Moderator- Hello, and welcome to public health live. I will be your moderator. I ask that you please fill out your online evaluation. Continuing education credits are available. We encourage you to let us know what topics are of interest of these so we can best serve your needs. Our toll-free number is 800-452-0662. You can send your written questions by fax at 418-0696. We have two physicians joining us today. Dr. Albright, I will ask you to give us an update on the diabetes epidemic that we are seeing.

Dr. Albright- I think the important thing for people to realize is that the numbers are going to go up, both for those who live longer with diabetes and as we get more cases. What we want to focus on is helping those who have the disease live longer and we want to see the number of cases go down.

Moderator- There is sort of a warning, isn't there? We talk about pre-diabetes. What does that mean?

Dr. Albright- That is a condition where you have a blood sugar that is elevated, but not high enough to be diabetes. But it is on the cliff. We have people that come back from that situation. That is the good situation, that you do not have to develop a type two diabetes.

Moderator- There are situations where you can come back. How do you diagnose?

Dr. Albright- We can look at the tests combined. There are very few ways that we can look at people who are pre-diabetes.

Moderator- Just by looking at you, you know, could you tell? Is there something that I would say, go get the test?

Dr. Albright- There are risk factors. Not everyone is necessarily going to be at risk. It is important to know what the risk factors are. It is a good conversation to have with your health care professional.

Moderator- This current generation of children may have a shorter life expectancy than their parents. And type 2 diabetes is likely to strike the younger generation. This is distressing. What are the chances of developing diabetes?

Dr. Albright- One in three born in the year 2000 will develop diabetes in their lifetime, and it is actually higher for Latinos and African-Americans. The yearly risk is about 1%. That is, if we stay on the course that we are on.

Moderator- There is a Prevention time window.

Dr. Albright- That is important for people to understand. And when people develop diabetes, they have about a three to six year window. We have data that comes from the provision that shows this. In the British study it was about 4.5. And with Latina Indians, it was even less. It is rare, but it was a harbinger. People should not look at, well, they
have a touch of diabetes, they have a little blood sugar and elevation. If we know that people have pre-diabetes, let's get them into a program that works.

Moderator- There are some complications during this time that we can look at also.

Dr. Albright- There are some things that can impact people with pre-diabetes. There are also cardiovascular complications. The number one cause of death in our country is cardiovascular disease. People with pre-diabetes are also at an elevated risk.

Moderator- We have had several watchdog prevention trials in the past several years. Can you tell us about those and what we have learned from them?

Dr. Albright- We want to base our interventions on evidence. The thing about researching pre-diabetes is that we do have large trials, and international trials. They have not just been done in the U.S. They have been done around the world. Some of the trials done in other countries were done before the Diabetes Prevention program. Some people have said, that is the Spanish population, or they are overweight, and we have better lifestyles. There was a trial done here and it did demonstrate that with modest lifestyle changes and improvements in nutrition -- it was not putting people on a special diet, but reducing calories and fat content and introducing them to exercise. We have proven that we can postpone type 2 diabetes. It was an efficacy trial. We had to prove that you can prevent diabetes. There has been subsequent research that you can make that a real-life situation. All of the research was done in a pristine, carefully controlled environment. The trial from the U.S. actually did show that you can reduce your risk of getting diabetes by about 58%. As a researcher, I take that to the bank.

Moderator- And that is not taking any kind of pills, just making changes in your life.

Dr. Albright- That is correct. In these research trials, people did get a lot of support and they got a lot of help. That is why real-life application of this research is critical. We cannot always jump from research into the real world, but we ought to make sure it is going to fly.

Moderator- You looked at many things in these studies and you did look at ethnicity as well.

Dr. Albright- That is an important thing to emphasize. People can say that a research trial was done in Caucasian men, for example. That research worked very hard to get a good cross variety of different ethnic groups. You can see that the lifestyle intervention worked across all racial and ethnic groups. That is another important finding in this study. It did not only work in one ethnic group, but across the board. I think the nuances will be where and in what way we deliver it. But those studies were out to prove whether you can prevent type 2 diabetes. And we can prevent it in all groups of people.

Moderator- Tell us about some of the improvements that you see with lifestyle intervention.
Dr. Albright- Will we see with improving your risk of diabetes, again, with your chance of getting pre-diabetes is that you are not only going to reduce your likelihood of getting it, which is huge, but you will also lower your cardiovascular risks as well. People have lower blood pressure with lifestyle change, improved cholesterol. They are modest improvements, but incredibly important. It is a true win/win.

Moderator- I want to look at this more closely. Does this have an impact on your HDL's as well?

Dr. Albright- It can help improve the level of your good cholesterol as well.

Moderator- Is this just moving more?

Dr. Albright- It is accumulating 150 minutes, which averages about 30 minutes a day, five days a week. Most people in the prevention program walked. It is an aerobic activity, so you want to get your heart rate up, but you need to start where you are.

Moderator- And the good thing is that it is not expensive.

Dr. Albright- That is right. Certainly, we want people to have safe places to do that. There are some things to think about in the communities where we all live and work and play to accommodate this kind of activity for people to be active.

Moderator- The numbers are impressive. But do we know about, and what do we know about long term results?

Dr. Albright- That is an important question because people will say that they did it during a research trial, where anyone can lose weight for six months. CDC has also been involved in our cities in China. People who have lost weight over time, if you're in this kind of a program and you have still been able to maintain the lost weight; you are still able to reduce risk of type 2 diabetes. We have been following folks for 10 years and we have still seen continued improvement. It has now moved to a 34% reduction with lifestyle, but it is still a very impressive outcome.

Moderator- I'm going to go to the next slide because this refers to the Community partnership model. Walk through the chart and explain how this model works.

Dr. Albright- You have got the population in total who are a healthy population. There are some things that need to be done for this population, things like policies and health policies, maybe menu labeling. As you move into those who have pre-diabetes, you probably will have to do more for them. These things are helpful, but not sufficient alone. If you look at the circles on the diagram, that means we need some things in the community and in the health-care delivery system. If you look at that whole piece in the center, that is what we can do together. These are things that we can do in substantive ways to join forces. Many of us can work to put primary prevention of type 2 diabetes in
place. It is not only of clinic care and not only the community. We need to join forces. One in three are developing this disease in our lifetime, or one in two in many cases.

Moderator- We are going to take a look at the Indiana School of medicine. It describes a real live translation of the Diabetes Prevention Program community studies. And that is our point.

Dr. Morero- I am Dr. David Morero, director of the Diabetes Center at the Indiana School of medicine. There are loads of people that are developing type 2 diabetes. Fortunately, a landmark study, the diabetes prevention program, also known as the DPP, shows that people can reduce their risk factors by as many as 60%. The problem was when we did the DPP study, there was a thing called an efficacy trial. Meaning, they had a lot of money and did not care how you got to the goals of the program. We had a strong need with this important finding to figure out ways to put this into the community. Here at Indiana University our approach to the efficacy DPP study was to figure how to make it compatible with different groups. One on one you had your own coach and you could not really afford to have doctors and nurses and health care personnel putting this into practice. So, we used the Y.M.C.A. Why? There are over 2400 Y.M.C.A. facilities in this country. Recently, New York State decided to reorganize themselves and bring together a strong coalition of stakeholders who wanted to do primary prevention in the state of New York. I have the honor of working with the state in developing this program and teaching people how to develop this program with the DPP prevention program. At first, we did not know whether it could really do the job. So, we tried it had a local YMCA and had great success. Given that diabetes is at epidemic levels, we need to do something to slow its progress. We need to develop strategies that are effective and cost-effective. The good news about the Y.M.C.A. program is that we can develop a program for prevention that is affordable. This is a 16-week program with monthly maintenance. For $200 a year, it proves to be cost saving.

Moderator- We are turning now to Dr. Nanavati, a primary-care physician in New York. We welcome you to our conversation, and would you talk to us about your patience in your practice who might be at risk for type 2 diabetes?

Dr. Nanavati - We definitely know from what Dr. Albright said is that one in three will be at risk. Here are the risk factors, one of them being aged 45, also family history, ethnicity. The history of gestational diabetes is very important. Also, women who have had deliveries of children weighing more than 9 pounds, that also becomes important. There are several endocrine oriented ailments. Also, the presence of cardiovascular disease. We talked about hypertension. Also, physical activity.

Moderator- What are some of the things that you're looking for when someone comes into your office?

Dr. Nanavati - There are several things. One, life style. In terms of activity level, there physique, and glucose measures. We have talked about elevated triglycerides, HDL. In particular, hypertension and people who are lacking in physical activity.
Moderator- When people come in and you say to them I want to test you for diabetes, do they normally have this attitude of, yeah, I kind of thought, or is there a tremendous denial?

Dr. Nanavati - Pre-diabetes has become very well known in the medical community, but people outside that have a notion that if I do not have a disease, there is no such thing as a pre-disease. Clinicians would say that there is -- that we all have pre-disease. We need to take better care of ourselves.

Moderator- Talk about some patients in your practice who have been diagnosed.

Dr. Nanavati - I had a lady who was diagnosed who was overweight, had a history of hypertension and had triglycerides never elevated in the 300 range. She was trying to take care of herself, but at the same time got married about a year ago and over that past year, her husband liked to eat out a lot. He would want to eat out four or five times a week. Over the past year, her glucose has gone from being in the mid 90's to being 120, 122. That is a classic example. Another is a truck driver into has a sedentary job. They tend to eat where they can get the food at the rest areas or whatever is available. What is happening is that the ability to get exercise is limited. The availability of food is limited, and the food choices as well. Over time, that can lead to a pre-diabetes.

Moderator- Let's take a listen to a patient diagnosed with pre-diabetes and let's hear what she is doing to stay healthy.

Carol- My name is Carol. I am a resident of East Harlem. I took advantage of free testing that was available and I was told that I was pre-diabetic. My initial motivation was family. I have two sisters on dialysis and I did not want that to be me. Portion control, eating in a more nutritious way so as not to elevate my blood sugar level. And eating little portions throughout the day. Be healthy and be educated. Even if you, yourself, do not have diabetes, I am pretty sure that someone in your family does. Talk about it freely. If you do not have diabetes deal with prevention. I think it is a good program. More people should participate. And the workshops are really good. To prevent the illness, that is the main thing, and to educate children so they have that knowledge about how to read, how to prevent diseases. And especially if diseases run in the family.

Moderator- Very true words there. Does Carol represent the typical patient with pre-diabetes?

Dr. Albright- In many ways she does in that she has taken action. She is what we like to have the typical patient do with pre-diabetes. She had seen the concern from her family and the outcome, and she has taken action that is a key factor with people with pre-diabetes.
Moderator- Interesting that she knew the family history, but still never thought it would be her. Talk to us a little bit about the role of the primary care provider, in working with patients who have been diagnosed with pre-diabetes.

Dr. Nanavati - In the case of Carol, she actually had been hit hard with family history. I have been told that people do not take it seriously enough. In her case, she was able to aggressively attack it, and it was nice for her. In working with patients, the big thing you look at is, the primary care provider has to screen and educate. And you do that not only so we get the point, but the patients get the point. Diabetes is considered a cardiovascular disease equivalent. If someone is diagnosed with diabetes, clinically, we treat them the same as someone who has had a heart attack. It is very serious.

Moderator- That really drives home the point. You work with clinicians, right?

Dr. Nanavati - That is correct. And we might enter the year in and also the triglycerides, the HDL. It is a very important factor. Looking at the vital signs, blood pressure, pulse, heart rate and resting temperature. Those are very important things. We're not talking about just a point in time intervention. We're talking about a different lifestyle that takes them to a happy place in terms of health and one that helps them be functional in the latter years of better life.

Moderator- There are community diabetes prevention programs. Let's look at a map showing 10 locations for the New York State Y.M.C.A. diabetes prevention program. Health-care providers are in the areas surrounding each of the participating Y.M.C.A.'s that help identify the programs in their communities. Doctor, how can you help people tap into these resources?

Dr. Nanavati - It is a fascinating program and it has been laid out in a very simple manner. Specifically, the basic requirements that are necessary to evaluate people whether they are qualified for the program simply include glucose measurements and body mass index. If people meet the criteria, then there are two simple forms. They can go to the Y.M.C.A. and they will be introduced to the program in terms of lifestyle intervention.

Moderator- Can you walk us through the process of the program?

Dr. Nanavati - Sure. The initial form really talks about a discussion of pre-diabetes, helping them explore their family history and their own lifestyle intervention. And the next that is not only the clinician -- and I make this point that the office staff can review the information. Also, the patient's own history can be reviewed in that. This information can come from a fasting test. It is not a very complicated process. And we get clinicians with lots of paperwork, but this makes it easy for the staff, the clinician, and the patient to work together.

Moderator- And this is filled out in your office?
Dr. Nanavati - That is correct. And the patient actually takes it over to the YMCA. Those people are informed as to where to guide the patient.

Moderator- It is a good program to help people reduce their risk for diabetes. Let's take a look at a few other interventions that are designed to reduce the risk of type 2 diabetes. The New York State campaign sponsored by the New York State Health campaign is next.

Wanda Montalvo- I am the clinical director for the New York State diabetes campaign. Our initiative is a statewide initiative funded by the $35 million commitment by the foundation focus on diabetes over the next five years. New York State has 1.8 million people diagnosed with diabetes. We focus on the clinical side and in the communities and on policy. Our initiative is to prevent diabetes as well as helping people who are already diagnosed. And engaging as many primary-care providers as we can in our campaign. We're working in the community as well as with the state and the Y.M.C.A. foundation to do these prevention programs. This is in at least 10 Y.M.C.A.’s across the state. The one in Harlem is a really great example. Diabetes is going to be a tsunami for us. The state estimates there will be about 3.7 million people in the next several years diagnosed with diabetes. I can do what I want in the office, but unless I am partnered with the patient -- prevention happens at home. But we are also able to help them get better outcomes.

Moderator- She really referred to that succinctly as a tsunami. I want to talk to you about the process.

Dr. Albright- That really is critical. We can often give people just the tools and we are well intentioned and we want to help people, and I'm sure all of us have been in some such situation. But people have to own it. They have to be engaged. The community has to support people who are at risk and who have diabetes. And it really is a societal issue. You're not on your own, but you have to own it as well. You, your family, and the people around you need to be engaged. There is plenty for people to do, but you do have to own it.

Moderator- You cannot just keep coming back from the brink.

Dr. Albright- No, and you cannot expect everyone else to worry about it and not worry about it yourself. You have to share the burden. That can be challenging, but you go along way if you adopt a philosophy about how you are going to tackle this. You can live a very full and successful life with a very serious disease, or prevent a very serious disease.

Moderator- Doctor, you mentioned the diabetes educators and the role that they play in helping people own this.

Dr. Nanavati- Diabetes as a physical entity is a social phenomena that we're seeing.
Educators are an underutilized resource. It is very important for the clinicians to link up with educators. Clinicians do not always get to link up with the patients. Educators can take the time to do that and have the expertise to do that as well.

Moderator- And doing it on live TV, they can also put you in connection with community programs. It is like one-stop shopping.

Dr. Albright- This is a real working example of clinical entities and the clinical sector working with the community sector. We have talked about what we are desiring to do, but this is a real-world example.

Moderator- We will listen to a doctor from the Mount Sinai School of Medicine in New York city.

Dr. Carol- I'm a doctor and a researcher and my research focuses on preventing diabetes and controlling diabetes and its complications. The reason everybody is here today is because we need to figure out how to prevent diabetes. It is estimated that one in two African-American and Latino children born in this generation will have diabetes as adults and we need to do something about it. We know the number one way to prevent diabetes is to find people who are overweight, who have sugars that are higher than normal, but not for the Diabetes level, and help them become more physically active. When we look at what we need to try to help people, to figure out if they have diabetes and then prevent diabetes, the first step is working with our clinicians. The second major channel is working with the environment. We have walking trails, for example.

Spokesperson 1- The Parks Department has created a "Walking Harlem." We knew there were not a lot of trees and there were a lot of health problems. We have created a community project. We realize one of the main concerns was obesity and diabetes. Obviously, we had some great partners and we work for the community board, the Health Department, the diabetes impact center. And we will have signs up around the community. It shows people where to go.

Dr. Carol- There were not enough supermarkets in the community. So, we started a campaign to bring more into the community. And if you go into a restaurant, save half your meal for another time.

Waiter- We have the cards on the table and we also have it posted in the window. By eating healthy, and by losing weight, things like that. You can eat half now, and eat half later.

Dr. Carol- We have the environment, we have the clinicians, and the third thing we have is what we can do to mold and educate the community. Talking about pre-diabetes, is like saying the roof is about to leak. If you do not have enough money for rent and other things, why would you focus on that? We have started a campaign to explain to the community that this is the time to focus on diabetes. The time is now. We have the science that we know how to prevent diabetes. But it takes a partnership with people in
the communities that are disproportionately and unjustly impacted. No matter what we as
policy makers are clinicians know work, you ought to have partners in the community.
You have to develop strategies. These things happen with community partnerships. I
encourage people when they're thinking about trying prevention, to try to prevent
diabetes; they should really work with people because that is going to be what makes it
work best.

Moderator- Partnership, a partnership, a partnership. You have got to be hand-in-hand
with the community. Your thoughts on the program in New York City?

Dr. Albright- Tremendous. We have a lot of work to do and we need a lot of ideas.
There are a lot of ideas out there and often what we need to be doing is implementing the
ones that work; both in the scientific arena and in the practical arena.

Moderator- I loved when she showed the size of a bagel and a bagel. And anyone who
has been in New York City, you know that you grab a bagel when you are running.

Dr. Nanavati- People have to decide what sizes are the right portion sizes. We go to a
restaurant and we expect to get the most for our money. At home, when we gather to
feast, we do not think about how much. Overtime, calories lead to gaining weight and so
on.

Dr. Albright- We are reaching people at their core. Food is very personal. Talking about
people's health, their lives, their happiness, those things are very personal. You want to
have that combination of things that are maybe more policy oriented, that have an impact
in the community. It is a great combination, that policy and getting to the heart and
getting engaged.

Moderator- I understand there are some exciting things that are happening on the federal
level.

Dr. Albright- Right now, we are working with partners, and that includes the Y.M.C.A.
and others, like United Health group. We're working with the National Diabetes
Prevention Program and our goal is to systematically scale that model that Dr. Morero
talked about so that we really will on measurable level reduce the cases of type 2
diabetes. We have focused on four key areas, and we hope people will remember what
we're doing and how they can get involved. You have got to have a trained work force.
There are some great ideas out there, but if you do not have a trained work force, whether
it is staff or diabetes educators or others, it will just be a nice idea that will not be able to
be to scaled and sustained. Number two, if we really want to implement a recognition
program, this is so that we can assure the public and clinicians and others that what we
are doing is founded in science. There are a lot of ideas out there and it is not that they're
all great, but we need to be implementing. You have to choose wisely. We want to
assure fidelity and quality of program. And then the third one is we want to be
implementing this at the site. You have got to get this up and running. We're now
working with 11 sites. United, they are funding six sites. And the state of New York is
another funding source that we're working with. This is that beautiful partnership between the clinical and the pair in the community. The government is not expected to pay all across the country, but it does need to be supporting that infrastructure. And then we want the private and public sector to join forces. And finally, you have got to tell people about it. It is not, "If you build it, they will come" necessarily. And we need to educate clinicians. We do not want them to be surprised by this. We want them to refer people and then we would need to have folks take advantage of it. We have these four pillars to create the National Diabetes Prevention Program, but we really will change the one in two developing diabetes to one in three. We have 60 million people in this country have pre-diabetes, so it is not a small number. But a more intensive and targeted effort has to be directed to people at risk of diabetes. And then there are the lower risk or moderate risk people. If we implement these policies, it will help all people. It is the same concept that you would not give medications to someone who did not need it. So, we want to target those who need it.

Moderator- And it is practical. I want to remind you, feel free to call in with questions at 800-452-0262. We now have a couple of questions. One is, is there anything we can do right now to help kids that are at risk of diabetes?

Dr. Albright- But I think the way we want to look at childhood issues, it is very critical that we change the course of our children. All you have to do is look at grade school pictures and look at how much heavier kids are today. Think about health promotion. Maybe there's some disease prevention involved, but it is certainly health promotion. The NIH is doing some research trials right now like they did for the DPP. Now you're seeing things like better offerings for physical activity for children, better offerings for nutrition for children. Parents are more engaged in what their children are eating. Those are the things that need to be happening now. As far as prevention, we're still learning as far as things better evidence-based. We need to be doing things for our children and for adults that have pre-diabetes. Since we cannot do everything, we want to choose wisely.

Dr. Nanavati- One of the things that we do with our school district is, again, the nutrition program in the school district which is excellent. We have done things to get soda machines out of the schools and have regular instruction for children so that they can understand that a younger age.

Moderator- Teach them when they are young the right stuff. Dr. Albright, you were talking about the four pillars and that wonderful program. If you would talk about and update us on how that rollout will take place.

Dr. Albright- We have, as I mentioned, gotten these 11 sites. And it does not just mean one building, but the larger community. And we have a payer -- because these are huge developments. Oftentimes, we have a great idea, but not a sustained source of funding. And we want the public health community to be engaged, the diabetes prevention and control program that exists in every state, the local health department, there are opportunities for them to partner in what is going on. Our hope is that there will be opportunity for us to scale this work and get as into many more communities. It really
will encourage people to identify what is going on in our communities. If someone is not there yet, hang in there. We're working our way there, but it will take some time.

Moderator- We got a question from the rural Health Network, how do we translate this to the rural areas with no Y.M.C.A. and no diabetes educators, and folks really have to travel to get the care.

Dr. Albright- That certainly is an issue. Rural areas are really challenged with these issues. What we're doing is training the workforce through the Y.M.C.A. This is not a Y.M.C.A. only program. The National Diabetes Foundation is intended to draw in other providers for prevention. Folks can be trained to do it. It does not take an advanced degree to do this work. You can look at organizations in your community that have the infrastructure and the workforce that can be trained. You do not want to just run in and drop some training manuals on some people and expect them to do the work. Take a look at the smaller areas and figure out who might be there, or how you can help them to tap into a Y.M.C.A. -- that may be further away.

Moderator- It can basically become the hub.

Dr. Albright- Exactly, and this is just the first year. We're finishing these training tools. 2010 is a big year. And in 2011 we will be able to expand this into many more communities. Keep the urgency and enthusiasm. But we want to do this in an organized way. Otherwise, it could be a real disservice if it is not sustainable. You pull in and you blow out of town again.

Dr. Nanavati- What we're talking about is not anything that is new in terms of day-to-day clinical practice. In rural areas, the clinician can be the motivator in the community. Community health centers often have people who are thinking, how can we help? The clinician can actually meet with them and do some sessions for the community members at large, or empower them to give out the information. But I think the question is a great one from the perspective that the clinician in the community will be the primary motivator. You can start today. And I think it is important to do that.

Moderator- You just used the word "Motivator," but how do you get people motivated? How do you do that?

Dr. Nanavati- Oftentimes, we just have sessions that are free and we have healthy foods available, such as fruits and vegetables, and not so much desert. If you can get one family member to buy in, you'll start to see a change in that family. Then you'll start to see a change in the community. Do not expect huge results from day one, but if you transform one life, that will affect the community eventually.

Moderator- Before we close in a moment, if anyone wants to grab a pen if you have not already been making notes, we will give you more information on the Y.M.C.A. program. There is the phone number up there. We will leave it up for a moment.
As you pointed out, Dr. Albright, to translate that into your own community, to find the stakeholders who may be able to best implement this into the community, that is where you want. Are any insurers paying for diabetes prevention? Is that a problem, or is that working?

Dr. Albright- Right now, this is actually news making. United Health Group has met with us and other partners to get together to ask the question, what is it going to take to get diabetes prevention on the map? And they stepped up to the plate and are reimbursing my staff to deliver this program. They're doing it in a way that is very much pay per performance. They get paid for achieving outcomes. They will get a payment after a certain number of visits and after a certain number more. It really is a quality effort and the payer is seeing part of what they will benefit from and so is the community. We have millions of people who need this assistance and these programs. We have got to work with the community and reach out to have them work with us.

Moderator- And expand knowledge and shrink the waistline in the process.

Dr. Albright- That is right.

Moderator- We want to thank all of our guest for this easily digestible information that makes it applicable to our communities. We want to encourage you to fill out your online evaluation. Continuing education credits are available. We're also available with this program in the form of Podcast. Our standard stream will be up in about a week or two. Please join us next month on seasonal and pandemic flu. We will see you next time on public health live, the third Thursday breakfast broadcast.