

Understanding Health Disparities in Rural America - Insights from the CDC MMWR Rural Health Series 12/18/17

Kristine Sande:

Good afternoon everyone, I'm Kristine Sande, the program director of the Rural Health Information Hub, and I'd like to welcome you to today's webinar on Understanding Health Disparities in Rural America. This is the fifth webinar in our series featuring the CDC Morbidity and Mortality Weekly Reports Rural Health Series. I'll quickly run through some housekeeping items before we begin. We do hope to have time for your questions at the end of today's webinar. If you have questions for our presenters, please submit them at the end of the webinar using the Q&A section that will appear on the lower right hand corner of the screen following the presentations. We've provided a PDF copy of the presentations on the RHlhub website, accessible through the URL on your screen or by going to RHlhub webinar page, www.ruralhealthinfo.org/webinars and clicking into today's presentation. If you decide to go download the slides during the webinar, please don't close the webinar window as you'll have to log back in to the event. For technical issues, please call WebEx support at 866-229-3239.

It is my pleasure to introduce our speakers for today's webinar. First we'll hear from Dr. Cara James and Dr. Jeffery Hall, two of the authors of the recently released MMWR article on racial and ethnic health disparities among rural adults. Dr. Cara James is the director of the centers for Medicare and Medicaid services Office of Minority Health and co-chair of the CMS Rural Health Council. She is a nationally recognized expert and thought leader in health disparities, health equity, and improving health outcomes for vulnerable populations. As the director of the CMS Office of Minority Health, Dr. James leads CMS's efforts to meet the unique needs of minority, and underserved populations.

Under her leadership, the office of minority health has developed the CMS equity plan to improve quality in Medicare, created and launched an ongoing initiative to help individuals understand their coverage and connect to care, and strengthen the quality and increase the collection and reporting of demographic data. Dr. James is a member of the National Academy of Medicine Roundtable on the promotion of health equity and the elimination of health disparities. Dr. James received both her PhD in health policy and her AB in psychology from Harvard University.

Dr. Jeffery E. Hall serves as deputy associate director for science in the Center for Disease Control and Preventions Office of Minority Health and Health Equity. In that position, he assists with the provision of leadership and consultation across a broad range of science, research, evaluation, and practice issues to promote the elimination of health disparities and the achievement of health equity. He also conducts research to develop or enhance local state and national systems or capacities for measuring and monitoring progress toward health equity. Dr. Hall is a medical sociologist by training. He also holds degrees in epidemiology, general sociality, sociology, and psychology, all from the University of Alabama at Birmingham.

Following the presentations by Dr. James and Dr. Hall, we'll hear from two speakers who have been working to address racial and ethnic health disparities in their own communities. Liz Manjarrez, the outreach projects administrator at Palo Verde Hospital in Blythe, California, will be our first speaker in that section. Since 2015, she has worked with local schools and the community to implement an outreach grant from the Federal Office of Rural Health Policy. They're focusing on reducing the incidence of obesity in the area of school-aged children. Liz has a master's of education in human relation psychology and has over 20 years of experience in

implementing innovative projects and integrative physical and mental health services in Arizona and California.

Our final speaker will be Linda Matessino, the grants project director at Innis Community Health Center in Innis, Louisiana. Linda is the former executive director of Innis Community Health Center who now has retired from full-time positions to focus on efforts like implementing the health center's outreach grant. She has over 40 years of experience in healthcare delivery ranging from nurse clinician to administrator CEO-type positions in various organizations. Her experience encompasses many years of administrative practice in acute care delivery, nursing education, public health administration, and ambulatory primary care delivery administration. At the end of today's webinar we'll hear closing remarks from Tom Morris, a HRSA associate administrator for Rural Health Policy, who directs the Federal Office of Rural Health Policy. Now I'll turn it over to Dr. Cara James.

Cara James:

Okay. Thank you, Kristine. Thank you, all of you, for joining. I want to especially thank HRSA and the Rural Health Information Hub for hosting today's webinar on this important topic and to also thank Liz and Linda for the work that they're doing to address the disparities that we uncovered in our article today. It's really important also to thank our contributing authors and our team of colleagues who worked here in the CMS Office of Minority Health as well as our colleagues in the CDC Office of Minority Health and Health Equity, one of whom you'll be hearing from in a little bit.

So, as we look at the landscape today, we know that there are a number of articles that have focused on differences between rural and urban communities, well documenting some of the health disparities that we see. Some of these reports have focused on particular geographic regions and including some data on racial and ethnic populations, but not a lot of them have been focused on all of the populations or covering the breadth of the country. So, as we look and see our changing demographics, we see that our rural communities are becoming more diverse. Some of the diversity, particularly among the Hispanic and Asian Americans as well as Native Hawaiians and other Pacific Islanders, but there's very limited research on these populations within the community.

So, it's one of the reasons that we wanted to look at this particular interest area as we have seen a growing amount of attention on rural health issues. Also, as we think about how we address these challenges that rural communities face, it provides an important opportunity to help decrease disparities among rural and urban communities as well as racial and ethnic minorities within those communities. So, it is with that background that we undertook this study. I'm going to now turn it over to my colleague Dr. Jeff Hall who will talk about the work and the findings that we found.

Jeffrey Hall:

All right. Thank you, Dr. James. With this effort, data from the 2012 to 2015 behavioral risk factors within the system were pooled to evaluate racial, ethnic disparities in health, access to care, and health related behaviors among rural residents in all 50 states as well as the District of Columbia. We used the National Center for Health Statistics 2013 urban and rural classification scheme for counties to assess rurality and focus on adults living in non-core rural counties. Analyzed characteristics included demographics such as employment status, health related quality of life indicators such as experiencing 14 or more days in poor mental health in the past 30 days, and health care access and use indicators such as needing to see a doctor in the past 12 months but being unable to do so because of cost.

We also assessed characteristic such as the number of chronic conditions reported and examined health risk behaviors such as binge drinking. The prevalence of these characteristics was estimated using 95% confidence intervals and all estimates except for demographic and

screening variables were age adjusted to the US 2000 population aged 18 years and older. Prevalence estimates but non-Hispanic blacks, non-Hispanic Asians, Native Hawaiians or other Pacific Islanders, non-Hispanic American Indians or Alaskan Natives, and Hispanics were compared in a pairwise manner to those who are non-Hispanic whites, the group comprising the greatest proportion of the population.

As you may understand, we obtained numerous findings. We will only cover a selection of these findings here. Demographic characteristics provide important clues about social, economic, and geographic factors that endorse or express inequalities. We found, for instance, that compared to non-Hispanic whites, fewer Hispanics, non-Hispanic blacks, and American Indians or Alaskan Natives, and more Asians, Native Hawaiians or Pacific Islanders were college graduates. Moreover, more non-Hispanic blacks, American Indians or Alaskan Natives, and Hispanics than non-Hispanic whites had annual household incomes less than \$25,000.

Measures of health related quality of life, an individual or groups received physical and mental health over time, capture the symptom burden of health conditions may indicate unmet needs and often better predict mortality and morbidity than objective health measures. Using such measures, we found reports of health as fair or poor health to be higher among American Indian or Alaskan Natives, non-Hispanic blacks, and Hispanic and to be lower among Asians, Native Hawaiians or other Pacific Islanders than among non-Hispanic whites. Our findings regarding frequent mental distress assumes a similar pattern except differences between Hispanics and non-Hispanic whites were not significant.

Access to health care and timely use of personal health care services promote health improvement, disease prevention and management, and disability reduction. Several areas of significant difference among rural residents were found for health care access and use. For example, our examinations reveal that compared to non-Hispanic whites, fewer non-Hispanic blacks, and Hispanics had health care coverage. Fewer Hispanics, non-Hispanic blacks, and American Indian or Alaskan Natives had a personal health care provider. Lastly, more non-Hispanic blacks, Hispanics, and American Indian or Alaskan Natives could not see a doctor when needed due to cost. Notably, Asians, Native Hawaiians and other Pacific Islanders also less often had a personal health care provider than non-Hispanic whites even though they did not differ significantly from non-Hispanic whites on health care coverage.

Cigarette smoking and alcohol use are two behavioral risk factors associated with the leading causes of premature mortality and morbidity among adults. Among rural residents, we found that fewer Hispanics and Asians, Native Hawaiians and other Pacific Islanders were current cigarette smokers than non-Hispanic whites. In addition, fewer Hispanics, non-Hispanic blacks, and Asians, Native Hawaiians or other Pacific Islanders than non-Hispanic whites engaged in binge drinking.

Our last couple of findings relates to chronic health conditions that are leading causes of mortality and morbidity among adults here in the United States. In the interest of time, we're focused only on the number of chronic conditions. Here, we tallied chronic conditions including myocardial infarction, coronary heart disease, stroke, hypertension, asthma, skin cancer, other types of cancer, chronic obstructive pulmonary disease, depressive disorder, kidney disease, diabetes, and any form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. We found that compared to non-Hispanic whites living in rural areas, more non-Hispanic blacks and American Indian or Alaskan Natives, and fewer Hispanics, and Asians, Native Hawaiians or other Pacific Islanders living in rural areas reported two or more chronic conditions. This highlights significant population level differences in the prevalent and potential impacts of multiple co-occurring conditions. I'll now return the podium to Dr. James.

Cara James:

Thank you, Jeff. Thank you for running through that. So, as you can see, the study has shown a number of findings and differences by racial and ethnic minorities. One contrary to our perception typically of those who lived in rural communities, rural racial and ethnic minorities tend to be younger than non-Hispanic whites. Similarly, rural non-Hispanic blacks, Hispanics, and American Indians tended to be poorer and have lower educational attainment.

As we think about what this means for future efforts to improve health outcomes in rural communities, we need to make sure that we increase our understanding of the unique needs of each racial and ethnic population. As Jeff indicated, a number of communities regardless of race or ethnicity experience health care challenges. Making sure we take into account the specific challenges that each population face can help us as we move forward as well as considering the impact of the social determinants on health within each of these groups.

So, as we think about where we go next in our work, one of the things that we really wanted to focus on is to understand the interaction between race, ethnicity, and geography. Earlier, as we noted, nearly 94% of non-Hispanic blacks live in the South compared to 38% of American Indians and Alaskan Natives who live in the West. As we know, where you live matters and understanding the interaction between geography and disparities is an important next step. Also, looking at these disparities within these rural communities in terms of how they differ. As we move forward and see our changing demographics, to continue to monitor how those changes are influencing health disparities among new and growing populations.

So, if you would like to see more about the article as well as the entire series that CDC has done for the MMWR on rural health, we've included the website here. Again, thank you for the opportunity and look forward to hearing from Liz and Linda who are going to talk about some of the important work that they're doing. Liz.

Liz Manjarrez:

Good morning, everyone. Hi, my name is Liz Manjarrez. Thank you for having me. I am from Palo Verde Hospital. To begin, I like to start off on how this all came about here in rural communities. Well, to begin with, when I came to work for the Palo Verde Hospital in 2015, it was under the HRSA Outreach Diabetes Grant in which it's the Poverty Children's Outreach Program for Diabetes within the school system. With that program is it's actually is what is the foundation of the other programs that we now run. We run the diabetes, from that we were able to find out that within the Hispanic population, we were able to find that there is a gap in services within health needs. The children that go to the school need a lot of health education because there is no health education within the area. Where we are, it's a remote area. We are just about, I'd have to say, 200 miles from any services here.

Let me back up a little bit. Let's see. Area, let me go back to our area here and our slide. Let me see. Here we go. Sorry. Okay. Because...connecting the dots. Here we go. Okay. All right. Area, Blythe, California. So we're in the Arizona/California border. We're under the HPSA, so we serve a lot of the minority, about 90%. As you can see, they're in the picture, we're serving the Hispanic population. We are, like I said, we serve a lot of the poverty within the Hispanic population. The gap identified within the Palo Verde children's outreach diabetes grant. We identified that out of 10 students, six of them are considered obese and over the 95 percentile for K through 6th grade school-aged children which is the dominant population is Hispanic. We also have a diverse community here, however, most of them are Hispanic.

While I do run the program, we also have other health divisions that also do go to the schools. While I am also in the homes, when I go in there and do health education with them, I also try to show them a little bit of how to watch their carbohydrate intake, things of that nature. Because within this area, there is something that we have also learned to identify that there is no health education. They don't know how to read the labels. There's no specialty care, meaning there's

no endocrinologist, there is no cardio. There is a lot of health needs within the area which if you see in the next slide, we had to identify in the beginning what the needs were because we were looking at a lot of disparities, chronic illnesses, within these children, within the families, in the homes, which related to a lot of need for specialty care, which in these families, they were not getting.

That was just the main thing. A lot of them did not have the resources. The simple resources of just to get in a vehicle and to go out of town to see an endocrinologist, these families do not have. A lot of the families did not know of how to even read or know what their sugar levels are supposed to be, what their symptoms were. Sometimes also we've seen a spike in or at least seen depression. Some of these children were suicidal. So, what we also learned was it was correlating to depression to children who were obese, bullying in the schools. A lot of we also have seen would cause substance abuse, cardio, just all of these things health disparity that were coming about that we've seen and need and how we were going to fix them with another question that we are going to try to tackle.

So, what we did, we kind of built teams within the hospital. We were like, "Okay. Now we have to be able to just sit down and see what is the main thing that we have to focus on." We were like, "Well, the lack of access to care, specialty care, transport to services." So how are we going to start to build these resources to start to connect the dots to be able to provide a whole person care? What we came up with, as a part of our diabetes grant, we thought we were going to be able to do a consortium in which we did at the very beginning which we were able to put together a very strong consortium of community members. With that, we also did outreach within the schools, parents, community organizations which brought the community together. With that, we were able to team build in order to do health fairs.

The local church, for example, does a annual event. So we go there, we talk about health disparities, we give educational awareness. There, we team up with the city. We team up with the county, which in this area is Riverside County. We have a lot of local support now. Then from there, we're able to just utilize those resources, and then we're able to branch out and bring them in. We're able to bring those stakeholders and have them aware of what's actually going on in these areas which are very remote. I mean, if some of the local officials were not really aware of what was going on out here, I mean, yes, they were, but not to this depth until we actually like spoke up and said, "Hey, these are our people. These are your people. This is what's going on, and we need help." That is what brought us to where we are today.

The outreach, the utilizing the resources, helped us to educate. The training, we're able to bring a ... We bought a Riverside County University Health out here to give a suicide training and prevention to the schools, to the community members, to students, to the staff. Just so that way, they were aware of what the symptoms are of children, of the teenage population to parents, so that way they are aware of where to look at. Another major part of this is also a big thing is how to collaborate within your other organizations. That is amazing of how to help to address the minority groups because a lot of what we've seen here in these remote areas is that we're not speaking to each other. Yes, we see that there are minority groups that they need the help, but we're kind of doing our own little plan. Each organization does their own, but we're not doing it together. I see, well, in this area that if we work together, it works the best. Kind of like putting the piece of pie where it's all broken up. Well, that's how this was until we're putting it together and now we're reaching out and it's coming together.

We're kind of mending it all so that way we're able to reach out more people at one time, and it's giving the people of this community better quality help. Because from this, we were able to connect the dots, we're giving whole person care because now we don't just have the health care providers which is the nurses, myself, the regular PCP looking to see what the patient is

going through, but we're also having the teacher, we're having the principal, we're having the mom's who's going to pay for her water bill, the lady who's receiving that payment, she's like, "Hey, you don't look to good today," because she knows the symptoms already. She's already had that training of, let's say, depression and suicide. You know, we're having the whole town look at what is actually going on within their community. I believe that this has worked us to take it to the next level.

Now, which takes us to our stakeholders. Our stakeholders have, actually, in Riverside, we're in Riverside County, so they've taken us a step further and they've given us a lot of support. The stakeholders, they're giving us programs. Right now, we're really happy because we actually spoke up and they're in partnership in building to help us in bringing a cohort in providing more quality help. We had spoke about putting a drop-in center for what we call 5150 which is kind of the suicide, health disparities individuals in this area. They are going to announce a drop-in de-escalation program for the community within our hospital tomorrow. So that is a part of this collaboration with rural areas in the expansion and reaching out to stakeholders within local supports for the minorities in rural communities. This is how we see also how we were able to connect the dots for whole person care. We trained the community on how to do BMI calculations. We are looking at training big community health workers on how to become promotoras. We trained parents, teachers, how to see their students become better students and monitor their health so that way their BMIs are not over the 95 percentile. So that way their health disparity within their population goes lower.

We are also hoping to expand this program within the coming years with the new grants that we have put in for. We also do a lot of mentoring within the schools. So this is how we're able to connect with all of this. So, from that, it just takes me to addressing the diabetes, depression, awareness. Substance abuse is a main issue especially in these remote areas. We're able to do annual wellnesses for the elderly as well. We do the PhQ-2 or PhQ-9, that's for depression screening. We do the training of the symptoms of suicide and depression. With all of this, we address, hopefully, all of it in not just one setting but we do hospital, we do it in labor and delivery, we do outpatient services, we do a community, and we do home visits. So we're addressing these all in this area.

So in regards to addressing that for the minorities, this is what brings out to what our values, beliefs, vision, and goals are. We have transforming insurance health care reform within the minority groups, integrate a whole person care with warm hands-off in multiple settings which we've been able to do. I could be remote and within the community. We reduced the recidivism of high utilizers for established reduction in health costs by promoting health care awareness and education, establish sustainability with the EHR, building partnership within Medi-Cal, TCPI-ACA, HRSA, and data collection, inpatient and outpatient care coordination with neighboring private practices, access to a case manager, clinical health coach, reduce readmission, lower A1C levels, physical and behavior health integration, health education, community outreach and care coordination, staff training and development, 5150 and de-escalation dropping center in collaboration with Riverside County Mental Health, community health collaboration, electronic health record, value-based payments, template and billing/encoding, tool capturing of data analytics and interface EHRs to support transformation efforts for best practice and patient quality care, and whole person and warm hands-off.

Now, these values, beliefs, and visions have been implemented and still ongoing basis for a couple of years. It's not an overnight thing. It takes a few years to do, and it's still a work in progress. However, the results within our patients has been very good. It's still not where we want to be, but it is a whole person care that we want to see happen. We're hoping to be reduced in health disparities. We like to be a whole person care. When we started doing the diabetes grant, we started to see all of those numbers really, really high in regards to the ...

there were a lot of over the 95 percentile. Then we started seeing the bullying, the depression. So we started correlating that one with the other, and then we started just seeing the multiple disparities within the parents, I mean, how it starts in the home.

We can go out and teach the children all we want, but if we're not capturing these parents in the homes more and educating them, then there's a major issue right there. I mean, we're not going to [inaudible]. Then yet, if there's no resources within the area, if the parent can't get into an endocrinologist, then they're not getting what they need, then they're not getting the help they need as well. So those were the gaps that we were able to identify. So hopefully with the expansion and getting, like I said, the help from Riverside County, doing the outreach, collaborative care, hopefully, that is where we're trying to get where our goals to be met. Which takes us to the Palo Verde Hospital's strategic goals.

Back, about two, three years ago, we had a vision. So if you read from one, two, and three, you follow it down, we're pretty much on task to where we want to go. Like I said, it's taken us a while. However, we will get there. We started once again with the diabetes grants. As a foundation and a spin-off of kind of like where we wanted to be was basically an eye-opener of what the needs really were, but it's taken us far and beyond to really what the needs are and where we needed to go. However, with that being said, we have accomplished a lot. So this next slide here is supervisor Manuel Perez which is the Riverside County supervisor. He'll be coming in tomorrow and will be making an announcement.

This is the part of what I mentioned earlier. This is a new drop-in center for the Palo Verde Hospital. We've been working on this for quite some time. It's a collaborative approach within the Blythe Valley, Palo Verde Valley to address the 5150, so we'll be working with them to help those populations. This is a huge accomplishment because Blythe, California has never had anything like this. All of those have come from basically from the diabetes grant, the outreach grant, so I am very proud to have been a part of this. I know the hospital is very proud as well. We're very thankful also for HRSA and for this grant.

From here, also, we move on to this model here, this is what we put it all together. This kind of puts it all together. From, also, the outreach grant, we were able to be a part of a different project which is the prime project which is the California project. So it kind of helps rural hospitals to put different projects together, so we were able to team build and kind of connect the dots so that's what we did here. We were able to do depression screenings, experts such as alcoholic substance abuse, care coordination, diabetes, A1Cs above 9%, so we have to be able to track all those down, tobacco screening. This is that chart on that. This is the way that we are able to address the health disparities within the minority groups and rural settings which has been really hard. However, it is able to be accomplished if you bring it all together and you kind of do the outreach and you're able to address these health disparities among the ethnic minority groups. With that being said, Jolene, I believe, I'm not sure who's next. I think it's Kristine?

Kristine Sande: All right. With that, we will hear from Linda.

Linda Matessino: Hello, everyone. I welcome the opportunity to share our story with you today and tell you a little bit about what's going on in Louisiana. We are about 50 miles or so southeast from Baton Rouge, so that gives you a perspective. Our project focuses on the oral health aspect. We've been a grantee now for two cycles. We've been very instrumental, I think, in gaining access for our children to care, especially in the oral health care. But through the primary care portal of entry, not just to a dentist, but to school-based health. We started out thinking we could integrate more oral health care services within the primary care clinic adult clinic, but what we were finding is that we were seeing more kids for sick visits versus their comprehensive

physicals and also at that time we had a high no-show rate at some of those well child appointments. So, we chose a change in the portal of access by going in through school-based health.

The second time around in our grant rotation has just continued to prove to us that that is indeed a critical access component if you want to reach kids. We also feel like if we can reach the kids, we can go back upstream and perhaps by teaching them, influence the health, even the oral health of the adults, their parents, because of what they're getting in the school-based health centers. So, we hope that that influence goes both ways. We know in the arena of oral health that the adults are many times afraid of oral health services, the painfulness of it, etc. But also, they haven't had the access that children have had. So, we're hoping that this has influenced that through these last years.

A little bit about the demographics of our areas served. We know, and it's been shown in our readings, and it is true in Louisiana that the higher incidents of dental caries occurs in rural populations. We know that children on Medicaid, they're not taking full advantage of that opportunity to get those services. In Louisiana specifically, it's reported that only 38% of the kids on Medicaid get a visit to the local dentist. So, we are medically underserved areas where health professional shortage areas, and this group of four other members plus Innis is our consortium. They've been players with us. We had three new ones this grant go around, but two of the previous one have continued on with us, so we're making some headway there of influence and access.

In Louisiana, in these areas that we're serving, we certainly have a lot of geographic barriers and access to care. We don't have a lot of public transportation services. Those get handles maybe in the inner cities. We have a lot of byways, highways, bayous. It's hard to get to services. The Innis Clinic is probably 30 miles out from the main hub of, what we call our counties out here is parishes, on Coupee Parish. So, access to get into those little hubs has been challenging. We also know in the area of oral health that Louisiana ranks highest. Sixth highest and it's 3rd graders who have experience with dental caries that is treated or even untreated tooth decay, it's about 65%. We're the second highest percentage for untreated tooth decay at 41%. The target areas in our grant project have a higher percentage of minorities as compared to our state or our country.

Here in Louisiana, three of our targeted parishes in surroundings areas are ranked among the lowest in the state, in their nation, in their per capita income. All five parishes that we're working with in this grant of our consortium members have a really high unemployment rate. We have a lot of farming, so we have those seasonal kinds of workers and a lot of small scale businesses don't offer health insurance. We compare to be higher than the national average with the uninsured. We just recently were a state last July where we expanded Medicaid as a result to the Affordable Care Act, so only time will tell over that if that's sustainable. Our kids in our study, we have a high percentage of those at risk that are based on their eligibility for free or reduced lunch, 77%, as compared to our state or even the nation.

Poverty is a barrier in health care in Louisiana. We have in the rural areas very poor, low socioeconomic groups, primarily African Americans. We know that they're less likely to receive dental care. That's come out. You know, we follow along with the Rural Healthy People 2010 report. Our target areas have a very high percentage of African American children located in the rural areas. I guess our other minority would be the Hispanics, but it still is a fairly low percentage when it comes to consider migrant farming. If you looked at California and other states, it's much, much higher in those states that population and what we experience here. But nonetheless, we have a high poverty area and kids living in poverty.

Just a history of the grants. I told you as I introduced our project, we are providing oral health screenings and trying to integrate that into a primary care setting in that comprehensive physical done by a medical practitioner, the nurse practitioners, doing those oral health screenings, not taking the mouth out of the body and leaving it to the dentist just to do the screening. What we're trying to say, that system of oral health assessment is just as important as trying to assess cardiovascular, GI, mental health, etc.

In our second go around our grant, we again changed our portal of access to the school-based health centers, and they were part of the organizational structure of the federally qualified community health centers, the five of them. Our goal really was trying to get access to kids in the best way that we could and to influence through them the health status of the family, the oral health status of the family. We expanded into other school-based health centers, and this grant that we are currently in the overlaid dental case management for referrals because we said, "Well, we were doing the screenings and we were getting access, but what happens we've got to get that child referred? What are we doing about that referral?" So, we overlaid dental case management in that, and that is currently what we are focusing on heavily in this grant.

The next slide there is just pictures of a couple of our health centers. We also have mobile health dental units that go out to the school. This is the particular pictures from Innis in Pointe Coupee Parish, Louisiana. Our next slide here talks about who we approached. We know school-age children. We wanted to make sure they have a dental home. We wanted to apply an evidence-based practice to reduce the amount of caries by using the fluoride varnish. If they didn't have a dental home, we wanted to create one for them through referral within our FQHCs, because many of us have dental-based programs. Also, we wanted to overlay the dental case management.

Children are in higher risk. This is where our disparities come in. We know that the children of the racial and ethnic origins experience that, and they have a disproportionate share of that oral health disease. That disease affects their total oral health status as well as their total health status. We know that the mothers of children, if the mother has high caries rate, if the mother's not receiving dental care, especially untreated caries, then children don't tend to have access or take advantage of those services whether they're covered through a Medicaid arrangement or not, we've got to get them to take access to that.

In the African American adults, we know that they're more likely to report tooth pain, tooth decay, loose teeth, and they certainly have lost more teeth than the Caucasian adults. African American children are less likely than Caucasian adults, African American adults, as well as ... are less likely than Caucasian adults to have visited a dentist in the past year. Another statistic that we look at. We know that Rural Healthy People 2010 has a significant focus area of oral health. It's ranked fifth in the need of a focus area to influence people living in those areas. What we know of some of the barriers to care faced by our families is their internal and external barriers, parents belief systems, phobias, anxiety about going to the dentist, difficulty even locating providers who will take kids that do have coverage for oral health care to the Medicaid program.

As Liz just said, you know, this whole parental literacy and understanding and buy-in of the need for oral health care is as important as the medical side of the care because they may never have had that as a child, and then you see the effects of their oral health status as an adult, and home care practices, a lot going on in the homes and the issue of brushing teeth and the things you have to do to make sure kids take care of their oral health needs. Those kind of get low on the totem pole, so to speak, with other responsibilities. Getting their homework done, trying to be a good student. We know that in our work that even though we make appointments for the kids to go to the dentist, many times there's limited schedule, hours, mother has to take off from work, there's transportation problems, there's a myriad of barriers to getting out when we have

recognized the need to refer once that mid-level practitioner has done that very good oral health assessment.

What we've done in the first two years of this grant, by incorporating oral health assessments into the physical exam, we have done that to the tune of 3,986 oral health assessments. The breakdown there is you can see from the slide the difference between the Caucasian and the African Americans. We are tending to what we're seeing in there. We're applying fluoride varnish on over 3,000 kids trying to do that to prevent those dental caries. We've had over 1500 referrals whether they've been problematic, that is we've seen something upon examination or that it's a preventative thing. In Medicaid here, you can have two visits for routine cleanings and getting those sealants on. Are we taking advantage of that? So, when we refer for preventative, we want to make sure that those referrals are seen just as well because of the good long-term effects of preventative care.

Right now we've got about a 51% of the referrals not being seen for various reasons. Transportation, just not keeping the appointments, and we really want to up that to weigh in the 80% as we go forward with this next round of grant applications where we will focus in even heavier by involving the teachers, etc. in trying to get those kids in the dental chair and be treated with a dental plan by the dentist. But we have to really, I think, influence practice. We have embedded a very good oral health assessment in the physical exam. I think we have clinically changed practice on the part of the providers. They see the oral health cavity as a system just as important as other systems or assessments. We've sort of tagged a line here saying that we believe that the access is school-based health. That's the way to get to kids, and if we could leave you with something of a tagline, we want you to remember school-based health equals oral health wealth. If we can influence that at the school-age, they will be better adults in their oral health, and then their children perhaps will have good oral health habits and have stronger teeth than what we're seeing today. So, I thank you. My contact information is there. I know we're eager to receive any questions on the part of anyone. I'll turn it back over to you.

Kristine Sande:

All right. Thanks so much. Thank you to all of our presenters today. Those were great presentations. Unfortunately, it looks like we're a little short on time, so we won't have time for our Q&A portion of the webinar today. But if you do have questions for our speakers, you can send those by email to webinars@ruralhealthinfo.org and we will make sure to pass those questions along to the speakers. For the few of you who have submitted questions with the chat box, we'll pass those questions along as well. So the email again is webinars@ruralhealthinfo.org. At this time, we'll hear some remarks from Tom Morris.

Tom Morris:

Thanks, Kris. I'm sorry about the condition at the beginning. We lost our WiFi signal, but we're able to hear everything, and I really appreciated all the speakers today, Cara and Jeff, I think it is really important and fitting, I think, that their MMWR was the last of the 13, were part of this series that CDC sponsored, because you know, we talked a lot during the course of this about health disparities, and yet, if you only look at disparities from a geographic perspective, you really lose a lot of important information. I think their findings really point that out because that informs how we design programs and how we design policy. If we don't understand how these play out in communities of color and different parts of the country, then we've not really taken everything into account that we should. So, I think it was a nice topic to end on.

With that, I would just also say we really appreciate CDC's leadership in bringing a really important national focus to a broad range of rural health issues over the past year, with the MMWR series that they've done. I also very much appreciate Liz and Linda providing a community perspective. When we've done these webinars, and this is the fifth of the ones that we've done with the RHlhub, we thought that it was important to pair the research with perspective of folks who are actually addressing that particular issue in a rural community. I

think both Liz and Linda did a good job in very different communities, pointing out how these racial, ethnic, health disparities play out in their communities and how they require a unique approach to really begin to address that. Kris, personally, I just want to thank you and the RHHub staff for doing a great job at these webinars and thanks to everybody for being part of today's discussion.

Kristine Sande:

Thanks, Tom. We've really enjoyed helping to make these webinars happen. It's been a great series, so thanks so much. On behalf of the Rural Health Information Hub, again, thank you so much to the speakers for the great information and insights that you've shared with us today. Thanks to all of our participants for joining us as well. A survey will automatically open at the end of today's webinar. We encourage you to complete the survey, to provide us with feedback that we can use in hosting future webinars. The slides used in today's webinar are currently available at www.ruralhealthinfo.org/webinars. In addition, our recording and the transcript of today's webinar will be made available on RHHub website and sent to you by email in the near future so that you can listen again and share this presentation with others. Thanks so much and have a great day, everyone.