NewSTEPs 360: September All-Awardee Meeting
PDSA Cycle
September 22, 2016

Marci Sontag: Welcome everyone to this month's all-state webinar, thank you so much for joining us. I know that this month, we had an unusual time, so I wanted to thank everyone for their flexibility, and for being here today. We are very excited to have Amanda Norton from NICHQ [National Institute for Children's Health Quality]. She will be speaking with representatives from both our Iowa, and Michigan teams about some of the activities that they've been working on, and going through some PDSA [Plan, Do, Study, Act] cycles. We're excited to have all [inaudible 00:00:35]. I had the pleasure of working with both Iowa and Michigan, and they've been doing remarkable things, so I'm so excited for them to [inaudible 00:00:43] With that, I'd love to past it over to Amanda Norton, who is a performance improving consultant with NICHQ, and also, [inaudible 00:00:56] if at any point anyone wants to [inaudible 00:00:59] please press *6 to unmute, or I think you can unmute by just clicking the little icon at the bottom of the corner of the screen.

Amanda Norton: All right, thanks so much. Thanks everybody for having me, and thanks to [inaudible 00:01:13] for the introduction. My name is Amanda Norton, she said I worked with NICHQ, the National Institute for Children's Health Quality. I work as the quality improvement advisor with them, and it's really ... I'm excited to be here today. Many of you I met, or saw, or you heard me present at the in person learning session. You may have remembered me as the one who was sick, and you were avoiding me, because I somewhat had the plague at that time. It's great to see everybody again. What are we here to talk about today? We really want to have an opportunity to talk again about the incorporation of quality improvement in the work that you're doing.

When we say, CQI [Continuous Quality Improvement], I know we have an acronym issue where I would say "QI," and QI to you is quality indicators, QI to me is quality improvement. It's just the way we go in the world of acronyms right now. Continuous quality improvement, rapid cycle quality improvement, the model for improvement, whatever it is that you're calling it, quality improvement is just a tool or resource that we want to talk a little bit more about how you might incorporate it and use it in the work that you're doing.

I'm going to start by just going through a few slides, and before I get too far, I just want to confirm that we have Ashley and Heather on the line, I know we have Heather, I heard her speak. I'm just going to click through, and I'm not seeing [crosstalk 00:02:33]. Okay, fantastic Ashley. Let's go ahead and talk a little bit about quality improvement. You all have heard presentations on quality improvement. I'm not here to bore you about them, but I think that we're

really at a nice place in the work that you're doing, to say quality improvement matters. It's not an end all, be all.

It's not a solution to everything you do though, so really thinking about the work that you had been doing up until now, some of it was applicable to quality improvement, much of it was not. You had really large programs to implement, and in doing state wide system change, it takes time, and it really is ... Some of those things really don't matter to quality improvement; but making change little by little as we move from this idea of big project planning into the implementation plans, the little things that you're going to do to make this successful. It begins to make more and more sense. What are some of the things we've heard about change? It's hard, people don't like it, and we've always done it this way, right? We've always done it this way, or my second favorite, we tried it that way before, and it didn't work, right?

The way things are now is fine, I'm fine. You cannot teach an old dog new tricks, love that one. My old dog would disagree with you. There's a lot of these things that we hear about change. It makes it sound like the worst thing we're ever going to do. What do we know about change? It's constant, it's required. Fight it or don't, you're going to end up changing. In each of your programs, you have committed to change. That is the reason you got grants, because you said, "Look, I think we can do this better." Does it mean that every hospital system that you run into is going to feel as passionately committed to change? No, it doesn't. Fight it or not, we're going to have to change.

I think it's really important to both pull out the social aspect of it, but to also say, "Well, everybody says that no one wants to change." It's not necessarily the case, it's the how we try change that really matters. If we think about the how we're trying change, there's this tension between thinking bigger, or is it okay to start smaller. What do I mean by that? You all run state wide programs, right? You aren't often afforded the luxury of thinking small. When you do something, you must do it for the state. You must change the way samples are collected, the timeliness in which you receive them, for every hospital in the state. If you have a new resource, everybody must know about it. If you have a new procedure, everybody must know about it.

As state wide organizations, you're not often afforded this, "it's okay to think smaller" luxury. I think because it's acknowledged in this particular program, that it has a role. Again, is it a one end all, be all? Is it the single solution? No, but it has a real role in some of the work that you're doing. How? How do we go from thinking really big, big picture implementation, to getting that into a really specific and small plan? It's not easy. I say that not to commiserate, but to acknowledge the fact that it's really not easy. In the work that I do, I work in itty bitty hospital systems with large academic medical institutions, with HRSA [Health Resources and Services Administration], with you all in state programs.

The application of quality improvement is very different based on those settings.

For you, it might mean taking some of the things that you're doing, and thinking about plans that you could kind of cut down into a smaller basis. If you were going to think about timeliness, and think about resources to improve timeliness, could you try some of those with one hospital rather than moving immediately to state wide [inaudible 00:06:27] I'm hearing a little bit of [inaudible 00:06:33]

Marci: Amanda, I muted everyone [inaudible 00:06:41] I can unmute you.

Amanda: Okay. How do we think about change differently? I mean, all of our work, everything we do, it starts with a plan, right? The plan matters, the plan is the hearty and soul of what we do. We also know that a lot of the good things we plan to do, don't turn to reality. That's kind of the tension in the work that we do. We always have ideas, we often have will, because we want to see things better. Execution is sometimes really difficult. When we're thinking about quality improvement, and how you might apply it, how do you change something? It's about coming up with that really specific plan. Who is going to do it, and when? What exactly are we going to do differently, and where?

What we sometimes miss when we're planning our quality improvement efforts, is the why. You have often heard me talk about a prediction, what do I mean when I say prediction? It's why. Why are we doing this? Why are we going out and doing education ... Why are we creating the video to do education with a bunch of hospitals? Why? What is our theory behind that? Where do we think it's going to be better? Do we think that type of education, that type of resource is really vastly going to improve the facility's knowledge, so that we get better specimens, we get them more timely? Why are we opening courier services on longer hours? I think the theory there is pretty logical. Knowing the why really helps you to solidify the, is this change something that I should I spend my time on?

Sometimes, we get just wrapped up in change. We are told by somebody we work with that we should be doing things differently, or we should have a different process. We don't really question the why, what happens is we end up with a lot of duplication, a lot of things we didn't actually need to do, or a lot of things that aren't truly improvement. I encourage you, when you're thinking about quality improvement in the work that you're doing, and you're really thinking about your activities, you keep asking yourself why. Why is this important? What would be better? Because, that why, we're going to come back to later.

The second thing we're going to ask you to think about is just doing it. How many times have you found your activities are whole heartedly delayed,

because you spend so much time planning, that you don't get a chance to do it? Quality improvement is different because this approach has never been more applicable, just do it. We sometimes are thinking too big, so we are thinking about state wide implementation, or we're thinking about educating everybody in the hospital, rather ... All hospitals within a hospital system, instead of maybe one hospital in that system. In quality improvement, we're asking you to just think really, really small and get to that why as quick ... Or, get to being able to do it as quickly as possible. Not perfecting every resource that you might make, but creating a resource, getting it in front of people to say, "Did you get anything from that, did you learn anything?" How could I make it better?

Then, we can study, and this is where ... When I said, where is the [inaudible 00:09:42] to the plan? I'm just going to highlight this in red, if I could do that quickly with my slide. This is why the why matters so much. What we're looking at is to reflect on, what did we think was going to be better because of this particular thing we're trying? Is it really better? We're going to hear a really great story in a little bit about timeliness reports, and the use of timeliness reports with hospitals, and why they thought that was going to be helpful. At the end of the day, creating a report like that, could either be an epic event of utility, where you're just creating reports and sending them out, and nobody's paying attention, or it could be an incredibly effective use of your time, that actually improves timeliness.

The study is really reflecting back on, is this an exercise in busy work, or is this really moving the marker on the way that we're looking at? Sometimes, quality improvement is recently kind of made synonymous with data collection, yeah data collection matters in this world, only because we need to be able to study the work that we're doing. We're holding ourselves really cognizant and really honest, and let's study whether or not this is effective, because it's easy to change. It's not easy to improve. If it was easy to improve, all of your systems would be perfect already, right? We've been changing them, we've been tweaking them, we've been putting band aids on them, or we've been completely overhauling them.

If it was easy ... If change was easy, everything would be perfect already, so this reflection time to study makes changes different, because sometimes we just change and we really don't think back. Finally, we want to act differently, so why did I say start small, or not go to state wide implementation first? Because, we want to be able to act differently, we want to be able to tweak. People will say to me all the time, "Of course I do quality improvement." I realized ... I went to one hospital ... I went to do an education session, half the staff didn't show up, because the time I came was bad, I realized that, so I course corrected, I tweaked it for the next one.

Intuitively, we are using this information, the more structure we can use that hold our brains to it, the better, and the more we reflect back on the data, the better. I'm not saying that this is not probably something you do every day, and you'll hear my example of raising a very rambunctious three year old, and how I'm constantly changing and tweaking the way we're going through life in hopes of better outcomes, we do this. To some people, it's more intuitive to others, but at the end of the day, this is something we do. We learn from our mistakes, right?

What's nice about quality improvement, is we want to learn from our mistakes quickly and with as little harm as possible, because it's really disappointing when you create a huge resource guide, and you release it to the state, only to find a typo, or that you forgot to include some information. We've all been there, I wish more of you were on camera, because we all have the PTSD of when we did that. This approach allows us to think about that a little differently. You've seen these slides before, and this idea of the PDSA model, that's really what we just walked through. I want you to think about, how are the different ways that this can be applicable? I just wanted to kind of walk through that as bare bones, acknowledge upfront that there are really big pieces, and we're going o have an example from timeliness reports, and we're going to have an example from [inaudible 00:13:04].

We're going to see there are parts where this work really makes sense, and there are parts where you have to get over several tasks, things you just have to do, before it makes sense. There's still that option, and the places of it apply. I don't want to talk about that of too long, I'm going to actually flip back and stop sharing my screen. Ashley, are you on video, are you still muted?

Ashley: I'm on. I'm on my phone, so I don't have the video up.

Amanda: [inaudible 00:13:34] we had ... I had an opportunity to meet Ashley, which was fantastic, and just talked through some of her work. What is it that she's been doing, and we immediately ... I heard a lot of background about what's been going well, what maybe hasn't been going well, and we began talking about these kind of timeliness reports. Ashley, I'm just curious if you can tell us, and tell the group a little bit about your decision to begin looking at timeliness, and then get a sense of ... I'm sorry, Ashley is from the Iowa team, thanks. I'm talking about her like Ashley and I are best friends, and we've never met. Ashley is with Ohio State, or Iowa State. She been kind enough to join us today, so tell us a little bit about your decision to kind of look at timeliness, and how you landed on these timeliness reports to something that made sense for you.

Ashley: Sure. We, in Iowa, realized that we wanted to ... That we had some certain infrastructures already in place, such as the courier, and staff in the lab, and follow up 365 days a year, but we had never really went back and evaluated if

those were working the way we thought. It sounds great to say that you have a courier and staff all those times, but is it achieving what we thought it would? We looked at the numbers, we realized, yeah it's great, our numbers are good, but they could still be better. With those infrastructures, we should have ... We're not maximizing the potential. The first thing we thought ... Just some of our interactions with hospitals was, they weren't aware that the courier was available on holidays, or on the weekends, or those sorts of things. Or, even if they were, they thought they weren't using it as appropriate. The specimens were being sent when ... On certain shifts, and it wasn't getting the attention that they should get on that courier that day.

We wanted to give meaningful feedback in an at a glance format, so we came up with our timeliness [coin 00:15:32] reports. Just to let the hospitals know how they're doing, they of course can't know they're performing poorly if we never let them know. We hope that if the facilities are given the feedback and the data, that they would review their processes, and make sure that they were getting the newborn screens collected at a proper time, and making sure they get on the courier at the soonest pickup possible.

Amanda: Yes, so Ashley, what I'm kind of hearing from you, if I think back about what I was just talking about, is when you come up with a plan, you need to know the why. You looked back, okay we've got a lot of other great structural supports, is adding a carrier [inaudible 00:16:13] You have one, or you don't have one. You test [inaudible 00:16:17] are some opportunities there, but once you start it, you have it or you don't. We've got some of these structural systems built, but why is our data still not performing as strongly? So, this idea of, if we try timeliness reports, maybe that would get us back to where we wanted to be. Am I hearing that correctly?

Ashley: Yeah.

Amanda: Great. How did it go?

Ashley: It went pretty good, I think it opened up the lines of communication with our facilities. A lot of them thought, of course if you don't hear any feedback, you keep on doing what you've been doing, if no one tells you otherwise. It was eye opening for a lot of facilities that thought, oh wow we did not know we were doing this poorly. Also, just some general newborn screening awareness gave us the opportunity to give them the why timeliness was important. We didn't just say, "Hey, here is our goal, we're the state, this is when you need to submit them," but really gave them a background of how newborn screening has changed over the last 10 plus years, with the expanded disorders, and some of the time sensitive, or time critical disorders, and why it really is this important. We're not just saying it to make numbers look good, but it really is affecting babies lives, and hours do matter.

Hospital were pretty receptive of it. Most of them thanking us for the information, it gave them a chance to start QI projects in their hospitals, or use it as the data ... It's kind of, here we've given you the data that can work on magnet status in their hospitals. It didn't go without struggles, we learned some things. In the beginning, I think the biggest struggle is, we had ... Was determining how we were going to measure our [inaudible 00:18:06] time, so our goal was focused on receiving all newborn ... 95% of newborn screening within 60 hours from the time of birth, at the lab. Our database doesn't capture the time we received samples, so [inaudible 00:18:22] in the beginning, decided that we would use the date and time entered into our database. We picked that, because we wanted to measure not just when we received the sample, because to receive it in the lab does not paint the true benefit to the baby, but what was really important, was when the testing begins.

In the beginning, we thought we could use the data from time entered into our database, since our entry begins right away, as does our testing, but then of course, we have some staffing changes and data entry, and things were being entered later, even though testings still begin at the same time. That really threw of the numbers, and it wasn't fair to our hospitals, and eventually we worried if we send a couple of months of reports of this that's not meaningful, they'll stop using our reports. We had to back and say, how can we fix this? We landed on, we'll go ahead and just use the static time received of 9:30 each night, when is the average when we receive our samples and begin testing. Of course, then we had to have IT change the report for us, once again. They had done lots of revisions and tweaks for us, but luckily they are pretty great and accommodating, so they were able to mimic that change once we let them know.

Yvonne: Ashley, this is Yvonne. Can I ask, how did you realize that was a problem?

Ashley: Actually, we had one night where we had two of our staff out, and it was in the lb. We thought, okay no big deal, we can still get samples entered. At this point, we had a facility who was looking at their detailed data, and they contacted me, since I had been emailing them [coin 00:20:06] reports, and said, "This doesn't add up." I went and looked back, and I said, "Oh, that's because this date things got entered later." They happened to be a smaller facility, so even just having a couple samples off, really threw off their data, and they had been working hard at it. They alerted me to the fact, and then I could share that with other facilities, because I didn't want them to feel penalized, especially in the beginning when we're wanting them to get excited about their progress. Then, it further was exacerbated by we actually made some changes to the data entry on the weekends, so because of that one day, I knew that the change on the weekends was also going to be an issue.

Yvonne: I have another question for you, because I got to work with you guys [inaudible 00:20:53] You didn't start out with all hospitals, right? For your data reports, didn't you start out with a few?

Ashley: Yeah. We started off with seven hospitals, and really the whole point of that was, we were trying to just get ... Wanted to just work with them for one month, and get feedback on the physical report. Was it meaningful for them? Was it accomplishing what we thought it ... What we wanted it to accomplish? We got their feedback, and made tweaks to it. Things didn't progress as fast as we thought, or might have wanted, and so we actually worked with those hospitals probably for a good six months before we ever were able to share the reports state wide.

Amanda: I'll say that ... Yvonne, I'm really glad that you asked that question, because I didn't even know that, and I was thinking to myself, if I was going to be really rigorously true to quality improvement, I would say, "Geez, Ashley, it would have been great to start those ... Like, a smaller sample of hospitals," but you were rigorously true to quality improvement, that exactly what we'd say. The fact that it took six months, I think just shows that ... Good thing you tested that, and found a fix along the way.

Ashley: Yes.

Amanda: I also remember, if we talk about some of the process details ... Ashley, I remember you telling me things that you came you with this idea ... Well, if we email reports, will people even pay attention to it? How did you learn a little bit about that?

Ashley: Initially, our thought was ... So, in Iowa we have around 80 birthing facilities, so our initial thought was, we can just print these reports off, it's on one file, and stick them in the mail with our lab reports each day, or the first of the month, and send them out. When I first went to print it off, the quality wasn't what I wanted, so ... This is when we were still working with our pilot hospitals, so I, in the effort of not wanting to let perfection get in the way of progress, we decided, let's go ahead and email them to them. Seven hospitals at that time, so I began emailing them to some of our contacts. The other thing we made sure is we wanted to have a lab contact, and a nursing contact at each facility at minimum. Then, open the door to them, if there was anyone else in their facility they wanted, or should be receiving these reports, please let us know.

When we thought about going state wide, it seemed like emailing was going to be too much, that it wouldn't be sustainable. If we have to email 80 hospitals, and they have two contacts at minimum a piece, how are we going to manage that? It had worked out so well with the pilot hospitals, that they would email me back, and we could correspond about timeliness or other newborn screening

questions, that I said let's just try it. The first month, we went ahead ... That we were doing it state wide, we went ahead and did email to everyone, and then I created contact groups on Outlook for each facilities, so the next month it would be easy. I could just type in facility xyz, and it would have all my contacts there.

Moving forward each month, it only takes about one to two hours to email all facilities for the month, so I just ... The first week of the month, let's do a few a day, break it up, so I do it over a two day period ... Two or three, depending on what's going on, and get those all emailed out. In that way, hospitals have said that it ended up being really great, because I think that they can share them, since it's an electronic version. They can share it with other colleagues in their institution. It didn't end up being as much work to keep up, and another benefit that we've kind of seen was that when someone's retiring or leaving, they have responded back to my coin report for the month, and let me know that they're retiring, or leaving, and gave me their replacement or another contact in their position. So, we can update our contact list in a more timely manner, rather than the once or two times a year that we are sending out surveys requesting this information from facilities.

Amanda: I think, to me you highlighted just what can sometimes be the devil in the details. We say, start small, try [inaudible 00:25:09] out. How many emails do these [inaudible 00:25:13] I think shows, just value. It's not just another email [inaudible 00:25:23] I mean, we only have [inaudible 00:25:26] Ashley, I wanted to talk a little bit about the ... How do you know if [inaudible 00:25:28] working or not? Give me a sense of how well are the timeliness reports working? Are you seeing timeliness improve?

Ashley: Yeah, so the beauty in this is the way we are measuring if it's working, is we're looking at the time ... The average time from birth to receipt in the lab, and then for state wide, it's continued to rise. It's taken some time, and we had to revise our goal date again, just because we started sending out state reports much later than we originally anticipated. We've changed it now to be January 2017, and right now we're at 90%, so each month I keep emailing our team and saying last month we were at 89%, so the last six pounds, I think are going to be where we're going to have to do some targeted focusing. We've done some on sight education, and that has been beneficial, but there are plenty of hospitals that we haven't specifically reached out and done any on sight visits with. Just the reports by themselves, they've improved their timeliness. We've also ... In the emails along with just giving them the reports, I think the other valuable thing is giving them the tools to look at their data themselves, so we have a web protal where they can look at the metrics themselves in more detail.

Our coin reports are just a general snap shot, but like everyone, they won't ... Once they are looking at the processes, they want to know which ones aren't meeting goal, and drill down to what's the difference. They're able to look at

turnaround time reports on the web for their facility, and specifically look at where the issue is. Is it collection? Is it the transit time? Is it NICU? Is it regular nursery? I've offered my assistance and worked within hospitals on an individual basis, but mostly over email on looking at those things.

Amanda: Ashley, I know that you're not on, but I just wanted to say that I pulled up that Excel document that you shared with me, so that we're able to see where you went from about 70% up to 90%, so for those who are looking at the graph, if we look at April 15, you see that we're down here. You can see some jumps back and forth, but there's nice steady incline to 90%. As we track and follow the data, we see exactly what we want, but we're moving int he direction of improvement. For any of the other graphs that you wanted me to show, I just wanted to make sure that was the one that you wanted me to pop up right then.

Ashley: Yeah, that's fine.

Amanda: I see a chat popping up. Make sure we don't have any questions. What do we see? What do we know? First, we know that Ashley worked really hard. This was probably a bit of labor of love for her. As we look at her data, we're able to see that timeliness improved, that we really do see some change there. That's what we want. Report cards are ... I always call them report cards, timeliness reports could be really beneficial, they could be really a gigantic waste of time [inaudible 00:28:33] I've seen them [inaudible 00:28:33] and so I'm really [inaudible 00:28:34] of Ashley, that this has worked out really well for them. I think, to me, this is a perfect example of [inaudible 00:28:43] how do apply quality improvement? How do we start small? Do we still have the big vision plan? Yeah, we have the big plan of getting timeliness improved across the state. [inaudible 00:28:56] if I was to use my lingo.

Again, it's just [inaudible 00:28:59] on how you're actually improved [inaudible 00:29:02] It might be a courier, it might be [inaudible 00:29:03] but, it allows you the opportunity to say, okay lets track it over time and see if this is really [inaudible 00:29:09] It's been a valuable use of her time, she's [inaudible 00:29:13] she's made system level change, sustainable system level change. Is it a little easier in education hospital based effort? It is, I'm not going to lie to you. While I love quality improvement, and it pumps through my veins, I'm a realist. [inaudible 00:29:32] one of those places where it's a little bit easier. Does it mean it doesn't apply in other places? No, I don't think so.

While we are continually using quality improvement, whether we overtly acknowledge it ... Ashley, would you have said this was a PDSA, as you ... Before you and I ever became friends?

Ashley: Of course I would, because we learned this. Were we conscious of knowing what we were doing, the plan, the doing, the act, the study throughout it? Probably not 100%.

Amanda: Yeah. I kind of agree with you, because as we were talking, I was making notes to myself of the way that you were just kind of intuitively doing this. You started small, but you called it a pilot. I would call it starting small, doesn't matter if you call it smurfs. You could call it anything, as long as you are using this mentality. [inaudible 00:30:31] I just want to pause, does anybody have questions for Ashley, either about how they did the work, or just how they're applying this? Beth [inaudible 00:30:40] maybe has a question, I see your hand up, but I don't hear you. I see your mouth moving, Beth, I'm sorry. Maybe you're not taking to me. Anybody have a question? I'm looking in the chat, I don't see anything in the chat. I cannot see most of your faces, so I cannot tell if you are [inaudible 00:31:10]

Speaker 1: [inaudible 00:31:15] if you're having trouble unmuting yourself, if you could just press *6, that'd be great./ there's also a little icon at the bottom left of the corner of your screen.

Amanda: Well thank you Ashley so much for your time, I really appreciate it. We also kind of want to talk about, how does this make sense in a more IT, HIT environment? First, I think Josh is going to talk to us about what are these kind of projects really look like, taking a step back from a big system view. Then, we're going to chat with Heather from Michigan, and talk about some of the work that they've been doing.

Josh: Hi everybody. I'm very excited to introduce to you, Heather Wood and the Michigan team, and their activities to this point. As Amanda just stated, these HIT activities can be very difficult to fit into a general PDSA cycle at times. This is [inaudible 00:32:10] complexities associated with it. Just to give you a brief background, Michigan has had some stellar pre analytic measures and timeliness up to this point. They've been operating at ... The lab has been operating at six days a week for the last eight years, or so. The courier service has been delivering six days a week, as well, and picking up. They recently last year switched from Saturday to Sunday pickup, which also helped with that.

They've put millions of dollars into expanding the courier service, and really have dedicated one person to help expand that courier service to hospitals. As a result, they are receiving around 80% of all their specimens within 48 hours of collection, and are collecting all their specimens anywhere between 90 to 100% within that 48 hour mark. Really, when they developed this 360 proposal, it was to ... Really, work on that laboratory process part, and get the HL7 messaging up and running for both the lab orders and the results recording, and really to provide those automated reports to the hospitals to provide feedback on their performance to solidify all the work they've put into this so far. And, to drive home the message on the timeliness part for the hospitals.

To this point, since January, they've really been in the trenches working on developing the HL7 messages, and mapping those to the [inaudible 00:33:39] in the laboratory. This is a very task oriented process that is quite laborious. They've spent hundreds of hours on this to this point, but it's also something that's very difficult to put into a general PDSA cycle. However, they are now getting to the point where they have buy in from two hospital systems that consist of seven hospitals, and their first meeting this Friday with University of Michigan Hospital, in which they're meeting with IT departments and their contact there to get this going. Really, it's this hospital part that is much more doable, in terms of putting into a PDSA cycle to this point.

They're moving to that process now, and so Heather Wood is going to talk to you about how they've put this into the PDSA cycle. For a large part, kind of using the shared HIT measures that we distributed to all the 360 participants [inaudible 00:34:38] Heather, I leave it to you.

Amanda: Heather, *6 to unmute, I think you're on the phone.

Speaker 1: I think Amanda might have a ...

Heather : Hello! This is Heather, can you hear me now?

Speaker 1: Yes.

Heather : Okay, great. Thank you Josh for the introduction, and thank you to everyone who helped us put this into a PDA phase cycle, like Josh had mentioned. It was difficult, because a lot of the stuff that we've been doing is really building everything on our side, on the laboratory side. Our goal was to onboard three hospital systems to use HL7, however, we didn't realize when we were writing the grant ... At least, I didn't, how much work was going to have to be done initially ahead of time, because we still needed to do everything on our end at the laboratory side in working with our LIMs [Laboratory Information System] system and everything, before we can even really get the hospitals involved. This included from the ground up, getting the inbound message implantation guide completed. The outbound message implementation guide is very near complete, and these guides are guides that we will be sharing with the hospitals to give them and idea ... It will also be part of an agreement to give them an idea of what their messages should include, what the messages will look like, and how to incorporate it into their LIMs [Laboratory Information System].

Really, it's been quite a learning experience with everything that we've been doing, and so we've really been putting in ... When I say hundreds of hours to do the implementation guide, that's not just my time, that everyone's time, because to work on implementation guide, is like building the actual messages, and working with all the different parts and partners that are involved in this on our end, at the State of Michigan. We are at the point now where we are

pretesting, so we're looking at messages that have been created from all of this work that we've been doing. Like Josh said, we've spent lots and lots of time just mapping [inaudible 00:37:11] codes, and now we're at the pretest stage. We're looking at test messages, the next phase will be user acceptance testing, and then we'll finally be able to engage the hospitals.

After the conversations that I was having with everyone, with Josh, Ruth Ann, our team, Amanda, it became clear that what we've been doing so far has been very difficult to put into a PDA phase cycle. However, now moving forward, we can do that. That is where we are, and I'm hoping that Amanda can share her screen that shows the PSA cycle that we ... Amanda had sent us the worksheet?

Amanda: Yes.

Heather : I'm hoping that you can share your screen so we can go over that worksheet, and I also had a diagram, I don't know if it's helpful or not, to see sort of see the process. What do you think Amanda? Do you think it's helpful to see the quick little diagram first, and then the PDSA cycle?

Amanda: Let me just go back and show the other one first.

Heather : Okay. At least for me, I'm a very visual person, so it kind of helps me put things in perspective. If we can just ... Can you zoom in on that diagram on the left that says HL7 message flow? Is there any way to do that? That's fine, I don't know how much people can see this, but yeah, that's perfect. This is just a little diagram that we had put together initially with our team. We had all come together, and we're all coming from different parts of the newborn screening program, and IT, and the hospital side. The first thing we did when we came together is realized that we don't really know what we all do exactly. We did sight visits to each others sights, and then we did high level process maps of each others areas to figure out where we need to fill gaps to work together for this HL7 message flow.

This is the high level process map for the HL7 message through the IT, so you'll see we've got the ... If you go, starting at the hospital side, you got the EHR, going into health information, the HIE, and that's a ... I can't remember off the top of my head. Julie, if you're on the phone, you can maybe pipe in. HIE is the health information exchange, and that is ... Then the information is going to be funneled into what we are calling X, which is a State of Michigan service, and then it's going to go to our data hub, which again is State of Michigan. Finally, it's going to go into our bureau of lab ... Laboratory Information Management System.

With all of that being said, we've been working on the right side of the diagram, right now. We haven't been working with the hospitals yet, we had to build [00:40:21] everything here at [COL 00:40:21] LIM side. Working with our LIMs

[Laboratory Information System], and then we're transmitting messages, or testing messages back and forth through my X. We'll be having a pilot meeting, or rather a kick off meeting this Friday with U of M, which would be the hospital here, the HIE, the [inaudible 00:40:40] my X, data hub, and us. Now, we'll be able to kind of start figuring out how we're going to get all the partners involved to get started.

That's just sort of where we are right now. Now, with the PDSA cycle, we can talk about where that's leading us now. The goal is to onboard our first pilot hospital. Thank you, Amanda. This is the worksheet that Amanda had shared with me, just to kind of help get me started, because here I am wondering how I am going to put all this in a PDSA cycle, and thankfully, Josh was talking to me forever yesterday to help me this. Our ultimate goal is to onboard our first hospital, we want U of M to successfully send and receive order and results messages in a production environment.

How are we going to do this? Well, thank goodness the new step 360 team had identified the shared measures with their group and others, and these measure are perfect. I'm so happy that these are available, because this really helps. I really just started throwing things into this table, and it's really very draft form, because I figured Amanda can help here. As far as these different shared measures, we can identify using the spreadsheet, and we can identify with these paths and identify who is going to be responsible. A lot of these measures, we've already done here on our side. We've already done all of these on the laboratory side. When josh and I were talking through this, things like ... For example, the transport mechanism system [inaudible 00:42:38], I was like, oh, that must be rhapsody, or the [inaudible 00:42:42] or whatever.

I'm starting to recognize, I'm like, okay, we've done this. I didn't really see it in the shared measure format, so I was just like, okay, this makes so much sense to me. I'm really happy that this exists, and I think this is really going to help us. Where we are now, is we have already identified a champion at U of M, who is going to be our person, who is going to lead this project, and get their team, their hospital and IT team together. The next, is the hospital and IT leadership approval, we have already done that. We are completed with that phase. The youth case agreement, including implementation guide approval, so this is the youth case agreement, it's like the big legal document, and then the implementation guide approval is all of that work that we put into doing implementation guide. All that has to go through their approval process to say, yes I agree that this is what we are going to be exchanging in data et cetera.

That just a short summary on that, so that is actually in process.

Amanda: Heather, if you don't mind me stopping for just a second.

Heather : Yeah, please.

Amanda: My question, and I mean I always have to push into the why, but I noticed right here, in your prediction you kind of left it blank on me.

Heather : Yeah, I know, because I didn't really know how to answer that. I predict that we will onboard U of M, for HL7. I wasn't really ... I guess I don't know how to answer that question. My prediction is we will succeed with U of M, and ideally we want to do 3 hospital systems, but that may actually end up looking like three hospitals. Ideally, we would want the whole system for each of these hospitals to be involved. For example, our Henry Ford hospital system has five hospitals, or something. Ideally, we would be working with all of them, but truly we're going to be working with one, and then it's going to roll out to the others.

Here, I predict that we will definitely get U of M as a single hospital onboard for this particular PDSA cycle. Does that answer your question?

Amanda: Well, I guess I'm thinking why ... Yes, I think that's part of your prediction, but then I'm thinking, why? What is the theory behind this prediction? I think, and I'm going to just put words right into your mouth, I kind of think that you're starting with one hospital system, because you want to learn what works well, and what doesn't go so well, so that it can smooth the process for the next system. Overall, I think you're doing this, because I think you'll be able to roll them in quicker in the long term, because you're going to learn what's working, what's not working, what are some things that we didn't expect. As you continue to scale up and build this, you're able to do it more successfully, and more efficiently.

Heather : Yeah! You did such a great job, Amanda. I love those words, yes, thank you. Yes, that's exactly what we're doing, we're going to have a pilot, and in that pilot, we're going to learn lots of lessons and what has been ... What we've done well, and what we haven't done well. I'm telling you, this project so far has been so full of lessons. Yes, you're absolutely right.

Yvonne: This is Yvonne, I have a question, too. Do you have any prediction on how long it's going to take to onboard them? Do you think this would be a month?

Heather : Oh god, no. Not a month. I mean, a year, at least. I think that from what I have talked to other states that have done HL7 implementation onboarding with hospitals, and states have said, a year to a year and a half. It really takes a long time, because ... I think that's also one of the reasons why we originally had proposed that we were going to onboard eight hospital systems. We clearly had no idea how much work this was going to be. As we're talking to other states, and they're like, "Oh, yeah, it can take a year, a year and a half to onboard a hospital," we're like, whoa, wait a minute. We really started scaling back, and then looking how much work it's been here at our level, we've realized even

further that, wow, we're going to be really doing great if we can get three hospitals on-boarded with HL7. Starting with U of M, who is agreed to be our very first pilot, then I think that we're going to be doing really well.

Yvonne: My other question for you would be that, my guess is you're not going to wait until this one is on-boarded to start the next one, so in some ways you're ...

Heather : That is correct.

Yvonne: So, you're learning about the beginning, and how long are you giving yourself until you start approaching the next one?

Heather : We are actually having ... We're approaching all of them at the same time. U of M is further along, but we are starting this process with all three. We've had three hospitals agree to work with us. We've had commitment letters, we've already had ... They've already been enrolled in our e-grams, grant system, they've already submitted statements of work, budgets, et cetera. We've gone pretty far into the process with the agreements, and we are starting our kick off meeting with the hospitals to figure out, now what? Now what do we do? What it's looking like now, is like U of M is our first pilot, and our kick off meeting with them, because we've already been talking to them, the kick off meeting is going to be with all the different stake holders within that flow diagram. When I'm talking to one of our other hospitals, which I'll be talking to on Monday that is going to say ... Okay let’s start our first meeting. It is going in a staggered fashion, but everyone is really getting started, more or less simultaneously, but U of M is further ahead. I'm hoping that we can learn and tweak as we go.

Yvonne: Right.

Heather : Also, one other note from my colleague Christy here, which I completely agree. Another thing that may be an obstacle for us with these hospitals within the same hospital system, is that even though they're all in the same hospital system, they may have different EHR's. If they have different EHR's, that's going to look completely different for each individual hospital. Even more reason why it's going to be ... It's going to be even more reason why we would want ... what one hospital may be more ideal than the entire hospital system. The most ideal situation would be to have the entire hospital system have the same EHR.

Amanda: I think you brought up some really good points. It sounds like your PDSA has both been just a chance that U of M really jumped on board, so you were able to start them first, in just a workflow issue, you can't really feasibly start everybody simultaneously, because you probably have other things to do [inaudible 00:50:30], so that would take a lot of time.

Heather : Right, yeah. Absolutely, and the hospitals are already at the same time, either. They have different things going on, too. They have upgrades in their EHR, or upgrades in whatever, their electronic health records system. There's delays, and we expect the delays.

Amanda: Right. I think what ... From just a QI perspective first, I really think you want to appreciate that you took the time to think about this work a little bit differently, where there are so many things that are not conducive to quality improvement, but there is this implementation component that does really make sense to it. I would also say that allowing yourself to be really thoughtful about ... Okay, so we can't do everybody at once, maybe we've got two that have already kind of committed, and you're moving a little quicker with. Allowing yourself the freedom to maybe hold off on the third, so that you can really learn from those two before you begin to bring in the third, both for staggered workflow, and for just kind of learning, sharing opportunities.

I think it really makes sense from the PDSA perspective, because what I'm hearing now is, originally I was thinking very big system, like roll in one, see what works. But, what you're really saying, is I need to learn about this timeframe from, you've said yes, to you're ready to go live. It's almost ... It's smaller. Here I am, thinking too big, trying to ... Here I am talking about quality improvement, thinking too big. I caught myself, but you're really talking about this onboarding process, and understanding, what does that mean? What does it look like? How long does it take? What are the structural things that we cannot influence? What are the nonstructural things that we can influence?

There's a lot of learning in there, and so I just encourage you to kind of survive it with one or two before you think about rolling in more and more. Then, I think it will ... The big picture, the big P, or the big plan is to learn what it takes, and to maybe be able to do this faster as the work continues, and you want to onboard more and more.

Heather : Thank you, yes.

Amanda: Yeah, thank you so much. I think that Ashley may have had to jump off. I know that we have a few minutes left for questions. I see that we had one question come in about how often Ashley was sending reports, which I think she answered. Let me go ahead and stop sharing my screen. I want to see if we have any questions for Heather, for Ashley, who is not here. So, for Heather, for myself, for other teams.

Marci: I just need to also read a question out loud that was addressed through text, just if there is anyone that's connected through the phone, I'm able to see it. We had a question from Eva Berman, from California. She had a question for Ashley. She asked, how [inaudible 00:53:27] providing the report cards [inaudible 00:53:30]? Weekly, monthly? Due to the size of their program at their area

service center, which includes 40 hospitals, 50 midwife service providers. They monitor and [inaudible 00:53:43] activity monthly, but will provide progress report cards quarterly. [inaudible 00:53:49] NICU managers, if we see adverse trend during the quarter, but we are unable to provide a report card more frequently than quarterly. This seems to be working for us, however, I'm always looking to improve. Ashley might not be on the call anymore, but she responded that, I was sent reports monthly for hospitals that commit greater than 200 samples a year, which is about 50 of their facilities. For the submitters that have lower volume, less than 200 samples a year, they send quarterly reports. Every quarter, they send around 80 reports, and about 50 monthly.

I'd now like to open it up. Anyone else that would like to ask a question to either Ashley or Heather?

Amanda: Even just general thoughts about ... Do we have someone else? I'm sorry, I didn't mean to talk over you, any general questions, too. Who piped up that I spoke over?

Yvonne: I think it was the two of you.

Amanda: [inaudible 00:54:59] I was wanting to thank both of our presenters that was great. For Heather, it came to our attention that you didn't necessarily know about the [inaudible 00:55:12] and how that could have been used before, and I had the same conversation with Patrice from Wisconsin a couple of months ago. I was like, look at how the [inaudible 00:55:22] when we want to measure progress on a national level with HIT measures, HIT progress, but really to be able to use it as a step by step guide. I love the way, Heather, you put that together for Michigan. You can say, "Yeah, we got step one done, now who is [inaudible 00:55:40] on to step two." The question I had for you Heather, is you have in there [inaudible 00:55:46] but who is responsible for each step? Right now, you have it listed as somebody from that hospital. You don't have a specific name? As you move though that step, will you remove that generic label with a specific person, or will it continue to be ...?

Heather : Yes, absolutely. It was like 6:30, last night when I was filling in that table, and I just didn't feel like researching to find out ... We have names to put in there, I just don't know who they are right now, off the top of my head. Yeah, I just didn't fill it out. Yeah, we have the people identified.

Amanda: As soon as you put somebody on paper, and they see it, that gives them that ownership of it, too. Thinking back to what Yvonne taught us all last year at the kick off meeting, is once you get to each of those stages, and you have that ... You could mark that column off as completed, figure out a way to celebrate that success and be like, all right, this person who did this, congratulations, thank you. Whatever that is in Michigan, however you can celebrate that success, I think is really important, so then they'll continue to buy in when their name

shows up on the next line. To echo that, it sounds like you guys have done a ton of work, and I'm hoping that you celebrate what you've just completed, because it sounds huge.

Heather : Thank you. We are currently at the point where we are having meetings once a week, and that's not just the only meeting. We're having multiple meetings, but we are definitely working at a fast and furious pace, so it's definitely heating up, and it's been a lot of fun. It's a lot of work.

Marci: Does anyone else have any question or comments that they'd like to add at this time? Okay, well I'm not hearing anything. I wanted to thank all the speakers again, for providing such insightful presentations today. It's really remarkable to see all of the work that everyone has been doing, and I'm learning so much from you all. I'm really in awe of all the hours of dedication that you've really put forth to these projects. I wanted to remind everyone of our next Allstate webinar, that's going to be on October 20th. We'll be [inaudible 00:58:04] normal time, and we'll be hearing from Texas about their change to their laboratory work hours to address [inaudible 00:58:11]. Thank you all again for joining us today. We look forward to seeing you next month.

Yvonne: Thank you, thanks Amanda.