In terms of the timeline and expected outcomes of the project, we've had to make some adjustments because of COVID. As everyone knows, a lot of care has been deferred for the last few months, and a lot of prior authorization has been waived. So, we may use some retrospective data so that we have sort of more of a steady state rather than sort of trying to calibrate for the changes in healthcare service use during this time and the drop in prior authorization.

We still expect to complete the project and release the report in late 2020, possibly early 2021, but we're still hopeful to get the project done this year. In terms of the outcomes, we're hoping that the project outcomes will be really helpful in informing all stakeholders who care about improving this process and streamlining this process, the policy makers at the federal and state level, as well as providers, health plans, technology companies that offer solutions, to really better understand what it takes to implement these types of technology solutions successfully given the complexity. We also hope that the outcomes will ultimately lead to more widespread use of these types of technology approaches because we do think that it offers great promise in streamlining the process. Finally, what we won't do is recommend any specific approach. We're not going to recommend a specific vendor solution or a specific type of platform, but we do expect to affirm the principles that we started with, which is that the technology solutions to improve prior authorization should be standard-based, scalable, payer neutral, and as integrated as possible with provider work flow.

Thank you so much again, and I'm happy to take questions if there's time.

Sheryl Turney
Thank you so much, Kate. I see we do have a question. Alexis Snyder.

Alexis Snyder
Hi. Thank you for your presentation. I had one question about the research questions. I'm wondering how your advisor had come to come up with the patient-centered research questions and wondering if patients and/or caregivers had been involved in that process.

Kate Berry
Thank you for that question. I will say that we've had lots of iterations. The AHIP team has worked closely with the RTI team. We've also had our technology partners weigh in, and we've had our health plan partners weigh in. We haven't specifically engaged caregivers, but I think that is a good idea, and we still have a little bit of time that we could do that.

Alexis Snyder
Patients and caregivers would be great.

Kate Berry
Patients and caregivers. Yeah.

Alexis Snyder
Yeah, because you really can't decide where the burden is without asking.

Kate Berry
Exactly. That's a great point. Thank you.

Sheryl Turney
That was a great question. Any other questions from the team? I don't see any other hands raised. I have a question while we're waiting for other people. Kate, what's the time frame that this was intended to run? Do you have any outline of that at this point?

Kate Berry
Yeah. Absolutely. I'm sure, as everyone can appreciate, I think with COVID changing all of our lives and ability to do business, we have had some delays because of all the participants. But our plan all along was to try to complete the project by the end of the year. We really are still pushing hard and are trying to make that happen. We're hoping to release the report with the analysis, and the findings, and lessons learned in late 2020, or early 2021.

Sheryl Turney
Thank you. Let me just check and see. Any other questions for Kate?

Alix Goss
Yeah, this is Alix.

Kate Berry
If it's easier to chat – Oh, sorry. Go ahead.

Alix Goss
That's okay. Hi, Kate. This is Alix. I wanted to ask you a quick question about the stats, and it looks like we got a PDF that actually contains some of those statistics, and I think they would be helpful as we work towards ultimately preparing a report, which we'll want to include some current state information. I really want to acknowledge AHIP's efforts in pulling together surveys, because it has been challenging to get

people to respond to them and get our arms really around good statistics. So, thank you for that level of lift on your part with your team.

I wonder if you have any commentary about sort of the challenges between what might seem like sort of a more straightforward sort of prior authorization scenario versus the complex, and how the complexity, either within the medical sphere or the prescription drug sphere, might have factored in to how you designed your pilot.

Kate Berry
Yeah. Thank you, Alix. A couple things. I did share the materials. I will also mention that we were about to release the survey results publicly right when COVID hit, and so we just held it because we thought it would just get lost in the shuffle. Not that we're trying to make news, but we definitely wanted to get the information out there because it is a comprehensive survey. So, we just released it publicly actually today. You guys are the first to receive that full package. You're breaking news.

I will say just quickly, I think that -- and I'm sure your group has heard this probably numerous times -- I think on the prescription medication side, there's a mature infrastructure and mature standards that has been leveraged to kind of be able to do the real-time benefit check and electronic prior auth, and the prescription medication arena. Plus, with CMS requiring that for Part B starting in the beginning of next year, assuming that doesn't get pushed out. I think that it's sort of that I think is something that I think is likely to move faster. I do think, as you implied, that the complexity on the medical surgical side because there's so many, kind of like the diversity, and the standards for attachments, and the various different types of procedures. I think it is more complicated in my mind. I think it's very, very important to try to do both, which is why we selected technology partners to work with on those two very distinct use cases.

Alix Goss
Thank you. I'm flipping through the slide deck, or actually the PDF of some of the stats, and I also notice one in particular where you talked about plans review their prior authorization lists at least annually. What I thought was fantastic was to see that prescription medications, 100 percent of respondents indicated they do it at least once a year, and for medical services it was only 5 percent that reviews it every two to three years, meaning that 95 percent of the medical prior authorization lists are reviewed every year. That's really good because one of our guiding principles was trying to create transparency and really reveal a cadence. I feel like as we can start to look at your survey results with some of our works to date, it may actually help us even refine our thinking as to what might be measurable stretch goals that we want to recommend as part of our upcoming report.

Kate Berry
I'm so glad you mentioned that one, because I neglected to and it is. It's amazing. Because I'm sure people don't realize that plans really do routinely review those programs and they both add and take away because things change. There's an evolution there. That's a great point. Thanks for bringing that up.

Alix Goss
You're welcome. It really speaks to the fluidity of the whole prior authorization ecosystem as we're learning, and as we're going, and new services are emerging. It just adds another layer of consideration for us. And if we can start demystify some of the perceptions and start to promote more transparency, it may really help

us with just having the whole ecosystem work more effectively together to get to what we need to, which is good patient care timely.

Kate Berry
Exactly. I think it's fair to say that prior authorization isn't going to go away, but we all want the process to be less abrasive.

Sheryl Turney
Yes. Yes, I agree. Good discussion. I'm not seeing any other questions. Any other questions for Kate before we move to our next topic? All right. Well, thank you so much, Kate. I really appreciate you attending today. If folks do have questions after today's meeting, her information is included in the materials so we can always reach out to her separately if there's something that you would like to have responded to.

Why don't we go to the presentation for Premier, and we can get started? Meryl, are you going to be leading off this discussion?

Meryl Bloomrosen
Oh, thank you. Actually, Scott Weingarten, Dr. Weingarten is going to start us off.

Sheryl Turney
Okay. Thank you.

Scott Weingarten
Thank you very much, everyone. Hi. Scott Weingarten. Good afternoon, everyone. So, Stanson was the underlying technology. We were acquired by Premier about a year and a half ago, which is a health system-driven information technology and supply chain company. Stanson was started at Cedar Sinai in Los Angeles and it's provider-led, provider-driven, provider-owned, and it was started or founded about seven and a half years ago.

The technology that we developed is a clinical platform to read clinical and administrative information in different electronic health records, interpret the information, discrete data elements and free text using natural language processing and machine learning, and deliver guidance in real-time. Because we always had provider focus, there were certain rules of the road for us. One of the rules was that we always had to be in the workflow, the provider workflow, which in our case was the electronic health record. That if there was a requirement that the provider log out and log in to something else like a portal, that that would be unacceptable to our provider customers. The second principle or rule of the road, it had to be real-time in that if the answer, the interpretation of the information and the guidance delivered to the healthcare provider took longer than one to two seconds, that would have been unacceptable.

The second principle or rule of the road, it had to be real-time in that if the answer, the interpretation of the information and the guidance delivered to the healthcare provider took longer than one to two seconds, that would have been unacceptable.

About four years ago, Aetna looked and evaluated our clinical platform, and they said, gee, you could automate the medical necessity part and the administrative part of prior authorization. I'd love to say we

thought of the idea. We didn't. It was people at Aetna. We've expanded well beyond Aetna's; you'll hear about later today.

About four years ago, we started repurposing the clinical platform to be paragnostic, scalable, standard-based to implement prior authorization. We're going to share with you the experience we have. I must admit four years ago that there were many things we didn't know that we didn't know. It's hard, as you might imagine. I'd like to share with you some of the challenges. We're also proud of the team and the progress they've made over the last four years. We'd also like to share with you some of the lessons learned along the way. With that, let me turn it over to Meryl and thank you for inviting us to participate today.

Meryl Bloomrosen
Thank you so much, Scott. So yeah, you've already gone to the next slide. Scott has given you a preview. This slide is to articulate what we're hoping to cover today. As Scott mentioned, we are going to provide you with an overview, a helicopter ride, about our experience automating prior authorizations using the platform that Scott alluded to. The experience includes working with various providers within multiple EHRs, and also working with payers in their various utilization management systems.

As Scott mentioned, you don't know what you don't know until you try it and we're going to share some lessons learned about challenges, and what we have learned, and how we are applying what we've learned to additional opportunities and changes. Then given the vision, mission, and charter of this task force, we'd like to offer some recommendations in terms of the convergence of administrative and clinical data. Next slide, please.

This slide, I'm on slide your number 16, I guess. Why automate prior authorizations? Kate has alluded to this. You as our task force has talked about it over the last several weeks, and you'll be spending some additional time talking about it over your several next weeks of getting together and then articulating in your report and how to move forward. But we certainly want to recognize that we see the importance and the relationship of the patients, the providers, the clinicians, and the payers having very much interest in prior authorizations, why is it important to each of these, and many other stakeholders. You'll see that this slide begins to lay a foundation for the themes that will be threaded through our presentation and discussion. Next slide, please.

This slide depicts our overarching overview of prior authorizations issues and challenges. Primarily from a policy lane, but certainly including a look at some technological and technical issues that we believe are important and critical to your ongoing discussions. You'll see that these similar issues and challenges are going to resurface during our presentation. I'm about to turn this over to Alex, who's going to walk you through the actual work that we've been doing. But you'll see, for example, that we've all recognized the labor-intensive nature of prior authorizations. OMC and CMS and HHS have done extensive reporting using stakeholder input to identify very much of the burden for both providers, health plans, clinicians, etcetera.

We are going to focus a little bit on, as Scott mentioned, why we believe prior auth needs to be in the work flow, bringing clinical data at the point of care, and that providers can access those data within their work flow and at the point of care with an effort and an eye towards reducing as much clinical administrative disruption and inefficiency as possible. You will see a theme of the need for standards, adoption, and implementation so that the entire process of prior authorizations, end-to-end automation of the processes

can be accomplished. We would like to recognize, for sure, as Kate and others have mentioned to this committee before, that this is a complex process. It's been very much documented as being manual, in many cases, or partially automated, requiring exchange and sharing of data among many diverse stakeholders. We are very happy to talk with you today about our experience and what we think are some key themes and ways to potentially address the emergence of clinical and administrative data and the standards that surround those data. Actually, you'll see as one of our recommendations is the need for interoperability between clinical and administrative systems.

With that, I'd like to turn it over to Alex who will walk you through our approach and our experience.

Alex Tatiyants

Thank you, Meryl. Next slide, please. Hi, everybody. My name is Alex Tatiyants. I'm the CTO at Stanson Premier. I wanted to talk today about the lessons we learned about prior auth automation. I actually want to start with kind of just getting on the same page about what automating prior auth means. There's a lot of different initiatives going on in the industry trying to automate it, but I think people sometimes have different pictures in their heads about what that actually means. So, to us, as Scott already alluded to some of this, when we try to figure out a way to automate prior auth, we kind of took a very provider-centric perspective on this. The solution that we wanted to build would be one that is accepted and acceptable by providers because ultimately, we are trying to potentially influence provider behavior and maybe change the decisions that they may be making. For that to happen, this has to be something that they can actually adopt. So, a lot of what I'll talk about is really taking that lens.

The other thing that I think from our perspective is very important to recognize is that there's a bunch of different stuff that's difficult about prior auth, but we think the hardest part is medical necessity adjudication in real time using chart data. That's really kind of the key focus of the system that we ended up building.

The way we've designed our solution was it all begins when the provider starts signing an order in their EHR. When that happens, automatically a call is triggered to a system that in real time evaluates medical necessity using chart data as well as other administrative requirements. If it sees that the order is appropriate and medically necessary, it then can, in real time, submit the request to the payer, obtain an approval, and put that approval back into their EHR. So, the idea here is by the time the provider finishes signing the order, they have obtained a prior auth approval, and essentially the entirety of that process is completed and it can then get included in the claim ticket data.

For this to be possible, there was some, as Scott alluded to, ground rules, or sort of table stakes toward the stakes. The first thing we really believe strongly in is that this solution has to come to the provider versus the provider seeking it out. So, no portals, basically. Whatever happens here has to be in their workflow. It has to be automatically triggered, and it has to be at the point of decision making because again if you're going to try to change somebody's behavior, it needs to happen when they're making the decision. Just as importantly, we wanted to make sure that the provider is never asked to document anything twice. If they've already documented and noted something on the chart, whether in a structured way or in free text, that information should be considered when adjudicating, and only if something is missing from the chart would you ask the provider for clarification. Otherwise, asking the provider to enter the same information twice was one of the key things we tried to avoid.

Then finally, this all has to happen in real time. So, we couldn't wait for adjudication to come back, or approvals to come back. It had to happen as they're working in their normal system, going through their normal workflow, signing orders in their EHR. Next slide, please.

Let's talk for a second about why medical necessity adjudication is hard, or we think it's the hardest part of prior auth. I think it's really there's two sort of forces that are at play here that combine to create a painful situation. On one side you have guidelines, payer guidelines. They are complex. Very clinically nuanced and have a lot of information that they need in certain situations to figure out whether something is appropriate or not. They're also ambiguous. Right? Guidelines were sort of designed traditionally to aid a human in decision making. They're not really designed to be fully codified and machine executable. There is ambiguity inherent in that and there's also incompleteness inherent in that. So, certain clinical circumstances may not be fully documented. Others may not be documented explicitly. You're looking for signs and symptoms for neurological deficits. What specifically does that mean? How long should those symptoms be in place before you can take them into account or not? There's a whole sort of world of complexity that is not really spelled out, but in order for this to be computable, it has to be.

Then on the other side of that is data, EHR data, the chart data. We'll talk about more of this in a second, but that data is noisy. It's often incomplete and often unstructured. It's not in any codified way. It's simply notes and text that the provider has entered into the system. So, you take those two forces and then you get something that is really complicated and really tricky to do in real time automatically. Next slide, please.

I wanted to also mention that we've seen sort of in the wild a couple of ways, at least, I'm sure there's more, to actually do adjudication using guidelines. At a high level, we reference these as probabilistic and deterministic models. So, in the first model, the probabilistic model, this uses a statistical model, whether it's an actual statistical model or some sort of a real network where you give it input, which is the chart, and then it's using prior data that it was trained on with response of some likelihood of approval. Based on the chart and based on the training data that I've already received; this has an 87 chance of being approved. Versus the deterministic model leverages actual rules. They're codified by clinicians, by humans that are evaluating the input and are resulting with both a binary, this is either approved or it isn't approved, but also the provenance behind that approval. Why did the system decide to approve? Which information exactly is leveraged? Which path through the decision tree was followed? It's very specific about why it decided what it decided.

Both systems obviously have pros and cons, but in our experience and what we've seen so far, the probabilistic model is difficult to make work. I think for two reasons. One is, as I mentioned earlier, guidelines are not necessarily clear and fully spelled out. Related to that, human decision making, human adjudication decisions, aren't always consistent. So, when your input data, when your ground truth is not always clear, the resulting models are not always accurate. But the other thing is probabilistic models by their nature are kind of a black box. You ask it a question and it comes back with an answer, and it might give you some hints as to why it decided what it decided, but it's fundamentally a black box.

Whereas the deterministic model is fundamentally precise. It knows exactly why it decided what it decided, and it can tell you that information, that provenance. Of course, the drawback is it requires clinicians, human beings, to actually build the rules and maintain them. That's not a trivial effort by any stretch of the imagination. But in our experience, the model we decided to go with and the model that we think can actually

work in the real world is the deterministic model because of all the reasons I just mentioned. The other one being, it's legally defensible, right? If someone were to audit a decision, you could pretty clearly spell out why the decision was made. Next slide, please.

So, what we kind of landed on was that guideline codification turns out to be really complex and very time consuming but necessary in order to achieve what we were looking to achieve in this automation of prior auth. Next slide, please. So, let's talk about data for a minute. As I mentioned earlier, and this is certainly no news to anybody, EHR data has complexities and it has issues. A lot of that I think results from documentation patterns vary pretty significantly between providers and between EHRs. So, we see things like data is often incomplete or fragmented. There're errors in the data. Time limits and current of that data can sometimes be difficult to figure out. But then the other thing that I think is especially relevant to the work we've done is that providers don't always document before they sign orders. So, if you're trying to adjudicate medical necessity when somebody's signing an order and they haven't captured that note until after that, you're going to be at a disadvantage because you're not going to have all the information you could have if they were closed different.

Now, this, of course, can change, and if providers have a good reason to change how they do things they could change it. But that limitation definitely exists today. The other thing that is really notable about EHR data is that a lot of it is locked in free text. Generally speaking, there's not that much stuff that's structured and cleanly documented, especially nuances of things like signs and symptoms that are really important for a lot of these guidelines. Next slide, please. Thank you.

So, what we ended up doing was we spent a lot of time trying to make sense of that free text, because we believed that this is critical to being able to do this correctly and cleanly. Obviously, there are many people trying to do this and this is obviously a big problem with lots of challenges. As you can see here, we ended up having to build quite a universe of fact extraction to aid our understanding with the patient. A lot of this is pretty nuanced in that not only are we looking for specific concepts like this note is referencing low back pain, but you also want to know if things like the word "worsening," talks about low back pain. It helps clarify that disease state.

You want to know that the first PT in this note references the patient, but the second PT in this note references physical therapy. That is sort of obvious to a human, but it's definitely not obvious to a machine, and it requires a lot of context to be available in order to make sense of things and really understand what the notes are talking about. We've done quite a bit of work trying to make sense of all this. It's definitely an ongoing effort, but like I said, we think it's critical in making this whole thing a reality. Next slide, please.

In spite of all that, in spite of trying to read notes and in spite of trying to look at structured data, sometimes you have to actually interact with the provider. You have to ask them a question to clarify something about the chart and your understanding of it. So, we have also built an interactive app that can actually pop up to a provider in their EHR and engage them in interactions that may be necessary in order to complete the adjudication process. Next slide, please.

One of the things that is really important to note here is can standards help in doing what we attempted to do? And I think the answer is yes. So, I'll talk about two of them, and I'll hand it off to Meryl to talk about the others. One standard that I think is really going to be helpful if you try to automate prior auth in the way

we're talking about is CDS Hooks. This standard was originally designed quite a while ago, actually, in order to help clinical distance support services, external services, integrate into their EHR. The way that works is the EHR allows a service to register for a workflow then, like signing an order. Then, whenever a provider takes that action, the EHR knows to call the CDS service, send it some data, and then facilitate an interaction with the provider. This is a very critical capability for something like automating prior auth because really if you think about it, that's what's necessary there, right? You want to trigger when a provider is taking an action in their EHR, and you want to potentially present some sort of recommendation, in this case a recommendation around prior authorization.

Related to that is a standard we all know and love is FHIR. The ability to get chart data from the EHR, both structured and pre-text, in a standard way that then can be sent up and be actually useful in this adjudication process. Meryl, I'll hand it off to you for the rest of this.

Meryl Bloomrosen
Yeah. Thanks very much, Alex. As a segue to what Alex has mentioned, in terms of what's currently standardized and what is due to the ONC final rules and some of the CMS recognition of the same standards in those ONC rules, we do want to do a shout-out for the use of standards-based API, application programming interfaces, and their benefit to seeing through the automation of prior authorization. As well as the related API certification criteria that ONC's final rules have made requirements. We're very much looking forward to the implementation timelines for both those open standards-based APIs and the related certification criteria, so that applications like those we're talking about today can be readily implemented by being integrated within provider's EHRs.

The second shout-out, if you will, and because you are a committee thinking about standards, is related to the evolution and the adoption of the U.S. core data for interoperability. That's use within and requirement of its use within electronic health records and we're very much appreciative and looking forward to the ongoing updating of the US core data for interoperability and its related standards version advancement process. I think as you'll see, as Alex has already described and as he'll continue to depict for you, why the continued adoption of standards, as well as their consistent implementation we think is essential to automating something such as the prior auth process. Alex, I'll turn it back to you.

Alex Tatiyants
Thank you, Meryl. Next slide, please. I wanted to spend a few minutes talking about surprises and lessons learned, and there were a lot. I sort of categorized it in things we learned about payers and things we learned about providers. We came from a provider world, so I personally haven't had much experience with payers prior to starting this, and there was a bunch of stuff that I found very surprising that maybe you don't. But I just wanted to share it.

The first thing that was truly surprising to me was just how much human interpretation is involved in manual adjudication today. A lot of this, again, has to do with the fact that **[inaudible] [00:48:45]** guidelines are designed to facilitate human adjudication but expect a level of interpretation and sort of gap-filling by the human. So, the amount of interpretation and also the variability that results from that was surprising to me. The other thing related to guidelines that was surprising to me was just, especially for larger payers, how many different versions of guidelines for different products and overlapping guidelines, and just a broadly

speaking lack of clarity about which guideline should apply to what. That was surprising because I assumed this would be a lot more of a clear, straightforward picture.

The other thing that was notable and interesting is that if you actually look at similarity between guidelines for the same thing from different sources, they seemed fairly similar in the logic. A lot of that probably has to do with the fact that the underlying evidence base is the same, and really where the variability does come in if there is any is just how granular one guideline is versus another in terms of what they need to see before a particular thing can be approved. In retrospect, it probably shouldn't have been surprising, but it certainly was when we first discovered it.

Then the final thing that I think is especially interesting here is that the existing prior auth process makes certain assumptions about how things are and what's available when. Those assumptions actually complicate things quite a bit when you try to automate it in the way we've done it. I think the most notable example of this is current prior auth process expects that if a payer receives an auth request, that has, if required, a furnishing facility. Where is the service going to be done? That makes sense in the current process because by the time you go to a portal-submitted case, you've already figured that out. The patient probably already talked to and an attempt was made to find a site where this could be done.

That's certainly not the case when you're a provider signing an order. Most providers don't know or maybe even care where exactly this order is going to be done as long as it's done somewhere. So, that limitation causes quite a bit of pain if you're trying to send a prior auth or request for approval to a payer as the provider signing that order. You've got to figure out what that furnishing facility is, and there are ways to do it. We've come up with few options, but just overall, if you were to think about, well, what does this look like if you had to kind of design it from scratch, really all you care about as a payer is that the service is medically necessary and is being done in some approved facility. Right? The auth would extend to any facility that's in network or approved for this service without necessarily having to specify the precise one. But, of course, that's not the case. Things like that, limitations due to assumptions baked into the current process, which was not really designed for this, make it tricky to work around and really made this clean and smooth and automated for the provider.

On the provider side, there was also a few things that we ran in to that were surprising. One was we didn't appreciate until we started getting into it the degree to which various provider organizations vary in how they manage prior auth both in terms of the tools they used and the people they have involved and the steps are involved. There's a lot of variability. It's not too surprising, given that there's not a lot of standardization here. Sure, in some cases, there are certain tools and standards they leverage, but a lot of it is pretty different, provider to provider, health system to health system, in terms of how they organize their prior auth process downstream of ordering. The other thing related to that that was especially surprising to us was just the length to which some providers are willing to go to help streamline their own efforts. One health system, for example, maintains a list of questions they've collected over the years from different payers about different services being ordered, just so that they can kind of anticipate what types of questions could be asked and what kinds of information they could collect up front to make it easier later. It's understandable why you would go through something like this, but it is still striking, just how much effort goes in to sort of tea leaf reading when it comes to prior auth.

The other thing that's surprising to us in a slightly different vein was there were certain data gaps we actually did not anticipate that actually ended up existing in the real world. For instance, we assumed that when a patient is registered in the EHR, their payer information is identified and available. That's sort of a reasonable assumption because it's required in a lot of different contexts, and you would think that could be captured up front. That's not always the case. That was a surprise to us. We didn't expect that but was something that we ran into in the real world. Then the other one that is related to EHRs and EHR workflow was this interesting limitation of scheduled versus ordered procedures. Just to get some context here, a number of EHRs support the ability to trigger on a workflow event related to ordering such as signing an order. Something could happen automatically when the provider attempts to sign an order.

That's not the case, for the most part, for scheduled procedures, things that aren't ordered but scheduled, like actual procedures, bariatric surgery for example. Because there's no good way to trigger on that, there's no good way to actually run an automated auth for those types of things. This is obviously something EHRs could change and allow for, but that's not common today. It's very rare that this exists.

One last point I want to make about EHRs that isn't listed here, but I just think it's relevant is a lot of EHRs have now started creating various app stores. So, ways for external vendors, third parties to plug in to those EHRs to deliver different functionality. This is actually a really powerful and positive development in the industry that didn't exist before. It's wonderful that this is happening now. However, and this is an important point, in many cases, those app stores don't give developers enough tools to actually properly develop, debug, and test the solutions they're developing. Most EHRs do not allow third parties access to some instance of that EHR where things could be tested.

The situation that creates is very similar to what would happen if you imagined a developer building an app for the Apple App Store without being allowed to touch an iPhone. That's not ideal for the developer. It's certainly not ideal for the customer, because whatever app they end up buying, there's no guarantee that it will work properly. It's not even ideal for the EHRs themselves because what that ends up doing is sort of limits how tightly things could be integrated, how functional those things could be, because developers simply don't have enough tools at their disposal to do it well. I hope and I think that this will change over time, but that's definitely a limitation that many people will run in to if they try to do something as sophisticated as trying to integrate prior auth into the workflow. The degree to which you need to test and have access is just -- it requires access to real systems where you can actually touch them and test things. That's unfortunately not the case for most EHRs today. Next slide, please.

I want to leave you with one thought, and that is, is automating prior auth is end goal here? I don't think that it is. I think prior auth and automating prior auth is a means to an end, and that end is really appropriate utilization of things. Prior authorizations historically have been a fairly blunt tool with which to enforce this. There are other tools, and notably, and, you know, this is obviously a bias that we have, because we are, we started, and are still a clinical decision support company. But I do think that clinical decision support leveraging that versus prior auth is another way to achieve the same goal without the expense and hassle involved with prior auth. Because even if you automate it, they are still an administrative pain and there's still significant effort required on the part of the payer and the provider to actually get it working. If your goal is to manage utilization appropriately, you could do something very similar with clinical decision support, paired perhaps with analytics that could give you insights in to provider outliers, people who are consistently

practicing outside of established guidelines, and allowing you to actually manage that in a different way, perhaps by outreach to providers specifically to let them know what they're doing right or wrong.

The other thing that's important about clinical decision support is utilization management prior auth is really about telling somebody you're doing the right thing or you're doing the wrong thing. But it doesn't tell you if you are doing the wrong thing, what should you be doing instead. Clinical decision support does do that. That's sort of one of the key value adds you can do there is to say when you decide to order this test, and it requires an auth, and it's not appropriate, here's something else you could do for your patient. Because, ultimately, what you're trying to do is do something for your patient. That's presumably the reason you started with this test in the first place.

As you think about what the end state is, I do think automating prior auth is a very important next step, but I don't think that's where the story ends. I think there's more you could do, and you could do the same thing cheaper, more efficiently, and without the additional overhead of prior authorization, even if it's automated. Meryl, I'll hand it back to you.

Meryl Bloomrosen
Yeah, thanks so much, Alex. Next slide, please. To the co-chairs in particular, this is Meryl, I'm very mindful of the time. Rather than perhaps doing a super deep dive on our two slides of recommendation, let me mention them and then let you and the committee have an opportunity to pose questions so we can continue the discussion.

What I would draw to your attention on our slides about recommendations is this is also an effort to summarize some of the key themes that I think and I hope you've seen as a thread that we've woven through the presentation, with a mind towards your charge, and your goals, and objectives. We stand ready to do a deeper dive with you either today or offline because we are truly interested in looking towards how to address interoperability between administrative and clinical data, and data and systems. We think you're looking at it from a variety of granular levels so that as you look at the specific data and data elements, or perhaps their definitions, and then think about the standards that are hopefully going to wrap around those data elements, and then the systems that could, in fact, be interacting and be interoperable, particularly as the NCVHHS members of the committee and the high-tech members of your task force are looking at this, I think one more from an administrator perspective and another from the clinical side of things.

You will see on these two slides an effort for us to summarize for you what we covered and also the important to dos, if you will, and some of the assumptions we've made. Such as making sure that data are available to the provider at the point of care and within workflow, as well as some of the new and emerging data and interoperability standards, several of which Alex mentioned. We know that ONC and other agencies are looking at those as we look to the implementation of the ONC final rules. I would be more than happy to stop there. Thank you for the opportunity to present. Let's open it up to your questions.

Sheryl Turney
Thank you so much –

Meryl Bloomrosen
Sorry. I'm so sorry, Sheryl.

Sheryl Turney
No worries. Thank you for that, and I really appreciate, Meryl, you and your team coming. We do have a couple of questions, so let's start with Jocelyn.

Jocelyn Keegan
Hi. Sorry about that. I had myself double muted. This is great. Hi, Scott and Meryl. Great to see you guys. Thanks for bringing this to us. I guess I have a ton of questions, but I'll try to focus. As we shift to risk-based contracts, I think Alex made such a great point about sort of prior auth not being the end point but really this ability to get into more of the CBS model around prior auth. Are you guys seeing or is your customer base looking at really that population level analytics about how people are utilizing services as part of risk-based contracting? That's the first question.

The second question, to the point around it needing to be sort of choose your own partner or choose your own app. Are you hearing how important or nonimportant, it being multi-payer or all-payer is, whatever apps somebody is picking to plug into their workflow?

Then last question is for the things that you've discussed today, are these capabilities that are widely available in production today? Give us an idea of what the footprint is of people using sort of this AI workflow model that you've been developing. It seems really tightly coupled with whoever you're partnering with compared to the existing traditional standards. So, if you can give us an idea of what kind of penetration you've got out in the market, I think that would be helpful. Thanks.

Alex Tatiyants
Sure. Scott, do you want to take that? Go ahead. Sorry.

Scott Weingarten
Yes. Why don't I take it? The risk-based contracting, absolutely. To be successful as risk-based contracting, you need information on appropriateness and whether providers are following evidence-based appropriateness guidelines. This type of information is very helpful as risk shifts from payers to providers and being able to track it longitudinally over time for providers.

Second, your second comment on multi-payers, yes. You need multi-payer involvement. You mentioned it needs to be paragnostic and scalable, because providers will say, gee, this works great for Payer A, and that's the effect that we're looking for. But, my gosh, only 20 percent of our patients are Payer A, and what about the 80 percent who are not members of Payer A? So, really good questions and important points. And then Alex, do you want to talk about where we are with it?

Alex Tatiyants
Yeah. Absolutely. As far as how widespread it is, we're currently running multiple pilots for this technology that is running live in production. It's not broadly available widespread yet. There's a ton of learning that had to happen before this became reality, and we're well underway with that. We've been running these pilots for some time now. COVID did certainly play a role in delaying some of the work involved here, but we're in pilot mode today in a number of sites today.

Sheryl Turney

This is Sheryl. I have a couple of questions also. What kind of effort does it take to implement a system like this, and does it work with any EMR system?

Alex Tatiyants
The effort depends on the EMR system. In order for it to be compatible with the EMR system, that EMR system has to have certain capabilities, most notably around the stuff I mentioned where we want to be able to trigger off of provider actions and get enough data out of that EMR to be able to adjudicate. A number of major EMRs do support this capability, but not all of them do. Certainly, some of the smaller ones don't. I think what's also relevant and notable here is there was a government effort around introducing clinical decision support into advanced imaging with a panel mandate where basically any dense imaging order that needs to get submitted to CMS has to be consulted with a mechanism that has been approved for that purpose.

That is a version of this without perhaps connection to the payers, but certainly adjudication against guidelines and determining appropriateness of these orders. That capability has been in place in with a number of EHRs. There's actually a number of companies, we are one of them, who have a solution that does something very similar to what I just described. But for a lack of a better word, government prior auth with CMS.

I know that that doesn't completely answer your questions, but just hopefully some context for what's possible and where this could actually work. As far as the effort, like I said, it varies. Some EHRs, there's a decent amount of effort to install the necessary pipes, if you will. Other EMRs, it's a lot more turnkey. It very much depends.

Sheryl Turney
Okay. Thank you so much. We have another question from Arien.

Arien Malec
Thank you. Just to be precise, the capability that you're referencing is the full FHIR profiles and CDS Hooks supporting a variety of hook actions, is that right, triggers?

Alex Tatiyants
Ideally. I will say that our existing implementations basically use what's available. So, those EHRs that support fully or partially the standards like CDS Hooks and FHIR, we leverage those. Those that have proprietary, we use those instead. It would be nice to have standards everywhere.

Arien Malec
Right. So, if there were a standards-based platform where every EHR supported the full FHIR profiles and supported CDS Hooks with a variety of order-based trigger conditions, that would be kind of the platform that you would ideally be building these capabilities on top of.

Alex Tatiyants
It would simply lower the cost for an app developer like ourselves to actually leverage this capability with multiple EHRs, yes. It would be a great thing to have.

Arien Malec
Are there data elements or triggers or other capabilities that those standards don't currently give you across EHRs that you feel are necessary and appropriate? Do you have to go out of the way using other means to go get to triggers?

Alex Tatiyants
Excellent question. I will focus on two, but there's probably a bunch more. Those just are probably most notable. The first is a workflow thing. As I mentioned, in most EHRs, there is a distinction in workflow between ordering and scheduling. As an example, you can order an advanced imaging test, and that's very easy to trigger on and present a provider with an interaction and a recommendation. But scheduling a provider is a whole other thing, a different workflow. Usually, no triggers to react to, and so that's a limitation in that you couldn't, even if you wanted to, present somebody a recommendation about hey, here's what you should consider for this surgery or this is not appropriate based on the evidence in the charts. The triggering is simply not available. There are work-arounds here, but those are all workarounds. It's not inherent capability. And this is actually pretty common for most EHRs. It's just not something they currently expose.

I think from a workflow perspective, as far as additional triggers, reacting to a scheduling event, or at least something close to the decision point about scheduling something would be great in order to plug this in. As it pertains to data, I mentioned that documentation patterns vary with providers, especially that pertains to notes and availability of notes. Many people don't sign their notes until the end of the day, for example, so after they placed all the orders. One way to mitigate that to some degree is the ability to obtain unsigned notes, so notes that may have been started in the system but haven't been signed off. Some are EHR support it, some don't, but allowing that data to be available at least gives you some chance to make some sense of the patient even if it's not full and comprehensive.

Arien Malec
Got it. So if you had a magic wand to wave, the two things would be number one, making sure that the scheduling work flow had the same FHIR-enabling and CDS Hooks triggering mechanisms as the ordering workflows and number two would be the ability to surface draft notes prior to the note being closed and locked out. So that while you're in the middle of the encounter where the note hasn't been signed off, you can still get access to the textual data to feed the ePA.

Alex Tatiyants
Yes. Can I give you more since I have a magic wand at my disposal?

Arien Malec
That's up to the moderators, to the chairs.

Lauren Richie
Okay. We do have a number of agenda items. We've run long, and I'm really grateful that we've had such a robust discussion. Perhaps we can have some other questions sent offline, if you would like, or maybe have them back, but we do have a couple of things we need to get to, including public comment.

Arien Malec

Thank you.

Alex Tatiyants
Thank you.

Alix Goss
Really good discussion. Thanks so very much, Premier Team. We're grateful for not only your participation today but we know you've been actively watching and supporting us as a public participant.

We're going to do a little bit of adjusting, I think. We're going to move public comment back to 4:25 to give us about the next five to nine minutes to set up a couple of things for folks. We realize that today would be tight, but we've had these great opportunities to bring industry commentary related to prior authorization to bear as we wrap up this portion of our task force work. This is really important efforts. We also want to make sure that we report back on some efforts of our small working groups and want to give you a bit of an update and a teaser for next week's more robust discussion.

First, with no further ado, I guess I'm going to start screen sharing. Katie, are we all set for you to pull over the new Google doc? Okay. Hopefully everyone can see the guiding principles and future ideal state document. It is dated as of June 8th. I really want to do a shout-out to the two groups that have helped advance this work. We've distributed previously a word document with the ideal state and guiding principle discussions that we have been working on. What we've done is enabled the second group, the privacy and security focus group, to do some ancillary work and they now have combined all of the input from the privacy group, as well as the reconciliation of the task force input into a new master document, and distributed as a Google doc for all of us to be able to access. More especially, beyond our general review that I'm going to ask you to do, it's also in a place where you can start to make comments.

I think it's very important to understand the context of the guiding principles and ideal state and how they'll be an instrument in helping us to get to the next phase. You may recall that a few folks raised their hand to talk about policy levers and recommendations on last week's call, and so there will be a new small working group that will start to create a straw man related to recommendations. We're going to launch that work later this week, but the guiding principles and ideal state content will really help us with a launch-off point for thinking about the recommendations. As such, what I wanted to do was to give you a brief update and cue up a discussion we want to dive into next week.

First and foremost, there were the summary at the top of the page of the categories of guiding principles that we identified. You may note that we modified information security and privacy. That's a new title there. This document is fairly clean at this point and ready for your commentary. But specifically, the stuff that you have not seen yet, because it's just been produced and finalized as of late yesterday afternoon, is the section that starts on Page 4 for information security and privacy guiding principles, followed by the ideal state.

What we'd like to do is make you aware that this is out there, knowing that we will talk about this next week when we have a little bit more time. In addition to your ability to take a pre-look and comment on this, what you can also do is read down through the other portions of this document, recognizing that there has been a wordsmithing exercise to incorporate the feedback from the last task force discussion related to the over-

arching documents. We're really eager to have folks take a look at this and comment on it. I had hoped to walk you through a little bit of the privacy and security information today, but I really don't want to try to cram more than ten minutes in to less than five. What we will plan to do is next week be joined by my colleagues from small working groups in presenting this information, and then working through any comments that may have been added into the document in the interim.

I believe, Lauren, that we've gotten effectively back on track, even though I wasn't sure we were going to be able to do that. I'll stop sharing, and then we should open up the slides for public comments.

Lauren Richie
I also have the number in the chat box. At this point, we'll ask the operator to open the public line.

Operator
Thank you. If you would like to make a public comment, please press star 1 on your telephone keypad. A confirmation tone will indicate your line is in the cue. You may press star 2 if you would like to remove your comment from the cue, and for participants using speaker equipment it may be necessary to pick up your handset before pressing the star keys. We will pause for a brief moment to pull for comments. There are no comments at this time.

Alix Goss
Okay. I feel like we may have had some other comments or questions that didn't get asked earlier, Sheryl, during the Premier session. We can open it back up while we wait to see if there's any public comments. We could go back to a general discussion with our presenters today if you'd like to do that.

Sheryl Turney
Alix, we didn't have any other people with their hands raised at the Premier discussion, so I don't know if folks have questions now. You can raise your hand. Or if you have any questions or comments on the information that Alix shared. I don't see any hands raised.

Alix Goss
I just want to make sure. There were some chat box questions, so I'm hoping those all got addressed as well through the dialogue earlier. Do we have any public comments?

Operator
No. There are no comments.

Alix Goss
Could we go back to the sharing of the document that I had presented earlier? Do you still have that ability?

So, one of the things that I wanted to explain about the document, the privacy and security team, I wanted to thank NIST and ONC for bringing a few other resources to bear. We brought in some privacy and security framework experts from NIST. Thank you, Ram and thanks to an idea from Jocelyn in collaboration with Tom Mason. Kathryn Marchesini, our privacy officer for ONC also joined us and so we had a robust round robin of several meetings and trying to get everybody in the same page and think about how we wanted to

structure the privacy and security section. You'll notice it's much more firmly broken out with guiding principles followed by ideal states. That's a pretty crisp, succinct structure that we used in that section.

For the other portions of this document, we do have high-level guiding principles as kind of the blue leading text. For instance, in transparency, that's the principle with statements that follow it that really represent the future or ideal state that we would like to achieve as a result of the concrete recommendations and work that will come as a result of the report that we will submit this fall. So, just keep that in mind as you're reading through this. Understanding that although this is about eight or nine pages, it's really designed to help us start to think through, now that we know where we want to head, what does it mean to us today and the path to the ideal state.

We may want to look at our recommendations in two-fold. I'm kind of teasing up some things for you to think about as we work into the next series of our conversations about if we want the ideal state, it could be a really big stretch. There might need to be some interim choices that we have to make in incremental activities to eke us towards the ideal state. We're going to likely have to think about recommendations in two flavors. My plan is for this week's recommendations team to start looking at the categories of guiding principles and start to brainstorm very specific detailed items that we can use as a launch-off point. So, why don't we stop sharing and go to the timeline slide just to kind of help put some of these things into context. Katie.

As you may recall in the last meeting, we talked about the overall timeline. We are continuing next week with some presentations. EHRA Association is presenting, as well as X12. We will hope to have time to get into our ideal state and guiding principle discussion with first kicking off with privacy and security content since we haven't reviewed that with you. Following that, in the week of June 22nd, we will meet and have a presentation from AHIMA and CORE. Then we will hopefully be able to start introducing some of the recommendation's straw man that the small team will produce. At the last call of the month, we hope to flip back over to the data categories and classes related discussion and talk about the process mapping and integrated federal data model.

We will continue then with any prior auth recommendation, time-permitting. Ultimately, coming out of Independence Day, we'll wrap up data classes, ideal state, and really crystallize the prior authorization recommendations, because in mid-July, we're going to pivot using this great work of the prior authorization example to the larger intersection conversation. Hopefully, the work that we've done since March will really be a tremendous launch-off point for the broader consideration aspects. With that said, I think that we kind of have the big picture of where we're headed. Are there any questions from folks? Sheryl, do you have any additional commentary?

Sheryl Turney
No. I think you did a great job, and I see no one's hands raised for questioning.

Alix Goss
Well, thank you, everyone, for attending. Thank you to our presenters. It was really insightful. I'm glad we're making room for these additional insights and look forward to the next couple of weeks. I hope everyone has a good day, stays healthy, and keeps smiling.

Sheryl Turney
Thank you, Alix.

Lauren Richie
Thank you, everyone.

Kate Berry
Thanks, ladies.