

Division of Diabetes Treatment and Prevention

Advancements in Diabetes Seminar

The CDC National Diabetes Prevention Program: Experiences and Outcomes

Ann Albright PhD, RD

Director, Division of Diabetes Translation
Centers for Disease Control and Prevention

Dr. Ann Albright:

Thanks so much, Jan. And it's really a pleasure to be with everyone today. I know it can be, virtual has got many good attributes and hopefully, being able to at least talk with each other we can really have a great and meaningful discussion together. As Jan mentioned, I am the Director of the Division of Diabetes Translation at the CDC and I have the opportunity to work with a wonderful team here. I did spend some time in the California State Health Department as Director of the State Health Department Diabetes Program and some time with the Surgeon General and Secretary of Health serving as adviser to both of those folks.

My background is a little bit unusual in that I was initially trained as a basic researcher doing work in diabetes and things like glucose transporters and I am an exercise physiologist and registered dietitian by training. So, I've had the chance to work at the cellular level and then I moved to seeing patients in a county clinic and I did some time doing that as I was public health department lead for diabetes. And then, I moved into really public health and public policies. I've moved to DC and then here to CDC.

I guess that maybe gives me the chance to have the opportunity to work at the cellular level and to work at the whole big population level. But I'm really eager to spend some time with all of you today, talking about the National Diabetes Prevention Program and most importantly to hear from you about the things that you're doing in this area, the things you like to do in this area, questions that you have, because this is an amazing time for us to be working in type 2 diabetes prevention. And certainly, those of you that work with Indian Health Service and with other partners serving the American Indian Alaska Native communities have been leaders in the diabetes prevention work and we'll certainly highlight those things as we go forward.

Let's jump in and be sure to ask whatever questions you have as I finish my remarks and we'll leave plenty of time for that and I want to be sure that you get your questions answered and we have a good discussion here.

So just to start us, to settle out the level a bit, remind us all in case we somehow were not aware. Diabetes is a significant public health problem in our country and for really all populations but certainly some populations are more hard hit by diabetes than others. We have 29 million Americans with diabetes and we have 86 million Americans to what we referred to as having prediabetes, of course that blood sugar is higher than normal but not high enough yet to constitute a diagnosis of type 2 diabetes. However, those folks are at higher risk for type 2 diabetes and for heart attack and stroke.

There maybe debates and differences of opinion on how we diagnose those individuals, but I hope that more and more people are acknowledging the fact that we really do need to identify people earlier, help them identify their risk, know where they stand, and be able to take action earlier instead of waiting until type 2 diabetes is upon them, and then of course we work to help folks to take better care of themselves



and to do their very best to avoid those complications. But the earlier we can start the better and the evidence that we all have from multiple trials demonstrates that.

Nine out of 10 of the people who fall in to that prediabetes category don't know they have it. So we have very low awareness around this condition of prediabetes or this risk -- of this notation of risk. It's also important to point out that 86 million people with prediabetes is really quite heterogeneous. They have different rates of progression to diabetes. Some will never progress to type 2. Those with at the lower end of the blood glucose range will have a lower or slower rate of progression to type 2 diabetes than those who fall in the upper ends of the blood glucose or A1C or oral glucose tolerance test range, all of which are used to diagnose both prediabetes and diabetes.

As we look at what our data is telling us now, we gave those numbers. Now, let's take a look at what lies ahead of us if we don't really get a handle on preventing new cases of diabetes. CDC does manage the nation's surveillance system and we work with our colleagues at Indian Health Service and through other data systems in the country to help identify and characterize the populations within a risk for diabetes. We did modeling work here at CDC and we have been able to model that if we stay on the trajectory that we are on for the incidents of diabetes or what we refer to as incidence, new cases, or prevalence, the number of people with diabetes. This is what our modeling data will show for 2030, that right now we have about 1 in 10, 1 in 11 people with diabetes. If we stay on the trajectory we're on, we could be at 1 in five by the time we reach 2030. Not that far away. Gosh! Not even 15 years away. We're about to come out with a new paper shortly that will have new projections so stay tuned for that. There is -- it's very concerning that we are on this steady and continual increase in both incidence and prevalence.

The good news that we have to share is that most recent data that we put out about the trends in incidence and prevalence -- and CDC waited a few years to put this out because we really wanted to be sure that the data was sound, that we had corroborating evidence from more than one data source. And that what we are showing here is that this is for the total population. We don't have this data broken out by racial ethnic groups. But when we look at total incidence and prevalence we can see that in the past six years after more than two decades of increases in both incidence and prevalence, we are seeing a decline in incidence and we are seeing a leveling in prevalence.

I think from our perspective what the message that gives to us and I hope it's one that we will and take very seriously is that, this is encouraging that the incidence is beginning to decline. It used to be 1.7 million cases diagnosed a year, we are now at 1.4. This however, could certainly bounce back up again. We hope that what this is telling all of us is that we have begun to move in the right direction. Let's not let up. In fact, let's more than ever, fortify our efforts for prevention, because we have begun it appears, to turn the corner but we've got to continue to press hard on moving the incidence rate and absolute numbers of people developing diabetes in the proper direction and the right direction as which we appear to be moving now. So I think it's both a encouraging bit of news and it's also a rally cry. It should really be causing us to really press hard on the work we're doing in prevention.

I wanted to share this information with you as well. You may experience this or this maybe a perspective you have or others that you're working with who say, "You know what? We have our hands full with people who already have diabetes. How can we possibly be turning attention to prevention? There just aren't enough of us. There isn't enough time or enough resources." And so I wanted to share this with all of you, if you look at the data we have on some of the serious complications of diabetes, so myocardial infraction, stroke, amputation, end-stage renal disease and hyperglycemic death. You can see again, this is for the average person overall, that we are beginning to see improvements in these dreaded complications of diabetes. This is again, encouraging news. We should be very heartened by this, but it also is a cautionary note, because we still have populations who are experiencing rates far too high for these complications.

I want to take this moment to point out though, that we have especially good news in the American Indian and Alaska Native population around end-stage renal disease. So the work that you have all been doing,

the funding through SDPI and other work and resources that have come to many in Indian Country have been very well used. And the ESRD rates are declining significantly in the American Indian and Alaska Native population. So these are really encouraging signs but again, it should remind us that there is still much work to do.

As it relates to prevention, the message is that we are seeing improvements in these complications for those with diabetes again, still more work to do. But if we indeed do not focus on preventing new cases of diabetes, we will be undermining these important gains that we are beginning to make in complications. Because we will have so many new people with diabetes that we will continue to flood the population of people with diabetes, and it will put an increasing burden and strain on the health care system, on the tools and availability of strategies that we have, and the resources to serve people.

So in point of fact, working on preventing new cases of diabetes and managing those who have diabetes are two sides of the same coin. They are inextricably linked to each other and its imperative that we do both. And since we must do both it means, we need to choose wisely and work well, work efficiently, work effectively in these areas. Really focus on those interventions that have a solid evidence base. Work well with each other so that we can bring that evidence into people's lives and make it available to them. Help it be real to them, help it be meaningful to them. And so as we go forward in the work on prevention and preventing new cases of type 2 diabetes, that's really where I'll spend the remainder of our time together, is to talk about the approach that we and many of you and your work in Indian Country and other partners around the country are taking on and working on together.

As we think about how to approach this large population that have prediabetes. You know 86 million is an awful lot of people and they have different rates of progression, different levels of risk within that high risk group. And so as we look at this table and you look at the whole population, we have really sort of looked at categories of risk and I hope this helps us figure out how to deploy our assets, our resources, our contributions that we can make.

We certainly want to do as much as we can to keep those who are at low risk from staying in that low risk category. That now is about 35% of the population, the entire population in our country. So we certainly look to strategies that are directed at the entire population, policy systems, environmental changes that impact the whole population. So healthier neighborhoods, healthier communities, many of the opportunities and things that many of us are working on, traditional foods, things that are going to change those food offerings lots of those kinds of opportunities, policies in schools that help children get a healthy start in life, prenatal care opportunities. All those things that we do to give children a healthy start in life, avoid childhood obesity, move into their growing up years. So all of those kinds of policies are really critical and require our attention and we have many colleagues who are working on those and certainly the work we do in diabetes supports that work.

As you move into those at high risk about 30% of the population, they have about 10% to 20% risk of developing diabetes over 10 years. Those folks we have probably less information about on what is actually the most effective way to intervene. Some would point to more sort of moderate risk counseling, may be that touching base with the clinician, reminding them about healthy habits, sort of periodic short discussions with them. That's an area that requires more research so that we can better understand that sort of medium risk group.

As we look at the high and very high risk categories, these are people as we've said before, this is what falls into that 86 million prediabetes. We do not have evidence. While we are clear that the environmental changes I mentioned, those policies and environmental changes are critical and supportive for all these populations, they are the foundation. There is not evidence that let's us say that those broader whole population strategies are enough for these high and very high risk groups. And so in that case, we need to look at what our evidence has for us there. And this is where we actually have the greatest amount of evidence, that we know very clearly that a structured lifestyle intervention of adequate intensity and

adequate duration is actually very necessary for this population in order for them to make the kinds of moderate lifestyle changes that are needed to prevent or delay type 2 diabetes.

I hope that this table sort of helps us all think about the entire population we have in the country, as we look at where they fall in that risk continuum and as we move along the continuum and we reach that high and very high risk group. Why we really do need to have this dual approach of policy system and environmental changes to create healthier environments around us. And for those who have high and very high risk, we need a structured lifestyle program that is implemented in a systematic widespread way that can have that population health impact that we must have to reduce the new cases of diabetes. These two issues are tied together as well. They are a dual approach. They are both needed. They are complementary and we need to maximize both of them.

As we think about what evidence do we have to support the structured lifestyle intervention? We actually have a tremendous amount. Are there still unanswered questions? Sure. Are there things that we need to continue to refine? Absolutely. But we have an overwhelming body of evidence that it would really be unethical for us not to be taking action on this information. And so as we look at that evidence, we are looking specifically about the pieces of evidence around the lifestyle intervention and about identifying people at risk.

And so really as we put at the top there, we are very focused on expanding access to the National Diabetes Prevention Program, which is, one component of it is the structured lifestyle intervention, and we'll talk more about that in a moment. The second part is promoting screening for abnormal glucose and those who are overweight or obese as a part of a cardiovascular risk assessment. What evidence to do we have to support these two goals? We have multiple randomized clinical trials. We certainly have the one many of us know very well which is the Diabetes Prevention Program Research study that was completed in 2002. Certainly American Indian and Alaska Natives were an incredibly important population in that study made significant contributions to those results. That trial that studied more than 3,000 people, examined this intensive lifestyle program, compared it to the drug metformin, which was in turn compared it to a placebo. And that trial showed us that this intensive lifestyle intervention was able to reduce the risk of diabetes or progression of diabetes by 58% in the overall population, by 70% in those over 60, and that was compared to the drug metformin, which had about a 30% reduction in the development of type 2 diabetes.

This population has been continued to be followed. We have a 10-year study and we have a 15-year report on that population. And we are able to see that while there has been recidivism and some regain of weight and that there is -- but there is still significant reduction in diabetes after 15 years. We are still at about a 30% reduction cumulative reduction in incidence in the lifestyle intervention. So even after 15 years, the trial is still showing that lifestyle has been in important. Metformin also continues to show some important improvements particularly for certain populations, women who have had gestational diabetes, those who tend to be younger, and those who tend to be heavier.

So it is important that the tools available to us are used and medication may certainly be one of them. But everyone is pretty much an eligible candidate for lifestyle and I'm sure many of you know that the original DPP trial was actually stopped early because the outcomes were so compelling and indeed in these follow up trials that I mentioned, we call them the DPPOS study that 10- and 15-year follow up. Those individuals were, all of them, were given access to the lifestyle intervention because it was so compelling. It would have been unethical to withhold the intervention from them.

We also now have had a whole series of what we call translation studies. These are the kinds of studies that look at things like, can you deliver this intervention to a group of people, instead of one-on-one like it was done in the DPP. Can you do this intervention using coaches who are laypeople or community health workers or lay representatives? Can you deliver it in using virtual technology as opposed to only doing it in person? So these are all the questions that make real world implementation very much more

doable and there are critical studies to be done if we are going to make the intervention widespread available in a widespread fashion and scalable to the population.

Subsequent to all of this evidence, we have now had a number of bodies of experts weigh in on this evidence. So we have the U.S. Preventive Services Task Force, who decides on whether or not various things in the Affordable Care Act will be reimbursed. And so they have come up with two recommendations, actually three, but two are very relevant to this work. They are recommending intensive behavioral counseling for obesity. They are also recommending intensive behavioral counseling for CVD risk reduction. And certainly as we mentioned earlier, prediabetes is a cardiovascular risk factor. And so we now have this very esteemed body who has weighed in and they are a hard group to win over. They have weighed in on the evidence.

The Community Guide which is an entity that is housed here out of CDC. The Community Preventive Services Task Force has weighed in and they have found this intervention to be highly recommended. USPSTF gave us a B rating and that means that it needs to be covered by commercial plans. How they cover it is up to the plans, which of course poses challenges because people can end up implementing, this in ways that actually are not every evidence-based? We have had other groups by the way, also weigh in on this. There is an ICER group that weighed in.

The Community Guide review also did an economic analysis. And so I wanted to share a bit of that information with you as well. This intervention is cost-effective. There have been multiple systematic reviews or studies that have been done on the economics of this intervention and all in a case of looking at 14 studies in this particular systematic review that my team is responsible for. We have found all but one study, found that the intervention was cost-effective and in some cases, it can be cost saving.

The ways in which the intervention can be cost saving has to do with the number of factors. You recall the table that we looked at earlier about risk stratification? If you provide this more intensive intervention to people who are at lower risk, you are less likely to see cost saving because you're going to be delivering this intervention to fewer people who would have gone on to develop type 2 diabetes. Is it bad to deliver the intervention to them? No, certainly not. But you will not have as strong of a cost-effectiveness argument when you deliver an intervention that does have a cost to those who would be less likely to develop a condition you are trying to prevent. But there is overwhelming evidence that this is cost-effective and as I said, there are factors that will move it into the cost saving.

It is the delivering it to the higher and very high risk group, highest risk group in particular. If you are able to deliver it in a group setting as opposed to one-one-one, if you are able to deliver it using less expensive health workers, if you are able to have a bit of a longer time horizon over which you are examining the cost-benefit to this intervention. We know a lot of health plans and groups that we work with in that fashion would like to see a year return on investment, very difficult to show that for just about anything unless maybe it's an immunization. There are a few things that can certainly show that but not in the chronic disease world. And so when we look at -- we are happy to see them more payers and others are looking at a two- to three-year time horizon. It's best if you can look at a five- to ten-year time horizon but you certainly in many cases will see cost-effectiveness and absolutely cost savings in some cases in that two- to three-year time horizon.

So we just got to take a moment to sum up before we get into the particulars of the National DPP itself and some comments I'd like to make about CDC recognition. I want to just leave this visual with you that I hope will be one that will be a good picture to keep in mind about sort of where we're headed and what we're trying to do. I'm a big music fan and so I lovingly refer to this as the Stairway to Heaven. As you look at what we've done in the first three stairs of the stairway, that's really what we spent time talking about already in this time we have together.

We do have important science that's going on, basic science and we need more of that. We need to understand the pathophysiology of diabetes and all forms of diabetes. We need to understand things

going on at the molecular and cellular levels so that we can better target interventions. We can really work to achieve cures for these diseases.

We also need to have these efficacy trials. I mentioned one, the DPP. I didn't mention there are multiple others done around the world, China longest running trial. Da Qing was done in China. My team at CDC works with them. We also have ones in India and Finland, so multiple populations around the world have these efficacy trials.

Briefly touched on the fact that we have an array of these real world effectiveness studies that have answered questions for us about how to deliver this more effectively, less expensively to a wider array of people, how to make sure we're adapting them for cultural preferences and personal preferences and those sorts of things.

Now we need to get to these upper three stairs in the stairway. We have a good body of evidence. We have good translation studies. How are we going to get the biggest effect on the most people with this lifestyle intervention? How are we going to make sure we have an adequate supply and how are we going to make sure that we are having a diffusion of the intervention to communities all over the country and not worsening disparities but actually addressing disparities?

And we really would point to a major contributor to getting us up to heaven, is the National Diabetes Prevention Program. It is what gave birth to the National DPP. The National DPP is more than a lifestyle intervention. It is the coming together of all of us in the country to put our muscle, to put our energy, to put our smarts, and our passion and commitment to preventing new cases of type 2 diabetes in those at high-risk, through a structured lifestyle change program with a strong evidence base. What we're doing is, together, as we are establishing a framework in this country for the delivery of lifestyle. We have a framework for the delivery of medications and medical procedures in the country. Granted not everybody takes their medications, there are challenges with that delivery system, but we have one. We have not had a delivery system for lifestyle. And so, this is our opportunity. And what a great opportunity to join forces around preventing diabetes. It's a population of millions of people who have prediabetes. It allows us to really get systems in place so that in the future, many other health issues who rely upon lifestyle will have much better systems in place. It will be a much more useful, well-oiled system that we can now be adding other elements to, in order to really begin to address even broader chronic issues. And of course, many of the issues that address prediabetes do address other things. As we said, it reduces risk for heart disease and stroke. It reduces hypertension, reduces a number of things, certainly overweight and obesity. So this is our chance to come together as a country and really join forces.

So there are four elements to the National DPP. As I said, it's more than a lifestyle intervention. These are what we refer to as the four components, because it is really a framework or an infrastructure. One of them is training. It's critical that we have a trained workforce. This has also been our opportunity to add jobs in the country. We have more people coming on as trainers and coaches. We need these individuals to be trained to a CDC-approved curriculum, and I'll mention that in just a moment. It really works best if these coaches are attached to an organization so that they have infrastructure and supports around them to deliver the program as opposed to an individual out there just trying to somehow marshal everything to deliver the intervention on their own. We also have very clear evidence that the intervention can be delivered equally effectively by health professionals and trained lay workers. And oftentimes, pairing them together is a real winning combination.

So the good news is that there's plenty of work for health professionals, plenty of work for trained laypeople, and that this is our chance to join forces. We really want to sort of, again, divide and share the workload. So we really want those physician clinicians, to be screening, testing, and referring to the program. Referral may not be required in many circumstances, most. But we know that physician referral really matters. And when the clinicians speak up about it, talk about it, it matters. When others in a person's life are talking about an intervention and supporting them, it's much more likely that storytelling,

that sharing of experiences really does foster that kind of community support for this kind of movement that we are working on together here. So the training is critical for those coaches.

We move onto the second element which is the recognition program. This is a really key element to the national DPP because it has allowed all of us to gather around a national set of standards. If you're really going to scale anything and have a big impact, you need to have a common agenda and you need to have a common set of metrics. And so, that's what the recognition program allows us to have.

CDC does manage this recognition program and we really feel it's a service that we provide on behalf of the country so that people can come in with their curriculum. We examine that curriculum to make sure it meets those national standards. If it does, come on in. We want you to come in. We don't want people getting in an argument over their curricula. We want us all to be anchoring around the necessary components of the curriculum that we know evidence has shown us works.

That means we've got curricula that are directed specifically at American Indian/Alaska Natives. We have a group lifestyle balance program for Native Americans that has been approved. There are those organizations who are serving American Indian/Alaska Native communities who have brought in a curriculum that has more cultural sensitivity. That is fantastic. We have other cultures who have brought in their curricula. If it meets the standards, CDC wants to approve and then we will work with the organizations to help make sure that that curriculum does meet those standards.

We collect a core set of data and I'll mention those in a moment. This allows us then to have a national, really repository of data now so that we can all be understanding how many people we're reaching, how many programs we have, where are they're located, and to help us all again join forces and work together as opposed to everybody sort of running at this randomly trying to do good work but not really gathering and marshaling our forces to work together.

The third component is the intervention sites themselves. And this of course is where the rubber meets the road and where there's all the action going on. These programs are being delivered in all kinds of places and that's a great aspect of this. It can be delivered wherever you can gather people or even virtually now, it's being done over the airwaves and then over computers and telephones and all sorts of technologies. Again, provided it can meet the standards and it can achieve the outcomes of the program. And so that's one thing and the recognition program that we are looking at bringing in a variety of organizations.

We have also been able to set up now the opportunity for health systems and payment health plans and employers to be linked to these organizations who can deliver the intervention. This is not happening in all circumstances, not every delivery organization is getting reimbursed through health plans or through employers. Some are still doing this on grant dollars, some are still doing it on other sources of funding, but our intent at CDC has to been to work with public and private payers and we and all of the partners working on this have made great strides and I'll share a little bit of that in just a moment. But this really is again that infrastructure for really being able to link this lifestyle intervention to the healthcare system in this country, but not medicalize it, not make it a medical intervention but make it a lifestyle intervention that can be delivered in the community but be linked to the healthcare system.

And finally, we need to be sure that we are getting the word out to people and we are getting traffic into these programs and we are getting health professionals to talk about the program, recommend the program to their patients, and family and friends to recommend it to their friends and family and neighbors and communities all over the place. And so we really have needed to put attention into a national public awareness campaign. And so with our partners, the AMA and American Diabetes and the Ad Council, we have launched the first national public awareness campaign on prediabetes. And so we really look forward to working with all of you to determine the best ways to get the messages out in Indian country and to really identify those spokespeople. We have found that the people who go through the program

are your best spokespeople. We really want to marshal as many opportunities to really have a national conversation about prediabetes and about the National Diabetes Prevention Program.

Let me dig just a little bit deeper here to talk about the recognition program. This information is on our website and I really encourage all of you, those of you who are on the line who already offer this program, you no doubt have many lessons learned and great experience to share with your colleagues, the good, the bad and the ugly. It's important that we all tackle these problems together because this is not easy what we're trying to do, but it is really our clarion call. We must really be pressing on this most proven intervention and maximize it as we also work to maximize those policy system and environmental changes and in other broader policies that will improve the environment around us for a much healthier life.

And so the Recognition Program as I said, it's really there to assure quality and fidelity to the evidence. It's there to give us really a repository of registry of those organizations who have met the standards. More and more of payers are looking to CDC-recognized organizations because they know that they are meeting the standards and that they are committed to doing that. CDC also uses the Recognition Program to provide technical assistance and to bring together the organizations that are delivering the intervention so that we can indeed problem solve and organizations can maintain their recognition.

So I said we encourage everyone to read the standards. There is a capacity assessment that's posted. It helps our organizations really ask themselves some questions about their capacity. And if you're not yet at that capacity, hopefully, you can identify those things that will help you move in that direction and if conversations with us and I'm sure our partners in Indian Health Service would be happy to talk with you about how to best prepare or what are things that can be done to better prepare. You do have to have the ability to collect the basic data and you want to be sure that you have that system in place and that you really do need to have the ability to either train coaches or access training for your coaches.

The standards, this slide just gives you a little bit of information about how that document is organized. There is an overview that talks about the standards and requirements for recognition, the process for applying for recognition. The application process is very simple and straightforward. Our goal, sometimes, it may not seem that way, but we worked hard to try to make sure that both the application process and the data submission process is not overly cumbersome. But it does require that you do have some data collection capability, some ability to make sure that you have a system in place and that you do have an infrastructure in place. And those things are important for successful program implementation.

Here's what the process looks like for recognition. As you come through and you apply, you submit the curriculum and statement of use to or that you're using say a CDC-approved curriculum. If you have not yet had the curriculum approved, you do submit it and we review it as I had mentioned earlier. We often work with organizations if it's not quite where it needs to be to help them make adjustments to get it where it needs to be. And then you move into what's called pending recognition status, and I need to say that this is how things stand now. Many of you are aware that we've been working with CMS and that Medicare is now going to be providing coverage for the National DPP. And so some of these terms and some of the process for recognition will be adjusted as we move into those finalization of that rule or actually rules because we'll be addressing this program to more than one Medicare rule.

As it stands now, you come in through pending, that takes about two weeks or so to get grant pending. Sometimes, it's done even much quicker than that. And then we collect data from organizations. We really want the programs to begin offering the Lifestyle Program within six months of getting recognition. It's really in the program's best interest to start offering the program shortly after recognition, just probably want to think about coming in for recognition once you're ready but that's really up to the organization's decision. At this point, we just say "Please begin to offer the program before six months as has elapsed."

At 12 months, we collect the first data. I can tell you that that will likely be changing. We used to collect it every six months. We will very likely be going back to collecting it every six months instead of every twelve months. That first set of data is submitted and then at 24 months, we get the second set of data that's submitted and the data are things like attendance of the participant. We get only the identified data but we do get participant level data that's de-identified. So we don't know who they are, only the organization knows who they are, so we protect privacy. And we look at weight loss, attendance, documentation of minutes of physical activity.

And again, the program is a yearlong. For six months, you have to offer at least 16 weekly sessions that are about an hour long. The second six months of program is approximately at least six monthly sessions that are offered again about an hour long. We have found that many organizations have put in what they call transition sessions so they don't just leap from weekly to monthly, they transition and they'll do biweekly and then they'll move to monthly. So there is again the sort of take-home points are has to be yearlong, needs to be basically broken into two six-month segments. You basically move from multiple weekly sessions to periodic monthly sessions as the participant is moving into that intensive portion to the more maintenance portion in the second half.

So we have collected that second set of data. Recognition is at that second set of data, two years, an organization will move from pending to full if they have met the standards. You maintain full recognition every 12 months if you continue to meet the standards annually. You don't have to reapply and again, you've maintained that as long as the standards are met. If for some reason an organization has not met the standards of two years, they have an additional year to seek to meet the standards so they can stay in pending a third year. If they then are unable to move to full, they need to withdraw and wait a year before reapplying again. Some of that again maybe adjusted a bit with the new Medicare rule coming in, but that is as it stands now.

What is that I've mentioned the kind of data that we ask for? Here's a summary of it. We look at participant data because people need to come in, they have to over 18. I know many ask how about a prediabetes program for youth. That is certainly an area that many are investigating right now. It could be very appropriate particularly in Indian Country because of the high rate of type 2 diabetes in youth, but we also encourage organizations and groups to really think about those policies that impact children in schools and in daycare and to really again look at whole population approaches in children as opposed to only identifying those at high risk. It really has to do with the sheer numbers. But in American Indian/Alaska Natives, there is a high preponderance of prediabetes and type 2 diabetes in youth.

We also collect demographic data, the physical characteristics and as I indicated, weight and documentation of minutes of physical activity.

We hope that people have found significant benefits of getting recognition. As I mentioned, more and more of the payers are looking to reimburse only those organizations that have CDC Recognition, the TA that we provide, the ability to be included on CDC's website so lots of organizations can find you if that's what you want, you really want to be recruiting participants. We have some organizations that only offer it to their own employees or only offer it to their own sort of more closed group. And so for them, that's not as much of a benefit.

Just quickly, I want to close with a couple of things going on that are really front and center and that is the Medicare coverage. I hope many of you are aware that the YMCA was used to test this model with Medicare. They were really able to do that because they have been a part of the National DPP from day one. It's exciting to see these results happening because of the work that all of us have been doing to make this happen, everything from the investigators and participants in the original DPP all the way up to those working on payment with employers and private insurance companies and all kinds of things.

Medicare has moved in now to rulemaking. They are moving into covering this for fee for service beneficiaries. We're working with them and also paying, covering this for the managed care, Medicare

population and we are in rulemaking right now. The first rule has already been opened for public comment, and a lot of the focus of that was on the requirements for those who will be suppliers or delivers of the intervention, the actual benefit design itself. And so that rule will be finalized in the next month or two. You should be hearing about the final rules sometime in November and I know many of you probably made comments during that public comment period. There will be additional rulemaking going on in 2017 because there are some policy issues that CMS and CDC were not able to address during this first rule. It wasn't intended to be able to do that but we will ultimately be able to get to that.

So where we stand now with the National DPP, we have over a 1,045 organizations who are delivering this intervention. And actually, it's now in all 50 states. Since I made the slides a few days ago, we're now in 50 states and DC. I wanted to be sure to point out that of those that have reported to us that they're serving American Indian/Alaska Natives, we have 156 organizations that report doing that. We are serving over 88,000 eligible participants and that is in the organizations for which we have data. We know that there are thousands more being served but we don't yet have data on them. And of that, we know that there are 683 participants who have voluntarily identified themselves as American Indian/Alaska Natives but there very well could be many more. They just have chosen not to report their race ethnicity.

Average weight loss is 4.6% for those who have attended four sessions. The goal is five to seven percent.

We have over 60 commercial health plans. We've been working with our state health departments on getting state employee coverage. We now have that going on in 11 states which is providing coverage for over three million people. And I mentioned the Medicaid coverage and also we have launched a Medicaid demonstration project. So our goal is really been to get commercial health plan coverage, Medicare coverage and Medicaid coverage and we're making really significant progress in all of those areas. And certainly, we know that Indian Health Service has been forwarding people the opportunity to use their SDPI funding for this and I think it's definitely continuing to look at those opportunities for organizations to use opportunities through Indian Health Service.

I wanted to mention because I anticipated getting a question about the cultural attributes of the curriculum. We do make a curriculum available free of charge on our website with no copyright things attached to it in any way, shape or form. And so this is available in English and Spanish but we invite people to use the supportive materials that we have that surround this curriculum. We call this Curriculum Prevent T2 which is a name that focus groups thought was a catchy name. And so we have named the curriculum that. But we have a lot of supplemental materials and handouts and promotional materials about the National DPP, and you can use those materials. You can adjust the photos, you can use the photos. We really hope people will use the language that's in here, but we work with organizations if they want to make those adjustments but still use the basic pieces that are here. We want people to make them useful to their population. So just a brief word on that but as I said, we approve a variety of curricula and want to be sure that people are meeting the cultural needs of the populations that they're serving.

I also wanted to draw your attention to some tools that are available, particularly for healthcare professionals that we've done in partnership with the American Medical Association. If you go to PreventDiabetesSTAT.org, that's really an initiative that we have that stands for prevent diabetes STAT is Screen Test Act Today, and we've got some healthcare toolkits around screening for prediabetes and about referring and some really helpful information. It's also got some patient materials in there for people to determine their risks and to have that conversation with clinicians about prediabetes.

So with that, let me stop and see if there are questions or let's see what questions have come in.

Jan Frederick:

Thank you, Dr. Albright for all of that information, really inspiring information and challenging information. We do have a number of questions from participants, and if you'd like, I can read those questions for you.

Dr. Ann Albright:

Sure.

Jan Frederick:

Okay, all right. Let's go through them. The first one I guess is more of just a comment, you can decide if you want to say anything. "So now that we know we have been fighting big sugar for the past few decades, I wonder how much easier it will be to decrease the incidence of diabetes in the general population. The next few years could be very interesting."

Dr. Ann Albright:

Yeah, I agree. It is going to be interesting. A recent study that came out has shown that sugary beverage intake is declining. So that again should give us a bit of optimism. We'll see going forward where that goes but that certainly been the focus for a number of groups, and I think we're going to be learning a lot as we examine what's going on in Mexico, Berkeley and Pennsylvania or locations that are looking at some of the ways in which sugary beverages maybe policies that may work on limiting. Those are controversial to many people. But I think also work folks are doing around water consumption, making those more available, promoting that. I think a lot of those joint efforts hopefully will pay off for all of us.

Jan Frederick:

Thanks. Then we have a couple of questions regarding an approved curriculum. The first is "Are any of the previously approved curricula available for review?"

Dr. Ann Albright:

I think it would really be identifying what curricula that you're aware of. I can certainly ask my team if there are some ways that we can identify the curricula that have been reviewed. Some of them are considered proprietary.

For example, we have organizations like Weight Watchers now, Jenny Craig and others that are in the Recognition Program. They have adjusted their programs, some just slightly, some more elaborately to meet the standards. Some of those folks certainly may not be willing to share their curricula per se, but some certainly maybe willing. You are more than welcome again to look at the one we have posted free of charge on our website. We know that Pittsburgh has one that is their Group Lifestyle Balance that was done specifically for a Native population. So I think to the degree we're able list those curricula but certainly asking those working in this area what curriculum they're using, the Y uses the one that had been done by Indiana. We had our earlier one posted that can be used as well but there were some copyright issues around that one because it had been copyrighted by University of Pittsburgh. So we wanted to be sure that it's a very wonderful curriculum and Pittsburgh, we managed to move them to an agreement where they will not charge people licensing to use it if the entity is not making a profit. But that's a decision of Pittsburgh because during the NIH trial, they copyrighted the curriculum. They don't own the content. They own the look and feel.

And so I think the answer of the question this person is asking is about being able to look at curricula that are already out there. I guess what I'm trying to say is there are some that are publicly available and you can certainly Google curricula for the National DPP or for diabetes prevention and look at those. We've posted two of them. You may certainly look at Pittsburgh, Indiana, has had one that the YMCA uses. So I think there are a number of them out there but this again, if they are proprietary, then we wouldn't be able to share those. It's just not our ability to do that.

