Moderator: Hello and welcome to Public Health Live, the Third Thursday Breakfast Broadcast. I'm Rachel Breidster and I will be your moderator today. Before we get started I ask that you please fill out your online evaluation at the close of today's program. Continuing education credits are available after you complete a short post-test and your feedback is helpful in planning future programs. We encourage you to let us know what topics are of interest to you and how we can best meet your needs. We will be taking your questions throughout the hour by phone at 1-800-452-0662 and you can e-mail us at any time throughout the hour at phlive.ny@gmail.com. Today's program is "Dental Health in New York State Children: A Way to Keep Kids Smiling." Our guests are Dr. Jayanth Kumar, the Director of the Bureau of Dental Health at the NYS Department of Health and an Associate Professor at the School of Public Health at the University at Albany and Bridget Walsh, a senior policy analyst at the Skyler Center for Analysis and Advocacy. Thank you very much for being here. So, Jay, you're here to talk to us about a way to keep kids smiling. Can you tell us, why is tooth decay considered a public health problem?

Jayanth Kumar: Because it affects a large proportion of children and virtually almost all adults. It can affect daily living like speaking, eating. It can also affect school performance. It is largely preventable and it can be easily managed. The treatment is easier in early stages. And in spite of substantial improvements we have made over the decades or so we still see that almost 18% all health care expenditures are devoted to dental care in children. That is one of the reasons why it is a public health problem.

Moderator: Are there some groups where we see the problem more than others?

Jayanth Kumar: Yes. It is more of a problem in poor children. And there is a national survey. We have data for New York State where it shows about 32% of poor children actually have oral health problems compared to only about 12% of non-poor children. So what has happened over the years is tooth decay was a problem of the rich in the last century and shifted to poor children around 1970s or so, mainly because of access to refined sugar and processed foods.

Moderator: Sure.

Jayanth Kumar: So, there are a lot of barriers for the poor population like transportation, insurance coverage is another one, and then availability of dentists in certain geographic areas. These barriers have to be addressed by human services agencies so dental practitioners alone cannot solve the problems. We like to partner with human services agencies to address these issues.

Moderator: Bridget, can you tell us more about your organization, the Skyler Center for Analysis and Advocacy? How did you get involved in trying to address oral health problems?

Bridget Walsh: The Skyler Center is a statewide nonprofit, nonpartisan, human services advocacy organization with a mission to improve health and human services for all New Yorkers with an emphasis on low income and vulnerable populations. We have been doing this since 1872 so we have a very long history of working on these issues here in New York. We work across a wide range of domains not only health and public health but child welfare, early care and education, and economic security. We became involved in the issue of children's oral health, more than ten years ago now, when we were looking at

the health factors that keep children developing to their greatest potential particularly in early learning and early development. And in looking at a range of factors people started talking to us about children's oral health and it wasn't getting a great deal of attention outside of the oral health community. So as we started to look at this and really realize the significant impact that poor oral health had on children's ability to grow, to eat, to thrive and to even smile and to do well in school, we started advocating for policies to improve access to care and to improve prevention. So we do a lot of work not only on the policy areas in children's oral health but we work hard to educate our colleagues and other people working with young children on the importance and significance of oral health.

Moderator: And what are some of the ways that these problems are being addressed in New York State?

Bridget Walsh: I think there are two really important documents that have come out recently that will help guide oral health activities in New York State. The first is the Prevention Agenda which is the five-year blueprint for state and local actions to improve the health of New Yorkers that was developed by the New York State Health Department in collaboration with over one hundred-forty organizations. And the 2014-2017 Agenda contains several important indicators for children's oral health. Also, the second version of the New York State Oral Health Plan was released in August. This is a specific road map to improve the oral health of all New Yorkers. It includes data on oral health as well as recommendations for state and local level actions that can promote prevention. And I think together that these two documents really provide a road map for oral health stakeholders because it gives us benchmarks that we can aim for to improve oral health.

Moderator: You mentioned that the Prevention Agenda serves sort of as a blueprint to improve health outcomes in New York State. Can you describe the objectives and framework within the Prevention Agenda that are specifically related to oral health care?

Bridget Walsh: Yes, one of the key benchmarks is to reduce the prevalence of tooth decay in children by 10%. I think that would be a significant decrease if we can do that over a five year period. We want to do that by increasing the adoption of effective prevention interventions. And these can include raising the percentage of people drinking fluoridated water and increasing applications of sealants and fluoride varnish. Dr. Kumar mentioned earlier that socioeconomic factors are a strong determinant of oral health status. To begin to address health disparities there is a goal of increasing preventive dental visits by 10%.

Moderator: What are some of the different types of interventions that might be available that we can use to address this problem and really try to meet those objectives?

Bridget Walsh: Yeah, the two different documents, the Prevention Agenda and State Oral Health Plan have a wide variety of interventions that can be used for that purpose and if you look at the public healthy pyramid on the left here on the slide, you will see that the factors on the bottom have the greatest influence on overall population health. As you move up the pyramid the interventions become more intense but they serve fewer people. The boxes on the right, are some of the specific oral health interventions that correspond with the levels of the pyramid. We want to start by insuring that all children have dental insurance that covers prevention and treatment and we want to increase the

percentage of people in the state drinking fluoridated water. Each level is necessary to ensure that everyone receives good oral health but the interventions at the bottom are where we really have the greatest impact on population health.

Moderator: And I would just like to remind our audience, as always the handouts are available on our website, so if it is difficult to see the font on the slides please feel free to download the slides from www.phlive.org to get a clearer picture of what we were just discussing. Now, from the national perspective how does oral health fit within Healthy People 2020?

Jayanth Kumar: There are important goals, one is to eliminate disparities and the other is to improve oral health outcomes, especially prevalence of dental diseases like tooth decay and also periodontal diseases, or gum diseases and to improve services like fluoridation, the use of dental sealants, which is a plastic coating placed on tooth surfaces and also to include dental visits.

Moderator: Now, pediatricians are now involved in providing preventive dental services. In a push towards improving oral health in Medicaid eligible children in upstate New York, the women, infants and children, or WIC, Smiles' program goal is to help the youngest children have healthy teeth at an early age and for families to continue good oral health practices. We had a chance to visit with Dr. Melinda Clark in Albany, New York to learn more about this program.

[Video]: **Dr. Melinda Clark:** So in 2011, Albany Medical Center partnered with our local WIC to bring oral health preventive services to young children. Myself, or one of my partners, go twice a week to the Green Street Clinic for a couple of hours and there we meet with families of young children. We do a few things. The first is we talk about risks for cavities for those individual children. We examine the teeth and mouth. We talk about healthy eating, healthy drinking, importance of good oral hygiene, brushing, flossing. Finally, we help the young children who have identified as being high risk or have dental decay to establish a dental home to get that part of their health taken care of by the subspecialist. Dental decay is the most common chronic disease of childhood. We aren't doing as much as we can to help prevent decay. If we can start in the mouths of very young children then we have a chance of doing true primary intervention so we can get ahead of the disease in preschoolers and then have better outcomes for the children in elementary school with a goal ultimately of trying to prevent cavities in the adult teeth or permanent dentation. So dental exams of preschoolers and early Head Starts in New York State reveal that 40% of children have already had dental disease. And 70% of that 41% have untreated dental decay. The earlier we can get into the mouth of young children, the quicker we can help the family and the child to meet behavior change, the earlier we can get them into a dental home. If they have already established disease and the more hope we have that we can truly prevent this disease. Fluoride varnish is a topical form of fluoride. Fluoride toothpaste is another example of a topical fluoride. Fluoride varnish, if you apply it to the surface of a healthy tooth, can help prevent cavities from forming. If you apply it to a tooth with the beginning of tooth decay it can help reverse those lesions and keep it from progressing into a full cavity or a hole in the tooth that wouldn't then need a drill or restoration for a young child. We use fluoride varnish because dentists are responsible for dental health but all of us are responsible for oral health. Pediatricians and family doctors and other health professionals that see young children are responsible for helping to prevent tooth decay. Some of

the changes that we discuss are improved eating or healthier choices. We talk about changes in hygiene behavior at home, primarily brushing and using a fluoride toothpaste and then we talk about how to get this child into a dental home. If the child has a cavity, an actual hole in the tooth, then they need to have that filled or definitively treated by the dentist or specialist. There are three important factors in the success of this program. The first is willingness to embrace something that we haven't historically done. So the WIC at Green Street, Albany recognized that their children had oral diseases, that they weren't able to get to a dentist, that the families weren't able to overcome barriers to achieve dental care. The second important piece besides willingness to do something different is collaboration. I was describing collaboration between Albany Medical Center and the WIC program. It's also the health department who has done a lot of education for primary care providers in the area and for the WIC staff. So the WIC staff understood the importance of the disease. The third thing I think is important is passion. You have to really believe that doing something different than what we have always done is going to matter. You have to believe this disease is important enough that you are willing to do something different to make a change.

Moderator: So it certainly sounds like they are doing good work and really trying to move things forward. I know that oral health is considered a leading health indicator. Can you tell us in New York State, is it improving? Is it improving across the country? What does the picture look like?

Jayanth Kumar: The report came out about leading oral health indicators in Healthy People 2020 and oral health is one of them. The report says it is getting worse It is one of the two leading indicators that got worse over the period of years. And although overall it got worse, but we are seeing improvement in children, especially improvement in preventive services. So this is related to percent of persons who visited a dentist in the last year. And we are seeing in New York State a modest improvement over the years.

Moderator: So that's good to see. Now, tracking oral health indicators and monitoring that progress is certainly an important thing to do. How do we measure that progress in New York State?

Jayanth Kumar: It's one of the core public health functions. And Bureau of Dental Health has been engaged in conducting surveillance activities over the last 20 to 30 years. And it's part of the National Oral Health Surveillance System. So we conduct surveys of third grade children and track certain indicators. For example, one of the indicators is caries experience. That is related to, we look in the mouth and see if the child has had cavities and fillings and we count that. And also untreated cavities. Say, if a child had experienced cavities, whether we still see open cavities or not. Then we track dental sealants. It is a long lasting clinical intervention, it's a plastic coating placed on teeth, and we track that. All of these three things require examination of the mouth and we take a random sample of schools. Dental hygienists or dentists go out and look in the mouth and track these things. We also have three indicators related to dental insurance, fluoride tablet use, and also last dental visit. These are questions we ask of parents and based on that we track it. We have conducted two surveys over the period of about 12 years or so and have some data to share today.

Moderator: And so based on all of this data how are the children in New York doing when it comes to some of these indicators?

Jayanth Kumar: Over the last decade we have seen some modest improvement. For example, dental caries experience has declined or the prevalence of tooth decay declined by about nine percentage points. Also, untreated cavities, that percent also declined. We are also seeing improvement in sealant prevalence that is the receipt of sealants. Overall we are seeing modest improvement. It's about 1% decrease per year and with respect to most of the chronic diseases especially like tooth decay it is considered significant.

Moderator: That's good to hear. Now, do we see any discrepancy with improvements when it comes to high and low income populations?

Jayanth Kumar: Yes. As I said earlier tooth decay is a problem of more of a problem in poor children these days. So in our survey we saw a discrepancy or disparity between lower and higher income children. Here lower income children refer to those children who are on free and reduced lunch program. All the others are categorized as higher income in our survey. As you can see, our target is by 2017, no more than 41.5% of children should have cavities. What we see is a big disparity between lower and high income. In order to achieve this target we have to make significant improvement in overall caries experience in lower income children.

Moderator: So we see from the chart that lower income children have greatest rates of suffering from oral disease. Do they receive dental care?

Jayanth Kumar: We have tracked that indicator, also. And although we are seeing modest improvement we still see a big disparity between higher and lower income again in the receipt of treatment and also in the receipt of preventive services. For example, with respect to untreated caries, we have to make significant improvement among lower income children. It's the same with the use of dental sealants. We have to increase from 36% to about 50%.

Moderator: And so what are some of the oral health indicators that we are currently tracking in New York State?

Jayanth Kumar: In addition to the three clinical indicators we have looked at dental insurance coverage because it is an important determinant of dental visits.

Moderator: Absolutely.

Jayanth Kumar: We have looked at fluoride tablet use. Fluoride tablets are prescribed in areas where drinking water is deficient in fluoride. We also track last dental visit within one year. We are seeing improvement with respect to all of the three indicators. So more children are covered by dental insurance. More children have access to fluoride and more children are visiting dentists. So overall good news.

Moderator: It is good to hear that overall the picture is looking a little bit better. There are groups where we haven't seen as much of an improvement. Can you explain what might contribute to the lack of improvement for those groups?

Jayanth Kumar: So we also analyzed data by geographic regions. For example, New York City and rest of New York. Interestingly, lower income children in New York City have done better compared to lower income children in Upstate New York, or rest of New York.

Moderator: That is interesting.

Jayanth Kumar: There is almost a 20 percentage point difference between these two groups. When there are differences like this we start exploring and formulating hypothesis; why there is so much of a difference. For one, New York City children have access to fluoride through drinking water. Whereas, in the rest of New York access to fluoride in drinking water is far less, only about less than 50% of children receive it through drinking water. That is one. And if they are on fluoride tablets compliance is a big issue. They have to take fluoride tablets every day. That is difficult for a lot of families.

Moderator: Absolutely.

Jayanth Kumar: There are other reasons, could be regular dental visits. There wasn't much of a difference between the rest of New York and the New York City children with respect to dental visit rates. Then we started and wanted to explore if sugar sweetened beverage consumption—is that a big difference between the rest of New York and New York City children. We had a question and we asked about soda consumption and another question about other sugar sweetened beverages. So the analysis shows that there is a difference between New York City children and the rest of New York in terms of soda consumption. More children in New York received fluoride through drinking water and also fewer children drink sugar sweetened beverages particularly soda consumption.

Moderator: That's interesting data. That actually surprises me a little bit. Good to know to help in planning interventions and moving forward with this problem. What role did dental practitioners have in addressing the high consumption rates of sugar sweetened beverages?

Jayanth Kumar: Dental offices can play an important role in addressing common risk factors. As you know sugar sweetened beverages are a risk factor for obesity, diabetes and so many other health problems. Dental offices can play a major role in educating and counseling patients about consumption because sugar is one of the risk factors for tooth decay and the way tooth decay occurs is because the interaction of bacteria on carbohydrates like sugars. The acid generated de-mineralizes tooth. So addressing sugar consumption is an important part of dental practice in my opinion. We have recently made some changes in the Medicaid program to reimburse dental practitioners for tobacco secession counseling. These are common risk factors for overall health that can be addressed in dental offices very effectively.

Moderator: Great. Can you go into more detail and describe some of the oral health problems that young children experience?

Jayanth Kumar: We have traditionally focused on school-aged children. So about 15 years ago we used to say take your child to the dentist at age 3. So that recommendation changed. And now we say take your child as soon as the first tooth erupts, or by age 1. It is primarily because when tooth decay occurs in young children especially when there are cavities it is very difficult to treat in dental chair, very difficult to get cooperation for very young children under the age of 6. Many children are taken to hospital operating room for treatment of cavities. About 4,800 children are treated in operating rooms in New York State. Most of them are under general anesthesia. It is very expensive. It costs about $5,000 per child to treat in the operating room. Very few children actually receive preventive services, especially those under the age of 3.

Moderator: That is a pretty surprisingly, at least to me, surprisingly high number of children being seen in a hospital for dental care. How frequently does this actually happen?

Jayanth Kumar: As I said, about 4,800 children are taken to operating rooms every year and more children also go to emergency rooms with dental problems. So we have been tracking these indicators. This is one of the indicators where we haven't seen improvement. Actually, it went in the opposite direction. We wanted to reduce emergency department and ambulatory surgery facility visits from 2,900 to about 1,500 over the last decade. Instead of that it actually doubled. This is an ambulatory sensitive condition and we should be able to prevent this.

Moderator: Well, the Health Foundation for Western and Central New York is committed to improving the health and health care of the people in their communities. In response to this clear and urgent need to improve the dental health of young children living in poverty they launched “Chompers! Bringing Dental Care to Children in 2010.” We had a chance to visit Kara Williams and learn more about this program.

[Video]: **Kara Williams:** The Health Foundation for Western and Central New York is a private foundation. We serve 16 counties in upstate New York. Dental disease can have a huge impact on children under the age of 5, especially those who are living in communities of poverty or in families in poverty. Our children's oral health work is a great fit for our overall approach and priority in the community. Kids’ oral health is an issue that is both entirely preventable and has a huge impact on children in poverty. And historically it is not a place where a lot of other funders have spent a lot of time and attention at least in our community. For us it was a natural fit to want to get involved because we can make a huge difference. Dental disease is one of those silent epidemics. It tends to not be on most people's minds. In families impacted by poverty there are so many other urgent problems that the families are facing, so many barriers, that oral health tends not to be on the high list of priorities. Often getting good oral health for their kids it is not something they understand as a high priority or can fit into their lifestyle. Sadly for kids who are struggling with poor oral health it can impact their ability to learn, they're in pain, they are distracted. It makes it harder to eat which leads to poor nutrition and it can have a variety of long lasting negative impacts. The Health Foundation designed an oral health program called Chompers! Bringing Dental Care to Kids a number of years ago. What was important to us at the foundation was that we were providing both education and screening and treatment to children in the community where they already go. The education piece is called Cavity Free Kids. It is a

preschool curriculum out of Washington State. A second component is called Portable Dental Care. We have trained dental clinics across our communities to use portable dental equipment. The third part of Chompers! is called Fluoride Varnish. That is something that pediatricians can do. Many families understand and prioritize pediatric visits. So we wanted to know is there is a way that pediatricians and other primary care providers could be involved in helping with oral health. The Chompers program uses a variety of partners. Because we are doing education and screening and treatment in a variety of different settings we had to have a wide range of partners. We are working with Head Starts and universal pre-ks and WIC offices and community centers. We are also partnering with New York State Article 28 dental clinics and hospitals and federally qualified health centers and pediatric offices and a number of just community champions who believe very strongly that kids' oral health is an important issue. One of the interesting things that happened, because we are a foundation we issued a request for proposals and invited different partners to apply to be part of the program. In some communities we where we have Chompers! they might only have the education, the Cavity Free Kids curriculum. Other communities have only Portable Dental. A few communities had both. We are able to see with our evaluation what the impact was. We found significantly drastically improved outcomes when you had both elements. If you can educate children and their families and providers about oral health and how important it is and provide good oral health care where they are in the community you can have a huge impact in improving their oral health. The Health Foundation has been so pleased with the impact that Chompers has had in the community that we are already expanding it. We started off two years ago with this program having six organizations doing Cavity Free Kids, the education for preschoolers and we had four organizations doing Portable Dental Care. Now we are expanding that number significantly. We are reaching out to more communities and more sites trying to get more people engaged in oral health education and training overall and with the Chompers! program in particular.

Moderator: There seems to be a lot happening around New York State and there is a lot of options for oral health prevention. What does New York State recommend?

Jayanth Kumar: When we recommend interventions, especially at the community level, we look for guidance from expert panels. There are actually two expert panels. One is called the guide to community preventive services and the other is called guide to clinical preventive services. So one of the recommendations by the expert panel is to promote fluoridation, the addition of fluoride to drinking water. It started in New York in 1945. We have a rich history. We have extensively studied the benefits of fluoridation, as well as the risks associated, if any, with fluoridation. So we want to increase the percent of the population in New York State on public water supplies from the current level of about 71.4 to 78.5. That is the target in the Prevention Agenda. So there are communities that can benefit from this. And this map shows there are some communities all colored red. That means those counties are not receiving the benefits of fluoridated water. So we have about 123 systems that are currently fluoridating. And we want to improve quality of fluoridation program and also we want to expand the extent of fluoridation in New York State. We have a lot of resources available for communities if they are interested in implementing fluoridation or improving the quality of fluoridation program.

Moderator: That seems like a really good option for reaching lots of people. Can you tell us more about school-based dental programs as another option?

Jayanth Kumar: That's another preventive service recommended by the guide to community preventive services, school-based programs are very effective in reaching a large number of children especially long-lasting intervention, the dental sealants that I talked about. We can target specific schools where it is very difficult to receive services, not enough dentists practicing in the area or other barriers. We can target those schools. Usually centers for disease control recommends that we should target those schools that are in areas where the percent of the population of children participate in the free and reduced lunch is about 50% or greater. So we have about 1,000 schools participating. We have 56 providers. These are federally qualified health centers, local health departments, or hospital-based public health programs that go to schools using portable equipment or mobile vans. So they can go to schools, see children and provide these clinical services. That is not the only way where we can improve dental visits and clinical preventive services. For example, there is a law now requiring schools to distribute dental certificates along with medical certificates in certain grades. So schools can encourage parents to take their children to dentists, link them to a source of care and provide and encourage dental visits.

Moderator: That sounds like an excellent idea. How often should children really have dental visits to prevent oral health issues such as caries?

Jayanth Kumar: We usually track annual dental visits. We have tracked it in our state Medicaid program, for example. And what we observe is overall less than 40% of children visit a dentist in the Medicaid program. And as this slide shows the utilization of dental services in younger children, particularly those below the age of 3 is very low. That is where we can make a significant impact by improving dental utilization in younger children as well as overall improvement.

Moderator: We know that oral health issues are a real public health issue. How can we bring about changes at the community level which we talked earlier we looked at the pyramid. You know, doing community level changes certainly has a greater impact than at the individual level.

Jayanth Kumar: In talking to our partners and stakeholders many of them suggested that they should be focusing on younger children and we should provide tools for communities to engage and to assess what are some of the best interventions. So there is a paper published from Colorado. Researchers looked at various interventions using a computer simulation technique. So based on cost, how much money is needed to invest and the return on the investment, how many cavities can be prevented, so these computer simulation models can inform communities about various interventions and what are their payback on different interventions. So what we did is we engaged several experts along with an expert in computer simulation models and with support from his team at children's dental health project in Washington, D.C. And with support from the two foundations in New York State, New York State Health Foundation and Community Health Foundation in Western and Central New York and SCAA and several other people, we got together and decided what interventions should be modeled in that simulation. So we applied this computer simulation model to New York State Medicaid population. We looked at various combinations and we refined the Colorado model. We added a couple of other interventions. We have some results to share about the model. This is a tool that can be used to inform

communities about various interventions and how it can be implemented and what will be the return on the investment.

Moderator: So let's talk about that. What are there, or are there costs benefits or savings when it comes to implementing any of these specific interventions?

Jayanth Kumar: We actually looked at about nine different scenarios. Here I'm going to talk about three to make it simple. The first one is community water fluoridation. So over the ten years in young children with an invested dollar, the return appears to be around $10. We can also promote tooth brushing. So community water fluoridation is a community level intervention. Communities can make the decision, promote it, and implement it. Whereas tooth brushing is an individual level intervention. So at home they can improve self-care. Parents can supervise children and encourage tooth brushing. And that is for every dollar the payback is about $1. 40. And again intensive preventive visits, that is encouraging children to be seen in dental offices and also in pediatrician offices and encouraging them about healthy habits and tooth brushing. Those interventions also show return on investment. So I want to say that this is a relative payback. We didn't figure in all of the cost savings associated. For example, transportation costs, time lost, productivity lost. In a typical economic evaluation we include all of those expenses. We didn't do this. This is mainly treatment cost and cost of implementation of the program. This is something we can discuss with communities interested in implementing various interventions.

Moderator: Those are certainly promising numbers. Bridget, can you talk about how your organization promotes evidence-based interventions?

Bridget Walsh: Last year the Skyler center embarked on a project to reduce dental disease in children and help the state achieve the goals of the Prevention Agenda. And to do that we have two different components, one is looking at state level policies that promote prevention and the other is engaging communities around disease prevention. At the state level what we are looking at are policies across that pyramid we saw earlier. We are looking at prevention activities, everything from insuring that all children have dental insurance to increasing the number of people drinking fluoridated water. We are even looking at things like are we using the right indicators to measure oral health in New York State. We are exploring avenues to help communities develop local partnerships to encourage local level actions on disease prevention.

Moderator: That is something that I think is very important, the idea that we have to engage a variety of community partners to make things happen. Can you talk about that process about how you manage to engage different partners?

Bridget Walsh: Our community work is starting with the early childhood caries simulation model. Often times when you find great research like this it doesn't get used, it gets put on a shelf and that's the end of it. We are actually using that research as the foundation for the development of a replicable program for community engagement to reduce ECC in communities. And it is a pretty exciting effort because we are actually creating a program that different communities can use over time and to see a measurable decrease in early childhood carries. We are initially working in two communities. We started this in Jefferson County earlier this year and we just began a program in Buffalo. We are assisting in creating

local level leadership teams. These are teams of not just oral health professionals and health professionals but the wide range of providers that you heard Dr. Clark and Kara Williams discussed in their interviews and what Dr. Kumar talked about. We really need to engage with providers, early care and education, Head Start, just anybody that really works and sees children and families. So we have been successful in getting a wide variety of providers and community partners at these local leadership teams. And then we are using a community campaign kit that has been developed for this work to help them choose the strategies that they feel will work more successfully in their community based on their need and based on what is already existing in their community. And then they will begin implementation of those strategies. These are all strategies that are taken directly from that simulation model. And then we are going to be providing continuing technical assistance and working to refine this campaign tool kit so it can be used for future communities.

Moderator: It certainly sounds very comprehensive and like you have laid the groundwork for this to be very successful. Can you talk about the process you used or how you started to roll out this project?

Bridget Walsh: So we started with that simulation model and started to think of what the interventions were. And then how can we think about implementing them in a community. So we've designed a program that will provide communities with two intensive workshops on how to use the model to select the strategies for their community and then providing them with training on communication and campaign development around early childhood carries. We know for a lot of people this is a new topic and new issue. Even people that work with young children may not understand the significance of oral disease, particularly in primary teeth. So there is a large educational component to the community and to bring in more partners and to leverage more resources in the community. So the communications on early childhood carries in the community is an important part of this program. And then we will help with ongoing technical assistance on implementation. I think what is really exciting about this model is that we are not trying to create new programs. What we are trying to do, let's say for example a community wanted to increase the number of children receiving fluoride varnish or the rate of children in their community who were tooth brushing on a regular basis because tooth brushing was one of the important strategies, what we are trying to do is take best practices and replicable evidence-based models and programs that are existing in other communities and bring them in so a community can take three or four very targeted specific programs, get the entire community involved in the reduction of early childhood carries and understanding what this could mean for the health of their children and then measure a reduction in this disease over time in that community. So it is a real intervention or program that really focuses these interventions in a real targeted way in a community.

Moderator: It sounds terrific. Who are some of your partners in making this happen?

Bridget Walsh: Well, this project is really a great example of what Dr. Kumar talked about in terms of needing to develop partnerships. In addition to local partnerships we are creating, we engaged a terrific team to help develop this at the state level. Both the children's dental health project and state health department were instrumental in developing the simulation model that we're using and they're both engaged in our work moving forward. The children's dental health project had developed a community campaign kit that we are using and providing workshops, training on communications, technical

assistance, and connections to best practices. The health department has been providing us with data and scientific evidence and also information on best practices and replicable models that we can use. The project is being funded by the New York State Health Foundation and the Health Foundation for Western and Central New York and they've also has been great partners in terms of thinking about how to implement a program on a community basis. So they have been very involved in the process, as well. And then one of our other partners is the Oral Health Center of Excellence. And they provided a lot of assistance in terms of data and data collection and data analysis in these communities. They are helping to identify best practices. They are going to be developing a library of best practices that all communities can go and try to see which of these models might fit best in their community based on the strategies they want to impact and then providing ongoing technical assistance. And so what we are really excited about is that after all of this work in these communities and with the assistance of all of these partners, we are going to have a model that other programs can come and take and say how do we do this in our community to reduce early childhood carries? How do we make our community partners and the people that we work with more engaged and interested and on the long term impact that this will have on the health of the children and their ability to learn once they get to pre-k and kindergarten and their overall health and development going forward. It is a pretty exciting project in that it does have a lot of community engagement and a lot of community support.

Moderator: Great. Now Jay, can you tell us more about the Oral Health Center of Excellence?

Jayanth Kumar: The state health department is providing funding to the primary care network in Rochester to establish the Oral Health Center of Excellence. There are several components. One of the key components is oral health surveillance. It is important to establish targets and also to track it. So the Oral Health Center of Excellence has the capacity to assist communities in tacking some of these indicators. Also community water fluoridation. They can provide technical assistance as well as put together resources and answer questions related to community water fluoridation. They also provide training to water system operators or others who are interested in promoting water fluoridation. There are interventions that schools can undertake. So they can provide technical assistance. So they act as a resource center and provide consultations to communities interested in promoting oral health. So one of the interesting things about early childhood carries, in the past we have always talked about reducing tooth decay. Here we have the opportunity to eliminate cavities especially in 3-year-olds. We wanted to change the social norm of accepting cavities as an inevitable outcome to not accepting cavities. It is exciting the work that SCAA is doing in these communities and presents an opportunity to create a generation of cavity free children.

Moderator: Can you briefly tell us about some of the initiatives that communities are undertaking?

Jayanth Kumar: Yes. We receive a grant from Health Services Administration to promote oral health during pregnancy. And this is to integrate community based strategies into existing programs. The state health department has funded 22 projects called Maternal and Infant Community Health Collaborative (MICHC) projects throughout New York State. We want to work with Monroe County Perinatal Network with assistance from Oral Health Center of Excellence and we want to develop a best practice model because pregnancy is an opportune time to educate parents and also to prevent early childhood caries.

Because the way cavity causing germs are transmitted are from mostly caregivers to infants and also inappropriate feeding habits like babies are fed with bottles containing a lot of sugars. So some of the risk factors can be modified and oral health can be improved. We want to target pregnant women and improve their oral health so that their children's oral health will be improved. So we have been working with Monroe County Perinatal Network. This is part of a national learning collaborative. We will be sharing our experience with not only projects here in New York State but also with projects in other states. It's going to be a national initiative and HRSA has the vision to reduce dental caries in children and promoting oral health during pregnancy.

Moderator: And is technology playing a role in addressing the problem?

Bridget Walsh: Yes. We have a project in New York City. Researchers at Columbia University received a grant from Center for Medicare and Medicaid Innovative Services. It is an iPad application for assessing risk which could be used for education and counseling as well as set goals and plan action. They will be working with many hospitals in New York City. The interesting part is this model you utilize this community health workers to educate and also to address various risk factors. It encourages non-surgical treatment. Surgical treatment is treating cavities by filling, cutting the teeth and operating rooms. So this is to initiate non-surgical treatment very early. And some studies show that cavities -- before cavities occur, there is a phase during that time when intervention can be implemented and reversed. It is an exciting project. We are very interested in seeing the results of this study being done at Columbia University.

Moderator: Great. Now, is there any -- I heard about telehealth in a variety of different medical fields. Is there anything similar in dentistry?

Bridget Walsh: There are telehealth projects and especially one that Finger Lakes started very earlier, the Finger Lakes Community Health TeleDentistry Program. It is being implemented in collaboration with the Eastman Institute for Oral Health. The project is called VIBRANT TeleDentistry project. The providers, like dental practitioners in Finger Lakes, can communicate with pediatric dentists at Eastman Institute for Oral Health using teleconferencing technology. So they can communicate. They can assess risks. They can figure out whether these children can be managed in dental offices or they have to be treated in an operating room. So usually the waiting time for operating room is about four months of waiting time for operating room. So and what it does is eliminates the need to travel multiple times especially from rural areas. This is very helpful and there are other projects in the rest of the country. Finger Lakes Community Health Center has demonstrated the use of this technology.

Moderator: I want to make sure we have time to get to questions. You've shared a lot of information; are there key messages you would like to share with our audience as a take home?

Jayanth Kumar: As we saw we are trying to integrate oral health into health policies and programs to prevent tooth decay. And also we want to establish targets that we have done already. And we want to track progress with respect to these targets. And we want to support evidence-based interventions. We want to share experiences. Most importantly, we have to build partnerships and leverage resources to promote oral health.

Bridget Walsh: On that last one on building partnerships, I think that one of the things that we here at the Skyler Center a lot because we deal with a lot of organizations that work with children is that people recognize sometimes that the children they are working with had oral health problems but they are not sure what to do about it and they didn't know it was preventable. So any sort of partnerships where we can connect people in communities with early childhood providers and people working with young children so that they can figure out and work together to reduce disease in children, I think those partnerships, so we are looking beyond traditional people that are usually working in oral health are going to be critical to changing that mindset that early childhood caries and dental disease in children is acceptable. I think that is an important take away is to look for those partnerships.

Moderator: Absolutely. That makes sense to me. We have a few questions from the audience. We'll see how many we can get through. The first is, 'We have other mechanisms for delivering fluoride to children such as fluoride toothpaste and rinse. Why is community water fluoridation still necessary?'

Jayanth Kumar: When we add fluoride to drinking water it reaches the whole population. It is a passive intervention. There is no need for an individual to take active action other than drink tap water. With respect to other interventions like fluoride tablets and tooth brushing, children have to engage on the activity on a regular basis. That's where the problem is, the compliance becomes an issue. When compliance is not great, the effectiveness goes down dramatically. Although clinical trials show good results when it is implemented at the community level and the participation is lower, the overall impact of the population level will not be that great whereas with fluoridation it reaches everyone regardless of socioeconomic status.

Moderator: Another question, 'How do I start a school-based dental program? What are the steps and are there resources out there?'

Jayanth Kumar: The first thing is to identify the need in the community. And figure out what schools can be targeted for such an intervention. And assess whether dental caries are available in the community or not. And then put together a partnership and especially in partnership with the schools, they will be able to figure out what the cost will be and also the impact. And then reach out to the state health department because we have guidance documents. We approve these projects. So in order to get the resources, there are many resources available; we have listed some at the end of the presentation. They can reach out to those resources and also reach out to the Oral Health Center for Excellence for guidance.

Moderator: All right. I have a question, 'I am a public health dental hygienist living in a town where they took fluoride out of our city's water. We are considering trying to restart the fluoride swish program in our schools. Do you have thoughts on this?'

Jayanth Kumar: Yes, fluoride rinse program is another strategy implemented in schools. If a school is located in a non-fluoridated area it looks like this is at a school that is in a non-fluoridated area and also if they don't have any other source of fluoride like tablets, access to tablets and is not that frequent then this is a worthwhile program to implement in schools.

Moderator: Thank you both very much for all the information that you have shared. We are out of time for questions today. I would like to remind everyone that is watching on the handouts there are a list of resources available that you can refer to, as well. Thank you very much for joining us today. Please remember to fill out your evaluations online. Your feedback is always helpful to the development of our programs and continuing education credits are available. To obtain nurse continuing education hours, CME, and CHES credits, learners must visit www.phlive.org and complete an evaluation and the posttest for today's offering. Additional information on upcoming web casts and relevant public health topics can be found on our Facebook page. Don't forget to like us on Facebook to stay up to date. This web cast will be available on demand on our website within two weeks of today's show. Please join us for our next webcast on November 20, "Crossroads: The Built Environment, Health, and the New York State Prevention Agenda." I'm Rachel Breidster, thanks for joining us on Public Health Live.