

Making Clinical Decision Support Real & Beneficial Part 2

CONSTANCE GILLISON: -- to today's edition of the weekly webinar series.

Today's topic will take a deeper dive into using the clinical decision support quality improvement worksheet, introduced in Part 1 of the Making Clinical Decision Support Real & Beneficial webinar. We will also discuss how using this template has strengthened one practice's quality improvement approach. I'm Connie Gillison and I'll be your host today. Now, I'd like to welcome our presenters. Leading the discussion today will be Dr. Jerome Osheroff, the founder and principal of TMIT Consulting; and Dr. Danielle Oryn, the Chief Medical Informatics Officer at the Redwood Community Center. Now, without further ado, I will turn it over the Dr. Osheroff.

JEROME OSHEROFF: Thanks very much, Connie. I appreciate it. So, as Connie mentioned, there's a couple different things that we're going to be doing today. I will provide a recap from this seminar -- the part one of this webinar that we did last month, and then do a deeper dive into these worksheets to support CDS and quality improvement efforts including hearing from Dr. Oryn, who's actually used these worksheets in her efforts. I talk in some general terms about how tools such as these worksheets and other products from ONC can help RECs with their quality improvement and sustainability efforts, and then wrap up with a discussion of what all this means for you and your RECs, and how it can help move forward your efforts.

So our objectives for this session are threefold. First, we're hoping to make sure that everyone leaves with a deeper understanding of the tools forthcoming from the ONC CDS for a new project -- and I'll remind everyone what that's about in just a

moment -- and to understand what the implications of these things are for RECs and providers and their quality improvement and CDS efforts; and then leave you all with some specific thoughts about how this material might be useful in your own high priority activities.

So I mentioned the ONC is supporting a project to develop tools and resources for clinical decision support-enabled quality improvement for meaningful use. And to make that a little bit -- fall more easily off the tongue, we abbreviate that to the CDS for MU Project. So that project provides the context for the webinar last month, for the webinar this month, and for the various tools that we've been talking about and will explore further today.

So outlined on this slide is an overview of the tools that will be in that tool kit that we're calling the Care Delivery Improvement/CDS Tool Kit. It includes worksheets for advancing clinical decision support and quality improvement efforts -- and again, we'll be going into some detail about that later on in this session -- some case examples of what successful clinical decision support enabled quality improvement looks like in care delivery organizations; training materials including the recorded version of this webinar and the previous webinars; as well as other kinds of related reference material. So when we talk about the CDS for MU deliverables of the tool kit, it's this collection of offerings, which will be on helpIT.gov in September, that we're referring to.

So in the last webinar -- what we're going to do next is just recap the sorts of things that we talked about, tying together quality improvement, clinical decision support, and what all this means in the REC environment. So, of course, the reason

why the REC Program is in existence is to support providers in achieving meaningful use, and this slide should be familiar to everyone, outlining the initial phases of meaningful use, starting out with things like improving data capture and sharing, and implementing EHRs; but ultimately, what meaningful use is, of course, about is quality improvement. So tools and resources that will support quality improvement obviously have a lot to do with the businesses that RECs will need to be in going forward.

In the last webinar, we kicked off the conversation hearing from folks from the Regional Extension Center for Minnesota and North Dakota, which is called REACH, where they talked about their progress on this journey, outlining the work that they had done in Stage 1, and really seeing support for providers related to quality improvement as being an essential part of where things needed to go moving forward, and that they saw that as being very important to their ongoing efforts, their services, to their community, and, again, quality improvement in clinical decisions support being central to achieving the ultimate meaningful use objectives of driving quality improvement.

So in order to help them along on this journey, they have collaborated with the CDS for MU Team in helping us to develop and alpha test, or implement and provide feedback about the deliverables that we've been creating under this project; and not only provide feedback into making these tools better, but actually use them in their own efforts. So they've done things like using these materials to provide training for their staff about CDS-enabled quality improvement, they've done a couple outreach webinars similar to these for their clients and supported them with, you know, with homework so that they can actually put this material into action within their own organization and the

provider-client base that they serve; and they found that this is something that's doable and valuable. They have in fact provided valuable support to their clients. They've advanced the thinking and work of their team. So they found this work to be a valuable experience, and this is some of what they talked about in the last webinar.

So the implications of this that they described going forward is that they see an opportunity to build on the strong work that they've done supporting their clients through Stage 1 meaningful use processes, and to layer on more of this quality improvement tools and approaches to help both them and their clients move forward with what meaningful use is about, specifically the quality improvement parts of it. So, for example, they can envision doing things like establishing a portfolio of services that they would provide to their provider-client base that would include as one of a number of different arrows in the quiver support for these CDS and quality improvement activities that are increasingly important going forward.

So in the last webinar, we basically made two recommendations for regional extension centers. We described a two-step process in terms of moving forward with -- into this new world where measurable quality improvement is an increasingly central part of what RECs and providers have to focus on. So Step number one is bring the REC staff up to speed with some of the key clinical decision support and quality improvement tools, such as the broad definition of clinical decision support that I'll review in just a moment. The CDS 5 Rights framework, and approach, and the work sheet that's based on those which, again, we'll look at in more detail -- and bringing all this to life through the quality improvement approaches, including PDSA cycles: plan, do

study, and adjust cycles of continuous improvement. So Step number 1 is making sure that all the staff in the REC understand these concepts and these tools so that you can then take Step 2, which is sharing these concepts and tools with your clients, and helping them apply them as they address the increasing requirements of delivering measurably better care processes and outcomes.

So, again, to just review some of the things that we -- some of the foundational concepts that we talked about in the last webinar: We reviewed the CDS definition from the meaningful use final rule, the essence of which is that CDS is help IT functionality that builds on the EHR foundation to provide people with information that enhances health and health care. And when you look at this definition, it's really quite broad in that it doesn't specify what providing people with information means. All sorts of different things can fit under that definition, and it goes way beyond rules and alerts that people tend to associate initially when they hear the term "clinical decision support." It's really a lot more than that, when you think about what providing information really means.

Also, the other thing about this definition is it kind of begs the question for providers and RECs of how are you providing information today to enhance health and health care, for example, related to meaningful use clinical quality measures. How is information being provided today, and how can it be provided better, leveraging the EHR tools that have been implemented in Stage 1, for example?

So when you think about this broad definition of clinical decision support, about providing information to people to enhance care processes and outcomes, the CDS 5

Rights framework is an approach to actually bring that to life; that if you're going to enhance care processes and outcomes by delivering information to people, it's again -- it's what clinical decision support is all about -- that if you want to achieve excellent performance as it is increasingly required, what you have to do is get all the right information to all the right people through all the right channels in all the right formats at all the right times. And what this basically means is that when you think about how information is flowing in a practice between, you know, everybody on a care team or everybody in a hospital, including especially the patients as well, it sort of answers the question for today with regard to that information flow. It answers the who, the what, when, where, and how of that information flow, and sort of begs the question, how might we leverage those dimensions better so that the information is flowing more efficiently and effectively, leading to better decisions and actions and outcomes?

So in the last webinar, we introduced a worksheet that can be used to bring this CDS 5 Rights framework into action. In other words, I mentioned several times the RECs and practices and hospitals and hospitals can use this approach to understand and improve their information flow, and these CDS QI worksheets are tools for actually bringing that to life. So when you think about a specific meaningful use clinical quality measure that you might want to improve, or any other care process or outcome, there are decisions and actions and communications and data gathering that -- what that will determine what the performance is on that particular measure. So the object of the game is to understand what all -- where all these key things are happening, and how you can improve that information flow at each one of those steps so that the decisions,

actions, you know, communications, et cetera are more efficient and effective, and the outcomes are optimized.

So in this flow diagram that's at the bottom of this slide, you can see -- and this is an example for an ambulatory environment, we have in the tool kit similar kinds of things for the in-patient environment -- what we call the care flow steps are. So the basic phases on interaction between individual patients in the patient-specific activities section, and populations of patients -- how the providers are interacting with patients in each of these major phases through all the subcomponent things that happen. So, for example, things that happen to patients outside of any particular visit or hospitalization, things that happen right before a specific visit or hospitalization, and then all the things that happen during and after the visit with regard to individual patients; and then, again, on the population-oriented activities, this is where we use things like, you know, registries and other large databases to look across all the patients served by a practice or hospital, and do quality improvement in that way. So these care flow steps are one of those dimensions. There's the when, which provide the opportunities for supporting decisions and actions so that we can get better outcomes.

So the worksheet that we're going to be describing has a number of different uses. So as we've been saying, its primary goal is to help providers and the RECs who support them, and the EHR vendors as well, as we'll note in a moment, understand what the current workflows and information flows look like relative to a target, and how at each one of the possible options there might be ways to make the information flow better so that there are better decisions and outcomes. So when you have full teams,

both people in the provider organization and the RECs, and even the vendors using a structured way of thinking about how information is flowing, that makes it harder to ignore specific opportunities where information might not be flowing well. For example, things have happened outside of specific encounters where patients are making decisions that will have a lot of impact on the particular outcome, how you can make sure you're considering all those opportunities to drive better care processes and outcomes.

So on this slide we see an example of a simplified version of a worksheet that enables teams -- the providers and RECs and even the vendors -- EHR vendors -- to think about how information is currently flowing. So we can see at the very top, we can see what is the target that we're working on? What is our current performance on the target? Then there's a summary table that has a column for each one of those decision support opportunities that we reviewed in the flow diagram on the last slide; and then underneath these, in two rows we can summarize how is information currently flowing relative to the target at each one of these care flow steps, and also to summarize what opportunities there are to make the information flow better.

So in the middle here is a summary table where that information can be recorded, and beneath that are working rows where you can tackle it care flow step by care flow step. So you can have the team sit down and say, "Okay, how is information currently -- how are we empowering patients when they're in the grocery store, when they're in their kitchen, you know, when they're in restaurants, if they're making good decisions, let's say, for targets like blood pressure control that we'll be talking about in

just a moment. So what information? How is information currently flowing at each one of these steps, and how might it flow better? And, again, in these component regions, you can think about all those details and then go back and summarize what the current information flow looks like across all those steps in the summary table; and then, again, use that to brainstorm potential enhancements.

So that simplified worksheet is a simpler version of this more robust worksheet that includes all the same information, but breaks things down into even finer levels of detail for more detailed analysis and planning. So, for example, the rows in this full worksheet version break out in detail what all those steps are -- some of them are lumped in the previous version -- and in addition to where we document what the current state of information flow is, on this full worksheet version you can see that we've broken out all of the five dimensions of the CDS 5 Rights so you can think in more detail about what channel is actually being used, what people exactly are involved; whereas in the previous worksheet this information is more summarized.

So we have a much more detailed breakdown of what the care flow opportunities are, where decision support can be provided; we have a more detailed breakdown where you can describe what the current state of information flow is. Again, there's also an opportunity to describe the enhanced state of information flow; in other words, what sort of enhancements you might want to introduce. And in addition, in front of all this is a portion of this worksheet where you can document in more detail all of the specific clinical and information flow things that ideally would need to happen in order to optimize performance on the particular target that you're working on.

So to just dive into a little bit more detail of the specific example of what this might look like is one individual row in a spreadsheet like this. So assuming that our target is going to be optimizing blood pressure control for all the patients in a particular practice -- again, I'm emphasizing ambulatory examples here, but in the tool kit -- the CDS for MU Took Kit -- there's corresponding information for -- to deal with inpatient targets as well. But in this case we're talking about the ambulatory target of blood pressure control, which is a meaningful use measure, a PQRS measure, a Million Hearts measure. If we're looking specifically, let's say, as we're working through all these various opportunities to provide decision support in the rows of this table, this example focuses in on the patient education step; obviously a very important part of making sure that patients are engaged and understanding why blood pressure control is important, what their role is, you know, all sorts of things like that.

So in this particular row we break out some of the patient education information, and in the current state in this particular example, we're describing that in order to optimize blood pressure control we want to make sure that patients understand what low sodium diets are all about, have sample menus and recipes, things like that. So that's the information that the practice wants to convey. Currently this information is stored in filing cabinets and in brochure racks on the walls, and it's used during the patient encounter in sort of a paper-based way, which is somewhat outside of the EHR workflow, but this is what the current state of this particular activity is. That's an important part of making sure that blood pressure is controlled in the population.

So, in this example, when the practice is looking at what the opportunities for improving that are, you can see that under the potential enhancements in the third set of columns in this full worksheet, the practice says that they want to try to manage that information more directly in the EHR itself, add multimedia material that's more engaging to the patients so that they can understand in more detail what the issues are with, you know, cardiovascular disease and its different approaches to its prevention. So, in this example, the current state involves paper-based patient education, and the enhancements involve leveraging the EHR to help out with that process.

So these worksheets have undergone significant alpha testing, as I've described. We've been working with a bunch of regional extension centers and other kinds of organizations in addition to REACH, which I mentioned earlier, to help us with the refinement of these tools, with the alpha testing of these tools in practice, and the upshot of what this slide is trying to say is that tools like these worksheets and other related material that's a part of the tool kit have been used by a number of different regional extension centers, including in their outreach directly to providers, and that this information has proved of some significant value. Again, not just in the work of the RECs and they're bringing their implementation staff up to speed, but also in their outreach efforts to providers; and, in fact, there's a number of providers who've begun using these worksheets as a part of this outreach and have gotten value from it. Not just the providers in the RECs, but as I've mentioned earlier, we're also starting to bring EHR vendors into this process, and these worksheets can underpin collaboration among all these different stakeholders. And what we'll do next is turn things over the

Danielle so she can describe in a little bit more detail what, you know, how tools like this can be used as we've described.

DANIELLE ORYN: Great, thank you very much. And I'm going to talk a little bit about the work that we have done using this worksheet, which has been a really great experience for us. I am from Redwood Community Health Network, which is serving as both a health center controlled network and an LEC. And the way that we came to be involved in this work is really through a national work group, which was set up by the National Association of Community Health Centers in collaboration with our EHR vendor, and the work group that we have is a group of clinicians and QI directors from across the country, mostly from FQHCs or other community health centers.

And so we meet four times a year or so in person, and then maybe 10 to 11 times monthly on the web, and we started a few months ago working with this tool as we could see that it would really help us in our common goal to achieve meaningful use and also be recognized individually for our patient-centered medical home, and many of the organizations within our work group are also becoming parts of accountable care organizations.

And so we really thought this was a good time to maybe shift our work group's focus. In the past we have focused mostly on feature-based interactions with the EHR vendor, and so now to really take it to focusing on clinical measures, on NQS measures and clinical decision support seemed like a really useful thing to do. So when we were approached with this we were really excited to try it. So what we decided to do was to go ahead and start with the asthma measure, the NQS measure 0047, which is about

pharmacotherapy for persistent asthma. And this measure was particularly important to our group of community health centers because we are required to report this out to HRSA, and some people were planning to use this measure for meaningful use, and so there were a few key things going on around it that were difficult for us, and so we decided to just dive right in and start there.

And so we had -- we took a look at the worksheet and the tool kit. We didn't do a whole lot of training, and what we decided to do was I, on the half of our health center controlled network, which is supporting a number of community health centers, and then another FQHC in New York, we separately went ahead and filled out the worksheet around the -- around the topic of asthma and specifically around this NQS measure. And we took about a week or two to do that on our own, and then what we did was we came together just the two of us on a web meeting, and we merged our worksheets together. And even just that was a really valuable experience, just the sharing of that asthma information between two health centers; that was without our national work group and our EHR vendor involved even.

And so once that was done, we took it back to our national user group web meeting, which we conduct monthly, and we didn't do a whole ton of introducing of the concept, but rather just kind of dove in to the worksheet and walked through the most difficult pieces that we encountered, and we were able to collect more information from the users on the call. And then also have -- our EHR vendor is on the call with us, and it was nice to be able to start that dialogue. So, really quickly, at the beginning of this discussion we were able to identify that some of the problem was in that it was difficult

to classify asthma within the EMR between persistent and intermittent, and because there was not an ICD 9 code, the EHR vendor had created a way to document that via structured data. However, we identified that that structured data was not in the clinician workflow and this is actually one of the assessments that the clinicians need to make.

So we were able to really quickly point that out. Coincidentally, the EHR vendor let us know that they were actually planning some work on this asthma measure. They hadn't included this in their work. So they were quickly able to reroute the way they were looking at it and get us involved in the planning for how to roll the newer asthma features out.

And then the other exciting outcome from this was there was some input from others on the call. There was one person in particular who had a really viable work around to making it part of the workflow. So in the end we were able to add that back to our documentation and we are working on ways to share that information. This is a view of the actual worksheet that we used to fill out, and you can see that the proposed -- there were some proposed enhancements that we made at that time, and we were able to give that feedback as well as just sharing best practices amongst the workgroup members.

So what we decided to do out of all of this was to definitely continue using this format for our workgroup going forward. And the EHR vendor has decided to create a worksheet -- an online library where we can post these worksheets so they can be used by all community health center users throughout the country. And in addition to that, of

course, we would be continuing to work on this particular measure and, as we move forward, the other measures using this worksheet.

So I just wanted to mention a couple of other outcomes from this was that the individual community health centers that filled out the form felt that it was valuable enough to use at their own individual sites to document the work that they are doing and to gather best practices from their own internal practice. And then as well as our health center controlled network, which is also serving as a LEC, also decided to look at this as a way to move forward with implementing a more standardized approach to clinical decision support. And I'm going to go ahead and pass this back to Jerry.

JEROME OSHEROFF: Great, thanks very much, Danielle. Appreciate it. So we've described a tool kit, we've described sort of this work sheet as essential component of this tool kit, we've given you an example of how, you know, one regional extension center. REACH participated in this, now you've heard the implication of this work for a provider, and what we're like to do quickly on the next few slides -- again, since the punch line of all this work is, you know, what does this mean to you, to the RECs that are listening in on this call? What implications does this have for your work going forward? So we'll give you two more quick examples of what individual alpha testers, other folks who've helped with the development of this tool, get their perspective on quality improvement in their sustainability efforts, and the role these tools, more specifically, and then, you know, we'll sort of wrap up with some suggestions about what all this might mean for you going forward.

So one of the organizations that's been involved since early on in this process is the Washington and Idaho REC, WIREC, and just very quickly, as they think about quality improvement and their sustainability efforts, their specific plans are unfolding, but their sense is that there is a need and an opportunity to tie their evolving business models going forward to things that providers are going to need to do to remain, you know, viable business entities. So, of course, there're the increasing quality reporting and improvement requirements, and the financial implications of that, associated with the PQRS, patient-centered medical homes, meaningful use, et cetera. They see, as the financial health and well-being of providers increasingly depends on quality improvement, they will be able to build out offerings that will contribute to their ongoing sustainability by providing clinical decision support and quality improvement resources that help providers on this journey.

And now with regard to the tools in this CDS MU Tool Kit, specifically, they as REACH did have shared these with their REC staff, the implementation teams, and others; they've used it in client webinars, and they're baking this material into their own tool kit that they're using as a part of their ongoing businesses efforts, the theme of which they summarized as saying that the clinical decision support, really it's not about technology. It's fundamentally a quality improvement activity, and it's something that providers can actually do, and they've begun using this material directly in some of their interactions with clients.

The North Carolina AHEC, which is a part of the regional extension center for North Carolina, we began collaborating with them much more recently. In fact, when we

did the webinar last month, they reached out to us afterwards, saying that, you know, what we were talking about was very much in line with work that they were doing and places where they were going, and they asked to collaborate with us. So it's only been several weeks that we've been working with them, but some useful things, I think, have unfolded.

So in terms of a QI and their sustainability efforts, they have a strong and long history of doing quality improvement work as a part of this AHEC having strong educational programs, doing work in the patient-centered medical home arena, and when they saw our tool kit, both on the presentation last month as well as some other conversations that we've had since then, it's their sense that this will be very useful; the tool kit elements of not only the worksheets, but the case studies and other parts of the tool kit will be useful in their quality improvement efforts going forward, and they anticipate starting to use this material fairly soon.

So in summary, to just sort of pull together some of the themes of all of our interactions with a number of different alpha testers that have kindly not only helped us to develop this material over the last several months, but as I've described, have been using it and getting value from it, is -- one observation is that many of these organizations have some kind of quality improvement background, either as I've just described for AHEC. Others are actually quality improvement organizations in addition to being a regional extension center, so that's a potentially important piece of information about the kinds of RECs that we've been working with so far. In each case, I think, it's fair to say the sustainability plans are under development. I don't think

anybody has a crystal clear picture of exactly what the world's going to look like going forward, but a common theme is that each has particular strengths, and the intention is to build on those strengths to reach out into this important, growing provider need around quality improvement and leverage that as a business opportunity; again, meeting practices where they are by helping them address some of these increasing demands with regard to the patient-centered medical home, et cetera -- the things that we were just talking about -- payer programs where quality improvement is increasingly tied to reimbursement and providing services that support that.

I think another important observation from the work so far is that the providers out there, and perhaps even the RECs out there, are not uniformly ready to dive deeply into all this material that, you know, they say the future is here. It's just unevenly distributed. So there are some places that are already thinking very heavily about quality improvement for meaningful use and other things. So these organizations, these providers, are at a logical starting point for the next steps in the explorations here. And again, I think it's a common theme throughout all these interactions that we've been having that the tools that are coming out of the ONC project that'll be on helpIT.gov shortly are, in fact, useful on this journey.

So to pull it all together and summarize where might you go from here as a regional extension center. So to summarize some of the points that we've been making all along, one starting point might be to review the Part 1 of this webinar from last month, the recording of this webinar today, the Part 2, with your REC team, both the implementation staff, the people who are actually out there interacting with providers

where this, you know, material might ultimately be layered, as well as the business owners who are thinking about what the next steps are in achieving sustainability, and as a part of these conversations, understanding both what the REC and the provider needs and opportunities are related to CDS enabled quality improvement.

So on top of that kind of high level, you know, understanding and familiarity then the next step would be to dive more deeply into the tool kit that we've been talking about, look through the case examples in detail, the worksheets in greater detail, the other collections of training materials and tools, and references, and to start to build that into sort of the DNA to the extent that this is something you would want to do going forward. And then, armed with that level of understanding and familiarity with these tools, actually take it on the road to providers, to a series of activities that might include, you know, broad webinars for a number of your different clients, to introduce them to these concepts, perhaps, using this deck or this slide deck, the one from the last webinar as well as other things that are in the tool kit, and then beginning to prioritize which of the providers that you're -- in your client base might be ready for these kinds of CDS-enabled quality improvement conversations, and ultimately support and helping them in turn work through the materials that you've become familiar with; and then helping all this actually drive quality improvement using QI approaches like PDSA cycles, not only for the providers -- in other words, helping them select particular targets, implement some of the tools and approaches that are described here to drive improvements on those targets, and using PDSA cycles. So thinking about what the enhancement might look like, and then actually implementing it and evaluating the

results, going through that work not only with the provider, but also doing it at the REC level. So applying PDSA cycles to answering the question, what kinds of tools and services might we provide to our client base? What might the revenue implications of that be? And then, again, using PDSA cycles to iterate and evolve models for using this material in ways that will add value to your client base and contribute to sustainability.

CONSTANCE GILLISON: So I just want to say thank you, Dr. Osheroff, and thank you, Dr. Oryn, for your wonderful presentation. And thank you, everybody, for participating today. We hope that you enjoyed this session. Please email the HITRC training team if you have any questions, and you can also email Dr. Jerry Osheroff as well. Thanks again for joining. We look forward to seeing you on future webinars.

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